



College of Education, Psychology and Social Work

**THE MULTILINGUAL LITERACY APPROACH (MLL)**

**Investigating the potential of an integrated approach to languages and literacy education driven by an iterative and adaptive process of teacher, curriculum and organisational change**

A Thesis Presented

by

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#### **Attachments (folders):**

1. Ethics (1a, 1b & 1c)
2. Model MLL Curriculum (Spanish) – schedules and schemas (2a, 2b, 2c & 2d)
3. Second Language Testing Instruments - table of test specifications (3a, 3b, 3c & 3d)
4. MLL PL Day PowerPoints (Phase 1 – Day 1a, b, & c, Day 2 & 3; Phase 2 – Day 4; Phase 3 – Day 5, 6 & 7)
5. PL Day Questionnaire
6. PL Day Agendas (Day 1 – Day 8)
7. Project Memorandum of Agreement between Flinders University and the Department for Education and Children's Services (7a & 7b)
8. Text-matching report: Turnitin

#### **Declaration:**

I certify that this thesis:

1. does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and
2. to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.
3. is not the product of any commercial editing service.

Signed: *Peter Nielsen*

Peter W. Nielsen 26 / 10 / 2020

## Synopsis:

There are many myths, false dichotomies and straw-man arguments in education. This study encountered and responded to several as it navigated a path from a problem of professional practice, both personal and general, to a novel response and successful replication and extension by a network of teacher-researchers. It shows how a distributed group of teachers became personal problem-solvers, formed into a network of research partners who contributed valuable, professional insights to the philosophic-analytic-scientific traditions of research, by demonstrating a communication-based research method.

The problem was a unifying force, asking how languages education could evolve so that learners in any context would be curious, motivated, engaged and positioned by instruction to cumulatively acquire and develop languages and the literate skills to use them. The aspiration was to do more, to do better. It aimed to dispense with the 'Twin Solitudes' paradigm that has separated languages educators and education from mainstream classrooms and the Science of Learning, Reading and Writing.

The first move was divergent, finding task-based messages from established scholarship that could be translated and implemented. The next move was convergent, coalescing these into a message complex about the performance of core tasks that would constitute the Multilingual Literacy Approach (MLL).

This Approach had three elements that needed to remain aligned for effective teaching and learning: axioms, methods and techniques. This was not about prescription but rather developing teachers' professional judgments through curriculum-design principles that would guide and align their use of developmental boundaries, instructional imperatives, schedules and routines.

These principles provided an operative bridge from theory to practice and back in a recursive fashion. They follow from evidence that most human brains respond to linguistic input and the impulse for linguistic output by activating similar neuronal architecture and linguistic resources, irrespective of orthography or culture. This underlies the MLL's cognitive and linguistic dimensions. The other important dimension was sociocultural. Together they form an imbricated schema for languages education that scholarship predicted could lead to the desired literacy outcomes. The key implication was integrative: encouraging the joint teaching of second languages and English literacy.

Certain considerations, dispositions and research formalities were necessary for an investigation into the MLL to emerge and develop as both a naturalistic inquiry and one that would produce replicable, trustworthy findings. The communication-based research vehicle was a two-year iterative and adaptive professional learning program (PLP).

Twenty-five classroom and languages teachers from ten government primary schools took part. They were encouraged to break with usual practice through co-planning and co-teaching, promoting literacy and languages by leveraging linguistic universals, guided by the MLL's theories, principles, methods and task analytic use of the Science of Learning, Reading and Writing. They were encouraged to become teacher-researchers, investigating their own practice rather than being mere participants in a research exercise.

Summary messages from the data sources converged. The conditions established by the MLL PLP produced changes in teachers' knowledge, practices, beliefs and the organisation of their sites that generated extremely encouraging outcomes in student learning, and a confirmation of the teacher-researcher role.

## **Acknowledgements:**

This thesis is an account of what can happen when teachers', students' and leaders' thinking and practices are systematically disrupted by novel ideas and evidence, when they are supported to experiment with and embrace changes flowing from those ideas and that evidence, and when they adopt an unwavering commitment to continually evaluate and improve. I would like to express my unqualified and profound appreciation to the participating teachers (and students) whose implementation efforts were the drivers of this knowledge-building exercise, to their leaders, their school communities and the education system for the vision and willingness to embrace risk associated with implementation efforts, to my principal supervisor for his clear and compelling insights and incredible understanding of the complexity and the agile pragmatism necessary for guiding this research into and through practice, and to my family, for all that they sacrificed and all that they offered to enable this thesis to become a reality.

This was a hard-fought thesis because of its aspiration to account for the complex constellation of elements involved in designing a new Approach to languages and literacy education, to communicate that to colleagues for their implementation, extension and professional judgments, and to elucidate it finally as both a valid and generalisable teaching Approach and knowledge-building exercise. It was also a thesis that had to survive the challenge of a period of leave that lasted some years, due to major injuries sustained by the author as a result of a bike-car accident. But the act of riding is in fact a metaphor for how this thesis emerged under the weight of these challenges; to ride a bike one must ensure enough momentum is maintained so that the bike and rider do not fall over; and so it was with completing this thesis.

There is neither the space nor the words to adequately express the deep gratitude and overwhelming humility felt by me towards those who were in their own way associated with this investigation; for ensuring that neither the thesis nor the author 'fell over'. The knowledge presented here stands on their shoulders. Thank you.

## **Dedication:**

This study is truly an example of collaborative intelligence in action. It is therefore dedicated to those who inspired, nudged, challenged, participated, advanced, and advocated for it:

- to my primary school, pre-service and postgraduate students for your active engagement in my exploration of, and experimentation with, the ideas at the heart of this thesis
- to the teachers and school communities who rallied behind the idea that languages and literacy education could be improved through teaching second (and subsequent) languages with first language literacy
- to the education system and university for providing resources and support to a longitudinal investigation
- to the academics whose cited work was a compass guiding the work
- to my mother, an exemplary teacher, academic and research partner who injected confidence and wisdom whenever it was needed (which was often!)
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- to my children for being willing 'subjects', shrewd evaluators and for surrendering time with your father
- and to my wife; sage, muse and, when necessary, counterpoint. You are and always will be, my anchor, my confidante and the selfless giver of the shoulders on which I stand to see over the horizon and embrace change.

Thank you for these gifts. This thesis is dedicated to you all.



## **Chapter 1:** Introduction to the Research Situation

*Language stands at the center of the many interdependent cognitive, affective, and social factors that shape learning.*

David Corson, 1999, p88

This chapter outlines what will be found in this thesis. It tries to make clear that this thesis should be approached on its own terms, otherwise its form and purpose might be misread or even missed altogether.

The purpose of this thesis is to report on a systematic effort to address a problem of practice, both specific to the practice of the author, and more generally echoed amongst the fraternity of junior primary/primary teachers of languages in Australia. It is also personal in that it is grounded in the pragmatics of practice yet general in its effort to communicate a research-based solution generated through the efforts of a group of teachers committed to participatory, action-research.

This is an account of a study that attempted to explore, and engage usefully with, the ongoing teaching practices of several real-life classrooms over an extended period. That research can or should be separated from practice is not given weight as a response to the messages of real, situated professional practice. The knowledge on offer is knowledge of practice, gained in practice, developed, demonstrated and communicated among a body of experienced practitioners co-operating across their differing situations and tasks.

What is shown overall is the communication of a generalisable method inviting and encouraging these teachers to research and develop their own practice for their situated purposes.

The extended study arose from the prior ongoing effort of the author to develop a comprehensive solution to a key problem facing him as a beginning teacher of junior primary/primary Spanish in a typical Australian public school setting. It was typical in that the author was expected to take each class and implement a stand-alone language program while the class teacher had non-instructional, planning time.

This situation of the 'Twin Solitudes' (Cummins, 2005) coincided with a lack of an agreed curriculum scope and sequence for the isolated second languages taught in different schools. Dissatisfaction with this situation, and the problems of practice he faced from an ill-defined curriculum and timetable, set the author to take on a path towards producing a teaching approach that would build on connections and integration based on an understanding of both language universals and particulars for beginning learners.

The second chapter sketches what may be called the 'biography' of the teaching approach that was developed, tested and revised in the author's teaching over some years. It is not an

exhaustive review of a limited topic but a brief investigation of a varied landscape, to an end that is practical (not purely definitional and theoretical).

It is set down as a cumulative journey, selecting and highlighting 'landmarks' encountered around an extensive, imbricated 'panorama' comprising a constellation of messages from many research areas. It moves by stages in response to need and selects expert research ideas that support and enlarge the preparation of a comprehensive and flexible language teaching approach for junior primary/primary contexts.

A series of people and events from the author's background training and professional learning are involved in this moving picture leading to an ever-widening pool of relevant research experts, both local and distant. This establishes a network of expert research messages that underpins the creation of what comes to be called the Multilingual Literacy Approach to languages education (MLL).

Literacy is a major aim of early schooling, and 'multilingual' (a term in common use across the literature) signals that the scheme aims to generalise across languages and encourage cooperative and integrative planning between teachers of the societal language and another.

The biographical character of the presentation will remain in the background. The thesis progresses on its way towards presenting biographies of teaching development. But the research study starts from chapter three, where the idea of research embedded in practice, for practice, is given first a general philosophical justification and then a particular form. The teaching approach was to continue to develop through dissemination among interested teachers. It was a testing in particular settings of the approach's potential for universal application. The outcome was an organised communication for professional learning, offering a communicational collaborative research methodology for junior primary languages teaching.

The specific features of each of the ten schools participating in this study are in the hands of the classroom and specialist language teachers as they work together on an integrated and shared program. The message of integration grounded in universal features of languages, literacy, and learning governs the overall method of the study and allows for the research-based Multilingual Literacy Approach (MLLA) to be 'published' and utilised by practitioners in dynamic and complex teaching contexts over a two-year period. This communicational research method produces data in the form of collaborative, contemplative feedback from the teachers' reflections and evaluations of their developing practice and the guiding messages communicated from and about the MLLA.

This was not an attempt at 'pure' research but 'real' research (somewhat akin to participatory action research). It wraps up the whole dynamic sphere of cycles of understanding driven

from and emerging out of situated professional activity. It does not create problematic gaps or borders to be traversed.

### 1.1 *Thesis summary: the biographic, the philosophic and the methodological*

Sections of this chapter have been drawn from the author's prior publishing. See Nielsen & Nielsen, 2012; Nielsen & Mageean, 2016.

The premise of this thesis is the author's dissatisfaction, as a primary school language specialist, with the status quo in languages education, and his aspiration to do more, to do better. This biographical trajectory led him quickly to seeking, through professional connections and communications, to become more acutely aware of long-standing schisms and problems related to the kind, or kinds, of knowledge required by his teaching task, and the challenges of acquiring or achieving such knowledge. In this way, in addition to the biographic, a philosophic and methodological element emerged, and the author started to reflect on the idea of becoming a 'teacher-researcher', committed to understanding and leveraging the 'situated dynamics' of effective classroom innovation in action, as both personal problem-solver and participant in an ongoing analytic tradition.

This has led to a thesis of three interacting parts that are progressively introduced and defined in chapters Two and Three by reviewing messages from scientific and philosophic literature. The first two chapters try to alert the reader to the nature of mind and how this thesis approaches research-driven quantitative patterns of thinking. Mind arises with and from the subtle varying quantitative patterns of natural process being expressed at a higher level in the consciousness of connection and a growing totality that becomes its own director. Variety, possibility, coincidence, unpredictability and accident (especially as minds are in communication) is written into the overall process as much as any lawful or regular pattern. This leads research on the human actor to value the multiform nature of human individuality and seek a suitable blend of the historical-biographical and the more standard theory-seeking research patterns. The first two chapters of this research account give necessary background and depth to the research study proper in its constrained form as a plan of definable action in a time frame for equally definable, expected, though always uncertain, outcomes. Thus, the research study as bounded and formal begins essentially in the Third Chapter, and progresses formally on its way from there, but without losing or neglecting the implications of its biographical lead-up and the early history/biography of the language teaching Approach that was produced in that light, and then could be used to prepare the stage and provide character, depth and background to the planning and conduct of the more formal research exercise that emerged.

Languages education and research methodology are vast fields, and this thesis has inevitably been selective in terms of which aspects to include and what to say about those aspects that have been included. No doubt others would make different selection, and indeed, had this thesis been written at another time other selections may have been made – it is a product of its time and place in the author’s professional development and in the developing canon of knowledge on the matter. The dictum that initially guided this selection was analytic and practical sufficiency in light of the declared aspiration and the situated reality of a particular teacher, curriculum and school. Selected messages were then organised to provide key principles for a research enterprise (described in chapter Four) with some promise of being shown to be useful in the concrete situation of classroom activity. It was an effort firstly to narrow and define matters in order to produce effective action in a real-life context, and then, in a natural progression, pass some judgment on the possibility of its worth and generalisation.

In chapter Two curriculum-design principles are identified from studies discussing learning and teaching in general and more particularly language learning and teaching. A number of crosscurrents are accepted and guided to this end. These principles are intended to delineate an approach to languages teaching that can specify testable patterns for classroom action, and so are in that sense methodological. And as from chapter Two there comes a definable model for an approach to language teaching tasks, so from chapters Three and Four there emerges a broader model for defining how such an approach might be communicated, tested in use and adapted when situated in a variety of complex real-life teaching contexts. The communicational methodology brings with it a dynamic notion of data (data of action as a basis for further action). People are not being told what to do or given rules to follow. The understandings are exchanged so that understandings the teachers have and then develop will become instructive to them and inform their action as professionals. Further developments are matters of their increasing understandings and the necessary judgments that are then formed from and for their own action. All judgment is in fact a connection to the deep reality of considered action and this connection is ignored at our peril. Any quantitative recording and assessment is thus formative. It seeks to achieve validity for purpose, and the key to all measurement problems is to get a fix on a job to be done. But whether the record be narrative, historical, numerical or any interrelating of these, the effort for understanding entailed seeks its completion in judgments in action, from action and for action in prospect. In this special case the record of those judgments comes from the rich soil of a constantly tested and renewed body of professional experience, including the experience of making and following professional judgments. It is a study of teachers teaching young children and teaching themselves and each other in the process. The

catalyst, the communication network overall, is set up and participated in by a language teacher whose work it extends, to better integrate and develop connections across the language work of teachers in the vital junior years. The action-test involved and the ongoing modification of what is being done guides a data selection and recording appropriate in the context of a two-way genuine communicational approach to research. What counts is simply relevance for ongoing activity to be judged successful and to prompt further improvement.

Thus, the general methodological strategy proposes that the teaching approach developed in chapter Two could profitably be transmitted to other teachers and tested in appropriately situated real-life task-activity using the communicational model developed in chapters Three and Four. Herein lie the three interacting parts of the thesis: teaching approach, transmission and testing, and a communicational model of investigation.

First-hand reports from this exercise provided data, which are presented in chapters Five and Six. In chapter Five the data featured are extracts from personal journals kept by the teachers over the two-year period of the research exercise. The researcher had the permission of the teachers to access the contents of these journals. Other data in chapter Five come from school observations and reports of student assessments that arise from curriculum-based measures used to support teacher judgments for classroom action. This data was not intended nor used to formally validate any part of the devised teaching approach, or the professional learning program devised for its transmission and professional testing in action.

In chapter Six the data come from reports from some principals of schools involved and all participating teachers. These were recorded anonymously at the end of the research exercise during individual and group interviews carried out by one of the expert research advisers advising on the project, and not known to the teachers. The interviews were transcribed by the interviewer and provided to the researcher with some brief summaries conveying the interviewer's general overall impressions of the interviews. Responses from all interviews indicated very positive feedback on the various aspects of the PLP research exercise in which they had been involved.

Four important themes came from the interviews, and were taken forward: firstly, the energising of teacher co-ordination incorporating an affirming of teacher skill; secondly, the consequent improvement of the quality of student engagement and language and literacy achievement; thirdly, the value of developing professional action through a well-guided encounter with current research; and fourthly, the advantages for professional development of a professional learning program with a two-way communication ethos sensitive to variations between communicators and settings.

Chapter Seven provides a discussion of these and other key aspects of the data to formulate the most significant overall messages from the two-year exercise. There is an attempt to bring linkages forward to reinforce evidence already considered. Evidence of positive reactions and significant achievements in learning provide answers to separate but related hypotheses concerning the quality of the PLP and the effectiveness of the MLL in the hands of other teachers.

Chapter Eight returns to the overall rationale for what was done, how it was done, and the associated reasoning. There is therefore summary reflection on what messages can be sent out regarding the MLL, the identity and role of 'teacher-researcher' and the question of doing research that is in search of knowledge 'for teacher action' and 'from teacher action'.

## **1.2**    *Limitations*

What this research will not do is develop an exhaustive list of all possible factors that enable language and literacy learning in and across languages using this Approach or any other, although the conceptual framework should allow other factors to be included at any time. Neither will the research assess the comparative efficacy of other languages programs or program elements. This is not an efficacy study but rather an effectiveness study that will identify, trial and report on a novel approach to teaching languages referencing measurable improvements in students' learning, specifically literacy outcomes, and how this has been implemented and tested across a range of contexts by a range of teachers with a range of languages.

As noted earlier, selection and use of expert information in the light of a situated problem guided what was done, and the same is true of how it is written about.

The account moves across matters of philosophy, linguistics, neuroscience, psychology of teaching, educational theory, evaluation, implementation sciences and professional development and professional identity in its quest.

Deep and thorough consideration of much of the vast amount of research in these areas was not to the point, even had it been possible.

What is attempted is a work of creative selection and connection in the service of building a dynamic picture, a work of demonstration of research for practice and 'in action'. And this may somewhat strain the usual thesis format.

However, as with all research, it has something to say as well as to show, and like all research it also falls under the maxim of the systematic historian of old: 'Just say exactly what happened. Pray for the grace of accuracy.'

### 1.3 *Defining the problem: what is the case for change?*

Sections of this chapter have been drawn from the author's prior publishing. See Nielsen et al., 2012; Nielsen et al., 2016.

As indicated, this thesis emerged in response to a problem of practice. The author began teaching Spanish in a medium size junior primary / primary school in the Adelaide Hills. It was quite a typical cohort of students and families, mostly monolingual English from the local area with a mix of blue and white-collar jobs, weighted towards blue.

There had been a Spanish program for many years. All classes received one 50-minute lesson per week, on average that was provided during classroom teachers' non-instructional time (NIT). The teacher had been a native speaker of Spanish but was not a trained languages teacher. At this time the prescribed curriculum was the South Australian Curriculum, Standards and Accountability framework (SACSA). By any measure it was accurate to describe this framework as 'progressive'. Its focus was upon loosely defined outcomes, marked at two-year intervals and weighted towards skills rather than having an appropriate mix with knowledge. It did not provide sufficiently coherent and consistent developmental schemas for skill or knowledge development that a teacher could use to design a cumulative program. The author received and verified a report that students lacked basic mastery of the language in its oral and written forms after a possible eight years of instruction. The author also heard that most problems of disengaged behaviour at the school occurred in Spanish lessons, judged by the increased exclusions and pupil visits to the Principal. Frustrated parents were questioning the value of languages education in the car park and at Governing Council meetings.

Such was the problem of practice. The first response was to audit exactly what was happening. It was immediately apparent that much of the work involved unrelated lists of vocabulary, games and worksheets. In fact, the previous teacher commented that it was not uncommon to play sport, as that was the teacher's area of expertise. This was an out of field teacher doing what they could under the circumstances.

The second response was to look to rigorous, tested models and exemplars for answers and to seek helpful messages and guidance from the expert research network, beginning with the author's pre-service teacher education, which was touched on in the previous chapter (1.1.1) in relation to the teaching of languages. What became clear was that the languages education models at the heart of this program, the socialisation model and what has become known as an intercultural model, were not up to this task. They provided no clear sense of direction: that is, there was no comprehensive and cumulative schema for the development

of the skills for learning the language (mastery of the receptive and expressive modes) and skills for using the language (consolidating learning).

But there was light at the end of the tunnel, coming from the author's pre-service teaching course in English and Literacy, which was designed and delivered by an academic who would become this project's mentor. This offered the promise of an approach that had been shown to build comprehensive knowledge of language operating principles, of language forms and functions and the skills needed to use language widely and appropriately for many purposes. Such a literacy-based approach for English teaching reflected the author's aspiration for Spanish. A background question was whether this might not apply equally to languages more generally? It was the start of envisioning a teaching approach that would be literacy-based and multilingual.

The notion of the single universal scheme was powerful, but my initial teaching in light of the scholarship led to a mixed bag of goods. Progress was made but at the same time I observed ubiquitous variability, both intra- and inter-individually. Some of this variability was attributable to the social contexts in which learners lived, some to factors best described as aptitude-based and some to the tasks, methods and interactions provided by my teaching program. What I had not fully understood was that learning is complex, situated and all the while multivariate. Moreover, teaching clearly did not involve mere transferring of mental models, or schemas from brain to brain. The message that I had yet to comprehensively address was that teaching and learning is not strictly a linear process of growth and that while stage-like views are appropriate and effective, they also need to accommodate variability in learners' affective, psychological and social factors.

This reflection led me to think afresh about the teaching and learning of languages and it was somewhat serendipitous that I then encountered Lenneberg's (1967) treatise on the biological foundations of language. He wrote: "The rules of natural languages do bear some superficial resemblance to the rules of a game, but I hope to make it obvious in the following chapters that there are major and fundamental differences between rules of languages and rules of games. The former are biologically determined; the latter are arbitrary" (p2). And thus, I began to see language learning from the perspective of dynamic biological systems; language can only be constituted by those sounds and behaviours that the human biological entity is capable of creating, perceiving and replicating. However, unlike a positivist, I was not of the view that the things that constitute either language or language learning are reducible to an immutable matrix of atomised units and processes. Rather, my thinking was driven onwards by my observations of ubiquitous variability within a theme, a view of language and learning as complex, dynamic systems emerging from biological constraints. To this end, Gleick's observation was rather salient (1987): "The act of playing the game has



a way of changing the rules” (p24), and, while Gleick was referring to naturally occurring dynamic systems rather than linguistic conventions, I sensed a striking similarity with those observations of variability.

Now I had to frame my teaching approach and get on with the task at hand. This call to pragmatism crystallised my thinking into a view of language, what I had to teach, as emerging from bottom-up stage-like schemas of linguistic conventions, vocabulary, skills and principles while at the same time viewing the process of formal language learning as benefiting from top-down purposeful interactions of multiple agents in dynamic speech communities with varied interlanguage/language constructs. This view had obvious implications for my teaching and the derivation of the ultimate MLL Approach: there is no fixed absolute syllabus to be defined, and while general, innate processes and propensities exist, a universal mould as it were (Moro, 2008), learning frequently occurs through tuning to and imitating recurrently encountered constructs, particularly those that are purposeful and comprehensible. There was thus a discernible benefit to be derived from attending to both functional and formulaic aspects of language and learning, that is, for both communicational intent and of the code(s) for message transmission.

#### **1.4**    *Ethical considerations*

The Social and Behavioural Ethics Committee, Flinders University and Southern Adelaide Health Service on June 26, 2009, granted unconditional ethics approval for this project (see attachment folder One for participant letters).

## Chapter 2: Reviewing Relevant Research Literature: literacy and languages teaching

*The really important thing is less the destruction of bad old methods than a positive indication of the new ways to be followed if we are to have thoroughly efficient teaching in modern languages.*

Otto Jespersen, 1904, preface

### 2.1 *Introductory biographic remarks: the situation of the language teacher*

*[Language is] a genetic inheritance, a mathematical system, a social fact, an expression of individual identity, an expression of cultural identity, an outcome of dialogic interaction, a social semiotic, the intuitions of native speakers, a collection of memorized chunks, the sum of attested data. A rule-based discrete combinatory system, or an electrical activation in a distributed network ... We do not have to choose. Language can be all of these things at once.*

Cook, G., & Seidlhofer, B., 1995, p4

If language can be many things, then it follows that its acquisition can be also. It was therefore a curiosity that as a pre-service student teacher coming to terms with what I was to teach I was confronted by the view of language acquisition as a process of socialisation. It was a stance that suggested language has to do with the performance of social functions. Therefore, its teaching and learning is first and foremost a process of social interaction with those who are more experienced or adept in the target language and culture.

I entered the teaching profession. I was confronted by over 150 young learners at various stages of growth and development, I was confronted by their parents and their beliefs and expectations, and I was confronted by a prescribed curriculum with certain expectations of my performance. I had stepped into a concrete world of action with a myriad of expectations, opportunities and pitfalls. It was a curiosity to me then that the discourse of classroom teachers in the school around me was awash with preoccupations over measures of children's reading and writing skills. It was a stance that suggested language is inextricably linked to people's use of written symbols. Its teaching and learning is therefore irrevocably linked to the Latin *littera*, or mastery of the writing system and its related conventions.

For a teacher looking for ways to improve the teaching and learning of languages it was equally curious that the canon of literature on second language acquisition had been broadly dominated by a single wide-ranging approach, commonly referred to as 'cognitive'. From this stance, language could be a 'social semiotic,' but above all it is a cognitive product. Its teaching and learning is therefore primarily a cognitive process.

Each view appeared to be grounded in an epistemology of significant regard and yet none was able to satisfy my court of practical wisdom, so as to arrive at a teaching and learning program that could satisfy my aspirations and those of the children, parents and system within which I operated. Indeed, my reflections on this state of affairs led me to an

understanding of the schisms or debates that were taking place within my chosen profession as logical outcroppings, interlocutions and points of tension between these three discrete perspectives on my tasks as a teacher of language: linguistic rules and conventions, cognitive strategies and processes, and sociocultural processes and interactions.

I was led to the literature for further clarification of these perspectives and identification of possible tasks and practices to trial. Initially, I was interested by Corder's (1967) hypothesis that rejected behaviourist theories of second language learning in favour of the idea that intrinsic linguistic-cognitive processes are the driver of second language learning and that these can be understood and responded to by analysing learners' output, in particular error analysis. He was influenced by Chomsky's hypothesis of a universal grammar (1965), an inherent syllabus of possible language utterances that both constrain output choices and lead to errors through inaccurate analogous reasoning, inaccurate use or incomplete understanding of rules and overgeneralisation in the learning of subsequent languages.

I was then drawn to Selinker's (1972) interlanguage construct that developed from these two perspectives: error analysis and universal grammar. Selinker defined his interlanguage construct as a transitional linguistic syllabus of general rules and principles activated when learning by a "psychological structure ... latent in the brain" (p211). This notion of a transitional interlanguage construct provided a clearer explanation and further refinement of Chomsky and Corder's thinking about the process of languages learning. Of particular interest was Selinker's support and refinement of Chomsky's notion that it is when learners attempt to apply their transitional interlanguage to the learning of language-specific constructs that errors tend to arise from analysis of which could come fruitful opportunities for deep learning through targeted feedback and instruction.

This linguistic-cognitive preoccupation in the literature sat comfortably with my broader undergraduate studies and initial experiences with languages education. As an explanatory framework, the idea that learners of additional languages draw upon a transitional fund of language constructs born of their knowledge and competencies in their primary language hinted at the possibility for improving outcomes through scaffolded use of learners' pre-existing language constructs and operational competencies, with selection of teaching methods that leverage learners' transitional interlanguage, and techniques for analysing learners' errors leading to targeted feedback and teaching. This seemed manageable and, in my opinion at the time, likely to improve the teaching and learning in my classes.

To varying degrees, it did just that. I surveyed the works of Vygotsky and Piaget to refresh my understanding of developmental processes and stages; I perused frameworks of syllabus content from around the world (e.g. North & Schneider, 1998), and I unearthed Krashen's

(1981) input hypothesis of language acquisition that asserts comprehensible input is a key driver of acquisition; important too were Schumann's stimulus-appraisal hypothesis whereby language learning is a process of responses to stimuli from conversational interactions, and his deeper theory of language learning as a rewards-based, complex adaptive neurological process arising from an evolutionary imperative to interact with conspecifics. He pays special attention to the affective dimension of purposeful interactions that results in the almost inevitable learning of one's primary language, but variations in second language learning outcomes because of differential affective, psychological and social factors regarding what is essentially a culturally inherited artefact (Schumann, 2004; Lee, Mikesell, Joaquin, Mates, & Schumann, 2009). The message from this scholarship was that planning for purposeful interactions as well as deliberate use of learners' interlanguage constructs was critical to mitigating or possibly positively leveraging affective, psychological, social and comprehensibility variables that could affect learning.

### **2.2.1** *Messages from an expert-research network: the organising theory (approach)*

My pre-service course in English teaching and Literacy in Primary Schooling was already (see 1.3 above) a distinct guiding light at the end of the tunnel of professional uncertainty I seemed to be in. This light became more prominent as my teaching developed and my research literature acquaintance became more extensive. Nothing could be more universal about languages than their potential for literacy, and for me the notion of literacy development being a building of comprehensive knowledge of language operating principles, of language forms and functions, and of the skills needed to use language widely and appropriately for many purposes had seemed to capture well my Spanish teaching aspirations.

Now the universal features across all languages began to appear, in something of a reverse image of this view of literacy development, as delineating the range of necessary and useful elements to be organized at the service of languages learning through a definable and testable literacy-based teaching program. The promise of such a teaching scheme dropping neatly over and embracing the wide possibilities of languages' common features, along with the many variables of pupils' potentials and limitations, was an obviously appealing one.

Languages could be taught in a multilingual framework, I was convinced, and taught in tandem, building upon the gaining of clarity through attention to comparisons and differentiations alike. The teaching would be able also to cater for pupil variation in what could be brought from their own first language to help in learning other languages.

The priority was to ascertain if any similar, literacy-based models were at work in the general languages teaching field and if any such models had a sufficient quantum of theories and

replicated evidence of efficacy. If that was not the case, then the threshold for suitability was still the same: a schema for teaching languages that satisfied the aforementioned aspiration.

In the end, a general schema offering the promise of guiding the selection or development of a teaching approach that could satisfy this threshold was found in the field of linguistics (Anthony, 1965). Anthony called his schema an approach, where an approach is held together by a series of axioms about the nature of the field in question that guide and constrain selection and sequencing of possible tasks and practices.

*...An approach is a set of correlative assumptions dealing with the nature of language teaching and learning. An approach is axiomatic. It describes the nature of the subject matter to be taught...*

*...Method is an overall plan for the orderly presentation of language material, no part of which contradicts, and all of which is based upon, the selected approach. An approach is axiomatic, a method is procedural.*

*Within one approach, there can be many methods...*

*...A technique is implementational – that which actually takes place in a classroom. It is a particular trick, stratagem, or contrivance used to accomplish an immediate objective. Techniques must be consistent with a method, and therefore in harmony with an approach as well.*

Anthony, 1965, pp63-67

In the context of this thesis the term approach will be used to refer to both the level of axioms (theories held to be true) and Anthony's overall schema that also includes methods and techniques. The difference will be signified by the use of either a lower-case 'a' (approach) for the former and a capital 'A' (Approach) for the latter.

Anthony's schema arose from patterns he saw in languages programs that were not succeeding. While schisms were emerging in the academic field offering guidance to teachers and systems, Anthony's position was not to focus on minutiae, but rather to look at how teachers were approaching the exercise as a whole. The picture he portrayed was instantly illuminating, as it matched the author's experiences when going from a pre-service student, to teacher, to researcher as sketched in chapters One and Two (see 1.1, 1.3, and 2.1).

As investigation had progressed, so too had the Spanish program. But it resembled an all-encompassing patchwork, rather than a coherent tapestry, with no overall curriculum structure but rather a series of well-intended strategies and tasks lumped together. The inescapable conclusion was that this interspersing of disparate, discrete-point solutions was a reason that early gains did not become more coherent, robust and comprehensive. There was a lack of cumulative growth in students' language and their skills to use it for varied communicative purposes.

Within Anthony's schema there are the three levels, or constituent elements, that it is important to keep congruent: approach, method and technique. According to Anthony, the entry point for establishing an Approach is to identify those beliefs and assumptions that inform, or could guide, one's practice and then to coalesce these into a working theory about the nature of the field or tasks. And so it was that Anthony's call to view teaching schemas as an Approach with three constitutive elements that need to be carefully and purposefully aligned took root. The starting point according to Anthony was theory.

The theory that provided a sense of coherence rather than chaos arose out of Kern's view of literacy (2000). It struck a chord because it provided a way to coalesce the ideas that had held in practice and in the aspirations and expectations of the school community into a program for teaching and learning that the author judged to be feasible and satisfactory to the system.

Kern's view provided the basis for identifying, articulating and correlating underlying assumptions that would come to define the tasks, activities and methods/practices for this Spanish program and ultimately an MLL Approach. His view is that

*Literacy is the use of socially-, historically-, and culturally-situated practices of creating and interpreting meaning through texts. It entails at least a tacit awareness of the relationships between textual conventions and their contexts of use and, ideally, the ability to reflect critically on those relationships. Because it is purpose-sensitive, literacy is dynamic – not static – and variable across and within discourse communities and cultures. It draws on a wide range of cognitive abilities, on knowledge of written and spoken language, on knowledge of genres, and on cultural knowledge.*

2000, p16

This definition was immediately appealing because of the way it conceptually wove together the key characteristics of the linguistic, cognitive and sociocultural views introduced at the start of this chapter. It was a 'working theory' for an expanded definition of literacy that promised the possibility for reconciling in praxis the various schisms at work within the profession and a starting point or organising frame for curriculum design within an overall Approach. However, the rubber hits the road for theoretical notions when they are confronted with the concrete realities of curriculum design and classroom teaching. For this reason, what was sought were tools or processes to felicitously enable the seismic shift from theory to practice: from approach to methods and techniques.

As Kern's view became more familiar there was a sense that this invitation was something more: it was the challenge to bring languages education out of the specialist silo and into the everyday actions of school communities: a means to bridge the intellectual chasm that leads to a paucity of salient and transparent second language input and an absence of contrastable language patterns in classrooms; a trajectory for curricula design that takes its

lead from an integrated view of learning areas; and, one that demands increased expertise and yields increased agency to teachers on that basis. It was the same literacy for all languages, encouraging joint contributions from primary languages (L1) and second languages (L2) to a single learning exercise. It was a challenge, a means and a trajectory for teaching that led to the development of a Multilingual Literacy (MLL) Approach that would see classroom teachers and languages teachers jointly planning and jointly teaching a combined Approach to English language literacy and second language literacy from the outset of schooling in the junior primary/primary (JP) years.

Anthony's message was clear and is reiterated here: the entry point is identification of those beliefs and assumptions that inform, or could guide, one's practice, then to coalesce these into a working theory about the nature of the field or tasks. In keeping with this message, the process of developing an Approach started with identification of those beliefs and assumptions that had been communicated through pre-service preparation and professional studies as an initial teacher and had proven themselves in the court of practical wisdom: the classroom. There were seven of these, namely that languages acquisition and literacy development involve:

1. Cultural knowledge (socio-cultural element)
2. Interpretation (socio-cultural element)
3. Collaboration (cognitive element)
4. Problem solving (cognitive element)
5. Reflection (cognitive element)
6. Language use (linguistic element)
7. Conventions (linguistic element)

Format based on Kern, 2000, p13-41

These beliefs and assumptions were an immediate fit, coalescing with the aforementioned definition that was hereafter adopted as the organising frame for an MLL Approach without modification: essentially, Kern's view constituted the level of approach. For it to become operational as a program and a curriculum design cycle a decision-making scheme was needed, to ensure overall alignment could be maintained in action between this approach and methods and techniques. The working definition, that proved to be a valuable tool for correlating pedagogical beliefs and assumptions about the nature of language and literacy learning, now needed to give rise to tools or processes with the capacity to act as an internal sounding board: to guide pedagogical decisions in action about goals, methods, tasks, techniques and activities such that alignment with the stated view of literacy, the approach, could be maintained.

This was a challenging task for an initial teacher who had been largely inclined to accept instruction, expectations and direction: there had been no cause to reflect deeply on the

rationale for certain tasks or instructional routines. Performance mastery was now called for. Anthony's call to alignment had to be heeded for any Approach to reward positively the author's aspirations. There followed an abiding need for disciplined thinking so that the tasks, methods/practices and techniques that would be involved became mutually reinforcing and cumulative. This need was to be satisfied by underlying principles. Henceforth, the notion of languages and literacy curriculum-design principles was adopted as the core tool for ensuring alignment between approach, or what is held to be axiomatic, and methods/practices and techniques for the classroom.

The need to accommodate variation was ever-present. The challenge lay in moving to operational thoughts. The rubber hit the road, where the author's road was in the specific setting of early schooling, the point from which literacy development would build, but in which learners are only just encountering the semiotic landscape of the literate world and are just emerging as readers and writers of their primary language.

This developmental context added to the other general variabilities noted in 1.3 and 2.1. It enforced a further discipline upon the generative phase of the curriculum-design principles, a discipline that was notably absent from Kern's view and that implied such principles would not necessarily be transferable to older cohorts of learners without modifications made with recourse to their characteristics and needs. The absence of this discipline does not imply a criticism of Kern's thinking or that his view may be inappropriate to serve as an organising theory; rather, it highlighted a potential pitfall in planning for implementation of an MLL Approach – that one size would not fit all.

Kern was clearly alert to this idea that literacy is purpose-sensitive, dynamic and variable across and within discourse communities, but he did not make any allowance, affordances or convey any sensitivity that could directly satisfy the varying needs and foci necessary to support planning for learners beginning to grapple with the task of becoming 'literate'. He was, by his own admission, speaking of and to the world of secondary and post-secondary teachers and learners.

The paucity of ideas and evidence to guide pedagogy for learners who had to come to grips with a new kit bag of sounds and symbols, of conventions and principles, of stories, texts and genres at the same time as they were acquiring those of their primary language was palpable. The many significantly monolingual community contexts in Australia were another complication. The intermediary task that was required to enable the organising theory to align with, and guide selection of, methods and techniques, tasks and activities for cohorts across varied settings was to generate curriculum-design principles for action that could



account for the situated context of learning that was hitherto absent from Kern's view, by taking on board developmental theory in addition to Kern's definition.

The idea of stage-like boundaries, or indicators, offered a clear pathway forward, one capable of aligning the adopted working theory with developmentally appropriate methods and techniques, tasks and activities. Such a pathway also hinted at the possibility that an MLL Approach could be available to teachers and learners at any level of complexity by reframing the curriculum-design principles in light of the skills, understandings, experiences and tasks for the identified cohort of learners: their boundaries. What is taken to be axiomatic by an MLL Approach would not need to change, nor the notion of principles for action. An MLL Approach, to be effectively manifested in differing contexts would need the curriculum-design principles to be dynamic and open to professional interpretation, not fixed or prescribed. The notion of alignment was taking on two dimensions: one, internal alignment of the elements of the Approach and the other, external alignment with the specific setting and student readiness.

In other words, implementation of an MLL Approach with learners other than those of similar experiences and capacities to those in any study would necessitate the intermediary task being reported here to be repeated: with guiding principles operating in light of stage-like boundaries, or balances and checks appropriate to the readiness of the target cohort of students.

It was appropriate that the boundaries used in the formulation of MLL principles developed by the author for himself and teachers generally arose out of a situational, needs analysis of the junior primary, primary classes of the author, those of colleagues in the local network of schools and in relation to more general 'stage' schemas by developmental psychologists such as Piaget and Vygotsky that are routinely offered in pre-service training programs (National Research Council, 1984; Kessen, 1983; Piaget, 1977; Vygotsky, 1962). It was established in general that junior primary and primary students could not be assumed to have:

- a. An oral language basis in the second language.
- b. A sufficient oral language basis for general comprehension tasks and classroom instructions.
- c. Developed an awareness of the relationship between sounds and symbols.
- d. Developed the ability to discriminate sounds.
- e. A meta-understanding of language operating principles generally or language conventions for their first language.
- f. A metalanguage for talking about language and literacy tasks.
- g. A developed automaticity in reading or writing.
- h. An awareness of culture at an individual or societal scale.

- i. An appreciation of 'otherness'.
- j. A capacity to reflect critically on experiences.
- k. A bank of life experiences sufficient to drive the (creative) development of different texts.
- l. An understanding of the selective, normative relationship between cultures and genres, genres and texts.
- m. Sufficient development of the underlying neural architecture, or neurobiology, that subserve reading and writing (in particular, a discretely distributed network involving Broca's area, the planum temporale and the occipital lobe).
- n. Sufficient development of the neural networks that subserve attention (notably, myelination of the dorsolateral prefrontal cortex).

These stage-related boundaries were blended into the selective discipline that was applied to the generative iteration of the MLL principles used in the author's classrooms.

### **2.2.2** *Messages from an expert-research network: theories that inform the MLL Approach's curriculum-design principles*

The discussion thus far has referred to the use of principles as a way of ensuring disciplined thinking and design throughout a curriculum development (implementation) cycle. These curriculum-design principles represent a bridge from theory to practice. They point to things to be done in a certain way, revealing theory and evidence as reasons for activity. Both using literacy skills and the teaching of their uses are key human activity patterns. They are inevitably patterns of tasks, great and small. What has been dealt with in the previous section is necessarily related to the analysis and definition of key tasks. The schemes from Anthony and Kern, and the above list of developmental performances identify and organise action by analysing tasks, in terms of key tasks of a more comprehensive type encompassing smaller tasks in a generally hierarchical fashion. But tasks cannot merely proliferate. The principles take theories of languages, of literacy and of development as 'working theories' for languages curricula, guiding selection of tasks of methods and tasks of techniques.

In addition to, and within, what has been offered as a general framework for literacy and its development are five rigorous, broadly accepted cognitive-linguistic and neuroscientific theories. These constitute the core task-analytic message complex that offers supporting evidence and direction for achieving the aspirations of the author through the initial design and iterative development of the MLL Approach:

1. The Language Constraint.
2. The Linguistic Interdependence Hypothesis.
3. The Common Underlying Proficiencies Hypothesis (CUP).
4. The Linguistic Coding Differences Hypothesis (LCDH).
5. The Universal Phonological Principle (UPP).

These empirically tested theoretical messages directly influenced the focus of classroom action for Spanish teaching in the author's school. The first of these theory-based messages concerned the notion of linguistic universals while the remaining four concerned the notion of learning transfer.

As noted in section 2.1, this idea of universality was a central concern of Chomsky (1965). He asserted that all human languages are fundamentally innate, sharing the same universal principles. He contended that the grammars of human languages do not vary freely, especially with regards to syntax. Chomsky's message implies that the class of possible human languages, as opposed to animal forms of meaningful expression, is dramatically constrained by complex general principles (such as structure dependence) that reflect innate sensory perceptions of the world. These principles do not have any immediate counterparts in other cognitive domains and do not occur randomly or accidentally; they correlate with specific neuronal activities (Moro, 2008).

*Languages, therefore, resemble men (sic) in this respect, that, though each has peculiarities, whereby it is distinguished from every other, yet all have certain qualities in common. The peculiarities of individual tongues are explained in their respective grammars and dictionaries. Those things, that all languages have in common, or that are necessary to every language, are treated of in a science, which some have called Universal or Philosophical grammar.*

Beattie, 1788

This gives rise to the notion of a general Language Constraint when reading, the first theory-based message. Put simply, this constraint establishes that when a person encounters printed words in any language, she or he understands their meaning within the context of the language, not as signs that derive their meaning independently (Perfetti, 2003; Perfetti et al., 2005). This theory calls for a classroom environment that ensures a rich exposure to comprehensible input in the (target) language that can be aided by early attention to high-frequency, functional, formulaic and task-based (thematic-conceptual) language. This message encourages classroom teachers and learners to begin using the second language for everyday activities and interactions and it further supports the use and importance of culturally authentic and appropriate language learning tasks.

The key premise of the Language Constraint is that oral language knowledge is a prerequisite for comprehending and composing oral and written texts. In the context of an MLL Approach what is germane is to view phonics (phonic decoding/recoding & encoding) as core cognitive skills underpinning reading and writing abilities (orthographic mapping and the self teaching mechanism that enables independent development of a sight vocabulary/orthographic lexicon; Ehri, 2014; Share, 1995) and oral language development as the basic facilitator of understanding/comprehension and composition (semantic mapping and word knowledge). This is a clear match with the Science of Reading and Writing (see

Gough and Tunmer, 1986 on the Simple View of Reading; Berninger 2002 on the Simple View of Writing; & section 2.3.3 below).

The second and subsequent theory-based messages concerned transference. The theoretical concept of language transfer has a long history in second language research but *“(d)espite its centrality, however, there is little agreement as to what constitutes transfer, partially because of the constantly shifting views of second-language learning – what is learned and how it is learned”* (Koda & Zehler, 2008 p70). Contemporary syntheses of research on second-language literacy development suggest a broadly accepted definition of transfer to be the ability to learn new language and literacy skills by drawing on the previously acquired resources (August & Shanahan, 2006; Riches & Genesee, 2006). Likewise, the notion of prior experience is becoming seen as more like a fund of knowledge, skills, and abilities that is available when developing literacy skills in a new language (Riches & Genesee, 2006). In these newer conceptualisations the message is about which cognitive and linguistic resources can become available to second language learners when learning the new language as well as developing literacy skills in that language, rather than an ill-formed and unsubstantiated message that first language influence is either negative or positive.

Speculation about language transfer arose in the form of two key theories, one from Cummins (1979, 1984) and the other from Sparks and Ganschow (1991, 1993, 1995). Working in the field of bilingualism, Cummins proposed his ‘linguistic interdependence’ hypothesis (Cummins, 1979, 1984). This is the second theory-based message and it claimed that second language acquisition and literacy skill development are partly dependent upon literacy competencies in the learner’s first language at the point Cummins referred to as the ‘time of critical exposure’. In the interdependence hypothesis he argued that language skills would transfer from the first to the second language if there were sufficient exposure to the second language and the motivation to learn it. In the related threshold hypothesis, he reasoned that if a student’s first language competencies were low, then competence in the second language would also be low. Cummins based these messages on studies of reading skills in language minority and immigrant child populations in which findings showed a high correlation between first and second language reading competencies (Cummins, 1979). Cummins’ ‘Common Underlying Proficiencies Hypothesis’ amplifies these messages further (1991). This is the third theory-based message. It claimed that knowledge and skills established in one language are an available resource for the learning of subsequent languages: that knowledge and skills can be readily transferred or used across languages. Evidence from his research in support of the interdependence hypothesis substantiated this claim. There are a number of subsequent studies in the published literature by Cummins and

others that supported these hypotheses; for example, Verhoeven (1994) tested the hypothesis with a group of Turkish children in the Netherlands by investigating the extent to which abilities in a first language are predictive of similar abilities in a second. His findings have provided positive evidence for the interdependence of first and second language phonological, literacy, and pragmatic skills.

Similarly, Sparks and Ganschow's Linguistic Coding Differences Hypothesis (1995; Sparks, 1995) claims that both first and subsequent languages learning depend on basic psycholinguistic mechanisms that are analogous for all languages. This is the fourth theory-based message. The evidence "...suggests that a universal thread exists in learning dual languages, despite dissimilar orthography, phonology and writing systems" (Pae, Sevcik & Morris, 2009, p374). An implication of this for classroom pedagogy is that tasks and activities that support the learning of one language should be operable in the learning of other languages. This is the fundamental prediction of the LCDH: that languages' learning depends on shared language-learning mechanisms that are, ipso facto, universally recruited.

The literature from the cognitive neurosciences is equally clear: a consistent pattern of neuronal architecture is recruited in the left hemisphere of the brain for languages and literacy activities irrespective of orthographic variations (see below: Sousa, 2006, Perfetti, Landi, & Oakhill, 2005; Schumann et al., 2004). As soon as neurological correlations are brought into the argument, the importance of a sophisticated task analysis from behavioural data and experience is seen. Without knowing the task demands, there is little to correlate with the neurological system. Once a correlation can be established, there can then emerge from neuroscience useful feedback to the task analytic scheme and a measure of confidence that important preconditions and capabilities have been determined and defined clearly enough to serve for intervention planning and its development.

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Figure 1: Three neurological regions critical for a reading brain (Sousa, 2006, p87)

The Universal Phonological Principle (UPP) responds to both messages, of universality and transferability. It states that word reading activates phonology at the most basic level of language allowed by the writing system: phoneme, syllable, morpheme, or word (Hai & Perfetti, 1998; Perfetti et al., 2005). This is the fifth theory-based message that is understood to imply that word reading and transcription benefit from both phonemic awareness and an understanding of sound-letter correspondences (grapho-phonological correspondences – GPCs, or phonics). These studies also demonstrated that phonemic awareness and phonological skills (common aspects/elements) are a universal foundation for becoming (bi)literate that are most effectively developed through global and systematic routines that build the ability to transfer the fundamental phonics-based skills for orthographic mapping (Ehri, 2014): global in the sense that phonemic awareness and phonological skills were considered to also benefit from rich language activities (such as interactive teacher read-alouds), and systematic in that instruction is both clear and organised so that students can develop and practice a coherent understanding of the concepts (GPCs) being taught in and across languages, moving from small, regular units to irregular and increasingly complex morphosyntactic units. It is a process that lends itself to analogic reasoning as will be discussed in this chapter.

The UPP supports an argument for an integrated approach to phonics instruction that is systematic and sequential, beginning with activities that develop awareness of each language's sounds and GPC principle(s). That is, activities which support learning:

- That words are made up of sounds (phonemic awareness).
- That sounds have orthographic representations (graphemes/symbols).
- The sounds associated with each grapheme (symbol and symbol clusters).
- The regular and irregular correspondences between sounds and the graphemes that represent them (symbols).

Again, evidence in support of the UPP from psycholinguistic and neuroscientific studies supported the assertion that "... effective phonics instruction features systematic activities and materials that are designed so that teachers can introduce a targeted letter-sound correspondence" (Villaume & Brabham, 2003, p481). The following brain scans provide a before and after interventions snapshot of struggling readers (Figure 2). These images add to the evidence in support of the importance and effects of explicit and systematic phonics instruction for developing key reading abilities like rapid orthographic mapping because these were the reported form that the 'effective reading interventions' took (Shaywitz, 2003). Moreover, it has been noted that this pattern of neurophysiological development is consistently observed in accomplished readers irrespective of their language (Perfetti, 2003; Koda & Zehler, 2008).

**This image has been removed due to copyright restriction**

Figure 2: Brain scans before and after systematic intervention (Sousa, 2006, p95)

While this literature was useful in establishing an evidentiary and theoretical basis for discussing the notions of universality and transference with respect to the objects and actions under scrutiny, little guidance was afforded to teaching methods, to acts to be employed in the concrete setting of the classroom, other than some support for the general literacy task analysis. Subsequent discussion and analysis on aspects of practical pedagogy for literacy-based languages programs uncovered two abiding frameworks for guiding classroom action: contrastive analysis (Conner, 1996; Ellis, 1994; Lado, 1957; Odlin, 1989) and linguistic interdependence (Coady & Huckin, 1997; Cummins, 1979; Diaz & Klingler, 1991; Verhoeven, 1994). Both of these frameworks provide messages that could support pedagogical application of the notions of universality and transference.

The first framework, contrastive analysis, maintains a central concern with commonalities between languages, but in this case the core message relates to structural similarities between languages (Chomsky's notion of a Universal Grammar) themselves rather than skills (operations). Within this perspective, considerations of universality are foremost: what structural (e.g., phonology, morphology, syntactical, semantic) similarities and differences exist between the languages that could assist or hinder the learning of the languages through an analogic process of comparing and contrasting (Odlin, 1989). Contrastive analysis in this usage means attending to these similarities or differences to scaffold successful learning.

The second framework, linguistic interdependence, evolved out of hypotheses on common underlying proficiencies, linguistic interdependence, and thresholds (Cummins: 1979, 1984, 1991). Its development was aided by Sparks and Ganschow's linguistic coding differences

hypothesis (1991, 1993, 1995). The core message is that all languages are interdependent in a learner's brain: that is, they rely upon common underlying proficiencies that reside in a single central processing system from which all languages operate. Exactly what these common underlying proficiencies are remains unclear (e.g., Edelsky et al, 1983; Genesee, Lindholm-Leary, Saunders & Christian, 2006; MacSwan & Rolstad, 2005), but they are interpreted here to mean language-operating proficiencies, as opposed to other specific knowledge systems or general cognitive abilities.

The literature on language transfer can be viewed from within one or both of these frameworks (Melby-Lervåg, Lervåg, 2011), the core message being that there are potentially tremendous gains to be had from teaching a second language jointly with first language literacy teaching. Thus, as noted above, through an ongoing series of movements from the concrete to the abstract and back again these messages from basic science were informing the author's self-talk such that a series of curriculum-design principles for guiding the teaching of Spanish (and then by extension, languages generally) for measurable literacy outcomes in an Australian primary school context was emerging and enabling the conceptualisation of a Multilingual Literacy Approach (MLL).

The small network of research experts near at hand, principally the literacy mentor and her former research colleague (see section 3.4.1), participated in dialogues which allowed the much more extensive network represented by published research literature to be communicated and be assessed as able or not to contribute to the ongoing definition of the Approach, principles and general or specific tasks at various levels. Equally, at all times in the background, messages from the 'instructive' ongoing activity of the author's teaching were available to sift competing expert approaches, schemes or formulations. The communication from this research expert network was introductory to the communication of concrete practice that, from the nature of these things, was already developing its own momentum through the author's daily teaching.

From the consideration of the beliefs, assumptions and theoretical arguments reviewed above, the working curriculum-design principles were identified as follows:

1. The notion of universal schedules, identifiable and usable for languages and literacy learning and teaching – e.g., common developmental and common underlying proficiency aspects of language, language learning, and language use.
2. In tandem with the principle of universality in language structures, use of developmental scaffolding of language and literacy learning tasks, in a single scheme offering collaborative programming opportunities both within and between languages; in-step planning.
3. A naturalist-immersion 'purposeful or real-life' classroom environment for comprehensible language development opportunities that are increasingly complex – encouraging the use of translanguaging techniques.



4. The developing use of a metalanguage for comparing and contrasting language systems – with the use of techniques and transfer tasks.
5. The use of task analysis programming defining tasks and supporting the selection and sequencing of teaching foci and practices that satisfy the purposes and outcomes of multilingual literacy-based teaching programs.
6. Systematic assessments, including criterion-referenced diagnostic assessments tied to evaluation, feedback, planning and recasting of multilingual programs.

These principles are informed by the five specific theory-based messages that were organised above under the two overarching theory-based messages of linguistic universals and learning transfer, by developmental theory and the core instructional elements identified through a task analytic review of relevant research and theory by the three National Inquiries into the teaching of literacy presented below in section 2.3.3. An assessment principle is included as this arises from the overall task analytic emphasis to be applied to task sequencing, teaching practices and patterns of practice (see section 3.5.1). These principles operationalised in this study of junior primary / primary classes had the stated purpose of guiding the disciplined selection of developmentally appropriate methods and techniques aligned with the working theory (or approach).

### **2.2.3** *Identifying further messages: methods that inform pedagogy and instructional routines*

While there is no readily identifiable account of the precise number of methods in common use, two widely regarded books (Larsen-Freeman & Anderson, 2011; and Richards and Rodgers, 1986) provide between them a list of eleven such methods. They are (in alphabetical order): Audiolingual, Communicative, Community Language Learning, Direct, Grammar-Translation, Natural Approach, Oral Approach, Silent Way, Situational Language Teaching, Suggestopedia, and Total Physical Response. An argument can also be made for the more recent emergence of a twelfth: Intercultural.

Herein arose a professional dissatisfaction, with its basis in what Rivers (1991, p283) rightly points out is a mirage: that what seems to be a dramatically new method is often nothing more than a variant of existing methods presented with “the fresh paint of a new terminology that camouflages their fundamental similarity.”

At the heart also of this overall dissatisfaction was the view that conventional methods overlook “the fund of experience and tacit knowledge about teaching which the teachers already have” (Larsen-Freeman & Long, 1991, p35). It became apparent, then, that any linkage between theory and practices provided by the principles needed to promote in teachers the ability to develop an MLL Approach in relation to their own teaching practice and context: to self-observe, self-analyse, and self-evaluate how they implement the Approach with a view to effecting desired changes.

Within a developing MLL Approach the concept of methods, guided by principles, becomes synonymous with the term macro-pedagogy, itself grounded in the view that “the relationship between theory and practice, ideas and their actualization, can only be realized within the domain of application, that is, through the immediate activity of teaching” (Widdowson, 1990, p30). Thus, macro-pedagogy focuses on how methods or instructional frameworks can be shaped and reshaped by teachers as a result of observation, self-analysis, and self-evaluation rather than the prescription of a given method for an idealised setting.

One can specify some very general imperatives to bear in mind, and to be utilised within appropriate developmental boundaries (see 2.2.1). They are insights rather than prescriptions and can be drawn from Kumaravadivelu’s research governed by the belief that instructional frameworks, or curriculum developments expressed at the method level, must emerge from classroom experience and experimentation (2003, p40). The macro-pedagogy messages for teachers as they plan for teaching and learning within an MLL Approach to languages and literacy education indicate that their program should:

1. *Maximise learning opportunities*; identify and adjust an appropriate mix of control and facilitation of learning.
2. *Minimise perceptual mismatches*; ensure shared understanding of what constitutes a learning opportunity and avoid rigidity to planning.
3. *Enable negotiated interaction*; gradually and appropriately divest control over tasks and activities.
4. *Encourage learner autonomy*; empower learners to exercise purposeful control over their learning (this does not automatically imply independence).
5. *Nurture language awareness*; explicitly attend to the formal and functional properties of languages.
6. *Stimulate instinctual heuristics*; provide rich tasks and activities that cause learners to infer, understand and crystallise underlying patterns governing grammatical rules and communicative use.
7. *Situate linguistic input*; provide rich tasks and activities that demonstrate how vocabulary and conventions are shaped and reshaped by contextual, paracontextual, linguistic and paralinguistic dynamics.
8. *Integrate language skills*; while isolation and explicit teaching of sub-element skills is required there is also an abiding need to holistically weave together listening, speaking, reading, viewing and writing skills within and across languages.
9. *Integrate languages*; given that language is a primary medium of thought it is imperative that learners are called upon to use their growing interlanguage by promoting age-appropriate translanguaging discourse, to cause deep learning through opportunities to compare and contrast language systems.
10. *Promote social relevance*; in order to act effectively and as intended, programming must account for the social, political, historical, and economic conditions affecting the learners, teachers and systems. However, it should remain undistracted from the main task.
11. *Raise cultural consciousness*; an important element for ongoing and cumulative language and literacy growth is promotion of purposeful engagements with ‘otherness’. Programs must activate critical reflections on learner identity through

tasks that blur cultural boundaries and collide worlds of discourse. Again, this should support, not impede, the main task.

Based upon Kumaravadivelu, 2003

An important difference between these messages and what was generally at work in the field is the call for integration. These messages were at odds with what was happening in the author's school, were at odds with current pre-service programs in South Australia and were at odds with both the prescribed curriculum of the time (SACSA) and the emerging Australian Curriculum. Commonly, languages programs were provided in isolation, during classroom teachers NIT (Non-Instructional planning Time) and focused on cultural understanding and the performance of basic social interactions.

Cummins challenges this squandering of multilingual resources in mainstream contexts (2005). He argues there is an abiding need to define instructional strategies that teach explicitly for two-way cross-language transfer. Anderson (2008) called for flexible approaches to pedagogy to respond to multilingual contexts that do not fit easily into existing paradigms. Lin and Martin (2005) have argued for more multilingual pedagogic and curriculum research. This is the drum that was beating as the macro-pedagogy frame of an MLL Approach was forming. Support was apparent at this 'method' (practice and procedural framework) level.

#### **2.2.4 *Bridging to practice: principles and consideration of methods (macro-pedagogy)***

The boundaries used in the formulation of the MLL principles presented in 2.2.1 arose out of a situational, needs analysis of the author's junior primary, primary classes, those of colleagues and in relation to more general schemas by developmental theorists.

These boundaries catalysed the selective discipline that was required for the generative application of the MLL principles in JP classroom action.

*As fashions in language teaching come and go, the teacher in the classroom needs reassurance that there is some bedrock beneath the shifting sands. Once solidly founded on the bedrock, like the sea anemone, the teacher can sway to the rhythms of any tides or currents, without the trauma of being swept away purposelessly.*

Rivers, W, 1992, p373

Axioms (theories) are the bedrock, and principles provide the 'swaying' linkage in this analogy. Methods and techniques, on the other hand, are more akin to the tides and currents.

Using the aforementioned design principles (see 2.2.2) to coax the macro-pedagogic frame into life meant that the positioning and use of a target language in relation to general tasks and activities and for promoting exploratory talk in classroom contexts were vital concerns. An initial position needed to be adopted. It can be stated thus: that the brain does not

compartmentalise languages. Learners move across languages in natural interactions, learners naturally mix-production to achieve communicative goals, mixed production has not been shown to generate 'contamination' nor do bilingual learners demonstrate any deficiencies in either language compared with monolinguals. Learners draw on whatever linguistic resources they have to derive meaning (Schumann et al., 2004; Perfetti, et al., 2005).

The overarching consideration for macro-pedagogy planning is integration: that learners' initial and default medium of thought, their primary language, should be harnessed in the learning of L2 and that L2 should be harnessed in the mainstream classroom to bring the dominant language and culture out of the abstract realm, for contrastive and analogic purposes. Translanguaging as a general practice is at the method or macro-pedagogy level, and as such guides the devising, analysing and defining of the specific transfer tasks used in teaching activity, which is the move to micro-pedagogy.

### **2.2.5** *Identifying further messages: techniques and tasks*

Numerous second language researchers operating from a task-based perspective have developed schemes and schedules for clustering, classifying and presenting a dizzying task array (Candlin, 1987; Crookes, 1989; Crookes & Rulon, 1985; Doughty & Pica, 1986; Foster & Skehan, 1996; Norris et al., 1998; Norris et al., 2002; Nunan, 1989; Robinson, Ting, & Urwin, 1995). What is important to the progress of an MLL Approach is to identify guiding research messages for teachers in the selection of tasks and activities that are in keeping with the overall axioms, boundaries, imperatives, methods and aspirations of the Approach. A disciplined, principle-driven process of curriculum design, and curriculum development cycle in action requires this.

What could be envisaged was already implicitly operative: a task analytic operation at increasing levels of detail. The literature on such matters is complex but also decidedly informative. Long (1985) uses the feature 'language action' to categorise tasks but he also refers to the notion of 'pedagogical task' to determine sequencing. The parameters he uses are: presupposed knowledge, location in time and space, number of parties involved, pace and duration. Similarly, Skehan (1996) focused on descriptors of task difficulty and task complexity: parameters included code complexity, cognitive complexity and communicative stress. Norris et al. (2002) identified three processing factors: code command, cognitive operations and communicative adaptation. The salient point derived from these three taxonomies is that tasks, strategies and techniques can be categorised and sequenced based upon analysis of the dynamic interaction of a definable set of linguistic, cognitive and

sociocultural parameters reinforcing and reflecting Kern's literacy approach (see also Weir, 2004).

The discussion will be extended in the following section specifically for Multilingual Literacy teaching in the early years of schooling and the design, iteration and implementation of developmental micro-pedagogic teaching schemas (see 2.2.6). The sections immediately below now deal with fairly typical attempts by researchers to analyse and categorise classroom language teaching, in relation firstly to classroom teacher status regarding specialisation, then to specialist second language teaching, and lastly to literacy teaching in general.

### **2.2.6** *Bridging to practice: principles and consideration of techniques (micro-pedagogy)*

The approach (theories) and curriculum-design principles, together with the macro-pedagogic bounded imperatives (see 2.2.3), can specify a range of suitable task methods (practices or procedures) for teachers as they design MLL-based schemes for learning. As just noted above, each method or practice indicates the general shape of a complex of possible derived tasks and activities which further task development and analysis can define as specific teaching tasks. A crucial part of this is done 'in action' (see 2.2.3). The number of possible techniques and activities is daunting. What is of benefit is provision of a general stance towards selecting techniques and activities that are aligned to the MLL axioms, principles and methods

In an expanded view of literacy, under Kern's scheme and general developmental theory, Cognitive Theory from the Science of Reading and Writing can mesh with the Linguistic and Neuroscientific theories reviewed in 2.2.2 to support the curriculum-design principles in selecting macro-pedagogic tasks of method or practice, to guide the further analysis at the level of micro-pedagogic teaching tasks and activities. In this way alignment within MLL teaching and learning programs is maintained from axioms to activities in a manner that preserves the Approach's demonstrable regard for experience, experimentation and pragmatism. With this further task analysis for the teaching techniques and activities level one can draw into the micro-pedagogic activity framework actual developmentally informed schedules and sequences, specific transfer tasks, and the driver of contrastive analysis techniques in the MLL: specific tasks of analogic reasoning. Such activity patterns will attract further comment below. But first must come a note on how the notions of micro-pedagogy and development involve a turn not only to micro-pedagogic tasks but also to the student.

Pedagogical vernacular has a tendency to link tasks with performance goals: to what *it* is that learners should be able to do with and through language as a result of a given cycle of teaching and learning. There is a necessary distinction here between performance and

learning, the former relating more or less to observations and measurement during, or immediately after, instruction and the latter to permanent changes in behaviour, knowledge or understanding. This distinction raises the importance of selecting both instructional tasks and assessment tasks, and requires a pragmatic discipline, as goals are often predetermined by a prescribed curriculum, and resources from within the teaching and learning environment heavily influence what can be planned and assessed and when. The salient point is that assessment tasks need to be aligned with instructional tasks if they are to afford the teacher evidence of what has been learnt and what students are now ready to learn. And that sequencing of instructional and assessment tasks must move beyond performance-based considerations to considerations of long-term learning. As a result, the following general questions can guide identification and selection of all tasks and activities, in essentially a task analytic operation.

1. *Skill*: does the learner have to speak, listen, read, view or write (while 'language action' is more apropos in relation to natural settings than 'skill', this distinction maintains value for professionals in the field entrusted with the task of ensuring learners can 'see' what *it* is they are trying to achieve, to minimise complexity)?
2. *Genre & text type*: what type of message has to be conveyed or understood and how (matters of form and function)?
3. *Information processing*: what level of processing is required by the linguistic input?
4. *Interlocutor*: with whom is the learner communicating?
5. *Contextual support*: what cultural and relational cues and resources are available in the communicative context?

In the context of the general Approach and developmental 'boundaries' identified in this Chapter for foundational and emergent learners of language and literacy (see 2.2.1 – 2.2.4), the following tasks take on importance for planning, assessment and programming:

1. Activities to build oral language patterns (pragmatics, listening and speaking skills).
2. Activities and games to develop and reinforce phonology and vocabulary.
3. Activities for mastery of sounds, systematic (synthetic) phonics and morphology.
4. Activities that cause the development of a metalanguage (decontextualised) for analysing differences and similarities across language systems (analogic reasoning and learning transfer).
5. Activities that promote mastery of the languages' grapho-phonological correspondence and syntactical principles (phonemic, syllabic, logographic; phonemes, morphemes, syllables, words, phrases, sentences and genres).
6. Activities to build oral reading and writing fluency (rate, accuracy and intonation/style).
7. Activities that develop and reinforce comprehension and composition strategies.
8. Integrated use of these activities across languages: translanguaging.

Selection is important, but sequencing determines the likelihood that instruction will give rise to long-term learning. To do this, the job at hand involved analysing specified tasks to determine: which linguistic, cognitive and cultural elements are needed; which differing

environments would best support practice that improves recall; spacing between instructional tasks, and instructional tasks and assessment tasks; interleaving of instructional tasks (rather than massed practice); and, how and when to leverage opportunities for activities governed by overall practices or methods such as translanguaging and contrastive analysis.

In discussing micro-pedagogic task analysis, it is again tempting to provide a set of routines to follow along with a yardstick to measure the amount and complexity of each element to add at each step. However, this would undermine a key strength of the Approach: adapting and assimilating pre-existing, effective classroom tasks and practices as well as indicating new ones.

Macro and micro-pedagogic tasks are organising agents for the long-term acquisition of target input and the development of targeted skills. They are, in the context of school-based languages and literacy programs, potential real-world communicative events but at the same time vessels of discrete linguistic, cognitive and cultural elements. This Approach treats them as such. To greater or lesser extents, the job of task selection is usually straight forward: the prescribed curriculum along with the accumulated aspirations of the school community for the program dictate those tasks that the program would be expected to provide instruction on.

Scaffolding is a slightly more complex proposition. The complexity arises on two fronts. First, what might a learner need to know and be able to do in order to attempt a specific task? Second, in what order might tasks be sequenced to minimise cognitive loading and provide the greatest leverage to learners?

This first point drives at considerations that go to the heart of successful task-oriented teaching: ensuring that what is planned for falls within the learner's 'Goldilocks Zone' (Kidd, Celeste, Piantadosi, Steven, Aslin, & Richard, 2012). In essence, what is called for is a discriminating analysis and definition of the sub-elements of the given communicative task. It has a diagnostic flavour. There are schemas available for such undertakings but what is important in this account is that teachers need to take a dispassionate stance towards analysing the resources demanded by the task and then determine if and in what form adaptations and/or scaffolding may be required. Consideration is directed towards balancing the linguistic, cognitive, and sociocultural demands of the task with those same categories as resources within the learner and learning environment.

The entry point for analysis is use of the five questions noted above (p35). The ordinal sequence offered is not altogether random; however, each one can be effectively dealt with in isolation. Indeed, the first is of greatest significance in the context of this study because it

cannot be assumed that learners have developed certain skills. The subsequent questions gain benefit from the progressively complex ways in which they interface with the first.

The next consideration is sequencing. Attention is drawn to the orderly presentation of micro-pedagogic tasks and activities such that opportunities for cumulative growth are afforded. Again, a considerable array of commercial schedules are available, but the imperative is to ensure that planning using the MLL Approach reflects the import and role for stage-like schedules: hitting the Goldilocks Zone time and again. While the development and use of such tools is commonplace, of vital importance are issues of recycling and repetition: cycles of increasingly complex retrieval practice in differing contexts. So special consideration has to be given to the development of schedules. The key message is that schedules of tasks require deliberate development to ensure creative retrieval and recycling of linguistic, cognitive and cultural items within and across languages rather than mere repetition.

The selection and use of appropriate transfer tasks has merit here. Appropriate selection, of course, lies in intelligent practice and depends heavily upon the professional judgment of the teacher in the moment. Transfer tasks are those that involve recall and appropriate application of prior learning to novel learning tasks. Scaffolds in the form of cues, prompts and designs based on previously learnt linguistic universals will aid these tasks, particularly while learners are developing their metalinguistic knowledge and capacity for analogic reasoning. Such scaffolds include note taking in English while listening to or reading L2 texts; translation and cognate instruction; mixed-production discourses and instruction; bilingual class books (including dictionaries); and interactive viewing with subtitles and bilingual literature. Critically, the role and use of each language is to scaffold the learning of the other and as such, the art of implementation is knowing when to prompt use of English in the L2 setting and when to prompt use of the L2 in the English setting. Guidance on this matter relates to establishing a level of desirable or productive difficulty using a retrieval practice frame with diminishing cues for activation and application of prior learning. In general, translanguaging methods are more prevalent at the beginning of new learning, then transitions towards retrieval cues that are gradually diminished until independent use of the target language only is possible.

This general patterning in the use of translanguaging practices was developed through a process of self-reflection, at times aided by pre-existing schedules used for the teaching of English or as recorded and developed for the Spanish program that informed the initial development of the MLL Approach. Translanguaging and transfer tasks must be encouraged as a general scaffold but continually revised in relation to the task, the stage of the teaching



and learning cycle and the level of linguistic and literacy skill sophistication of the learner(s) and teacher(s).

There are then certain elements within the literature on learning transfer that have a bearing on the treatment of the key notion of transference as a lever for learning (and a learning advantage) through the MLL Approach. The initial focus in the literature centred on the observation of a general bilingual advantage that was thought to be a product of improved executive function (Bialystock, 2017). The mechanism hypothesised to promote this learning advantage centres on observations of bilinguals' improved planning, managing, and executive goals relative to monolinguals that were substantiated through tests of inhibition (Hernández, Costa, Fuentes, Vivas, & Sebastian-Gallés, 2010), cognitive control (Bialystok, Craik, & Luk, 2008), and more recently, spatial processing (Morales, Calvo, & Bialystok, 2013), attention (Brito, Murphy, Vaidya, & Barr, 2016), and working memory (Grundy & Timmer, 2017). In general, the purported advantages are generalised improvements in metacognition and working memory substantiated on the basis of identifiable contributions to observed improvements in reading and mathematics confidence and performance.

Since then, some researchers have begun to question the validity of a generalised bilingual advantage (Nichols, Wild, Stojanoski, Battista, & Owen, 2020). Generally, these investigations have been grounded in three key findings: a meta-analysis on the cognitive advantages of bilingualism by Lehtonen, Soveri, Laine, Järvenpää, de Bruin, & Antfolk (2018); the identification of a publication bias towards studies that supported the bilingual-advantage theory, thereby "casting doubt on the validity of any review or meta-analysis of the published literature" (Nichols et al., 2020, p2); and, a population study of 11,041 participants on an array of 12 executive tasks that found "...the size of the positive bilingual effect...was so small that it would likely have a negligible impact on the cognitive performance of any individual" (ibid. p1).

This finding is not entirely novel. For example, Melby-Lervag and Hulme's (2013) meta-analytic review of working memory training (including higher level cognitive functions like reading comprehension and metacognition) found improvements in tasks similar to those taught, but those improvements were not found to generalise to other tasks, general academic performance, or to be maintained over extended periods of time. This specification is more representative of the general body of research that accepts the idea of domain-specific benefits, and the qualified possibility of general benefits, from instruction (e.g., Adams & Adams, 1958; Bol, Hacker, O'Shea, & Allen, 2005; Carpenter et al., 2019; Lichtenstein & Fischhoff, 1980; Nietfeld & Schraw, 2002; Renner & Renner, 2001; Sharp, Cutler, & Penrod, 1988). This literature offers relevant evidence and argumentation for

consideration of transfer tasks and practices within the MLL Approach and this study (see also 2.2.2).

But, given the ongoing debate about a bilingual-advantage there is value in clarifying the definition, use and expected 'learning advantage' of transfer tasks and practices within the MLL Approach. In particular, it is necessary to clarify the basis on which tasks are classified and will be communicated as similar or general and how the notion of transference as a mechanism for leveraging a learning advantage with either or both types of tasks is conceptualised and to be guided into action by the MLL Approach. The key point is that the MLL is mainly concerned with specific and similar-domain tests, in expecting or seeking to promote transfer.

In a study by Cartwright, Bock, Clause, Coppage, August, Saunders, & Schmidt (2020), the notion of a learning advantage was defined in terms like those used by Melby-Lervag and Hulme above: on the basis of near- and far-transfer effects (similar or general). Near effects are described as improvements that are a product of task-specific strategies for related tasks within the same domain of learning, whereas far effects are described as (generalised) improvements in unrelated tasks and domains of learning.

In section 2.2.2, transfer was stated as the ability to learn new language and literacy skills by drawing on previously acquired resources (August & Shanahan, 2006; Riches & Genesee, 2006). The premise is that the important points of reference are the task and/or the structure(s) of the language(s). The idea, arrived at on the basis of the literature reviewed in 2.2.2 and above, is that near transfer can be achieved when a language structure and/or language or literacy learning task is manifestly similar within or across languages and is effectively learnt in one, such as the languages' orthographic mapping principles (e.g., alphabetic, syllabic, or logographic) or phonological decoding skills. And effectively learnt is a critical notion that refers to repeated and varied learning opportunities that foster the development of learners' metacognitive understanding of a language structure or control of a given task in one language to the point at which they are able to recognise the nature and demands of a similar structure or task in that or another language and can then retrieve and apply their prior learning to the new language learning situation (that point is usually a move to automaticity).

Effective prior learning that leads to automaticity, confidence (sense of self-efficacy) and metacognitive control of linguistic knowledge or task performance constitutes the condition considered necessary by the MLL Approach for promoting independent transfer of 'near' learning to similar knowledge or tasks within and/or across languages with the same structure(s). To appreciate the possibility for 'far' transfer, it is important to turn to the

guidance to be offered by the MLL Approach in respect of the key mechanism of transfer identified in section 2.2.2: analogic reasoning.

The general guidance is that learning transfer can be scaffolded through prompts, cues and formative feedback which draw learners' attention to similarities in the languages' structure(s) and/or language and literacy learning task(s), for analogic reasoning, in their task performance, using and demonstrating appropriate adaptations and applications of prior learning (from students' current knowledge, skills and/or strategies). By adopting this active role there is then the potential for teachers to facilitate a learning advantage for those tasks that, from the perspective of students, may be considered not only 'near' but also 'far'.

Summary analysis of this discussion and the position on learning transfer (Lt) encouraged by the MLL Approach maintains that it is a direct function of relevant prior (learning) experiences (PE) and teacher scaffolding (TS) of the tasks of analogic reasoning (AR), which can be expressed in algebraic form as:  $L(t) = f\{PE, TS, AR\}$ . From this equation it follows that an increase in the quality of one or multiple variables improves the likelihood of transfer and a learning advantage while a decrease in the quality of one or multiple variables can diminish the likelihood of transfer and a learning advantage.

This idea that teachers can facilitate both near and far transfer is not without precedent. Cartwright et al (op. cit., 2020) investigated the effects of an executive function (EF) intervention delivered by teachers adopting similar roles during monolingual reading-specific small-group instruction of 57 teacher-identified struggling readers (where EF is generally synonymous with metacognition). They found "...the reading-specific EF intervention produced medium to large effects on reading-specific and domain-general EF skills as well as on researcher-administered and school-administered reading comprehension measures, even after grade level (and thus reading teacher), verbal ability, children's age, and respective pre-test scores were controlled" (p1).

The mechanism and key challenge for learners to recognise and grow from such learning opportunities is to apply previously acquired information to new situations (see 2.2.2). This can be decidedly difficult as noted by Nichols et al., above (op. cit., 2020), but it is arguably more so for young learners who are unlikely to have developed an overt schema for language nor an understanding of language operating principles; there is a paucity of experiences to enable the formation of linguistic or literacy analogies, to enable what has been referred to as analogic reasoning, moving from linguistic/literacy 'knowns' to linguistic/literacy 'unknowns'.

What does it mean to reason analogically? Several phases are presumed to take place related to the practice or method of analogical reasoning, including attending to relevant

information and inhibiting interference from irrelevant information, identifying relationships within and across items, and making the appropriate mappings across fields to either generate inferences and/or derive their common principles (Holyoak, 2012). There can be noted a strong parallel here with metacognition. The priority for each step is attending to shared relationships that are common to both fields or in this case, languages (Gentner, 1983, 2010). An example is helpful here.

Early opportunities for an analogic reasoning method arise in relation to syntax: specifically, punctuation and the arrangement of words and phrases to create meaningful sentences. During book-based learning activities teachers routinely draw students' attention to salient print and text features. There is a level of repeated drawing of attention to such features that is necessary for long-term learning to occur. However, when students are exposed to bilingual books there arises an opportunity for contrastive analysis, to compare and contrast the different punctuation markers used in different languages for the same purpose such as inverted question and exclamation marks at the beginning as well as end of questions and exclamatory sentences in Spanish. This opportunity to move from the abstractness of one language to a comparative context offers the possibility for deeper and faster learning of the fundamental purpose of punctuation signs and establishes a foundation for analogic reasoning of more complex elements of syntax such as noun-verb agreement and word order.

Chomsky (1965) noted great similarities across languages' syntactical structures. In particular, he observed that languages share common principles of agreement and word order. However, what he also wrestled with was the difficulty that is experienced in learning these (operating) principles. It may be significant that the contexts he was examining were monolingual. As with translanguaging practices and transfer tasks, there exists an opportunity to scaffold learning through an integrated approach with another language. This enables learners to establish clear, bounded conceptual models for operating principles, and it emerges when teachers draw students' attention to differing examples of the same principle from different languages.

One example of this is the principle of agreement in romance languages where gender is signified through changing the end of adjectives where an O generally signifies masculine and an A feminine. Thus, in Spanish "small girl" is "niña pequeña" and "small boy" is "niño pequeño". Once students are taught to notice and mark this kind of grammatical construct in one language, then other agreements, and in other languages, can be facilitated for noticing through analogic reasoning, like noun-verb and noun-article agreement (e.g., singular or plural) in many languages.

Another case occurs with word order: as teachers draw students' attention to constructing simple verb and adjectival phrases the distinction becomes clear, as does the need for acquisition of a metalanguage for talking about those differences. For example, "Mary has green eyes" becomes "Mary has eyes green" in Spanish. Often, students notice these patterns for themselves and either ask questions or progress directly to reasoning by analogy that what is at play here is the order of the subject, verb, adjective and object or subject, verb, object, adjective. The same can be argued for acquisition of phonics-based decoding strategies. The salient point is that techniques prompting contrastive analysis tasks from general analogic reasoning methods afford the possibility for improved speed, depth, retention and retrieval of new learning by offering examples and non-examples from a different or a similar language to activate and extend the attention, focus and concept mapping processes of students.

### **2.3.1** *Messages from an expert-research network: general patterns of Approaches to languages education*

Johnstone (1994) identified five generalist Approaches that he referred to as 'models' for the teaching of languages in primary school classrooms. These classifications were developed through reflection on schools where teachers were teaching a language in which they were not fluent, had not studied to a post-secondary level of qualification and were teaching learners with very limited exposure to the language outside the school. It reflects a similar situation to where this study started; languages education was enacted in the 'silo', did not develop literacy as defined by Kern and was not a consideration in classroom teachers' Approaches to English curriculum design or general classroom planning.

Johnstone's five Approaches present as a continuum of sorts: from sensitisation to complete immersion. Placing each program on this continuum is more a reflection of teachers' level of competence, and indeed confidence, in the target language than of any particular schisms or preoccupations within literature or the profession.

Brief definitions of the characteristics of each Approach are listed in the following table where the program / learning tasks distinction roughly parallels Anthony's theory / method distinction (Table 1).

The first Approach is *Awareness*. Teachers (classroom-based) aim to introduce learners to different languages with a view to demonstrating how language works that can include explorations of songs, literature and cultural facts. Systematic instruction or practice aimed at the development of specific competencies is not a focus. The *Encounter* Approach is similar and together they are sometimes classified as *Sensitisation* Approaches. This is

where learners typically encounter more than one language; learn a little vocabulary and progress to a basic level of communicative competence.

The third Approach is arguably the most common in Australia if not the English-Speaking world: *Subject Teaching*. This Approach aims to develop linguistic competence in one language and to extend the provision of that learning until at least the senior secondary years of schooling. Generally, the goal is to develop foreign language knowledge and communicative competence with intensive instruction from a specialist teacher rather than the development of a general understanding of the patterns and structure(s) of language.

The fourth Approach, *Embedding*, is usually characterised by inserting the study of language within other curriculum areas. This should not be confused with teaching other learning areas through the target language but rather programming language learning in relation to the larger scheme of the classroom. Thus, word lists, syntactical structures, text analysis and composition emerge for consideration in light of the theme(s) and genres being tackled in the classroom program. This model usually requires a classroom teacher with significant competence in the target language or some form of collaborative teaching with a teacher who does. The final Approach, *Immersion*, is where subjects are taught through the medium of the target language. This method is commonly found in Quebec, Wales, Scotland and Ireland where bilingual education is variously conducted in French, Welsh and Gaelic-medium teaching. This is a full maintenance model where a target language is both a product of learning and a medium for learning.

**Table 1: A continuum of classroom-based Approaches to languages education**

Classroom Approach to languages education	Awareness		Encounter		Subject Teaching		Embedding		Immersion	
	5% L2 use - 95% L1 use		10% L2 use - 90% L1 use		30% L2 use - 70% L1 use		50% L2 use - 50% L1 use			
	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks
	How language works.	Sharing stories and participating in cultural events.	Basic communicative competence.	Sharing stories, learning songs and participating in cultural events. Some explicit learning of functional vocab and formulaic phrases.	Academic study; ongoing development of linguistic competence.	Targeted teaching of vocabulary and syntactical units. Exploration of written genres.	Development of linguistic competence driven by curricula areas; functional.	Contextual teaching of vocab and syntactical units; thematic lists and functional phrases.	Systematic study of the language and through the language.	Systematic study of linguistic and syntactical units, progressive development of reading and writing skills; explicit examination and composition of genres and styles.

### **2.3.2** *Messages from an expert-research network: specialist Approaches to languages education*

Of importance for contrast with the Approach being developed here is the literature around the schisms that have arisen out of and driven perennial cycles of change in specialist languages curricula and languages teacher education programs over the last 50 years. It is valuable to keep in view that although new methods come into play in an attempt to address these schisms, they do not comprehensively supplant what was in place, as teachers tend to amalgamate new methods into their pre-existing schemes for teaching. And new methods have tended to be a key driver of new Approaches emerging from particular theories of language and language learning constructed in relation to views regarding how to resolve or respond to the previously stated schisms or aspirations for improvement.

The following table has applied a selective discipline to the categorisation of Approaches to languages education, but it is important to note that the lines of separation are not absolute, nor can it be said that there are absolute lines of distinctions between them in practice. Teachers adopt and adapt new methods into their pre-existing schemes rather than making wholesale transformations to both their underlying beliefs and curricula (Richards, 2009).

The origin of these schisms goes back decades, to debates about 'grammar' or 'natural' methods. In the 1960s the growing mobility and interconnectedness of workers, corporate entities and travellers created a heightened demand to learn local languages for working, trading and travelling in different countries. Languages curricula needed to change to meet societal demands. Worldwide, languages policies started to extend languages education to all children, fostering the introduction of second language programs in primary schools (Lo Bianco, 2009).

Attempts to establish policy became fraught with battles over the purpose(s) and utility of programs that illuminate the schisms in the profession. Is it to learn the language as an object of study (a linguistic focus on rules and structures)? Is it to learn to communicate for real-world purposes across language modalities (a focus on internal, cognitive strategies and skills for the performance of language functions)? Is it to learn to communicate in culturally authentic settings with other speakers of the language (a situated, social interaction focus)? Each of these purposes privileges certain theories and methods and to some degree they address the same questions about the nature of language, language learning, the roles of teacher and students as well as the inclusion and sequencing of certain tasks and materials (Nunan, 1999). However, the level of support and direction for classroom implementation provided by these theoretical schools is not what it could be. Often, there is incomplete or too general guidance provided to enable teachers to iteratively design and adapt their programs and methods aligned to a clear theoretical frame that supports the purpose of their



program. This incoherence can become a significant rate-limiting factor for learning, when a cumulative process of ongoing development needs to be maintained.

Meanwhile, researchers went about the job of producing varied, discrete studies in an attempt to address the specified purpose(s) of policy and to address specific 'problems' as stated in program evaluations: generally, responses to piecemeal recommendations. Findings from such studies served to initiate new schisms, put out 'spot fires' of program ineffectiveness created by them and to generate new 'spot fires' by focusing on one issue or schism to the exclusion of alternative views. Negative effects were amplified in practice when researchers did not locate their findings with respect to the purpose of a program presented within a comprehensive Approach in the sense of Anthony's schema: to considerations of theory, methods, techniques and the overall alignment between them.

An outcome of these activities has been the accrual of a sufficient number of studies and debates to enable the identification of three broad 'classes' of schisms having influence on program foci: emphasis upon either rules and structures, upon function-focused skills and strategies, or, more recently, upon culture and interaction. No one study has dealt with the tension inherent in these divisions such that their piecemeal influence upon languages education has been readily addressed. Curriculum writers and writers of primary years languages teacher training programs have been presented with a deficit model of languages curricula and a potpourri of solutions aimed at fixing elements rather than a comprehensive conceptualisation of languages education that carries with it key ideas and tested recommendations from established theories in a coherent Approach that supports a clear and comprehensive purpose(s) for languages education.

These schisms in the literature on curriculum design and policy for languages education have tended to show a shifting preoccupation: from language as a fixed object of study, to the cognitive processes supporting language learning and use, and finally to language as a contextualised social semiotic. The underlying pattern to this shift can be viewed as moving curricular emphases from structural towards functional and then interactional theories. This pattern is a continuum that reflects the foci inherent in three overarching theoretical schools at work in the field, that also may be labelled: structural (linguistic), functional (cognitive) and interactional (sociocultural). Its value is further aided by the fact that Kern's definition of literacy clearly embraces these three schools of thought, which suggests that they are not necessarily contradictory.

It might be noted that in Table 2 the columns become more detailed in task terms, more procedural perhaps, from general approach to particular learning, going from left to right, but the horizontal ordering is not so easily described, with more overlapping categories. These

categorisations are the result of analysing and refining descriptions from Larsen-Freeman & Anderson (2011), Nunan (1999) and Richards (2009).

Use of capital letters signifies increased weighting of that particular theoretical school.

**Table 2: A continuum of Approaches to languages curriculum design**

Curriculum Design	Theoretical School	Pedagogical Orientation (belief)	Program Foci	Teaching Emphasis	Core Learning Tasks
<b>Grammar Translation</b>	Structural	Language is learnt as decontextualised units; texts and syntax	Syntactical units; lists of vocabulary items	Language forms; written language	Memorise words and syntactical rules; translation exercises; study simple texts
<b>Situational</b>	Functional	Language is learnt through defined communicative events	Contrived dialogues; written grammar	Artificial speech with fixed relationship between dialogue and context	Learn dialogues by rote (scripted); role-plays
<b>Audio-lingual</b>	Functional	Language is learnt through the internalisation of expressions: habits	Artificial dialogues; scripted and recorded with accompanying images	Repetition of artificial speech acts in invented settings	Listen and repeat dialogues in labs; imitate and practice variations
<b>Functional – Notional</b>	Functional	Language is learnt through functional analysis of speech acts	Functional speech acts and topics	Repeating decontextualised vocabulary and oral text focus	Practice set spoken texts in simulated settings
<b>Communicative Language (Intercultural as a sub-strand)</b>	INTERACTIVE Functional	Language is learnt through meaning – making in authentic situations	Authentic information exchange; elements adopted from previous models	Spoken language for authentic use – outside of school	Oral language activities (culture-based) such as cloze tasks
<b>Task – Based</b>	Structural & Functional	Language is learnt through the performance of tasks requiring negotiation of meaning	Structured, authentic tasks linked to select syntactical units	Vocabulary and grammar linked to real-world tasks; collaborative learning	Interactive tasks that require negotiating meaning
<b>Content Based (Bilingual and immersion)</b>	Structural & Functional	Language is learnt through subject-defining activities	Subject content; HASS topics, field reports, experiments etc.	Use of target language for authentic purposes	Tasks and texts associated with subject areas
<b>Genre – Based</b>	Structural, FUNCTIONAL & Interactional	Language is learnt through analysis of the purposes and wordings of texts used for making meaning in differing sociocultural contexts	Oral and written text types	Focus on functional lexico-grammar (strategies) of genre	Functional analysis and composition of genres; focus on written texts
<b>Text – Based</b>	Structural, Functional & Interactional	Language is learnt through analysis of what is happening in a context, how language is integral to what is taking place	Oral and written texts constituted by social needs and practices	Use of language and analysis of language integrated with social purposes and practices	Realisation of social purposes using expressive text activities and analysis

### **2.3.3** *Messages from an expert-research network: Approaches to literacy education*

The literature on literacy development is not dissimilar. There are shifting perspectives on literacy in both theory and policy. These can be seen as matters of degree, measured by the extent to which specific preoccupations are concerned with linguistic knowledge and skills (rules and structures), cognitive processes (learning and performance skills-strategies) and sociocultural skills (culture and interactions). That categorisation still has value. At a broader level there has been an enduring debate that is often referred to as the 'Reading Wars' (Castles, Rastle, & Nation, 2018). This debate places what is labelled the 'Science of Reading', often defined by the Simple View of Reading (Gough & Tunmer, 1986) against what is referred to as a 'Whole Language Approach' (Goodman, 1967).

While both the Science of Reading and the Simple View of Reading will have similar implications for this thesis, their distinction deserves clarification. Unless otherwise stated, the Science of Reading refers to a general body of knowledge about how skilled reading works, how children learn to read, and disorders of reading within and across languages; whereas the Simple View of Reading refers to a specific theory about how children learn to read where the evidence base is drawn predominantly from studies of the English language: specifically, about the contributions of listening comprehension (oral language knowledge and skills) and decoding skills to learning to read. The former has particular relevance to discussions of universality and transference while the latter has increased relevance in the context of curriculum design, implementation and development, to be discussed with reference to useful planning frameworks, notably the 'Big Six' (see below).

The fundamental difference between the 'Science' approaches and the Whole Language approach is that for the latter learning to read comes as naturally to human beings as speech. The Science of Reading does not agree. In practice, this leads to a fundamentally different suite of methods or instructional practices, routines and techniques. At its most basic level, children within a Whole Language Approach are taught to use three cueing systems to identify, or perhaps more aptly 'guess', the meaning of printed words (semantic, syntactic and graphophonic cues). On occasion a fourth cue is entertained: pragmatic. It is a top-down Approach. The 'whole' of literacy is available from the start, as it were. Proponents of the Science of Reading reject this 'psycholinguistic guessing game' in favour of an analysis of the sequenced task of learning to read. They focus on initial learning and the teaching of phonics-based strategies to decode, or map written words onto their sounds that then provides access to meaning via the student's store of oral vocabulary. It is a bottom-up Approach.

In December 2005 the Australian Government endorsed the Science of Reading through the Department of Education, Science and Training's National Inquiry into the Teaching of Literacy – the Rowe Report (this followed a similar recommendation by the United States' National Reading Panel in 2000 and was subsequently endorsed in 2006 by the UK's Department for Education and Skills Rose Report). The Australian report states "The evidence is clear, whether from research, good practice observed in schools, advice from submissions to the Inquiry, consultations, or from Committee members' own individual experiences, that direct systematic instruction in phonics during the early years of schooling is an essential foundation for teaching children to read" (p11). This represents the fundamental platform for the bottom-up Approach.

Each of these three national inquiries into the teaching of reading and literacy settled on the same recommended constellation of core elements for instruction: phonological awareness (and skills); synthetic phonics; vocabulary, fluency and comprehension. The aforementioned Reports refer to these as the 'Fab Five'. In addition, each of these inquiries noted the significant importance and substantial contribution that oral language makes, and that all literacy learning is based on oral language development. However, owing to the particular methodological threshold adopted for acceptance of studies, most of those that were conducted in respect of oral language were not included. The main reason for this is that oral language is a highly imbricated construct that does not readily lend itself to variable controlled, non-interacting studies. In the end, all three inquiries recommended the importance of oral language and called for further research that would meet the particular methodological threshold they had established. In Australia, and in particular South Australia, the importance of oral language has been recognised and included as an expectation of curricula with the 'Big Six' framework (Fab Five plus oral language) for early reading and literacy instruction (Konza, 2014).

Stanovich captured this understanding well before national inquiries were established. He asserted "The idea that learning to read is just like learning to speak is accepted by no responsible linguist, psychologist, or cognitive scientist in the research community" (1994). There have been many attempts to settle the 'Reading Wars' (Castles et al., 2018). In a 2019 systematic review of research literature on reading, Moats concluded, "Almost every premise advanced by whole language about how reading is learned has been contradicted by scientific investigations" (executive summary).

The difference can be summarised thus. Whole language Approaches are based on the following premises or axioms (Moats, 2000, pp2-3), that:

- adults appear to process the written word without recoding it letter-by-letter or sound-by-sound.

- children should learn to read as naturally as they learn to speak.
- the decomposition of words into sounds was pointless.
- attention to letters was unnecessary and meaningless.
- letter-sound correspondences were "jabberwocky" to be avoided.
- skill development was largely boring, repetitive, nonsensical, and unrelated to developing real readers.

Whereas Approaches predicated on the Science of Reading are based on the following premises or axioms:

- Learning to read is not a natural process. Most children must be taught to read through a structured and protracted process in which they are made aware of sounds and the symbols that represent them, and then practice applying these skills until automaticity is reached and cognitive space is available to attend to meaning.
- Alphabetic writing systems are not learned from simple exposure to print. Phonological and phonemic awareness are primarily responsible for the ability to sound words out. The ability to use phonics and to sound words out, in turn, is primarily responsible for the development of context-free word-recognition ability, which in turn is primarily responsible for the development of the ability to read and comprehend connected text.
- Spoken language and written language are very different; mastery of each requires unique skills.
- The most important skill in early reading is the ability to read single words completely, accurately, and fluently.
- Context is not the primary factor in word recognition.
- All children need explicit, systematic instruction in phonics and exposure to rich literature, both fiction and nonfiction.
- Although children need instruction in phonics in early reading development, even then, attention to meaning, comprehension strategies, language development, and writing are essential.
- At all times, developing children's interest and pleasure in reading must be as much a focus as developing their reading skills.

Adapted from: First Alliance, 1998, p61

This spectrum of preoccupations about reading appears in a broad range of disciplines including education, educational psychology, cognitive psychology, educational sociology, educational anthropology, rhetoric and composition, history, and sociolinguistics. Recently there has been a statement antagonistic to the Science of Reading from the National Education Policy Center in the USA, signed by the Education Deans for Justice and Equity (accessed March 24, 2020 at [EDJE Reading Wars](#)) which appears to be based upon a murky premise about the nature of science, in particular about the relationship between basic and applied science.

In the context of the Science of Reading as presented here, basic science refers to the cognitive processes that enable literate practices. It is descriptive and general. Applied science, on the other hand, refers to the methods, practices and techniques used for

teaching people to be literate, given a specific goal(s) for what it means to be literate. In this sense, applied science is normative, operating at the level of methods and techniques in Anthony's schema while basic science is at the level of axioms. Axioms can't help a teacher to directly design a program, as stated earlier in this chapter, and are not especially insightful when a teacher encounters a quandary such as a technique that improves fluency but prompts a modest decline in a student's disposition towards using the language. This is where recourse to curriculum-design principles and practice as developed through these chapters is important. Principles-based practices, procedures or methods, organising curricular tasks, lead ultimately to techniques which deliver an organised learning effort, positioning teachers to adopt those practices that basic science has demonstrated 'work' in specific contexts and to effectively implement them in respect of the particular constellation of variables operating in their setting and their own curriculum development opportunities.

One might also note that the Deans for Justice and Equity have declared themselves at odds with another expert network of Deans emanating out of the USA: Deans for Impact (see: *The Science of Early Learning & The Science of Learning* at [Deans for Impact](#) accessed March 24, 2020). This latter network has stated their support for the Science of Learning and the Science of Reading.

The literature on the 'Science' of writing is not dissimilar. Like reading, there has been a longstanding 'grammar war' concerned with what constitutes correct grammar, what elements of grammar to include in a teaching program and how best to teach grammar - structured (see Orwell, 1946), explicit and systematically (see Harris, Graham, Mason, & Friedlander, 2008) or through a systemic functional/social semiotic framework (see Halliday & Webster, 2009). The former can be considered representative of the 'Science' of writing while the latter can be considered similar to a Whole Language view of writing. However, these distinctions are not as divergent as they are with reading.

There is compelling evidence that neither reading nor writing are 'natural' skills but rather reciprocal operations that draw upon a common fund of linguistic knowledge, cognitive skills, sociocultural conventions and adapted neuronal networks that are constantly re-purposed for use with different languages (Berninger & Winn, 2006; Dehaene, 2009; Longcamp et al., 2005; Schumann et al., 2004). There are then certain elements within the literature on writing that have a bearing on the treatment of the key notions of universality, transference and literacy in this thesis. As was the case with reading, the general body of scientific literature on writing is relevant regarding universality while the more specific literature on what is known as the Simple View of Writing (Berninger, Vaughan, Abbott, Begay, Coleman, Curtin, Hawkins, & Graham, 2002) - a particular theory within the Science of Writing similar in scope to the Simple View of Reading- is relevant with respect to transferability.

Literacy will be used as an umbrella term in this thesis for listening and speaking, viewing, reading and writing, unless otherwise stated. The term 'writing' will refer to a specific suite of transcription and propositional elements that have been captured by the Simple View of Writing (SVW). This view holds that effective writing is the product of two elements: good spelling and good ideas.

Good transcription (spelling) elements include alphabetic knowledge (phonic encoding, orthographic lexicon), handwriting/keyboarding skills and grammar/linguistic knowledge. Good propositional (ideation) elements include world and word knowledge, inferencing/perspective taking skills and metacognitive skills (including task analysis, goal setting and the ability to self-regulate). From this description it is possible to note the overlap.

Reading needs knowledge and skills in at least six elements, the 'Big Six', and writing requires the same knowledge and skills reoriented towards expression and composition: in particular, oral language, grapho-phonological-correspondences (taken to include basic phonological and linguistic structures – e.g., morphology and punctuation), and vocabulary. These represent four of the 'Big Six'. It can be argued from a task-analytic perspective that fluency is also a universal element, but with an attuned focus: for (oral) reading, fluency is concerned with speed, accuracy (decoding), and intonation/prosody; for writing, fluency is concerned with speed (handwriting/typing), accuracy (letter formation/spelling-encoding/grammar), and style/voice. Where there is some difference is at the apex-level of reading and writing: the comprehension and composition elements. Both draw upon world and word knowledge, oral language experiences and alphabetic knowledge (including print/text), but there are strategies that are principally for comprehension, such as Jigsaw and annotating, and strategies that are principally for composition, such as Author's chair and editing (Fisher, Frey, & Hattie, 2016).

The literature regards reading and writing as reciprocal cognitive operations – the main difference being that one is receptive (decoding & comprehension-based) while the other is expressive (encoding & composition-based). In the SVW literature, writing, like reading, is viewed as a complex process that requires specific knowledge and skills across a range of sub-elements (Poch & Lembke, 2017). In this context it is significant that, as teachers move to planning, the potential for promoting knowledge and skill transference between reading and writing processes both within and across languages arises (see 2.2.2). This potential for a transfer-based learning advantage within, but especially across, languages is significant and important to capture at the macro-pedagogic and micro-pedagogic levels because of the joint L1-L2 stance to teaching under scrutiny in this study (the MLL). That, together with the cross-linguistic explanatory precision provided by their task-analytic descriptions noted above, is why the Simple View of Reading and the Simple View of Writing will be used as a

supporting frame for coding and analysing teacher messages about their programs, their students' learning and this study's professional learning component.

The scheme for capturing teachers' literacy views that evolved out of this literature review is presented in the subsequent table (Table 3). It has three imbricated sections that reflect the linguistic, cognitive and sociocultural schisms affecting languages and literacy education and are also the constituent elements of Kern's global frame for literacy at the centre of the MLL Approach.

Table 3 has no claim to be watertight but offers a guide that reflects Kern's definition and also relates to features of the previous Tables. An overall Approach is more characterised by the left columns under 'Pedagogical Beliefs' and the practice implied more by the right (Tasks). It may be commented that divisions appear to be more prominent than any overlaps between the three Approaches.



**Table 3: A continuum of Approaches to literacy curriculum design**

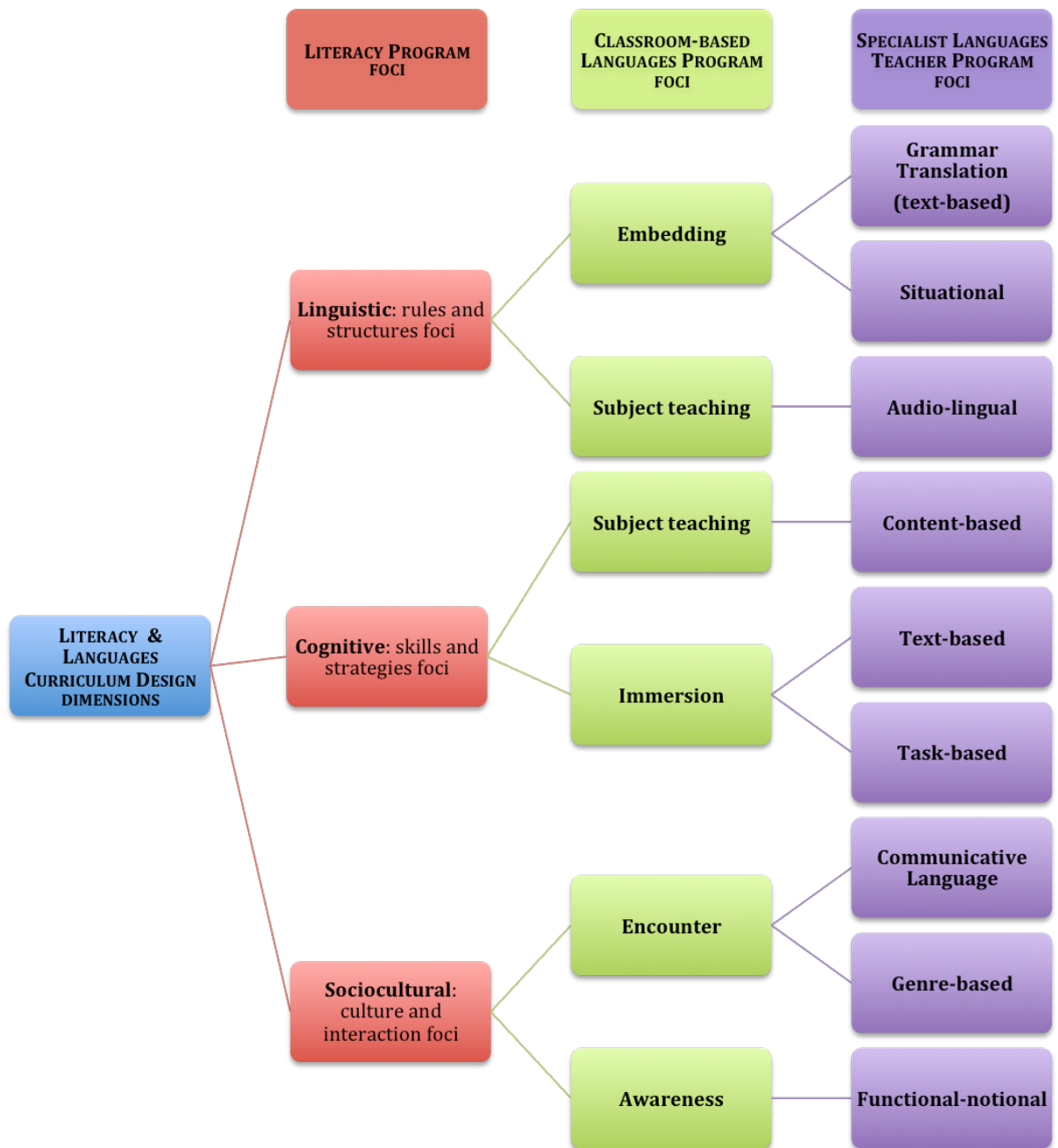
Table 3: A continuum of Approaches to literacy curriculum design												
Teacher	Text-centric or <i>Linguistic Approach</i>				Cognitive-centric or <i>Cognitive/Metacognitive Approach</i>				Culture-centric or <i>Sociocultural Approach</i>			
	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks
	Literacy involves mastery of a writing system and its attendant conventions (knowledge about language and linguistic conventions)	Language and knowledge of how to use it: lexical, morphological, syntactic, semantic, pragmatic knowledge	Linguistic / syntactical units, normative genres and text types (styles)	Memorise 'rules' of language (normative conventions), learn lexical and syntactical structures and relationships to communicative functions (medium and mode), practice macro skills using set texts	Literacy involves active thinking and problem solving (knowledge about language and skills to create and transform knowledge)	Decoding and encoding skills; relational thinking skills – predicting, inferring and synthesising	Linguistic and syntactical units – closely aligned to reading and writing strategies. Meta and relational language and strategies	Practice reading and writing for discrete purposes and learn sub-element skills systematically. Development of mental schemas, goals and self-monitoring, self-teaching skills	Literacy is a socially constructed phenomenon. Texts are not natural or universal, they are formed through interaction	Critical examination of social discourses and conventions used for creating and interacting with texts	Language, macro skills and strategies in context of use not as discrete units or skills	Shared literacy activities: collaborative reading and writing. Linguistic and syntactical units problematised in contexts of meaning making in learning areas

### **2.3.4** *A consolidated overview of expert research messages about Approaches*

Some general observations about the reviewed literature and the three continua of Approaches can now be made. The literature accepts the importance of an overall Approach to language teaching with three aligned layers. At the foundational layer the literature delivers the notion of a global literacy structure with three imbricated domains (2.2.1). This affords the possibility for developmental schemes and curriculum design to operate. Further literature (2.2.2) provides for specific theoretically based principles to guide a design process. But as the design process moves towards the layer of methods (2.2.4) the literature offers less guidance to the task of appropriate selection and integration for various situations than prescriptions for domain-specific methods in idealised conditions. And at the final layer of techniques and tasks (2.2.5) there is a dizzying array of opportunities not governed by a global yet responsive and adaptive frame of coherent principles, though there are useful ideas on domain-specific techniques and tasks.

What is in Table 4 is a bridge across the three preceding tables: providing an opportunity to note generalities and key relationships, which may be expected to be influential on teachers' beliefs, methods, techniques and program designs (Table 1 = green; Table 2 = purple; Table 3 = red). The continua of the three tables, coming from different directions, cannot be expected to merge neatly together, but based on the triple division from Kern's broad literacy theory, used in Table Three, it is possible to map out some sort of pattern in a general picture:

**Table Four: program foci comparison chart**



The general observation is that there are certain beliefs about languages and literacy learning that lead teachers, and teacher-educators, to privilege certain programming domains. In Table Four, these beliefs become apparent from the connecting lines like branches of a tree beginning, from the left, with beliefs about the importance, perhaps in relative terms, of linguistic, cognitive and sociocultural domains. These then lead to certain choices about methods and techniques by either a classroom teacher (usually untrained in languages

education and in the target language) or a specialist languages teacher. The points of reference here arise principally from the program foci, teaching emphases and core learning tasks from Tables One to Three. This affords a second, more nuanced observation concerning program foci.

Following the branch from *linguistic* emphases, there is a tendency for programing choices to privilege knowledge and usage of language rules and structures, including demonstrations of knowledge. The *cognitive* branch leads to emphasising doing and reflecting on doing, in terms of knowing rather than mere habit or instinct, of normative usage and use relations, of skills and strategies for learning and application, and of communicative appropriateness informed by metacommunicative and metacognitive awareness. The *sociocultural* branch leads to emphasising interaction, situated use, language functions and an ability to communicate in culturally authentic modes and mediums.

The most consistent overlap observable across all three branches lies in the privileging of oral over written communication. In terms of the extant literature reviewed, the distinction lies in the context for learning. This is especially apparent when consideration is given to the sociocultural-based programs where attention to systematic development of the linguistic and cognitive elements of reading and writing are generally afforded less emphasis; but also, to the qualified distinction between linguistic-based and cognitive-based subject teaching programs. A linguistic-based program that leads to what can be broadly described as audio-lingual techniques has a tendency towards carefully orchestrated, but artificial, speech acts while cognitive-based programs lead to what can be broadly described as content-based techniques that tend to privilege authentic purposes.

A final summary observation recognises that in practice, each of these program variations has served the goal of oral communicative competence well. However, in the absence of an overarching Approach that systematically integrates all three planning domains within and across languages with a clear focus on the cumulative development of oral, reading and writing skills, many of the general goals that can be particularly well served by languages education, such as metalinguistic and metacommunicative awareness, along with students' mastery of the elements of languages and the skills for their use through multiple modalities, have yet to be realised.

## 2.4 Summary remarks

This chapter establishes what the MLL Approach as used here was. It was done using Anthony's schema. The level of *approach* defined those things that were held to be axiomatic about languages, languages and literacy learning and languages and literacy teaching in the Approach through the particular work of Kern and some general

developmental theory. At the level of *methods*, the notion of macro-pedagogy was employed to bring forth a series of bounded imperatives to support selection of teaching practices within the Approach. Lastly, at the level of *technique*, some details of tasks, defined by task analysis, for language and literacy schedules, in curriculum development cycles, were noted, to be extended here under the overarching referent of micro-pedagogy. From the start and ever-present in the background was the idea of guiding principles putting theory to work moving between levels of disciplined contemplation and action, to be returned to at any level of decision-making to ensure alignment between appropriate specific developmentally-bounded choices and the overarching axioms.

The Approach can be tentatively represented thus:

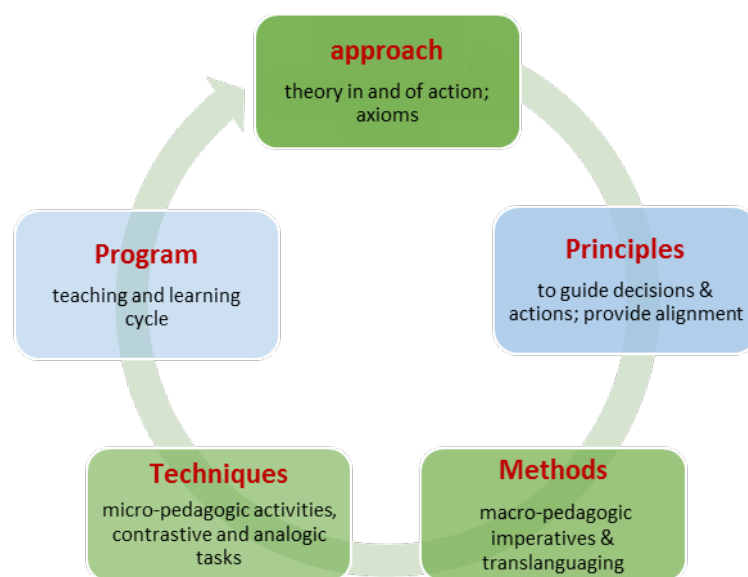


Figure 3: A cyclical view of the MLL Approach in action. Representing constant revival, reframing and recasting in light of experimentation

The Approach as methodical action will be given greater form in the next chapter. Figure 3 above shows the Approach in its abstract character, as a moving generalisable pattern of different, though connected, layers or levels of concern for a plan of action. In Chapter 3, starting from where the 'Rational Approach' for cycles of instructional action is sketched (Fig. 4), the Professional Learning Program (PLP) that was the vehicle for the dissemination of the Approach, and the associated curriculum development cycle providing actual implementational support to teachers in this study will be introduced. For now, it is important to restate what was foreshadowed early in this chapter: the MLL Approach is integrative – the teaching of second languages is conducted jointly with first language literacy teaching.



### Chapter 3: Methodological Questions

*...many arrows, loosed several ways,  
Fly to one mark...*

William Shakespeare, *Henry V*

#### 3.1.1 Preparatory remarks: a research process

With the MLL Approach planned and tried in the author's own teaching, the issue for this chapter concerns moves to build further knowledge of the Approach and extend it. The route ultimately taken to that end was to share and test the basic scheme in a guided interaction with other teachers, so as to create a professional learning program (PLP) together, based on actual day-to-day teaching. It was hoped to make this a research exercise. This chapter deals with the rationale in terms of method. Chapter Four will give the more practical details.

An excerpt from the opening address of the 45<sup>th</sup> annual conference of the South Australian Public Teachers' Union by Deputy Director of Education, Mr W. T. Martin on May 31, 1940, provides an illuminating perspective:

*My service in the Department covers forty years, during which time I have been a student, teacher, inspector, and superintendent. This long and varied experience has afforded me much inspiration and a considerable knowledge of educational affairs; but education is such a complicated business that I do not claim to be, even in the smallest degree, an authority on it. Education is so inseparably linked up with human experience, which is man's (sic) effort to adapt himself to ever-changing conditions of life, that it can never completely solve its problems...*

AEU, 2015, p3

This is a humbling perspective, particularly when currently the basis of the 'scientific method', the positivist paradigm, is being subjected to significant scrutiny. The issue is trustworthiness or legitimacy, that someone other than the original researcher should be able to obtain the same findings by following the same methods. This task has been advanced by the Center for Open Science through the Reproducibility project (Nosek, 2015a). The first research field they subjected to scrutiny was (cognitive and social) psychology. Over 270 collaborating authors across five continents were asked to select from a pool of 2008 published studies reflecting basic science in the field, and not requiring specialised samples or equipment. Of 100 studies then replicated analysis found only 36% of replications reported statistically significant results (obtaining a p-value of 0.05 or less) compared with 97% of the original studies. This represents a significant blow for scientifically minded teachers who do not have the research experience of these collaborating authors and suggests investigating the possibility of research being conducted under naturalistic conditions, as in the present context, where teachers, or other professionals, suitably trained and co-opted as research partners, would be aware of working in their own situations and for their own purposes.

Corresponding author, Brian Nosek (2015b), a psychology professor at the University of Virginia, commented on the outcome of his project in an article in Scientific American: “publication is the currency of science. To succeed, my collaborators and I need to publish regularly and in the most prestigious journals possible.” But academic journals routinely prioritise “novel, positive and tidy results (above replication and negative results).”

Do tidy communications work well for untidy situations, such as Martin described? The problem here is a kind of Gordian Knot; the fabled challenge that only one person is known to have solved – Alexander The Great. The task is to clearly state and confirm the new knowledge that is (hypothetically) contained within the individual cords of an MLL-inspired metaphorical ‘knot’. As noted in Chapter One, there are three readily identifiable cords: the MLL Approach, the possibility of further implementation, and a communicational research frame to be developed in this chapter.

### **3.1.2** *Introductory philosophic and methodological remarks: the situation of the teacher-researcher*

*Quality use of research evidence in education is defined as... the thoughtful engagement with and implementation of appropriate research evidence, supported by a blend of individual and organisational enabling components within a complex system.*

*Monash University Q Project, 2020, web page summary*

This investigation probes teachers researching their own practices where pedagogy is the object of study. As such, the emerging investigation can already be characterised as one that will be informed both by action-research and efficacy-study designs and guided by the case-study potential offered through a range of participating teams of teachers from a range of schools.

To understand which acts worked, and perhaps how and why, is considered here to require a view of participating schools as complex organisations and of a role for teachers as collaborating researchers. This means that facts and observations about teaching and learning processes and contexts need to be taken as interrelated and mutually constitutive. It also means that participating teachers would need to take an active role in collecting data, to record significant learning events for themselves, and significant teaching and learning events for their students, colleagues or school communities attributable to and arising from the MLL and PLP. It is not entirely possible to avoid issues of personal critique and self-definition in this research situation, and this bringing forward of the personal is signalled where necessary, as in the preceding section, with use of the personal pronouns ‘I’ ‘me’ and ‘my’. This will not occur too often, however, in the main text.



To preserve the integrity of recorded data teachers involved would not be further influenced, biased or directed in *what* they might *choose* to record. This does not mean that teachers would be unsupported in making decisions or that they were afforded little direction on how to collect and record data, rather, that the whole investigation was designed to address:

... questions grounded in practice, *involving* practitioners, focusing on interventions that are *effective* and *manageable* to implement, *collaborating* with practitioners to establish *feasibility*, broadening the context for successful research demonstrations, and increasing interest in doing school-based research...

Carnine, 1997, p516. Italics are mine

At this introductory junction the investigation was faced with an important choice regarding method; it was a choice between isolating key variables or propositions for study, or undertaking a naturalistic, action-oriented investigation.

As a practitioner, my initial motivation for this research was neither to prove a theorem nor to establish research credentials, worthy as these goals are. The motivation was to improve classroom praxis in a manner that could be considered intellectually honest, robust and above all generalisable. An early indication of how to proceed was found in the work of Odom (2009). Odom promoted several relevant propositions that guided the early design of method. In essence, these propositions follow the view that teacher training can ensure the success of an intervention; that teacher feedback, if not co-construction, is a critical component of effective implementation efforts; and that teacher professional learning advances not only their professional acumen, but the quality of the teaching and execution of the intervention. Later, Gentaz (2018) argued that this type of professional learning as research method would provide productive insights into how children learn and the effects of the professional learning on teaching. Both Odom and Gentaz offer instructive support for both the overall design of method presented in this chapter, and for its development in response to the motivation to investigate the value of the MLL Approach in improving classroom praxis.

This motivation was propelled further forwards by the oft-cited research to practice gap, by the absence of readily applicable and adoptable findings for classroom pedagogy that Carnine identifies above (1997; see also Horvarth et al., 2017). This gap was not so much an indictment of positivist research but rather pointed to a need for research undertakings to be set up and research findings to be communicated in a manner that is relevant, easily digestible, and actionable by practitioners in settings that may vary somewhat from those in particular studies.

The choice to be made may be viewed in terms of the 'paradigm wars' whereby the hegemony of the positivist paradigm of quantitative research is opposed by social scientists

supporting qualitative research and proposing constructivism (or variants thereof) as an alternative paradigm (Reichardt & Rallis, 1994). Qualitative research, its proponents have argued, can capture the messy and context-laden nature of professional practice and provide more easily digestible findings for future action. While this paradigm proves promising on many accounts, it also perpetuates the communicational divide between researchers and their tasks and practitioners and their tasks. They use different languages that prevent practitioners from identifying and implementing appropriate research findings and limit the chances for researchers to partner with practitioners in solving important problems of practice situated across messy settings with different interacting variables.

Can future settings for teaching and learning strictly adhere to an original research setting and protocols, to ensure exact replication of conditions and impact? It might be better to see if new knowledge can be generated and communicated in terms of principles of curriculum design and teaching patterns that can allow for the shifting and interacting variables of specific situations. That would face up to a more realistic challenge of generalisability. Different teachers could be guided to use principles communicated by exemplar tasks and practices across a variety of contexts.

This latter stance, which was adopted, arguably requires an integrative paradigm and collaborative approach to method that can provide legitimate findings capable of speaking to teachers in terms of the constantly shifting realities of their daily practice, that can deliver both quantitative signposts about exemplar tasks and practices and qualitative narrative about possible implementation pathways to desired impact. An early and somewhat obvious direction was to consider judicious selection of methods on the basis of contextual and investigative relevancy rather than through recourse to epistemological heritage. The question then becomes how actual problem definition can be established and integrated on a basis that amplifies and accounts for the voices of a broad range of professionals doing the work?

Integrative research is referred to as a 'third wave' that moves past paradigm wars between quantitative and qualitative purists (Johnson & Onwuegbuzie, 2004). As a research frame it can be likened to mixed methods approaches where the goal is to draw from the strengths and minimise the weaknesses of both quantitative and qualitative traditions. It sits in harmony with Carnine's call to improve the feasibility of research that captures the dynamic, pluralistic forces and characteristics of human thought and behaviour, dispenses with methodological dogmatism and embraces pragmatism. In philosophical terms it draws on the work of classical pragmatists (e.g., Charles Sanders Peirce, William James and John Dewey); the bottom line is "...that research approaches should be mixed in ways that offer the best opportunities for answering important research questions" (Johnson &

Onwuegbuzie, 2004, p16), and where further inquiry “is not standing upon the bedrock of fact. It is walking upon a bog, and can only say, this ground seems to hold for the present. Here I will stay till it begins to give way” (Misak, 2004, p15).

The job of linking epistemology and method is essentially dealt with by Peirce’s ‘pragmatist maxim’. In Peirce’s own words (1878): ‘Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of those effects is the whole of our conception of the object’ (in Gallie, 1952, pp11-12). The message that Peirce conveys is that the significance of any idea, conception or word lies in the difference it makes in action, to what one does. It is this grounding and relevance of ideas and words in relation to inquiry and action that is the fundamental premise of Peirce’s thinking on his version of pragmatism.

Teachers, like researchers, have cause to be pragmatic. For teachers, choice of task and method is informed by the goal(s) of the program (sometimes described as outcomes or learning intentions), prior experiences and the context(s). For researchers, choice of method is informed by the nature of the investigation, or knowledge sought, prior experiences and the context(s). In both cases the choice is constrained by the nature of the context(s) and action, and they are in that sense pragmatic.

At the heart of this matter is the nature of the real situated problem as defined and of the knowledge sought accordingly. As with most interventions involving human beings it is a complex one. This complexity emerges principally from the size, characteristics and interactions of the population in question and the nature of the problem. This study began with this researcher’s own classes and students. It was relatively small, and the context would have been amenable to reasonable levels of control and indeed the possibility for randomisation, allocation concealment, intervention blinding and management of the study conditions. However, the study also envisaged an approach of general validity, and in the event extended to ten sites, multiple different languages, hundreds of students and dozens of teachers working collaboratively as part of a research network, but also as members of teaching teams at their respective sites. In practical terms it is questionable whether these teachers and their students, who circulate in the same school setting and interact across classes, could be kept unaware of the use of different tasks and methods; whether home settings and individual characteristics could be accurately and economically accounted for and compliance maintained; whether classroom teacher compliance and control of collegial discussions could be maintained; whether the influence of ongoing professional learning across each site could be constrained or adequately accounted for; and whether these variables could be controlled and sustained over the timeframe of two years; not to mention

the ethical implications of a two-year trial that could advantage students in the trial compared with those who aren't.

There would appear to be important considerations ruling out the pure positivist approach, where an efficacy trial asks whether a specific strategy, task or intervention will produce the anticipated impact, under conditions where variables and their interactions are under direct control. The important consideration relates to conditions. The goal here was to probe implementation on the battlefield, rather than the parade ground, with equipment and strategy equal to the task. The aim was to understand the potential of a novel approach across a representative sample of contexts in the South Australian public school system under routine conditions. This pivots the issue towards generalisability, or determination of impact across real world contexts based on routine practices and on evidence guiding both planned and in-the-moment pedagogical decision-making.

One key matter is to ensure that chosen methods constitute a satisfactory balance between generalisability, or external validity, and internal validity. The former can be effectively enacted through qualitative methods centred on multiple replications across 10 case studies while the latter can be effectively enacted through quantitative methods and the use of previously validated theories, national inquiry findings and meta-analyses. These methods are seen here as a continuum, and the goal is to select methods for generalisation adequacy accompanied by satisfactory internal validity.

From the quantitative tradition this thesis draws upon standardised assessment schemas: use of results from efficacy trials of specific tasks, strategies and practices, use of normed-assessments in English for population comparisons and judgments of impact, use of a time-series design for data collection (percentage change over time), and use of standardised instruction and direction given to participating teachers on the collection of implementation evidence and pedagogical decision-making. These methods support internal validity. From the qualitative tradition this thesis draws upon discourse analysis (emic perspectives – structural and functional elements and categories), ethnographic and open-ended processes of data recording, flexibility towards initial hypotheses and questions in light of developments, observation schedules, iterative and adaptive research input, interviews, journals, informant checking, and methodological triangulation. These methods support external validity and, together with the former methods, they constitute a pragmatic approach to integrating and balancing internal and external validity in a manner that is appropriate to both the contexts and the investigation.

### 3.2.1 *On new knowledge*

*The successful practitioner is the person who can retain both care for the individual while being informed by, and informing, the general.*

Mason, 2002, p221

This chapter accordingly considers the rationale for a methodology that will become more specific in Chapter Four. A problem of practice has dominated discussion to this point, and it will continue to be the organising frame for a research methodology as the teacher-researcher author follows up what further issues, problems or questions arise in responding to the problem of practice.

When formal research questions are expressed, there is a call to generalisable knowledge. In that sense they are questions that are necessarily concerned with epistemology. The first section of Chapter One introduced this element of the philosophic, what Hamlyn states as “the nature of knowledge, its possibility, scope and general basis” (1995, p242). This is a necessary consideration if this thesis is to offer insights that merit respect and are recognisable as emerging from sound research. It will be argued that the touchstone for dealing with this matrix of problems, questions and hypotheses is simply a suitable acceptance of human intelligence in action. This is the fundamental basis of this kind of research endeavour, and it implies that the insights gained will be more compelling than absolute. They will be plausible and, it is hoped, on the basis of the rationale in development here, convincing.

Such a movement, to what is convincing, implies communication, and the normal process of research publication points the way. The insights of the MLL Approach are to be communicated, and the obvious audience is fellow teachers. But to be realistic and true to its genesis this should be a shared effort of teacher-researchers who would respond to messages with their own insights from their own practice. They would become partners in a research exercise and join in extending the knowledge on offer. All partners in the exercise would communicate instructive ways of understanding the matrix of problem and questions and similarly, instructive ways of implementing responses to the matrix that have been found to work. But they will not claim them to be the ‘one true way’ of seeing the matter.

Rather than attempting to add weight to one side or the other of a metaphorical tug-of-war between quantitative and qualitative traditions this discussion of research methodology aims to justify the importance of the research process as disciplined decisions driven by the nature of the problem. Michael Crotty stated it thus:

*Speaking in this vein sounds as if we create a methodology for ourselves – as if the focus of our research leads us to devise our own ways of proceeding that allow us to*

*achieve our purposes. That, as it happens, is precisely the case. In a very real sense, every piece of research is unique and calls for a unique methodology. We, as the researcher, have to develop it.*

1998, p13-14

The epistemological-methodological debate was introduced above. 'The paradigm war' – the 'great divide' between quantitative and qualitative methods – was sidestepped at that early point when dealing with the teaching problem. The promise of the 'third wave', identified with pragmatism, won the day. The appeal of this is obvious when one considers the wrangling about paradigms and about the basis upon which quantitative and qualitative data (with distinctly different ontological and epistemological heritages) could be combined. Guba and Lincoln (1994) for example, have claimed that this is not at all possible.

The pragmatic journey being described here is a journey that will be guided at times by definitions and theoretical abstractions, but not into intellectualisations, divorced from experience and action. The value of laying out some assumptions here is for the shaping of the research questions, the purposiveness of the devised research methodology and the interpretability, and trustworthiness of the research findings and messages.

### **3.2.2** *On new knowledge: the 'Gordian Knot'*

If one seeks individual threads within the Gordian Knot as described then one is tracing Lonergan's three tasks of intelligence in action: experience, understanding and judgment (1957). The fulcrum is experience from action. Without this there is nothing to inquire about, and so no insights to drive understanding and nothing to judge or make judgments about. In this regard Lonergan parallels the work of Piaget, using ideas of experiencing, structuring, operating (testing) and restructuring for further operations. The context is always what is being done, for Lonergan and Piaget both.

Lonergan sees intelligence active in experience, becoming 'expert' and then telling itself, and with other 'experts', what it now knows, for continuing active experiencing. The insight is a 'hint' of expertise, and a judgment guides a testing of the insight in continuing experienced activity.

While Piaget was a biologist first, he spent most of his working life on his 'genetic epistemology', a theory of the origin and developing pattern of knowledge and thinking. His account was in terms of patterns of operations or schemes and their generalisations. A child not only sucks to obtain food but also sucks its thumb and in doing so the child has generalised a basic operation. Once repeated in different circumstances and with a different object there is a move towards differentiation. Such schemes are repeated and there is a tendency then towards formation of more elaborate, integrated structures out of lower or

more simplistic schemes. In differentiation there is a movement towards increasing complexity that involves ideas of repetition and automaticity.

In the work of Piaget, arising from the intellectual legacy of Wallace and Darwin, development is the sum of adaptations, and an adaptation has two drivers, assimilation and adjustment. His psychological theory could be readily applied to the notion of developmental schedules used in this study but that would be to underutilise what Piaget is saying for the broad conduct of this study and the nature of the insights and research messages derived therefrom (Piaget, 1977).

For present purposes what will be of central importance for a naturalistic study is the development of the MLL Approach in the hands of a broad range of teachers in a broad range of contexts, so as to note the movements both general and differentiated those teachers find necessary for the process of adapting classroom practices in light of the shared MLL Approach. An adaptation of teaching practices is an assimilation in so far as the activity proceeds from a pre-existing scheme of pedagogical practices. As teachers gain sufficient understanding and command of the MLL Approach it will go on to be developed in their day-to-day practices, opening up the possibility for generalisation and differentiation. Assimilating the MLL scheme would involve a certain amount of adjustment to their pre-existing schemes for teaching language and literacy. There is then an adaptation insofar as the pre-existing teaching scheme would be functioning in a modified way. The same can be said of the teachers' pedagogical beliefs, as these would underpin their choice and enactment of teaching practices, indeed their pedagogy in the broadest of senses.

The notion of assimilation and adjustment is functional; it is tied to experience and the idea of intelligence in action accumulating and organising insights. In this way Piaget's position, like Lonergan's, grounds active methods. Piaget is more operation-centred, and Lonergan more insight-focused; but they are two sides of the same coin.

Development of, and through, the MLL Approach would proceed from the activities of the teachers themselves, from what they can already do being developed through the structure, insights, tasks and guidance afforded by the MLL Approach. The underlying premise here is that for development to begin there has to be something to do, and this would arise from what the teachers can do, are already doing and hope to do. There will be a sense of connectedness but also a sense of repetition or iteration and testing. Just as the brain atrophies from lack of functioning, so the teachers' teaching schemes would develop through activation, or functioning, and their own developing experience.

### 3.2.3 Knowledge as Insights; judging fact from fiction

Mere experience however is not evidence. New knowledge comes from clear judgments about insights (internal messages about understanding messages of experience) and as always, when experience is shared and messages externalised, from intelligent humans inquiring together, which is the simple aim of research. St. Augustine was committed to the materialist line of thinking for years; he could not see past the reality of the merely material and sensory world. But he changed. Then he talked about reality, what is the case, not in terms of *realitas* but rather *veritas*, about what is held to be true from the operation of judgments, not the senses.

Lonergan dedicates some space to this overarching notion of truth. How he gets there is through a process of defining relevant negative comparative judgments/propositions about different objects (and between subject and object/s and subject and subject) such that *A* is not *B* and so on. Lonergan would say that objectivity comes from a pattern of judgments, never simply one. It is a higher integration (like a Piagetian restructuring) of separate judgments of the evidence guided by further insights. Guidance from understanding one's intelligence in action and communication within a group of people sharing similar experiences is normally called for.

This is a movement away from purely material or mechanical views of seeking knowledge to a more expansive stance envisioned by the likes of St. Augustine and Thomas Aquinas: to intellectually detached search for the unconditioned guided by clear distinctions between experience, understanding and judgment. For Lonergan, truth, or the unconditioned, is based in the ability to make distinctions between each of these operations and to acknowledge the ultimate appeal to judgments and the intelligence of oneself and others in action.

What experience offers is something to understand, and the understanding is firstly merely an insight needing to be checked. The check, or judgment, is a further insight that grasps the conditions to guide affirmation and sees them met or not. What is reached is 'virtually unconditioned' if the conditions are met. One may certainly speak of insights or messages that have arisen from a particular task complex and to refer to these as legitimate because of the judgments of those who have participated and who have been suitably aware of the need to make necessary distinctions and agree on what is the case.

The summative messages, drawn from the data of their teaching, judged by teachers participating in this exercise to be clear and relevant, and the responses to the research questions that have been drawn from these teachers' judgments about the teaching Approach and any associated research process, constitute series of insights. These define



the knowledge generated. They are not claims to unconditional truth but rather insights, conveyed as a series of messages, which need to be judged on the basis of evidence of their internal and external validity. A judgment can be made on the basis of the questions they raise or do not raise, and about their overall legitimacy or adequacy in the eyes of those who generated them and who have been acting in response to them.

A further point is with regard to the adopted analytical stance to be transmitted, nurtured and monitored throughout the exercise with each teacher; it would be a stance informed by Lonergan's transcendental precepts (Lonergan, 1972a, p.53), which are: "to be attentive" in the matter of judicious selection of data of experience, "to be insightful" in the matter of seeking an open but definable understanding of those data, and "to be reasonable and responsible" in the final interconnecting, judging and weighing of the evidence for knowledge gained in and for the field of action and experience. The legitimacy that comes from this analytical process of informant checking and methodological triangulation arises not out of specific and lockstep procedures, but the professional experience, expertise and acumen of all actors involved as they enact and experience the three tasks of knowing as described. This process will be explicated further in 3.6.1 through discussion of Mason's approach to noticing and marking.

A second point is more aptly thought of as a question: how do you know if an insight is correct? The answer, for Lonergan, lies in distinguishing between vulnerable and invulnerable insights. With the former a person has really caught onto something, like hooking a fish on the end of a line, but there are further questions that arise, or work to be done reeling the fish in. At this stage the insight is just the beginning of a cluster of insights. Through further reflection it becomes possible to qualify and correct it through future insights. If there are in fact no further relevant questions that might correct the given insight, there is then the state of invulnerability. The fish is in the bucket, and it is a fish (not seaweed)! Thus, claiming that the state in which the teachers find their pedagogical beliefs and practices, and the learning outcomes of their students, at the end of this Approach research exercise, is a direct result of the exercise is a more vulnerable insight than stating 'something has happened'.

Distinguishing between fact and fiction is aided by the tendency for insights to cluster. This leads to a sense of 'at-homeness', a point of familiarity where everything that occurs seems fixed more or less within the same scheme. Should anything new or contradictory emerge amongst the partner teachers then in a joint research exercise the research leader, other experts and the teachers themselves can be considered suitably knowledgeable about the situation to determine the further, relevant questions. There is a general movement that

underpins this tendency. It is towards a threshold that is reached when no additional relevant questions are forthcoming.

Insights are born of evidence, from experience. So too is the capacity to check and judge. Checking tends also to imply communication. Strong judgments would be proposed here to be those that resonate with the experience of other professional teachers and researchers and reflect their understanding of the teaching and learning context. Invulnerable insights would most likely be those that arise with strong judgments but gain an extra layer of evidence in light of established theories communicated in judgments from the field in question. There is a cyclical dimension of probative sifting, sorting, questioning and clarifying within the cycles of checking, communication and methodological triangulation that provide for the use of evidence and experience relevant to building strong judgments. However, invulnerable insights need not remain so indefinitely, being clearly rooted in time. And, when a performer suitably experienced and aware of their tasks cannot make a certain judgment that is more complex, then she may be able to make a certain judgment that is more qualified.

#### **3.2.4** *Intelligence in action: a communicational research frame for methods*

*Method... is a framework for collaborative creativity.*

Lonergan, 1972b, pxi

Sections 3.2.4 & 3.2.5 have been drawn from the author's prior publishing. See Nielsen et al., 2012; Nielsen et al., 2016.

The practices of education are themselves tasks about tasks and researching those practices has somehow to link to those task patterns as they are enacted, engaged in and performed. Research on classroom teaching should therefore be research involving or linking to teachers in action, which is where they learn – where their effective tasks and messages are, and where their effective professional self-attending will be most intense.

#### **3.2.5** *The Task Message Complex*

For a researcher to send messages to fields like teaching and not care about their own involvement in those teaching tasks would be too casual and send exactly the wrong messages to those whose operation the researcher is set to assist. This danger arises for a teacher-researcher, when they step into a guiding / leading role, because the experienced professional network is normally distinct from the expert-research network. Messages from a researcher without task involvement on the part of that researcher in the relevant tasks that allow jointness of operation court the danger of 'remoteness' from the action and actors. As

nothing teaches like doing, there has to be some moving towards joint endeavour, and to joint tasks.

As reported in Chapter One, the first movement was played by the researcher, a junior primary / primary teacher of Spanish. It took the form of self-talk with the message being clear dissatisfaction with what was happening. While this message was both pedagogical and professional it was carried by the pragmatic considerations of a classroom teacher; it was formed and conceptualised within a 'self-talk' network.

The existence and role of such a 'philosophy of one's action' is worth noting. At some point in their career teachers, as most professionals, form a profession-based framework that defines their ongoing aspirations and tasks. Often such frameworks emerge through pre-service teacher education experiences where experts in the respective fields and/or experienced teachers convey research findings and practical pedagogy. For practitioners the ultimate test for any of these ideas is workability: is the approach, method, technique or activity practical given the teaching circumstance? The question soon becomes one of communication within larger networks such as an expert-research network, the second movement in the general improvement cycle enacted and described in chapter Two. But it just as easily and perhaps more usefully extends in practice to networks of experienced fellow-professionals, of collegial-practitioners.

Sometimes, what is paramount is whether a notion relates clearly to the local statutory and/or systemic requirements and has practical adequacy ultimately in the given context. At any rate there is built up a crucial message-generating and message-sorting role for one's 'philosophy in action'. This is the test that expert research messages have to pass if they are to be adopted into classroom practice in any enduring fashion. History is replete both with worthy ideas that have failed to be adopted into practice because of a real or perceived mismatch with classroom 'reality', and with ineffective ideas that have made it into practice because of some hoped-for practical adequacy or expediency. The practicing teacher dissatisfied with what is happening in their classroom will be searching out and adapting what they can find and should realise that crucial messages are readily available from experienced colleagues.

Teachers genuinely involved with research will expect the lead researcher to plan, co-ordinate, schematise, provide overviews and so on, but they also expect these things to be reflected in or to be part of some joint activity. The creation of the joint task becomes the guiding consideration, and the relevant messages can come from anyone concerned. As with any learning it is a matter of sending messages and getting responses, and of getting messages and sending responses, i.e., communicational. And, as developmental, the joint

task(s) are taken on in steps, gaining definition as the action proceeds, creating the need to assess new messages and re-group. A careful plan is required, but in a form responsive to learning in and through the enactment. The plan must be flexible, even negotiable. The researcher provides a focus, but it is an active focus, responsive to messages as well as a source of important messages.

In the end a research exercise comes down to something that can be stated and published. This is an important event, but it is a step, not a termination. The cycle may be expected to have a continuing research momentum, even when the formal researching task can be stated to be finished.

In effect, there would be envisaged now three task-message complexes within the *Communicational Research* frame: self-talk, expert-researcher and collegial-practitioner networks. These related parts of the communicational research join with the aim of 'publishing' the MLL Approach through messages of implementation, demonstration and, above all, use. They will appear further in the context of the messages they generate for enactment through the Professional Learning (PL) program that will be the focus of the next chapters.

### **3.3.1** *The school setting as complex site of research and praxis*

While the broader research project aimed to investigate the effectiveness and generalisability of the MLL Approach, this project could not be undertaken without affecting, and being affected by, the nature and processes of the setting in which the tasks were being undertaken: the primary schools. The logic is apparent: school-based activities do not occur in a laboratory environment, thus it was necessary to devise strategies that could support and guide teachers in managing the forces at work in their schools, to recognise the effect of those forces on their engagement with and implementation of project activities and to modify the project activities as a result of those forces to ensure trustworthiness and reproducibility.

The custom of viewing organisations in the literature in terms of either classical theory, humanistic theory or system theory was deemed inadequate for understanding and driving the process of organisational change requisite for this research endeavour. A new paradigm was required. Initially, this paradigm was provided by contingency theory (Burns & Stalker, 1961) which provides an eclectic position that holds that in any given situation schools can be expected to choose solutions based on the intellectual and practical resources at their disposal.

Mintzberg (1991) was not satisfied with a purely 'contingency theoreticians' view and went on to clarify the strategies best for developing an organisation, what makes an organisation

outstanding when it counts, and what it takes to maintain and perpetuate an organisation that is already functioning well. His is an overwhelmingly 'rational' model of the forces that affect organisational change or renewal.

But Mintzberg left very little room for those constellations of forces that can lead to 'good' educational organisations (loosely defined here as those that are successful at continually identifying and achieving their goals). The St Gallen Group (Gomez and Zimmermann, 1992) developed a 'management theory' that did. Together, these theories afford a broad perspective through which schools and their inherent change processes can be viewed and planned for.

Such theoretical views suggest four forces as having a bearing on school-based processes of change and improvement, and research methods that might flow from a communicational research system: individual teachers (internal), principals (school administration – internal), the Department for Education and Children's Services – DECS – then Department for Education and Child Development – DECD – and now Department for Education DfE (system – external) and the researcher (University – external). These were the readily identifiable forces of change that would have the clearest bearing on this intended research project.

House, in Dalin (2005) provided a further, overarching consideration for the development and delivery of strategies to support individual teachers in this project:

*In his studies, House found that personal friendship and personal contacts were both organized factors in the spread of new ideas within the school systems. He also feels that this spread is contingent on cultural factors: from the transportation system to membership in committees; but he still regards personal contact as being of foremost importance. In a phrase for which he is noted: '... to control who meets who is to control innovation!'*

p140

Many studies have shown that the judgments of individual teachers are rarely heard in their own school, diminishing their potential as vectors for change and improvement (Dalin, 2005). The constellation of forces can marginalise the active participation of teachers in change processes, learning processes and action-oriented research. Blackler (1995) offers further, supportive analysis for an interactive and organic dynamic as envisioned by House.

He asserts that the important dynamic for effective individual and organisational change is not compartmentalised and static, but rather mediated, situated, provisional, pragmatic and contested. Like Piaget, Lonergan, and Guskey (see 4.1.1), Blackler's analysis "suggests that attention should be focused on the (culturally located) systems through which people achieve their knowing, on the changes that are occurring within such systems, and on the processes through which new knowledge may be generated" (ibid. p1021). It is a matter of

cumulative cycles of communication, of a task message complex involving oneself, one's colleagues and, ideally, rigorous, replicated research evidence.

There was no call here to exert outside control over this inherent complexity by artificially isolating normally interactive variables, but rather an acceptance of pragmatism in the face of their essential interactivity. There are various streams or cords within pragmatist philosophy, but a general preoccupation reflects the rational, contingency-based view of school organisations and their operations as set out above and reflected in the design of this study. Rescher's generalised account was instructive:

*The characteristic idea of philosophical pragmatism is that efficacy in practical application – the issue of 'which works out most effectively' – somehow provides a standard for the determination of truth in the case of statements, rightness in the case of actions, and value in the case of appraisals.*

1995, p710

This flows from the thinking of Peirce, and one can offer an additional clarification here about meaning and communication. Peirce saw that larger context of human existence – the web of communication that drives and enfolds us – was a matter of social, rather than merely individual activity of thought and communication. Humans know and learn in action together, and the action is informed by a communication that is active within the individual, but has always gained form socially, so that we become a linked web of communication for joint action.

As Gallie puts it: 'It is not "my" experience (Peirce asserts), but "our" experience that has to be thought of. And (Peirce) finds clearest proof of this thesis in the way that language guides and controls the greater part of our thinking: for language is essentially a vehicle whereby one expresses those parts of one's experience that *are* general, that must be 'ours' rather than 'mine' if they are to be communicated at all' (Gallie, 1952, p28-29).

Communication is the key, therefore. However, there is still lacking some sense of the broader context delineated by Peirce. The philosophical pragmatism of a 'science for practice' needs Lonergan's view of method as 'a framework for common collaborative creativity'. Lonergan's scheme tells us how 'our' intelligence acts, and 'our' job is to notice this in action. This collaborative ideal governs the place, form and dynamic of research messages and communication in action through this study's design.

### **3.3.2** *Developing the communicational research frame through iterative curriculum development cycles in schools*

The vehicle used to drive the communicational research process was an adaptive, specially designed Professional Learning Program (PLP). The engine at the heart of this vehicle was an iterative cycle of collaborative curriculum development that typifies the 'rational' approach

as described by Taba (1962) and Wheeler (1967). This 'rational' approach may be recognised as a typical 'action-research' cycle, shown in Figure 4:

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Figure 4: A curriculum design cycle (Smith & Lovat, 2003, p116)

Owing to the centralised role of education bureaucracy in South Australia there has been a longstanding dynamic whereby the 'system' either endorsed or provided a curriculum framework to which teachers were being held accountable. It underpinned the problems of practice elucidated in the preceding chapters. Roberts (1998) captured this dynamic: "In an "operative" model the teacher is restricted to meeting the requirements of a centralized system, such as the delivery of a textbook as planned, to a set timescale. Such a limited role, limited to that of curriculum transmission, implies training objectives based on mastery of a set of competencies determined by the centralized syllabus." (p103).

At the time of this study a new nationally agreed curriculum came into effect, the Australian Curriculum, which is driven by a corpus of behavioural objectives, or 'outcomes' stratified

into year level aims. This occurred concurrently with sustained commitments and efforts towards a standardised National Assessment Plan for Literacy and Numeracy (NAPLAN). This effort was not substantively changing the curriculum generation role of the teacher away from that of a pizza delivery person who is handed the product and held accountable for the time it takes them to deliver it. This contrasts with the idea that the most effective role for the centre to take in an education system is to ensure a 'creative local process' (Roberts, 1998).

A different relationship was needed to build education sites around the professionalism of the teachers in a way that promoted a dynamic and contextually responsive curriculum development and enactment process. Roberts referred to it as a problem solver model: "In the case of the "problem solver" model, a decentralized curriculum gives teachers greater autonomy in making educational decisions. A diversified language curriculum, characterized by adaptation to learners' needs, requires teachers to be able to diagnose problems and adapt materials and design original learning activities" (p103). This was the starting point adopted for collaborative curriculum designing and planning and programming within the MLL Approach specifically.

To begin this process required some reflection. This involved teachers asking themselves the questions 'what am I doing?' 'Why am I doing it?' And 'how?' Preliminary messages from possible teacher-partners were clear: they did not believe they had any substantive sense of agency in curriculum design and development. Rather, their choices were more limited towards consideration of methods, as Lange observed two decades beforehand:

*Foreign language [teaching] ... has a basic orientation to methods of teaching. Unfortunately the latest bandwagon "methodologies" come into prominence without much study or understanding, particularly those that are easiest to immediately apply in the classroom or those that are supported by a particular "guru".*

Lange, 1990, p253

A perspective that is often missing from this method-based view of teaching is that of how methods interact with other factors in the teaching-learning process. This opened the way for deeper reflection and investigation of what the MLL Approach was doing in calling for teaching second languages jointly with first language literacy teaching. In this case, it required understanding that "Choice of teaching method cannot therefore be made unless a great deal is known about the context for the language program and the interactions between the different elements involved" (Richards & Rogers, 2009, ix). This is also the case for choice of specific researching methods, as will be explored in the next chapter. It is an expression of a general need for responsive pragmatism.



It was envisaged therefore that teachers invited to participate in what would be a PL exercise of collegial partners and potential teacher-researchers (as they can be rightly framed with this call to curriculum design and development), having expressed an interest in the MLL Approach, would commit to a program of learning about what it is, how the three elements of the Approach can work together through guiding principles, macro-pedagogic imperatives and micro-pedagogic task analyses to get the sort of outcomes that are possible, as in the initial trial undertaken by the researcher (now project leader) in his Spanish-English curriculum situation. It would be an action-research cycle about a curriculum design and implementing cycle.

The stage was set for a creative, collaborative generative dialogue. It was guided by Tyler's version of 'what, why, how?' for evaluating the nature and process of curriculum development (1950, p1), proposing that there are four fundamental questions that must be answered when designing any curriculum and plan of instruction. These are:

1. What educational purposes should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be effectively organised?
4. How can we determine whether these purposes are being attained?

These questions opened further dialogue in combination with the overall curriculum development model, the 'rational approach' presented above. Importantly, some recursion to what was currently operative in their schools was essential to initiate what was planned in the PLP to become an ongoing, iterative and adaptive cycle of curriculum renewal guided by curriculum-design principles, joint languages in-step planning, developmentally bounded imperatives and task analysis. This ethical and professional stance allowed for collaborative and productive relationships to grow on the basis that:

*Any innovation in classroom practice – from the adoption of a new task or textbook to the implementation of a new curriculum – has to be accommodated within a teacher's own pedagogic principles. Greater awareness of what these are on the part of the designer or curriculum planner and, indeed, the teachers themselves, will facilitate harmony between a particular innovation and the teacher's enacted interpretation of it in the classroom. The opportunity for teachers to reflect upon the evolving relationship between their own beliefs and their practices lies at the heart of curriculum change.*

Breen (unpublished manuscript, 45) in Richards, 2009 p217

There was thus an effort to design for open dialogue running between teachers' self-stated pedagogical beliefs and those of the MLL Approach. It was a matter of designing-in recursive cycles of messages between the self-talk and expert-research networks to be moderated within the collegial-practitioner network by the researcher and literacy mentor (see 3.4.1). In

a refinement of Taba (1962) and Wheeler (1967) there were eventually eight specific elements in the development cycle of both the PLP and the MLL Approach curriculum design template offered to the participating teachers for consideration of curriculum broadly (see Figure 5). Although the situational analysis and rationale are generally the initiating tasks, through a dynamic and integrated research process each of these eight activities was expected to impact upon the others in systematic ways. The ebb and flow of this cycle of recursive development was readily identifiable as action research as exemplified by Corey (1949, p519):

*In a program of action research, it is impossible to know definitely in advance the exact nature of the inquiry that will develop. If initial designs, important as they are for action research, are treated with too much respect, the investigators may not be sufficiently sensitive to their developing irrelevance to the ongoing situation.*

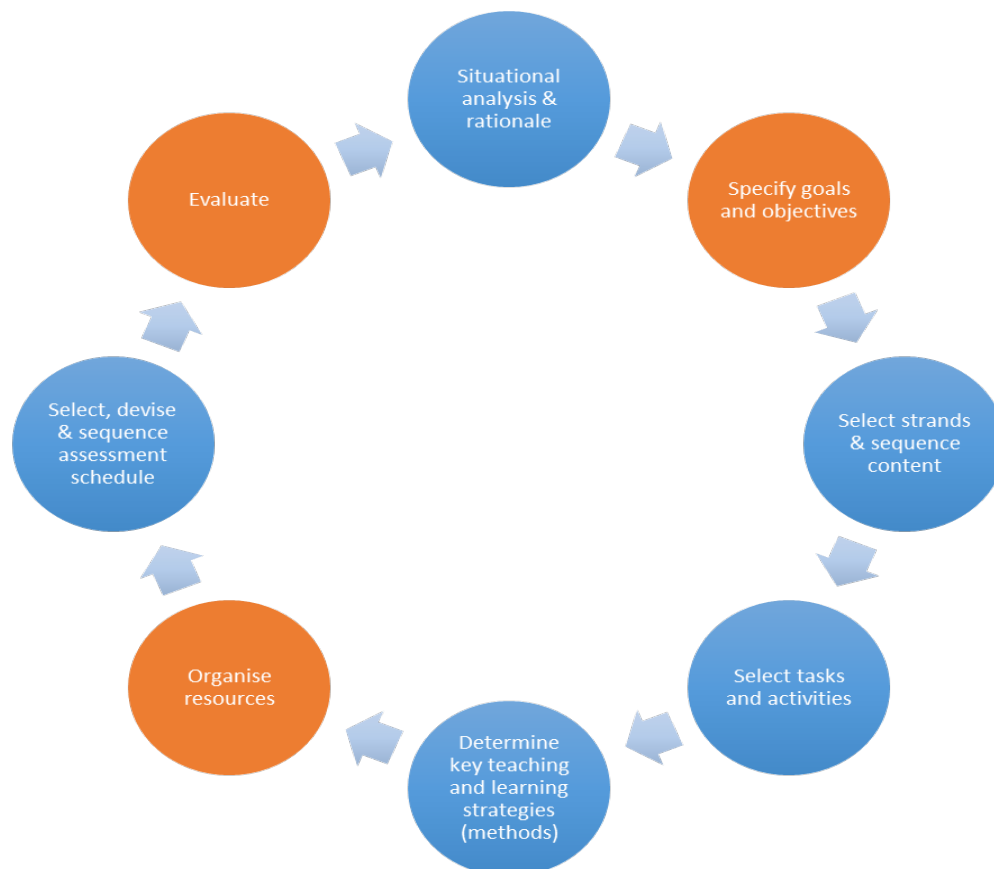


Figure 5: The PLP and MLL curriculum design process

### 3.4.1 Looking backwards: establishing the local expert-research specific task message network

Between the efforts of the author to design the MLL Approach as self-communication in his own activity, and the extension of the communication subsequently to a group of colleagues, he had also involved a couple of local experts (as part of the wider network) in a local network of expert-research communication: firstly, his pre-service literacy lecturer and then

her colleague (a psychologist researcher who had been involved in her research). From these he invited messages of commentary, hypothesis and recommendation. The research psychologist was a source of messages on the process of learning in action, on what can properly be referred to as research methodology, and the literacy expert, whose input had been central to the researcher's pre-service training, was asked to provide systematic messages on suitable pedagogical possibilities and considerations. Both experts supported the evidence-based research from sources such as What Works Clearinghouse, Education Endowment Foundation, Visible Learning, Evidence Based Education and Evidence for Learning. Added to these were meta-analyses undertaken by three National Inquiries into the Teaching of Literacy: USA (NICHD, 2000); Australia (Rowe, 2005); and UK (Rose, 2006). The judgment that these were relevant was based on the literature on the universal principles governing the structure of languages, and those governing literacy teaching and learning, as discussed in Chapter Two. With these actors in place the stage was set for a localised study extending more widely the efforts of one teacher attempting to change a Spanish 'language awareness' program into a literacy-based program. Stepping back into the concrete classroom setting was an anticipated and constant cyclical element of this. The education bureaucracy was also involved; but their role took on more of the character of statutory / system liaison and resource procurement, as their expertise would suggest.

#### **3.4.2** *Collaborative intelligence in action: extending the task message network (research in action)*

As evidence sought on the application of the MLL Approach from the initial teaching of the Spanish program began to emerge and be discussed, normal inter-professional communication was ongoing. Awareness grew in the field among teachers at large and, through the support of the education system, other suitable teachers were invited to become part of the extending research-communication network, of what would become the communicational research system. As was often the case, initially this movement was not planned for, but in the end, it provided the opportunity to further establish the generalisability and hence (external) validity of the Approach and to collect data covering a broad sampling of languages and school contexts, across several sites.

Learning is in the doing and when this involved site-based teams of teachers it became increasingly important to ensure that the same message was received and understood rather than demanding everyone would do the same thing. A classroom schema for teaching languages was on the table and an opportunity to trial its application by other teachers, with other languages and in other settings had arisen. The core notions, subsequent principles and student learning outcomes data from the initial Spanish program proved attractive to the system and to other teachers and leaders. Thus, the task of the teacher-researchers was

now a test of the transmission of the MLL Approach in and through a network of site-based teams of responsive teachers researching their pedagogy and programs by a guided program of professional learning, modification and development.

The expected research-communication network of collegial-practitioners was now in place from the interested professional teachers. The existence of two rather imbricated communication networks in addition to the researcher's own self-talk network called for a shift in the role of the initial teacher-researcher. The researcher was the communicator straddling all three networks.

The important tasks now were the communication of salient, pedagogically relevant messages to this wider group of teachers, to determine whether this transmission would gather any momentum in their day-to-day practices and whether that would lead to a satisfactory rate of growth in measurable literacy outcomes from their student cohorts. It became incumbent upon the initial teacher-researcher to move not only within each communication network but also between; thus, the broader communication system emerged with the initial teacher-researcher at the epicentre of three communication networks, which might be called the 'research in action' task message network, or the 'communicational research' system.

The initial teacher-researcher had to act as an interpreter of sorts, translating and relaying messages from academia into practical pedagogy and translating and relaying messages from practice-based professionals into academic vernacular and abstractions.

### **3.4.3** *Looking for evidence in data of experience and communicated experience*

The issue has been identified as knowledge for practitioners. Over thirty years ago, Robert Slavin asked "Do we really know nothing until we know everything?" (Slavin, 1987, p347). He was speaking to the discussion about evidence and was noting that scant randomised-controlled studies (RCTs) had been conducted. While extreme positions are not common, there are many in the education field who believe that treating RCTs as the 'gold standard' reduces teachers to "intellectual navvies" who are told "where to dig their trenches without having to know why" (Stenhouse, 1980, p5). The issue then and now is not whether systems allow teachers to follow their professional judgments without recourse to research evidence, nor whether carefully conducted research studies can inform efforts to improve learning outcomes, but how research can consider the complexity of social situations in which teaching, and learning occur, and then communicate in a manner that speaks to teachers, penetrates their practice and improves their students' learning?

The importance of complexity, and how to account for it when providing recommendations for policy and practice is the nucleus of the matter. Teachers want to know what works but they also want to know how to make it work in response to their situated dynamics. An analogy with medicine, as the harbinger of the RCT 'gold standard', is instructive to end this general introductory discussion.

The pancreas does not have consciousness nor agency to determine how it might respond to blood-sugar levels, but a patient does have the agency to decide if they will accept and follow through with prescribed insulin therapy. Similarly, one patient's blood-sugar level is not impacted by another's cholesterol level's response to statin medications. But the one patient's response to the treatment practices of a particular doctor may have a determining effect on the other patient's choice to seek or respond to treatment advice from that doctor or any other. It has been estimated that over 75% of patients are noncompliant with medical advice in at least one way (Vermeire et al., 2001). The answers to this are varied and multifactorial but it raises the matter of treating the patient and not just the disease or dysfunction. Such a shift suggests that RCTs in and of themselves may not be sufficient. They may be necessary for understanding patient presentations in general and for identifying what treatments are likely to help improve individual patients, but they are left wanting when it comes to the matter of dealing with individuals as complex systems in which they are self-aware and interact and co-evolve with other individuals and systems: findings from variable-controlled, efficacy RCTs may be necessary but not sufficient for improving an individual patient's symptoms. The UK's Medical Research Council recognises and is responding to the difficulties of applying findings from variable-controlled non-interacting studies to complex, interacting social ones by calling for an increased emphasis on applied, integrative, and effectiveness studies (see Greenhalgh & Papoutsis, 2018).

### **3.5.1** *Iterating practice on evidence: MLL assessment tools, schedules and procedures*

A significant aspect of the Approach involves gathering, recording and evaluating evidence of learning to be used in making teaching decisions and monitoring student learning – i.e., in the elicitation of both formative and summative data. To this end the data must be easily gathered within the ordinary work of classroom and languages teachers, and be easily recorded, understood, evaluated and used by them.

Data collection may often be fine-grained and for immediate purposes, but there will also need to be baseline and end-of-period assessments of students' language and literacy knowledge and skills in English, and likewise the use of targeted assessments of baseline and end-of-period L2 language and literacy skills and knowledge. In any study of a given Approach, standardised assessment tools are needed to monitor impact and effects, on

students' general English and L2 language and literacy development, from use of, for example, this integrated Approach.

Testing is not the same as assessment. As Cronbach stated (1971), an assessment is nothing more or less than a procedure for making inferences. While testing can be viewed as a process that measures someone's performance at a given point in time, assessment is viewed as a systematic measurement process for making inferences about long-term learning.

Another way of putting this is that assessment should be for learning. The question this raises is 'whose learning?' The argument advanced by the MLL Approach is that assessment should catalyse the learning of students and inform teachers, parents, systems and researchers. In this way, it should catalyse these actors' learning as well. Broadfoot's principles for guiding assessments accounts for this constellation of audiences and purposes. They specify that assessment for learning should:

1. be part of effective planning for teaching and learning.
2. focus on how students learn.
3. be recognised as central to classroom practice and research.
4. be regarded as a key professional skill for teachers.
5. be sensitive and constructive, because any assessment has an emotional impact.
6. take into account the importance of motivation.
7. promote commitment to learning goals and a shared understanding of the criteria by which they are assessed.
8. provide constructive guidance about how to adapt, iterate and improve.
9. develop learners' and investigators' capacity for self-assessment so that they can become reflective and self-managing.
10. recognise the full range of achievements (of students, teachers and researchers alike).

Adapted from Broadfoot et al. 2002

The issue then is selection, design and development of assessment tools and schedules that can fulfil these worthy aims, while also providing signposts and evidence that are valid, reliable and actionable for students', teachers' and researchers' purposes.

### **3.5.2** *Assessment tools: general considerations*

The central question around which matters revolve is whether assessment tools used by teachers can be generally operative for the purposes of research as implied by Broadfoot's principles. Principles three and four impose a specific constraint on assessment tools and schedules: teachers under normal classroom conditions must be able to readily apply and interpret them. It can be anticipated that there would be with time increasing similarities across L2 programs using the Approach outlined, and thus there would be similar L2 test

specifications. But given the breadth of language codes and diversity of school settings it cannot be anticipated that the content of the L2 assessments would be the same from school to school. This variability follows from recommending the dissemination of the Approach through the teachers' own teaching development.

Other key problems are the paucity of rigorous and systematic tools for use in assessing second language learning and the all but non-existent status of procedures for assessing integrated literacy development.

There exists a shallow pool of published material on the suitability of classroom-based assessment tools for research purposes. Teachers tend to use tools given to them by the school or system in which they work, or they devise their own in relation to one of three requirements: reporting to parents and the system, testing performance and testing content knowledge. It is not common for teachers to undertake diagnostic assessments that can lead to deeper understanding about a learner's performance. These are usually assigned to para-education professionals such as speech pathologists and psychologists. In some instances, tools are denied to teachers through legislation. There is insufficient space here to adequately engage with the reasons and rationale behind this state of affairs; suffice it to say that it is not unreasonable to suggest that not all teachers are adequately trained in statistical techniques necessary for accurate analysis nor do they have the requisite understanding of test design principles and procedures to ensure that they design and/or administer tools with fidelity. This knowledge is not generally prominent in pre-service teacher training programs. Nonetheless, it is an important matter raised by Broadfoot's fourth principle. The other side of this coin is that insights from tests designed or administered outside of the classroom context and program are difficult for teachers to use.

There can arise a divide between the diagnostic skill set of the specialist and the pedagogical directions needed for classroom action or a divide between tests administered proximal to instruction and tests of learning in novel contexts and distal to instruction. This represents a key sub-text to this thesis: the 'foreign language' gap that divides teachers and researchers, and also teachers and clinicians/specialists (extending to test designers and administrators generally).

The approach taken here is to consider the additional skills and understandings necessary for practicing teachers so that they are in a position to enact an assessment cycle for learning that also provides rigorous and reliable data for research purposes.

### 3.5.3 *The MLL assessment design statement, blueprint and test specifications*

The MLL assessment schema is driven by a focus on design quality and interpretative rigor. The former notion refers to the standards to be used for the evaluation, design and selection of the tools, while the latter pertains to the standards and process for determining legitimacy. In terms of design quality, the following principles served to guide the development, selection and use of data collection tools and strategies:

1. Within-design consistency.
2. Design suitability.
3. Design fidelity.
4. Analytic adequacy.

These principles are particularly salient in the development of the standardised, criterion-referenced assessments necessary for a range of languages being taught across a number of schools. Consideration of interpretative rigor was aided by Tashakkori and Teddlie's notion of inference quality (2003). They identified four (non-exhaustive and not mutually exclusive) criteria for ensuring and evaluating interpretative rigor (inference quality):

1. Within-design consistency (procedural consistency in designing and delivering the data collection tools).
2. Conceptual consistency (inferential consistency across the data sets and with established theory).
3. Interpretative agreement (methodological triangulation across data sets, different teachers and researchers).
4. Interpretative distinctiveness (rival explanations have been considered and ruled out).

The initial development of the MLL Approach by the author allowed for input and scrutiny by psychometricians, literacy assessment experts and trialling with students. Their responses were recorded and scored, and the results analysed by the aforementioned experts to ascertain whether the instrument was capable of providing the kinds of information that would satisfy the pedagogical decision-making needs of teachers generally, the sets of principles and criteria mentioned above, and research purposes specifically. Their responses were in the affirmative.

Hughes (2002, p.59) insisted, "The essential first step in assessment is to make oneself perfectly clear about what it is one wants to know and for what purpose." That is, the what? The why? And the how? In the case of this Approach information was to be sought about the acquisition of L2 items delivered through a planned program of teaching and learning for the purposes of informing instructional plans and evaluation of the MLL Approach in practice. The design and trialling of an assessment tool and schema to satisfy these requirements was undertaken in the initial, localised study by the author for Spanish teaching.



The focus was on the types of task to be used. Of particular import were tasks able to capture information on learners' acquisition of targeted (or delivered) L2 material, and tasks able to capture information on learners' literacy development. An obvious constraint was the classroom program, another was learners' general stage of development; for example, are they able to read questions and write responses? However, a third dynamic was at play: which tasks can identify and provide information about whether and to what extent there is any developmental interplay between the two language programs? This is the matter of establishment of procedures for assessing integrated literacy learning. It is a matter of stating the basis and specific linguistic elements upon which the literature considers language transfer to occur and aligning this with developmentally appropriate tasks for inclusion as test items in developmentally appropriate tools already in use with assessments of English language development, and the derived L2 tools.

The design statement proceeded from the questions: What? Why? And How? This led to the operative 'design statement', what Fulcher and Davidson (2009, p123) called a 'statement of purpose'. Ideally, this lays out a definition of the assessment construct, a description of the learners being assessed and an explanation of why the approach adopted is appropriate. In the case of assessments in and for English language there is no readily identifiable need to construct any instruments, what is necessary is judicious selection.

The preliminary and ultimately enduring design statement was that the purpose is to '*ensure every child is making age-appropriate development and to assess the effect of the MLL Approach*'. Of course, age-appropriate development could be attempted in the context of the English language programs, but given the absence of suitable standardised, norm-referenced tools for L2 language and literacy development in Australia, recourse to teacher judgment was called for. Crafting the assessment blueprint was principally a matter of establishing the kinds of assessment to be used in accounting for the impact on student learning and general effects of the MLL Approach. Green (2014) suggests that there are typically three elements involved: a design statement, an assessment blueprint and test specifications. The fulcrum of this generative exercise were the *specifications*.

A table of test specifications is needed to ensure within-design consistency; research-driven analysis; and that target elements of the MLL Approach and specific content programming are given a degree of attention that reflects different teachers' curricula, thereby preserving the naturalistic integrity of the overall study. The message from a psychologist-psychometrician member of the expert-research network was that a table of test specifications allows for the target knowledge, skills or abilities assessed to be plotted against the different tasks (framed in terms of cognitive processes). Miller et al (2012) have since made a similar suggestion:

*The final distribution of items in the table of specification should reflect the emphasis given during instruction. Objectives considered more important by the teacher should be allotted more test items. This applies not only to the items on classroom tests but also performance assessment tasks. The weight given to the performance of such assessment tasks should reflect the importance of the objective. Similarly, areas of content receiving more instruction time should be allocated more test items and assessment tasks.*

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Not only does a table of test specifications provide for a balanced design it also provides for subsequent interpretation of measurements; for establishing what is commonly referred to by teachers as 'distance travelled' or growth. With recourse to a normed scale significant judgments and conclusions can be drawn. In their absence teachers need to resort to other criteria.

*A numerical scale ... consists of descriptions and criteria for each (task) associated with standards and learning goals... The criteria for each performance level are defined in terms of what the learner does to demonstrate skills or proficiency at that level.*

Law & Eckes, 1995, p29

On scoring and moderation there are obviously various ways of representing scores as either a proportion of the maximum possible score, or in relation to how well other learners have performed, or in relation to a previous attempt or by mapping and weighting the tasks according to what it means for a student to demonstrate basic proficiency (the obvious intent being to assign a grade in this latter case). Percentages offer one way of placing scores from previous assessments onto a comparable scale and for preserving instructional emphases: the initial spelling test score of 5 out of 10 and the subsequent test score of 20 out of 40 could both become 50%. This makes it easier to determine combined totals that preserve the weight of different assessments and to establish (aggregated) 'distance travelled' in a uniform manner within and across reported results. This matter will be taken up in chapter Five, especially the need to support teachers to attend to marking that accommodates proportional weighting should the number of test items within a given category change to reflect their instructional emphasis, as in the example above.

Specifying tasks for the particular assessments relevant to the MLL Approach began by posing the following question: what is important to know about learners' development as readers, writers, speakers and listeners of multiple languages? To arrive at such decisions the author entered into a process of task analysis of literacy guided by the already established understanding of the universality of language, the notion of cross-linguistic transfer and the sub-elements from the Science of Reading and Writing.

What was needed were carefully sequenced research-informed messages about what it is that learners need to know and be able to do at different stages along the way to becoming 'biliterate': an elucidation of developmental or learning progressions within and across languages.

*The idea behind task analysis is that a student must learn the components of a task in order to learn the task. Teachers using task analysis attempt to identify these components and to test the student's knowledge of them in order to decide what a student needs to be taught.*

Howell, Morehead and Fox, 1993, p46

The expert-research message on sub-element skills (see section 2.3.3) had indicated there are six essential sub-elements (components) that need to be planned for in early literacy development and in particular the development of reading, which have become known in the literature as the 'Big Six' (Konza, 2014; see also section 2.3.3). They are:

1. Oral language development.
2. Phonological awareness.
3. Understanding of sound to symbol relationships (extending orthographic mapping to the development of sight words, spelling and morphosyntactic knowledge).
4. Vocabulary knowledge.
5. Fluency.
6. Comprehension.

In the context of multilingual development, van Gelderen et al (2004 & 2007) carried out a three-year longitudinal study of 389 adolescent students that found very strong relationships between L1 and L2 reading skills, demonstrating that L1 reading was a much stronger predictor than various L2 sub-element abilities on L2 reading (see chapter Two, section 2.2.2 of this thesis for expert theories about this relationship). The overall results broadly speaking support L1 to L2 transfer of reading abilities and the Interdependence Hypothesis discussed in chapter Two (section 2.2.2). Furthermore, it is generally agreed in this expert literature that the following sub-element skills transfer across languages and are thereby available as a scaffold for future learning whether that learning is directed towards reading, writing, speaking or listening (Chiappe, Siegal, & Gottardo, 2002; Chiappe, Siegel, & Wade-Woolley, 2002; Geva, 2006; Geva, Yaghoub-Zaheh, & Schuster, 2000; Lesaux et al., 2006; Limbos & Geva, 2001; Wade-Woolley & Siegal, 1997):

- Phonological awareness skills (number 2 above).
- Word decoding skills (number 3 above).
- Reading and writing strategies (numbers 5 & 6 above).
- Metacognitive awareness (numbers 5 & 6 above).
- Pragmatic skills (numbers 1 & 5 above).

However, transfer from L1 to L2 does not seem to occur for:

- Vocabulary knowledge (number 4 above).
- Morphosyntactic knowledge (an advanced level of number 3 above).
- Listening comprehension (an aspect of number 1 above).
- Orthographic script-processing and script production differences.

This scholarship provides for a schema to be devised and used in the development of assessment items and tasks adaptable to the content programming of different teachers of languages that has discernible points of contact with classroom English language programs and (bi)literacy generally. The message provided is that the following five sub-elements are those that are available resources for literacy development generally.

1. Phonological awareness skills.
2. Word decoding skills.
3. Reading and writing strategies.
4. Metacognitive awareness.
5. Pragmatic skills.

And those that are currently deemed language specific are:

1. Vocabulary knowledge.
2. Morphosyntactic knowledge.
3. Listening comprehension.
4. Orthographic script-processing and production differences.

The author's initial assessment instrument was reviewed by the expert-research network for internal and conceptual consistency, suitability and fidelity while the table of test specifications was similarly reviewed to ensure adequate detail for teachers to design different instantiations reflecting their curriculum content. These instruments can be found in attachment folder Three.

### **3.5.4** *Assessment tools and their cross-linguistic relationships*

The relationship between the template L2 test items (Questions 1-7 translated as necessary from the Spanish baseline exemplar, reception/year 1 level, used by all participating languages teachers) and the identified sub-skills can be stated as follows (see attachment folder Three for L2 testing template versions 3a & 3b for reception/year 1 students and versions 3c & 3d for years 2-4):

- Q1. *Oral instruction to write name at number 1.*  
This was a test of oral (listening) comprehension.
- Q2. *Write the given sounds of the alphabet* (initially all common vowel sounds and at least 4 consonant sounds are given, based on program coverage at point of testing).  
This tested students' understanding of phonological awareness and grapho-phonological correspondences (orthographic mapping) in the target language.

- Q3. *Written instruction to 'draw three sisters'* (content in italics to represent program content at point of testing).  
This was a test of comprehension (word and sentence knowledge).
- Q4. *5 minutes for students to write down as many words as they know* (phonetic spelling accepted on teacher's judgment of accuracy).  
This was a test of students' sight word knowledge (expressive vocabulary).
- Q5. *Translation of (12) words from class work* (this list increases as more vocabulary is covered in the program).  
This was a test of students' vocabulary development (semantic mapping).
- Q6. *Written response to 2 written questions requiring specific knowledge of numbers, colours and the use of cognates* (content based on program content at point of testing).
- Q7. Complete this sentence '*Hello...*').  
These tested written comprehension, word, phrase and sentence knowledge (including punctuation) and writing fluency (composition – language sophistication, cohesion and directionality/print conventions).

With respect to English programs, the standardised and norm-referenced assessments identified and recommended by the expert network are listed below. The relationship between the English tests and the identified sub-elements (as opposed to the overall or complete purpose of each test) is as follows:

1. *Peabody Picture Vocabulary Test (PPVT)* was designed to test a student's overall receptive language (vocabulary) using picture prompts and a standard instruction. It provides both a percentile ranking and a growth-scale value (GSV). The GSV is an independent measure of vocabulary development based on the total number of words understood by the student. This measure accounts for the fact that a student's vocabulary can grow even though their percentile ranking may fall.
2. *Phonological Awareness Skills Test (PAST)* is an assessment of phonological / phonemic awareness skills.
3. *The Salford test* assesses reading ability; as such it provides an indication of the second and third elements of the 'Big 6' (phonological awareness and phonics). Supplemental questions are provided to assess the sixth element (comprehension).
4. *Westwood Spelling* provides a measure of students' orthographic, phonological, morphological and etymological knowledge.
5. *Who am I* is an early literacy assessment that provides, information on a student's beginning awareness of key concepts of print, specifically directionality and punctuation.
6. *The Marie Clay Writing Assessment* provides measures of a student's punctuation, language choices, and text structure (as noted above).

### **3.5.5** *Examples of student tasks from specifications of theory and guiding principles*

The task in hand now is descriptive. It involves showing that the combined student-teacher multi-data set from this overall assessment scheme is aligned with the generative hypotheses of the MLL approach (axioms or approach); and the prescribed principles and tasks of the MLL Approach (see 2.2.2 – 2.2.3).

The purpose here is to provide instructive background to treatment of implementation efforts and learning outcomes (such as appear in later chapters). It will generally follow the architecture for integrated literacy development established in the previous section based on the 'Big Six' framework. Specification of key tasks and activities that would be provided to teachers learning to use the MLL Approach are introduced below.

1. *Oral language (vocabulary development), and*
2. *Phonological awareness (in particular, phonemic awareness).*

The first, second and third MLL principles predict that tasks and activities that have, in this instance, been generally and positively operative in one language for developing phonological and phonemic awareness and learning vocabulary are likely to be drawing upon basic, or general, psycholinguistic processes and neuronal structures. As a result, these tasks and activities should produce similar improvements when employed in the teaching and learning of phonological and phonemic awareness and vocabulary in any language. Moreover, the literature as presented in chapter Two and above views this process as interactive and broadly cumulative.

Key activities for phonemic awareness and oral language development include:

- Activities to build oral language patterns (formulaic sentence stems and phrase building flashcard/sentence strip activities, Community of Inquiry, Socratic Seminars, Four Corners, Fluency-focused read-alouds, Rhetoric / dramatic role-plays etc.).
- Games to continue to develop and reinforce phonological aspects, morphology and vocabulary (alliteration/assonance, interactive thematic, functional and cognate-based word walls/flashcards, vocabulary ladders – morphemic, polysemous and etymological-based, semantic gradients and maps, Save the Last Word, Frayer models etc.).
- Activities for mastery of sound and letter identification (e.g., phoneme manipulation, letter name exercises, handwriting).
- Activities that promote the use and development of a metalanguage (decontextualised) for analysing differences and similarities in language systems and analogic reasoning activities that promote cross-linguistic transference, or two-way literacy development (transfer tasks).

3. *Understanding of sound to symbol relationships.*

The Universal Phonological Principle (UPP) states that word reading will activate phonology at the most basic level of language allowed by the writing system: phoneme, syllable, morpheme, or word (Hai & Perfetti, 1998; Perfetti et al., 2005). In terms of the 'Big Six' elements, the UPP implies that word reading benefits from both phonemic awareness and an understanding of sound-letter correspondences (GPC or phonics). The UPP further supports the generation of the MLL principles (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> & 5<sup>th</sup>) for building languages and literacy programs upon phonemic awareness and phonological skills in global and systematic ways as explained in Chapter Two (sections 2.2.2 & 2.3.3).

Key activities for promoting the development of phonics knowledge and skill (orthographic mapping into sight word development and spelling) include:

- Explicit demonstrations of sound to symbol relationships starting with short vowel and continuant consonant sounds (SATPIN is a common start in English), digraphs and consonant blends and from regular to irregular orthographic representations (e.g., sound walls and sound-based flashcards (NICHD, 2000). Highlighting the target orthographic representation of the sound is an optional scaffold). Different orthographies implicate the need for programs to emphasise, include or omit certain elements. This is principally based on orthographic mapping size. English, Spanish, Indonesian and Romaji (Japanese) all share a strong 1:1 phoneme to grapheme focus initially. Spanish and Romaji, however, move quickly and substantively to a CV and CVC (consonant-vowel, consonant-vowel-consonant) syllable mapping size that remains particularly regular compared with English (see attachment 2; Plenary Day 2 PowerPoint in attachment 4; Nakanishi, 1990; Ladefoged & Maddieson, 1998; Freidin, 1991; Brunswick et al, 2010; Konza, 2006).
- Decode, Cover, Write, Check and Translate activity with sound-based flashcards using high-frequency, functional and thematic vocabulary where appropriate (for the focus sound). This is a fast-paced, highly interactive task based on the principles of statistical learning and retrieval practice that support independent reading and sight word development (self-teaching ability & orthographic lexicon). It is a two-stage task based on a gradual release of responsibility model where the teacher explicitly demonstrates and the whole class practices with as-needed teacher guidance and then students practice individually (small group work is not specifically advised but possible). **Stage one:** teacher demonstrates and then students read letter sounds in isolation (letter names are advised later if students are not already familiar with them but the teacher needs to determine whether this would cognitively overload some learners initially, in which case letter names can be taught as part of revision or separately); teacher and students blend (read) sounds to make whole words (starting with blending simple CVC, one syllable words); students read (decode) up to 10 sound-based words on flashcards letter-sound by letter-sound (teacher points to each letter and places sound-based cards in flashcard holders on an uncluttered easel, writes on an uncluttered whiteboard or clear IWB screen). Instruction progresses to the next stage once students are able to write the letters of the alphabet automatically (or are able to use mini whiteboards and magnetic letters to form words. Another option is to trace sound-family words as part of alphabet and sound-family take home decodable readers etc.). This sets the groundwork for spelling and targeted vocabulary instruction in stage two, linking meanings to a larger web of knowledge provided through translation tasks (see phonemic awareness and oral language development activities above). This is a more sophisticated process of semantic mapping that increases in significance once students are ready to engage with morphology and etymology. **Stage two:** the teacher covers the word or family of sound-based words, recites each word and students write them down (students can do this in pairs rather than with the teacher but careful monitoring is required to

ensure this remains an efficient learning process for each student). Teacher removes the cover, students check their orthographic representations and correct errors three times segmenting and blending as they write (if the teacher judges there to be significant confusion, then the teaching sequence is repeated from the start); word meanings are discussed (semantic mapping exercises), translation is determined and recorded by students and words are added to the sound wall (translation in brackets).

A variation to this task involves oral spelling chains at the end of stage one where one letter is changed at a time, and/or sound-letter flashcards can be used to create words and sound family word lists. This can also apply to teaching syllable types and syllable divisions. Reviewing prior learning should occur routinely, with a recommendation to start each lesson with a quick recap of the previous lesson and interleaved practice of a series of prior lessons on a weekly and monthly schedule until accurate decoding and automatic sight word recognition is secured (Spoonerisms and nonword activities are useful). The teaching sequence and practices are based on Hollingsworth and Ybarra's explicit teaching cycle (2009). Resources to extend and diversify this practice in 2010-2011 include: *The Complete Phonics Handbook* (Hope, 2001), *Letters and Sounds* (UK Department for Education, 2007), *From Sounds to Spelling* (Fried & Konza, 2010).

- Sounding out 'all through the word' strategies (segmenting and blending – starting with continuant consonants that can be easily stretched leading to CVC words with stop consonants – in English this involves learning about schwa vowels).
- Chunking words into onset-rime, syllables (common syllable division patterns) and morphemes as appropriate for the language code.
- Word play and word building exercises (mini whiteboards and magnetic letters, Spoonerisms, Elkin boxes, spelling chains where only one letter changes from word to word etc.).
- Use of decodable phrases, sentences and texts (as beginning readers).

#### 4. *Linguistic knowledge (grammar, syntax and morphology).*

The Linguistic Interdependence hypothesis asserts that the rate and extent of language acquisition and literacy skill development in subsequent languages will be dependent upon a learner's competencies in their first language as well as the degree of linguistic similarities between the languages, and their orthography and grammar (syntax and morphology). This notion led to the MLL principles (1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup> & 6<sup>th</sup>) that promote the use of explicit, sequential teaching and learning programs focused on tasks and activities for the development of a metalanguage that can be used instructionally to support a translanguaging immersion environment and contrastive analyses. Sequencing refers to a progression of teaching and learning foci from simple, small units of linguistic knowledge to larger and more complex ones (word and sentence types – incorporating conjunctions, figurative language, phrases, appositives, questions, paragraphs and texts – including poetry) and from the first language



to the target language depending on the complexity of the language construct (see attachment Two for further details). For instance, plurals and the base ten system in Bahasa Indonesia are far simpler linguistically than in English, which indicates a rationale for reversing this teaching flow and thus, minimising cognitive loading. Teaching grammar/transcription and propositional/composition, the writing process, is recommended to be systematic, structured, explicit and undertaken in the context of topics and learning areas (including responses to reading) with a strong focus on genre-specific and self-regulating strategies as appropriate for the developmental readiness of the student cohort (especially spelling and reading ability, handwriting/keyboard skills, vocabulary knowledge, text and literature experiences). These included consideration and adaptation of strategies under six broad headings: sentence and paragraph writing, goal setting, brainstorming and organising, peer revision, self-revision, and summarising (see Graham & Harris, 2005; 'Sharing the Pen' instructional routine, Plenary Day 4 PPT in Attachment 4).

This element represents the most substantive departure from a monolingual view of the 'Big Six' framework, as the focus here is morphological and syntactical knowledge (particularly spelling and punctuation) rather than pure word knowledge that has been shown to be resistant to transference except for cognates (words with a common etymological origin). A specific task for promoting linguistic knowledge is interactive viewing and responding to familiar narratives with targeted use of subtitles (see Nielsen, 2006 for further details) while another is bilingual book-based learning. An overview of a general process for writing instruction adopted and adapted to suit students' developmental readiness is provided by Derewianka's five stage 'Teaching and Learning Cycle' (see updated version, 2015).

#### *5. Fluency.*

The Common Underlying Proficiency theory and the Linguistic Interdependence Hypothesis were understood to mean that effective enactment of MLL principles two, four and six would lead to measurable progress in each student's oral and written fluency. The use of targeted teacher demonstrations of fluent reading, explicit teaching of punctuation and grammar, opportunities for purposeful language use supported by sentence stems, fast writing, writing strategies (see point 4 above), interactive word walls, role-plays / Author's chair / Hot-seating, extended writing, and student and teacher-led reading and writing conferences are all exemplar tasks and activities.

#### *6. Comprehension (and vocabulary).*

The notion of a Language Constraint supported the generation of the third MLL principle that calls for a classroom environment built upon rich, interactive exposure to the (target) language through shared reading, independent reading (at home where possible) and

accompanied by a focus on the early development of high-frequency, functional (Halliday & Webster, 2009), formulaic and task-based (thematic) vocabulary and phrases through interactive word walls (Wood, 2010a; 2010b; Wray, 2005), role-plays, drama-based activities and writing exercises. The MLL Approach strongly encourages use of the target language for everyday activities and interactions, development of interactive word walls, vocabulary ladders (morphemic and etymological) and word games (some ideas include redesigning commercial games like *Guess Who? Guess Where? Boggle/Scrabble*, as well as nursery rhymes and group activities like 'Save the Last Word') and brief instruction in comprehension and composition strategies such as summarising, questioning, clarifying, predicting (Reciprocal Teaching), inferring, monitoring for meaning or cohesion, imagery, graphic organisers and cooperative learning (e.g., 'Community of Inquiry', 'Jigsaw', 'Socratic Seminars', 'Text Rendering', Drama-based activities – 'Hot Seating'). As a result, the overarching prediction is that tasks and activities which support a rich and comprehensible two-way oral language environment will lead to measurable improvements in students' oral and reading comprehension and sophistication in students' written compositions.

### **3.6.1** *The communicational research system at work: a note on introducing assessment*

Designing an assessment schedule was a key piece in the curriculum development cycle, necessary for assessing and monitoring student learning, and for judging the effectiveness of the MLL Approach in its varied implementations as introduced in this chapter (see 3.4.3, 3.5.1, and 3.5.4). The primary message was that assessment involves placing an "...interpretation on measurement information concerning a student's or students' performance" (Smith & Lovat, 2003). A critical question to drive discussion was 'does assessment come after the information has been collected?' Based on experience of classroom teaching and collaboration with teachers in and across schools it was expected that the generally operative view of the group would be that assessment is principally concerned with "...assigning a mark, a rank, a grade, or some qualitative comment to measurement information about a student's work" (Smith & Lovat, 2003). The final view of the group was constructively challenged by the notion that assessment has a sense of comparison:

- Comparison of the information derived from the measurement of one student with measurements from other students.
- Comparison of a student with her/himself at some other time.
- Comparison with an ideal or faultless response.
- That there are three generally accepted types of comparisons: norm-referenced, criterion-referenced and goal-based.

This notion, particularly the final dot point, established a basis for consideration of the research-based need to collect and monitor the effects of MLL Approach implementation initiatives. Consideration was consistently nudged forward with the core message from the expert research literature discussed in this chapter: that assessment of and for learning needs to be systematic and disciplined. Mason's quote was used as a key stimulus:

*from being a sensitive practitioner awake to possibilities, ...  
dissatisfied with the status quo;  
through reflective practices,  
to engaging in productive and effective personal professional  
development;  
through drawing on published research and colleague's experience,  
to contributing to the professional development of others;  
through being **systematic** and **disciplined** in recording,  
to undertaking research and participating in a research community.*

Mason, 2002, p5. Bold is mine

The program followed with the idea that collecting measurement information, data, can be linked to planning through the reciprocal notion of an inventory. In relation to this program of professional learning there were three initiating questions used to guide and support deliberations:

1. What language is to be learnt?
2. What are the language demands of the curriculum or task?
3. What do learners currently know about language, and what are their language learning needs?

Participants were cautioned at this point that there is a not unfamiliar temptation in practice for teachers to see straight through language to topics, units of work and sometimes entire units of study effectively marginalising the importance of sub-elements like vocabulary, grammar and textual features. An inbuilt intention with the first two questions was to bring forth consideration of integrated planning for languages and literacy development. A subsequent or supplementary series of guiding questions were designed to tune participants into this possibility and to start moving in the direction of collaborative or what was referred to as in-step planning. They were:

1. What spoken language demands will there be?
2. What listening tasks will there be?
3. What texts will students be reading (decodability & thematic/conceptual considerations)?
4. What written text-types (genres) will, or could be encountered?
5. What aspects of grammar (e.g., tense, sentence types) does the topic require learners to use?
6. What specific vocabulary does the topic require learners to know?

Addressing the third and final question required refocusing teachers onto data about their learners' current language and literacy development in each language and data about their universal funds of language and literacy skills and knowledge. Planning for this aspect of assessment began with orientation towards different forms of formative assessment. The following prompts about formative ways and means for understanding the current needs of learners were offered. It was suggested that reliable formative tools and protocols are based in:

- Observations of how learners work and interact with others, such as how far they make use of environmental print around the room, their level of interest in reading and writing, and how confident they are in speaking.
- Teachers' interactions with individual learners, such as talking with them about how they have gone about solving a problem, listening to how they reasoned a math task and discussing their understanding of what they are reading.
- The outcomes of listening, reading, speaking, and writing tasks.
- Portfolios of work.
- Learners' self-assessments.

The evolving perspective here is that in developing a response to these questions and prompts an inventory formed that included both an account of what planned curriculum tasks and activities would call learners to do and a considerable amount of formative data about what learners were able to do. What remained was for the teachers to evaluate, or judge, what to teach, how to teach it and in what sequence to teach it. In this respect there were three basic principles offered to support dialogue and drive the process of judging:

1. A focus on *meaning*; this requires the input, or the language that learners listen to or read, to be comprehensible.
2. A focus on *language*; this includes the development of a learner's mastery of language forms, uses and direct strategies.
3. A focus on *use or skills*; this involves using language to transform what has been learned, through generating new knowledge, creating literature and art, and acting on social realities. Indirect strategies were implicated and discussed/demonstrated here.

Based on Cummins, 2000

It is perhaps unfortunate then that despite much work in the field by researchers around the world there was a paucity of norm-referenced yardsticks to support teacher judgment of learning that is in service of learning in two-way, integrated languages and literacy programs, and relating to the patterns and progress of learning a second language jointly with first language literacy learning:

*(A fundamental issue) ...in languages education is the fact that at present no systematically-gathered data are available to address the important question: what is it that children and young people in Australia actually achieve as a result of learning languages as part of their education, at any point along the K-12 continuum?*

Scarino, 2007

### 3.6.2 Data collection: student assessments

The language specific assessments that were devised to capture student progress on each of the MLL program's cognitive tasks were internally consistent, standardised criterion-referenced assessments as described in section 3.5.1 to 3.5.4. There were no published assessments of this kind available in any of the languages (L2) involved in the study. Instead, an initial template was designed and implemented by the researcher drawing upon the formats (to aid conceptual consistency) of the standardised, norm-referenced assessments used for English assessment. The researcher then led the iterative design process of each language specific tool with the participating teachers.

These assessments were conducted at the beginning of the project to establish a baseline and then re-administered at the mid- and endpoints of the project. On average, they captured six complete school Terms of developing practice. Initially, some teaching programs had not covered sufficient material relating to a specific cognitive/literacy task to warrant on-demand testing in the judgment of the teacher. This has been identified on the tables and accounted for in the scoring and assignment of percentages.

In terms of the target language, the format of the questions and structure of the assessments (the cognitive tasks) remained unchanged. However, some modification to content was undertaken to reflect the ongoing delivery of new content within the program (the criteria). The English assessments were conducted by the participating teachers or by the researcher and/or project mentor (who were also registered teachers) in accordance with the conditions indicated by the test design and/or protocols as necessary. This would be the case with the Peabody assessment as it is an individual assessment that can be unduly demanding of teachers' time.

Given the age of the student cohort it was unlikely that a baseline measure of reading comprehension or written composition would be viable. They would be generally unable to read or write at the beginning of the program. Their listening comprehension and oral compositions served in this instance (Q1 & Q6 in L2 and Peabody in English – see 3.5.1 etc.).

Assessments were conducted by the languages teachers under normal classroom assessment conditions that were the same both pre and post study. On a global level, languages teachers provided the following instruction: *this is an assessment of my teaching program. If you decide not to do your best then the low marks will tell me that I have to find a new way to teach this material to you again, if you decide to help each other in order to get high marks then I can assume that my teaching has been successful, and we will be able to increase the speed and difficulty of the program!*

No teacher reported any indication of students gaining external assistance or being disengaged in this situation.

### 3.7 *Summation and next steps*

The key messages from the expert-research network identified in Chapter Two have been carried into this chapter through the frame of the five supporting cognitive-linguistic-neuroscientific theories and the 'Big Six' framework. These notions were previously extended and translated into a series of six overarching, curriculum-design principles that can be a consistent point of reference for the enactment and implementation of the MLL Approach supported by a series of tasks and activities that can be recommended and demonstrated for teachers. The instructional tasks and activities (from p37) can be restated here in summary form as:

1. Activities to build oral language patterns (pragmatics, listening and speaking skills).
2. Activities and games to develop and reinforce phonology and vocabulary.
3. Activities for mastery of sounds, systematic (synthetic) phonics and morphology.
4. Activities that cause the development of a metalanguage (decontextualised) for analysing differences and similarities across language systems (analogic reasoning and learning transfer).
5. Activities that promote mastery of the languages' grapho-phonological correspondence and syntactical principles (phonemic, syllabic, logographic; phonemes, morphemes, syllables, words, phrases, sentences and genres).
6. Activities to build oral reading and writing fluency (rate, accuracy and intonation/style).
7. Activities that develop and reinforce comprehension and composition strategies.
8. Integrated use of these activities across languages: translanguaging.

Further, the assessment framework that is to carry ongoing evidence of learning to inform a teacher's adaptive and iterative moves in action that may provide data for research output has been presented. This constitutes the definitional model of the MLL Approach that was first developed in the author's teaching practice and constitutes its key messages.

The task for the next chapter is the definition of a methodological strategy that discusses how these messages, and the Approach might be communicated, transmitted, adapted and tested in appropriately situated real-life contexts by other experienced teachers. As a result, the discussion in the following chapter shifts from thinking about any research exercise to as clear as possible definition of a PL program with a specific process and purpose as research vehicle for testing the knowledge value of the MLL Approach in complex contexts.

## Chapter 4: An Approach to Method through a Professional Learning Program (PLP)

*The most worthwhile changes in education require time for adaptation, adjustment, and refinement. Therefore, we must be willing to extend support for gathering evaluation information over longer periods of time.*

Guskey, 2000, p9

### 4.1.1 Introduction to the PLP

*Learning cannot be designed: it can only be designed **for** – that is, **facilitated** or **frustrated**.*  
Etienne Wenger, 1998, p229 (bold is mine)

It is nearly thirty-five years since Guskey offered his model of teacher change (Guskey, 1986). That model presented a stage-like overview of systematic efforts directed at improving teachers' instructional practices, their attitudes and beliefs about those instructional practices, and ultimately, the outcomes of learners. These three foci are generally considered the common purposes of PL programs (Griffin, 1983, Timperley et al., 2007). However, what Guskey addressed with his 2002 revision was what he claimed to be the "... second important factor that many professional development programs fail to consider ... the process of teacher change" (Guskey, 2002, p 382). Of course, the first factor was what Timperley et al in their *Best Evidence Synthesis of Teacher Professional Learning and Development* (2007) referred to as integration with respect to theory and its translation into practice (xxxiii). This acknowledges that teachers are drawn to professional learning opportunities because they believe they will gain specific, concrete, and manageable theories and practices that relate directly to their day-to-day classroom tasks (Fullan & Miles, 1992).

A long-standing presumption underpinning the design and delivery of professional learning programs is that changes in teachers' beliefs and attitudes towards certain practices, programs or curricula are the critical starting point from which changes in instructional practices and behaviours will flow, which will in turn improve the targeted learning outcomes. Much of this emerged from psychotherapeutic models (Lewin, 1935), theories surrounding the impact of invisible or implicit biases (Zuieback, 2012, Singleton, 2015) and theories around adults' immunity to change (Kegan & Lahey, 2001).

Guskey does not dispute the importance of beliefs and attitudes for sustained change, what he questions is the sequence in which this happens. The fundamental point of his model of teacher change is that it is "the experience of successful implementation that changes teachers' attitudes and beliefs" (Guskey, 2002, p383) rather than the professional learning experience itself. The logic was appealing for the intention to research practice as intelligence in action. Teachers believe a given practice is effective because they have been

a party to it working in practice, achieving the desired learning outcome(s). It is this observable success experienced through implementation that elicits ongoing commitment in practice, as below:

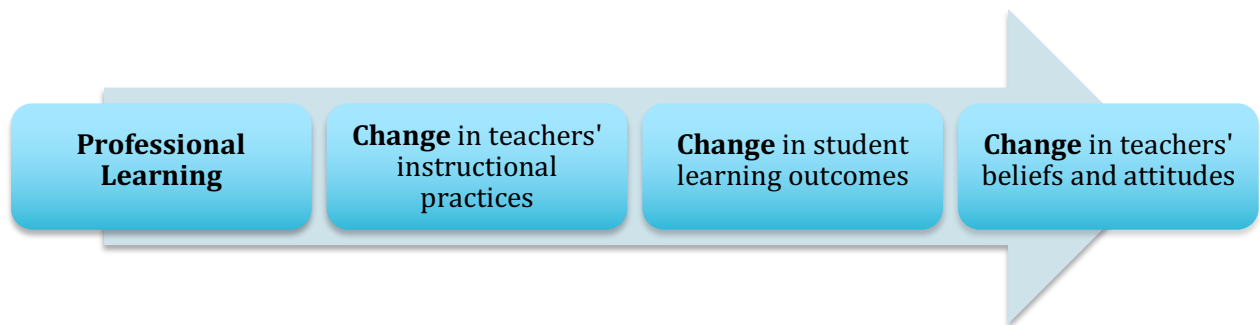


Figure 6: Guskey's model of teacher change

Both a series of systematic reviews that used the University of London's Evidence for Policy and Practice Information Centre (EPPI) web-based EPPI-Reviewer application (Cordingley et al, 2003; Cordingley et al, 2005; Cordingley et al, 2007) to identify characteristics of PL that led to positive learning outcomes and a 'Best Evidence Synthesis' by Timperley et al (2007), which also calculated effect sizes, have supported Guskey's view. A subsequent systematic review by Bell et al (2010) also examined studies that reported a positive impact on learning outcomes from teacher engagement with research findings. This review acknowledged many of the obstacles teachers experience when applying research to their work, in particular, practical obstacles such as time and external support as well as a lack of research skills.

Some of the research methods developed in the health sector were adopted into the design of the MLL PL program. The PARIHS (Promoting Action on Research Implementation in Health Sciences) is one example (National Collaborating Centre for Methods and Tools, 2011). The key elements of this framework are that the effectiveness of research and implementation depends upon the evidence base for the research initiative, the situated dynamics of the implementation site(s), and the extent of facilitation of the research initiative. The evidence, contextual dynamics and facilitation elements of the PARIHS framework are reflected in and support the design and general conduct of the MLL PLP.

The general communication need has been evident for decades: "Gaining an insight into the intricacies of scientific investigations is important, for society cannot make the most satisfactory progress if time, money, and energy are expended on faulty work. Neither can society advance if reliable findings concerning education are not widely disseminated to scholars and the general public for critical examination and appropriate application" (Van Dalen, 1962, p366).



Van Dalen also noted the critical question of how such messages would be communicated to where they were needed most: "Pioneers have struggled to erect some spans of understanding from both sides of the academic river, but a free flow of intellectual traffic to and from the classroom and the laboratory has not been achieved" (ibid. pvii). The problem was one of communication: "The formidable "foreign language" of research fences off many teachers from the exciting frontiers of education thought, and the resulting paucity of teacher-researcher intercommunication impedes professional progress" (ibid. Pvii).

In the scientifically favoured tradition of specialisation, one current idea, consolidated in a handbook (Kelly and Perkins, 2014), is that it calls for a further specialisation:

Implementation Science. The handbook's editors tell us that:

*Implementation science is the science of making programs and interventions effective in real-world contexts. This book is an indispensable, highly innovative, and evidence-based resource aimed at using implementation research findings in psychology to improve all aspects of education, from individual teaching programs to 104rganized104zed104 development. It addresses the widespread confusion and disappointment about the lack of effectiveness of real-world psychology and provides 27 chapters offering proven policies, strategies, and approaches for designing, supporting, and improving interventions in schools.*

Ibid. P1

The danger of inserting yet another research effort (called 'implementation science') between theoretical activities and actual problems is that the new science will be like the old in regard to its view of research, and so the fatal gap remains. Will more communications on the same model mean better communication?

No doubt positive things for various persons associated will come from implementation science, as from other research areas. But for extensive and effective change what is required is a more widely conceived and redesigned model. A different conceptual architecture is warranted, based not on an abstract scientific model, but coming from the activity of interest itself, that is, from what is being done by educators – from educational practice in action. To take this track is simply to follow the lead of human intelligence in action. With an appropriately careful appreciation that in action people fundamentally know and seek to learn about what they are doing, this focus can point a way that widens the scope of the research notion, while building on the value of the existing work.

The touchstone is educational practice in action, but the reader needs at the start to appreciate that while classroom innovations were to be scrutinised, it was the general form of the activity around them, with teachers fostering them in their activity, that was the focus, not specific innovations themselves. The next chapter will give some account of teachers' specific innovations. The task for this chapter is to give an account of the conduct of the

professional learning involved, in a general way, but so as to convey a clear feel for what happened in action.

#### **4.1.2 A Memorandum of Agreement**

As noted above, many studies have shown that the voice of individual teachers is seldom heard in their own school, diminishing their potential as agents of change (Blackler, 1995; Dalin, 2005) or implementers of a novel Approach. It has seemed to be a fundamental phenomenon of educational organisations that there are few incentives to learn from one another. Drawing upon these conclusions, the following principles guided the development and delivery of each of the PL program's group workshops and school visits:

1. Information must be relevant and translated for practice.
2. The transfer of knowledge must be organized and accompanied by sufficient personal-professional contact and support in the implementation phase.
3. The school and local community need to be supported in assuming a positive disposition toward school improvement along with a workplace culture that is characterised by administrative support, collegial co-operation, and problem-solving behaviour.

As early as 1990, Louis and Miles sought to uncover how processes of school change take place under very different and often difficult conditions. The following five principles, described in their subsequent publication (1990) as being of critical importance to school-level change, also guided the nature of interactions between the researcher, the research expert network and each school team:

1. Clarity: new knowledge must be comprehensible and clear, not vague and confusing.
2. Relevance: new knowledge must be seen as meaningful for everyday school life and not irrelevant, inapplicable or impracticable.
3. Workable: it must be possible to illustrate the knowledge in terms of specific acts. Teachers must know what they are doing to get there.
4. Will: new knowledge must develop the motivation, the interest, and the will to do something with it.
5. Skills: each individual teacher (or principal – administrator) must be equipped with the necessary skills to support and implement new practices.

In every political system the government is faced with hard choices with respect to its centralised role. The education authorities must first and foremost consider the distinctive character of teaching. The task of the 'system' is to set the stage for a 'creative local process' (see 3.3.2 above). This fits well with public choice theory that has been pervasive across OECD countries in recent decades. Moreover, it is representative of the character of the educational system in which this study occurred: centralised management in a centralized system.

Therefore a Memorandum of Agreement (MOA, see attachment 7) was developed and agreed upon between the public education department of South Australia (at the time DECS – Department for Education and Children’s Services, then DECD – Department for Education and Child Development, and now DfE – Department for Education) and the Flinders University School of Education for the purpose of developing, delivering, monitoring and evaluating a two-year professional learning program with the goal of investigating the potential of the MLL Approach. This was the fundamental strategy for working with the system in support of the school-based investigations: it dealt with resources, responsibilities and above all, a clearly articulated commitment to the site-specific processes of change (see attachment folder Seven for further details).

Strategies that were embedded in the MOA process and subsequent articulation of the professional learning program were in line with the following principles that were identified by Dalin (2005, p. 252) as a basis for effective external and systemic strategies for supporting change within educational organisations:

1. Without support, teachers will only see problems.
2. With support, and with ample opportunity for in-service training, the mood will change.
3. Success requires renewal at the local school level. For change to be sustainable, systematic work at each school must be carried out over a period of several years. Leadership and co-operation is required.
4. Reforms require changes in school culture. This will take place provided the reform is organized as a learning process (an opportunity for the development of a professional learning community/collegial-practitioner network).
5. Reforms require system modifications. For reforms to succeed, one must work with all the elements at the same time.
6. Results depend on the execution: on the way the stage is set for learning and collaboration throughout the entire system.

The PLP activities were guaranteed full funding through the MOA. The overall cost, inclusive of all resources, catering, venues, relief-teacher payments, literacy mentor fees, travel, administration fees, interview and evaluation report, was slightly less than \$210,000, or approximately \$4,000 per teacher per year. It was considered an economical budget by the Department for Education and sustainable by site leaders.

The program had its own structure that was rolled out in three phases that helped the research project to arise from it, but this happened somewhat independently in its own way. Of immense importance was support for the periodic full-day workshops (plenary days).

#### **4.1.3** *The PLP Task Message Complex*

The sections of this chapter that follow attempt to convey the real character of the PLP, its constant activity and interactivity. It was not a giving out of rules, but a developing dialogue,

alive and not mechanistic. The underlying 'solid' structure already set out in chapter Two, and the law-like basic science involved, were still prominent. They were fed into the process through presentation of systematic listings, as set out in Chapters Two and Three (see attachment folders Two and Six). This information and other material to follow may seem to proliferate unhelpfully, but the reality of the action was an evolving communication, a proper effort to have all parties assimilating and adjusting information to drive and test their own adaptive activity. The proliferation served the communicative effort. Figures 3 (Chapter Two), 4 and 5 (Chapter Three) have outlined the abstract schemes.

The reality was constant, dispersed iteration and evaluation, with people taking charge of their own intelligence in action, but in a context of regular penetrating communication and evaluation, for the whole group meeting together, for the individual site teams, and for the program leaders. The process was not simple and prescriptive, but flexible and invitational. The seeming proliferation of messages was just part of the communication. What would catch the attention would differ from person to person, according to their own schemes for action, and they would work out in action the significance of the different messages in their own selection and in their own time, as iteration followed iteration, and messages returned frequently. 'Nature's way' perhaps is just this: proliferation of messages and communicators alike, constant recycling and lots of time. What was to be organized was a dialogue between a planned experience enacted and an understanding of that experience for further action. Mere experience is not enough. It must be insightfully understood and then judged to be adequate in its particular way as evidence (see 3.2.3).

The author maintained Guskey and Lonergan's view that the central focus for establishing 'what works' is direct evidence of change in individual student learning outcomes. In the context of the MLL PLP this meant data from the collegial-practitioner network. But, given the longitudinal nature of the MLL research initiative and the time taken for the sequence of influences to reveal their effects, intermediate indicators of progress were sought from the collegial-practitioner network through continuous dialogue, and also through journal recording of comments on experience and understanding, to be supplemented later by interviews and learning outcomes data.

In approaching the phase of curriculum development with PLP participants two notions helped to guide deliberations and action during plenary days: selection and universality. The first was provided by Mackey (1965). The salient point being that "Selection is an inherent characteristic of all [programs]. Since it is impossible to teach the whole of a language, all [programs] must in some way or other, whether intentionally or not, select the part of it they intend to teach" (p161). The MLL principles were generally operative here, but decision-making was to be supported through recourse to the bounded macro-pedagogic imperatives

and micro-pedagogic process of task analysis; both of which were judiciously presented, demonstrated and nurtured in action through subsequent plenary days.

This movement required looking back and looking forwards. Reflecting on what was already happening was an obvious starting point for the commitment to treating teachers as ‘architects’ of curriculum rather than ‘couriers’ (see 3.3.2). What was available for review at that stage was the new English curriculum framework (ACARA, 2009). Notably, it articulated three strands for planning: language, literacy and literature.

The second notion, universality, provided a connection between the aims for English learning and those of the teachers of each of the languages that were being targeted for in-step planning. The lens offered to gain an overarching sense of perspective was the notion central to the MLL Approach, i.e., literacy as described in Chapter Two, and what were designated in section 2.2.6 the micro-pedagogic considerations. In this context, the focus for considerations of micro-pedagogy was generative – aimed at designing both for languages acquisition and global literacy development. So far, the argument has been that literacy involves the creative use of socially shared linguistic and cultural resources where ‘creative’ and ‘use’ implicate cognitive dimensions. The accepted idea that literacy practices are shared leads to the inescapable conclusion that they are also governed by conventions. In this way the notion of literacy is becoming, as Harold Rosen puts it, a matter of “playing the game of free choice according to the rules” (1985, p14).

All literacy practices were presented as having a primary purpose: to convey and interpret meaning. For the curriculum development cycle this entailed a move towards visualising the relationship among identifiable linguistic and cultural resources and the development of the cognitive dimension of literacy, specifically for reading and writing. This was aided by Kern’s notion of ‘available designs’ which is itself intimately linked to the task analytic process called for by the MLL Approach’s micro-pedagogic element. The sub-text to this aspect of the PLP was the belief that a directed, often artificial learning program has increased benefit for all learners if it has a core schedule of explicit and systematically taught tasks and activities.

The importance of explicit and systematic teaching coupled with cues and prompts for cross-linguistic transfer (tasks) remained an enduring point of reference for demonstrations of classroom practices translated from the basic science, especially as they related to L2 programs. The underlying rationale for this was introduced in chapter One (Schumann, 2004) and was reinforced recently in Seidenberg et al.’s paper (2020) that concluded learning a primary language is less cognitively demanding and involves more implicit statistical learning of mappings between orthography, phonology and semantics than a second language. And, effective second language learning requires more “explicit rule

learning and instruction (but)... with extended study successful second language learners eventually begin encoding language statistics through usage” (p14). The MLL curriculum-design principles (3, 4 & 5, p31) were an interpretation of this basic science and key point of reference during plenary day demonstrations, planning for, and prompting, reflections on practice.

In referring to available designs what Kern is highlighting are the initial knowledge, know-how, and patterns that enable reading, writing and conversation to begin. In other words, there are definable schemata of skills and understandings necessary for the enactment of literacy tasks: for conveying and interpreting acts of communication. These are: vocabulary, grammar, declarative knowledge, stories, style, genres, procedural knowledge and writing system(s) (Kern, 2000, p62). While these are helpful in the abstract as a higher-level guide for task analysis, they do not of themselves lead directly to a plan for teaching and learning that allows for the observable process of gradual and differentiated development.

Specifically, the PLP did not take the stance that it would be through mere practicing of communicative acts in a purely naturalistic manner that learners would become literate: that would imply reading and writing are biologically ‘natural’ processes. A more discriminating analysis of these tasks was deemed necessary for effective and efficient teaching and learning. The PLP engaged with this notion by drawing upon the already operative task-analytic frame for reading (and writing as noted in 2.3.3) known to the participants and introduced in chapter Two: the ‘Big Six’ of reading. These are: oral language, phonological awareness, letter-sound relationships (phonics), vocabulary, fluency and comprehension (Konza, 2014). And the logical extension of this, as presented in the Australian Curriculum’s Literacy General Capability and chapter Two of this thesis, is that systematic interrogation of written texts (& grammar) can promote development of the ‘Big Six’ in relation to writing activities.

The PLP also presented the idea that while it is natural for learners to enter into the reading process early in their first language this may not necessarily be best practice for learners in their subsequent language. The rationale, quite simply, is that learners have an established lexicon in their first language that enables them to readily recognise letter sounds, decoded words and then meaning. This cannot be expected of learners in their developing second language and would therefore need careful consideration to support reading for meaning in addition to mastering the mechanics of reading. With this in mind, the PLP promoted a developmentally ‘inverted’ notion drawing on the thoughts that Allen put forward in 1965 from the perspective of a learner of a new language, namely

*What I can think about, I can talk about  
What I can say, I can write*

*What I can write, I can read.*

Connecting with this developmental, multi-level task-analytic frame was instructive. Material from the expert-research network was introduced to prompt consideration of the sub-element skills and understandings of literacy alluded to by Kern's notion of available designs and the 'Big Six'. It is an orientation towards identifying those resources learners need, to communicate across different modalities, how and in what sequence these can be scaffolded for learning within and across languages (in-step planning) and which resources could be used as cross-linguistic resources as called for by the MLL Approach. Practices for translanguaging (mixed-use of languages as a learning scaffold) and tasks of contrastive analysis (analogic reasoning as a learning scaffold) featured prominently at this point and set the scene for later considerations of collaborative, integrated, or in-step planning between the classroom and languages teachers.

In-step planning refers to deliberate plans for concurrent or sequential teaching of two languages, with similar material that provides opportunities for developing and leveraging translanguaging and contrastive analysis techniques that scaffold and enhance learning. A number of examples were provided based on the initial trial of the MLL by the author. An obvious target was vocabulary. Beginning with the language of classroom instructions this process requires teachers of both languages to attend to nouns, prepositions and ordinal words, but also adjectives and verbs. In general, the flow should be from the L1 to the L2 in this context, but it is in the teaching of the L2 that the opportunity arises for creative use of target vocabulary and phrases in novel contexts of use (the L2), and active reflection on language choices that aid development of metalinguistic knowledge and self-regulation. As teaching programs progress there is a greater emphasis on content knowledge. The idea shared with teachers was that word knowledge is world knowledge and when teachers of both language programs attend to the same core, thematic-conceptual vocabulary with the same tasks such as Frayer models and interactive word walls, there is an opportunity to develop learners' ability to compare, contrast and reason from the meanings of key terms using salient information from two language contexts, thereby extending their conceptual schema and word attack skills.

The concurrent enactment of phonological awareness tasks across multiple languages is another example of in-step planning. This has the advantage of 'fine-tuning students' ears' to the sounds of language, a critical skill underpinning phonemic awareness and early phonics instruction in a manner not afforded by a monolingual context. This also applies to the development of the orthographic mapping principle and blending and segmenting skills that underpin decoding, or the basic mechanics of reading (and writing). However, the in-step flow could be reversed in English L1 speaking classrooms due to this language's deep

orthography (an orthographic challenge to overcome). The principle of mapping sounds to symbols is more stable with all of the languages involved in this study and on the basis of the author's trial in his English-Spanish context it was advised that learners would likely learn more quickly and be less confused by more shallow/regular (Spanish) orthographies which can be used to facilitate earlier and more effective development of phonics-based competencies, particularly for those children with learning difficulties as regards English literacy.

There was support for this approach in the literature. Aro and Wimmer (2003) found that while French, German, Dutch, Spanish, Swedish, and Finnish children achieved oral reading accuracy approaching 90% by Year 1 with pseudowords that share commensurate onset-rime patterns with a real word, such as *dos* (two in Spanish) and *sod*, English children achieved only 50% accuracy after approximately the same amount of schooling, and the higher figures were not attained in English until Year 3, where phonics programs were used, and Year 4, where phonics programs were not used. In the PLP it was posited that this type of evidence is arguably quite robust given the phonological recoding demands of the task. But, harnessing this differential rate of reading development to promote a learning advantage was a challenge as there were no linguistically-developmentally appropriate learning progressions available to guide in-step planning and joint teaching of English and L2s to deal with the different linguistic and orthographic challenges indicated by Aro and Wimmer's study (e.g., orthographic depth, multiple verb forms, noun markers, and use of syntactic and semantic pronunciation cues). The 'in-step flow' had to be developed by the teachers on the basis of the exemplar Spanish MLL curriculum, knowledge of L1 learning progressions, L2 linguistic knowledge, and then iterated in action on the basis of evidence of learning.

The key principle conveyed was that in MLL programs each language is a resource for the learning of the other. The appropriate stance is analytic, determining which language should take the lead in the teaching sequence, based on an analysis of the relative coherence and durability of each language's operating principles, linguistic item(s) or required cognitive effort/skill(s) for learning. The language with the most coherent and/or consistent element(s) should be considered, along with learners' corpus of L1 knowledge and skills, for taking the lead. This may minimise the potential cognitive load and the number of possible confusions while at the same time increasing the probability of a learning advantage. The time-lag for this form of transfer-based instruction, or between learning of the salient item(s) in one language and then using that for learning the same or similar item(s) in the other language, may be a day, week or even the same day. Next, planning consideration moves to practice and retrieval. Whichever language follows in the teaching sequence provides novel contexts



for extending and securing new learning. There is, in this sense, an interleaving process inherent to the notion of in-step planning that hinges on joint planning for cycles of interspersed practice where the lead language becomes prior knowledge for learning of the subsequent language using an in-step reciprocal rhythm.

#### **4.1.4** *Extended research scheme: the PLP, plenary days and site visits*

This section has drawn from the author's prior publishing. See Nielsen et al., 2012; Nielsen et al., 2016.

Taking into account the pressures and distractions of school environments, the idea communicated to the system was that contemplative reflection, constructive dialogue and responsive programming would be most likely to eventuate in environs away from the 'school bell'. On this basis funding was provided to undertake the series of full day plenary sessions at the University regularly over two years (the schematic timetable is given in 4.2.3 below).

A copy of each day's agenda, outlining the general course of each day and the overall planned program can be found in attachment folder Six and attachment folder Two respectively. Each PowerPoint that was used to support and structure these plenary days can be located in attachment folder Four. There is no PowerPoint for PL day eight, as it had a forward planning and evaluative agenda, for open discussion.

For the participating teacher-researchers' dialogues the key features of the PLP were the plenary days. These were planned for and executed using clearly translated theoretical notions supporting individual situational analyses, and progressing into articulation of the needs of learners, aims for programs and an overarching consideration of the MLL Approach.

A core component of the message transmission system was translation of ideas, tasks and feedback from one audience to another in an ongoing, reciprocal fashion. Each teacher came to these days from a different setting and with a different pedagogical belief system. While these differences responded positively to the more general communications from research, what proved vital for such abstractions to emerge as classroom actions was having them rephrased, sometimes metaphorically, but most often concretely set within the experiences and parlance of each teacher. This communicative dynamic was directly aided through the use of site visits by the researcher and through a dialogic presentation of tasks and messages to the full group by the two researcher guides (the author and the literacy mentor from the expert-research network). The nature and significance of these reciprocal discussions has been summarised by the well-regarded cognitive psychologist Kirschner in a recent blog post (2020) thus:

*...research doesn't bring certainty but questions certainty. It can tell us what could or should work in what situations with what type of learners and not what you must do. It helps the teacher to be evidence-informed. It can, however tell you what you mustn't do. Science is not something stable and unchanging, but dynamic and questioning. That's what a good researcher does. On the other hand, being a researcher is about being a partner in the educational process (with teachers). It's about listening, working together, translating, and so forth.*

The idea of site visits is relatively straightforward. However, the dialogic or collaborative communication of tasks and ideas by two research leaders is not. In the first instance each message had to be preserved from ambiguity that could arise when attempting to integrate two views on each. Next, as both experienced teachers and researchers, the author and the literacy mentor had to establish consistent pedagogical views about the matters at hand and enter into an openness to being challenged and scrutinised in the moment of transmission. Lastly, a positive disposition towards uncertainty in the face of differing perspectives and understandings was required. These dynamics were aided by the use of examples, metaphors and task exemplars from two similar yet distinct pedagogical experiences. Collectively, this provided for constructive communications to teachers to take place that also modelled a viable process of research communication with participants on the plenary days and with their school-based colleagues. Clarity, responsiveness, demonstration of tasks and timely feedback were core principles at work in this space.

The initial key messages about the MLL Approach established a basis for each teacher's ongoing engagement with the research project; it either resonated with their pedagogical belief system or not. If it were the latter, it would be reasonable to expect participants to exit the project. This did not occur. Substantively speaking, the PLP was a series of communications on and about the MLL Approach that operated to support and guide each participants' movements from their concrete contexts to the abstractions of research findings around the Approach and its tasks, and then the return to action in their context. The initial (see 2.2.6 & 3.7), core pedagogical tasks communicated were:

1. Activities to build oral language patterns (pragmatics, listening and speaking skills).
2. Activities and games to develop and reinforce phonology and vocabulary.
3. Activities for mastery of sounds, systematic (synthetic) phonics and morphology.
4. Activities that cause the development of a metalanguage (decontextualised) for analysing differences and similarities across language systems (analogic reasoning and learning transfer).
5. Activities that promote mastery of the languages' grapho-phonological correspondence and syntactical principles (phonemic, syllabic, logographic; phonemes, morphemes, syllables, words, phrases, sentences and genres).
6. Activities to build oral reading and writing fluency (rate, accuracy and intonation/style).
7. Activities that develop and reinforce comprehension and composition strategies.
8. Integrated use of these activities across languages: translanguaging.

These core tasks gave way to concrete explanations and task-analytic discussions that yielded feedback on their acceptability in light of prior experience and subsequently, feedback on their enactment. It was this final element that proved highly productive in terms of research output: participant feedback on task definition and performance – learning by doing. As noted initially in this chapter, the close attention of practiced teachers is generally on what is to be the classroom task. That is their main frame of reference.

In the first instance the expert-research network had to identify the aforementioned tasks for integrated literacy teaching and learning as called for by the MLL Approach and to then analyse each task in terms recognisable as teachable chunks or sub-element skills and knowledge. Appropriate pedagogical considerations were then entered into, and deliberation given to how best to communicate these ideas to the teacher-research network. Guiding the teacher-researchers into a task-analytic stance required heuristic and dialogic communication at a range of levels from broad theoretical abstractions to practical pedagogy. This ensured task-based messages were readily applicable to participants' own learning in action.

The teacher-researcher (or collegial-practitioner) network subsequently planned and responded by turns to ensure effective feedback, engagement and partnership in the process of transmitting ideas and tasks from the expert-research network through to classroom enactments and back again.

This ongoing, reciprocal cycle of communications constituted the research 'method' in its general, extended form. It was centred on real-life classroom activity that formed the basis for transmitting a dynamic task-analytic research message about languages and literacy education by encouraging equal and open communication interplay between teachers and networks, whereby teachers and networks participated jointly in the research task.

#### **4.2.1** *Key aspects of the PLP: the providers*

The PLP had a program leader and a program mentor. The originator of the MLL Approach (i.e., the researcher) was program leader, and the university literacy expert was mentor. The essential role of both was to foster accurate appreciation of the teaching Approach being disseminated, while encouraging a general collaborative, consultative and creative professional dialogue among all participants. Teachers were being asked to collaborate and share, as the program proceeded, but not to mentor each other.

#### **4.2.2** *Participants*

Teachers of junior primary and early primary years were invited to nominate themselves together with at least one colleague from their school. The minimum requirement was for a

language teacher and a classroom teacher. Site leaders (principals) were also invited, and each nominating teacher was required to obtain the written support of their site leader for release time to attend the fully funded plenary days and a guarantee that their nominating staff were assured of continuing employment at their site for the duration of the program.

In the event, there were ten school-based teams of teachers (and three site leaders) accepted. Those accepted represented a broad cross-section of languages taught in the South Australian public primary school sector: French, German, Indonesian, Italian and Japanese (in addition to the researcher's own trialling in Spanish). Equally broad was the cross-section of schools represented. These ranged from large, inner suburban schools with a high average socio-economic status to large, inner suburban schools with a low average socio-economic status; the representation of rural schools included a very small, remote school and a large rural school located within a regional centre. There was also a school from a popular tourist township located over an hour from the CBD, a 'riverbed' school nestled within a predominantly primary produce community and a school located in the inner CBD with a very high proportion of parents with professional careers.

Similarly, the cross-section of teachers ranged from those with over twenty-five years of experience to those with less than three years. On these bases this eclectic group was considered highly representative of the state education system generally. Further details on each specific site will be given in the 'case-study' write up of their provided data in the next chapter.

#### **4.2.3** *Design elements of the PLP*

The PLP was designed in three phases.

##### **PHASE 1: DESIGNING THE IMPLEMENTATION (TERMS 1 – 3, 2010)**

1. Select **10 schools** where the classroom teacher(s) and the second language teacher(s) are interested in working collaboratively on the development of shared literacy teaching practices.
2. Provide three PL days for teachers at Flinders University (FUSA):

##### **Plenary day one**

Introduce the project, the curriculum-design principles; the processes and the desired outcomes. Begin a comparative analysis of the linguistic structures of their target languages with English: phonology, morphology, orthography and grammar/syntax.

##### **Plenary day two**

Mapping the learning sequences and teaching practices for literacy development in each second language (oral language, reading and writing). Matching these with English literacy development sequences and teaching practices (adapted as needed).

Guiding teachers' development of criterion-referenced baseline assessments for monitoring each student's literacy development.

### **Plenary day three**

Focus groups where teachers are guided through an in-step (joint) planning process that extends the design of their integrated languages and literacy programs.

Ongoing development of criterion-referenced assessments for monitoring students' literacy development.

3. Site-based activities included: delivery and evaluation of baseline and ongoing assessments for English and the second language, preparation and delivery of a scaffolded literacy program.
4. Development / dissemination of bilingual oracy, reading and writing resources (including interactive whiteboard resources).
5. Establishment of digital communication medium: Edublog site.

### **PHASE 2: STABILISING THE IMPLEMENTATION (TERM 4, 2010)**

1. Participating teachers' baseline data entered into databases and analysed along with ongoing assessment data. Assistance provided on the adaptation and design of new literacy tasks (teaching and learning) implicated by assessment data.
2. **Plenary day four** in Term 4, 2010 at FUSA: support of in-step school-based planning, data analysis, further literacy task development (teaching and learning of writing focus), and planning for end-of-year assessments.
3. Individual site visits linked to ongoing planning and reflection. Select additional classroom teacher from each site to enable expansion of the program within and across further year levels (Term 4).

### **PHASE 3: EXTENDING THE IMPLEMENTATION TO A WHOLE OF SCHOOL FRAMEWORK: NURTURING SELF-RENEWAL AND ENSURING CONTINUANCE (TERMS 1 - 4, 2011)**

1. **Plenary day five** in Term 1, 2011 at FUSA: guided reflection and planning with Australian Curriculum, including end of year assessments, ongoing refinement of second language (L2) literacy developmental continua and further design of L2 curriculum details and resources (e.g., developmental modifications and tools supporting translanguaging practices and transfer tasks). Specialist language teacher focus.
2. **Plenary day six** at FUSA (Term 2) guiding in-step curriculum planning and further resource development in support of expanded programs.
3. Individual site visits to assist with planning, reflection and identification of resource needs.
3. **Plenary day seven** at FUSA to support curriculum review and renewal, new resources and post - 2011 planning (Term 3).
4. Individual site visits linked to planning, reflection and end of year assessments as needed (Terms 2 & 3, 2011 full days). Site developments: active inclusion of Principal and/or key staff to support the development of a whole of school framework and extension of the program into the middle and upper primary years to ensure continuity of the program subsequent to the project.
5. **Plenary day eight** at FUSA (Term 4, 2011) for the purpose of program evaluation by participants, invited guests and for (second language) teachers to consider the extension of their joint practices at sites across the primary years, including pre-school.
6. Summary report to DECS and FUSA, February 2012.

#### **4.2.4** *Iterating the PLP design: evaluation questionnaires*

In the context of this study, evaluation was the "... overarching concept that both depends upon measurement and assessment and brings together a number of measurements and assessments to make a composite judgment or decision" (Smith & Lovat, 2003). An evaluation can be undertaken with:

- Students
- Teachers
- Resources
- Activity(ies) / strategy(ies)
- Programs
- A group of programs / courses
- A whole school

The summative evaluation of the MLL Approach PL program was based upon an integration, or triangulation, of information from teacher journals (including information about the context(s) in which they implemented the MLL Approach), interviews and reported evidence of student learning (assessment measures).

There was also an embedded, or formative aspect to the evaluation. This aspect was purposefully designed and deployed to inform an iterative approach to the design of the PL days: PL day questionnaires. Key considerations for this tool to inform were: what is it that teachers now need to consolidate, what are they unclear about, what hasn't stuck, which PL elements are working, and which aren't? In a broad sense, the purpose of this tool was to determine the status of learning and what was to be done next in the PLP to ensure engagement, understanding, skill and effective implementation.

It was understood that such tools have limitations. With this in view, the designed format for the questionnaire included significant scope for qualitative judgments and directions for subsequent sessions on behalf of the participating teachers driven by guiding, open questions. This tool was standardised, delivered and completed anonymously at the end of each plenary day or returned via post or email soon thereafter as dictated by the wishes of the participants. A copy of this tool can be found in attachment folder Five (PL day questionnaire).

#### **4.2.5** *PLP tools: curriculum and pedagogical planning schemas (supporting in-step planning and implementation)*

Developmental scaffolding of learning was aided by the introduction and application of stage-like sequences for language and literacy development. These sequences needed to be identifiable in their programs, especially those adaptations deemed necessary by the

teachers for use with their different languages. There was no expectation that these sequences would be formally evaluated through the PLP or the research project itself. They were guidelines teachers could adapt and apply in their teaching, in light of the Approach suggested.

Support for joint planning was an essential component. The MOA was the first step, outlaying resources to enable teachers to meet, discuss, reflect, seek guidance, plan and evaluate. This notion of jointness took root with the teacher cohort as it was seen to connect intimately with the messages about cross-linguistic transfer, recycling rather than separation of language and literacy elements and their enacting neuronal networks, principles of universality and hence translanguaging practices and contrastive analysis techniques. Throughout the PLP recourse to this notion of 'being' in-step was presented as a way of visualising and organising collaborative planning and programming drawing upon those aforementioned messages from the research expert network.

It was expected that this approach to curriculum planning would generate novel and highly interesting professional judgments about the ways specific elements of language and literacy development cross over or become available as a resource for learning the other language, allowing for comparison of language codes from a pedagogical, if not cognitive loading perspective. There was no clear evidence in the generally available literature that indicated the exact nature of any developmental interplays between the concurrent learning of two languages.

In order for the participating teachers to effectively undertake this novel, in-step approach to languages and literacy planning required some carefully scaffolded sessions within the PLP. An explanation of in-step planning was that it is like a three-legged race. The central, bound leg represents literacy development that is occurring within and across languages in a generally concurrent fashion. The outer two legs represent the different languages at play where, depending on the context, either of the two languages might be leading the charge to acquisition (see 4.1.3 above).

Explanations were aided by the use of the developmental schedules. Sequential schemas like this were not new ideas; teachers routinely used them as reference points when they were planning. While many such schemas were available for English language learning there were no suitable options for the array of L2s involved in this study at the time. In practice, languages teachers have tended to focus on topics and themes rather than sequential literacy development. The absence of such resources and training in their use from pre-service teacher education programs compounded this scenario. It was perhaps

unfortunate that recent scholarship on linguistic universals had not yet produced results that could help more directly in this matter.

If the selection and use of developmental schema was a rather straightforward matter for the classroom teachers (aided by the draft National English Curriculum framework), the same could not be said for the languages teachers and hence the very practice of in-step planning was faced with a significant challenge. What could be drawn upon however, were the developmental schemas for oral language, reading, writing and syntax in Spanish (see attachment 2) created by the project leader/researcher in his initial development and trialling of the MLL Approach. These templates, or exemplar schemas, were provided to the teachers supporting a two-step process: the first, to bring the languages teachers' expertise, knowledge and professional judgment to bear on checking, elaborating and *defining* their theories about the developmental progression of learning in their L2; and second, to collaborate with their classroom colleagues regarding points of *similarity* with developmental progressions used in their programming for English learning.

Establishing a stage-like schema for what is generally experienced as a fluid learning process that evolves at differing rates was beneficial for planning and evaluation, but this should not be misconstrued as an effort to impose a lock-step process on the classroom acts of teaching and learning. Rather, it afforded an opportunity to plan for leveraging prior learning in other languages, and even accelerate learning with the benefit of foresight, knowing which language affords the greatest opportunity for deep and rapid learning of target elements. Translanguaging and analogic reasoning practices featured prominently here.

A key design task was the articulation of joint reference points for calibrating programs and for aligning these with learners' developmental readiness in and across languages. This task was contrasted with developmental frameworks that aim to certify language proficiency levels (Council of Europe, 2010). Exactly how the teachers designed such schemas was of significant interest; what was offered were templates from the author's original trial that provided a stage-like series of reference points of the observed pattern of learning Spanish in South Australian primary schools (supplemented by versions from the Council of Europe referenced above). This provided descriptors of observable behaviours in light of oral language development, syntactical knowledge, and reading skills, where oral language development was taken as a binary construct of both speaking and listening skills.

What carries the development of these skills and knowledge is vocabulary. This is often a stumbling block for languages programs in the sense of traction with learners and the wider school community: a common lament is that children keep learning the same vocabulary and



hence, the program is a waste of time. Without digressing into discussion about the amount of time allocated in primary school timetables to allow for effective engagement, retention and recall of L2 vocabulary, or the drift towards interesting 'cultural activities', the PLP supported teachers by offering ideas about how to incorporate meaningful L2 use into daily routines and the progressive development of increasingly varied and more complex vocabulary supported by a thematic-conceptual and culturally engaging flowchart.

As with the developmental schemas, this flowchart was designed and trialed through the project leader/researcher's development of the MLL Approach. There were a number of caveats or perhaps guidelines. The main caveat was that any schema for vocabulary development should be purposeful (serve goals readily identifiable and valued/recognised as important by students) and drive a creative process of recycling vocabulary into increasingly more sophisticated phrases, sentences and eventually discourses. The strands flowing from this keep in mind the type and sophistication of language usually displayed by learners (in their first language) at the time or age in question. The overarching schema was a flowchart of sorts driven by themes and concepts related to frequency of use in and for oral and written texts across all learning areas. Underlying this was a focus on functional, formulaic and high-frequency vocabulary and sentence types.

The logic was expected to be transparent to these experienced teachers. Functional language allowed for daily interactions to begin and be developed into meaningful, routine interactions. Formulaic language (e.g., arising from learning area-specific sentence stems) allowed for more sophisticated language constructs to be mastered quickly and then be recycled into increasingly complex interactions and eventually discourses (see Wood, 2010a; Wood, 2010b; Wray, 2005). The introduction of high-frequency language had a special emphasis on students' developing sight word vocabulary, and thus the initial move towards independent reading (and writing), that can be developed through their self-teaching of previously unseen words via the orthographic mapping route (Ehri, 2014; Share, 1995). This orientation was not about learning words by sight, but rather to guide teacher selection of words for use in each language's phonics program, for practicing their rapid retrieval, and to guide vocabulary instruction (semantic mapping) towards routinely occurring words in texts that are beyond early decodable texts and that would aid overall text comprehension. In this context, guidance was also given to the selection and treatment of words (functional, formulaic sentence-based, and high-frequency) with irregular spelling patterns and multiple meanings (see Kilpatrick, 2015): the critical message was that the pattern for learning needs to focus on developing students' 'set for variability' skill, which refers to "the ability to determine the correct pronunciation of approximations to spoken... words" (Tunmer, 2011, pxii). This is the ability to identify a word on partial information/decoding, of the irregular

orthographic sequence, that students can be taught to recognise from their regular sound-to-symbol correspondence phonological framework and then commit to their sight vocabulary through repeated practice (Katz & Frost, 2001). These guidelines were focused on teacher decision-making that would support students' move to independent and fluent reading and writing of increasingly complex texts through fast and early access to the meaning(s) of words in a rapidly growing sight vocabulary (see 4.1.3).

Each of these elements was developed in light of current scholarship, interrogated in the group for any mismatches with experience and monitored and adjusted during implementation towards the expected learning advantage outlined above (early and rapid development of a sight word vocabulary, that is understood, and the move to independent and fluent reading and writing).

These schemas provided the basis for ongoing in-step planning. But it would have been remiss to leave it there. Such schemas have more extensive utility owing to their generalised articulation and hence their function as points of reference. The PLP extended teachers' thinking towards use of these reference points for assessment of and for learning (see 3.6.1): as criterion-referenced tools, language inventories and formative tools (in particular, curriculum-based measures). Moreover, it was intended that through the ongoing cycles of reflection-on-action embedded into the PLP that these schemas could and would be modified and further developed in light of praxis. This was not an attempt at validation, although the professional judgment of the teachers would be instructive.

Copies of the original Spanish developmental schemas for oral language, syntax, reading, writing and vocabulary can be located in attachment Two. Further, examples of tools used to support development of in-step planning protocols and outputs can also be found in attachment Two.

#### **4.2.6** *The communicational research system at work: a note on strategies*

There was a special focus on strategies within the PLP in response to the reported evidence that research on cognitive and metacognitive domains of language and literacy learning had not previously penetrated the participating teachers' programs. The intent was to empower teachers to harness evidence on how students learn which started with reconceptualising methods, the macro-pedagogic frame of teaching practices. Focused dialogue on macro-pedagogic imperatives (see 2.2.3) was planned, to allow for concomitant demonstration and interrogation of teaching and learning strategies through planned and impromptu 'teaching moments' in response to participant input. The connection was neither complex nor imbricated; strategies enhance teaching practices and learning generally. The idea is that a strategy is an in-the-moment response that resolves any inherent conflict, impasse or lack of

coherence in the teaching and/or learning process. They are especially important for languages learning because they are tools for active, self-directed engagement, which is critical for improving expertise and greater self-confidence.

The conceptual system devised within this PLP to support and encourage open discussion, reflection and debate about the use and selection of strategies was categorical. They were divided into two main categories, direct and indirect, that were then further defined or grouped as most relevant for either teaching or learning of languages and literacy. They are:

Direct Strategies (three sub-groups):

1. *Memory* strategies for consolidating and retrieving new information (interleaving, spaced practice, retrieval practice and diminishing feedback cues are examples).
2. *Cognitive* strategies for understanding and using the language (analogic reasoning and synthetic phonics strategies – blending all through the word - are examples).
3. *Compensation* strategies for using the language despite knowledge gaps (translanguaging was one such strategy).

Indirect strategies (support and manage without direct language involvement) included three sub-groups:

1. *Metacognitive* strategies for coordinating teaching and learning processes.
2. *Affective* strategies for regulating emotions.
3. *Social* strategies for working with others.

**4.2.7** *Conduct of the project leader and mentor*

*...effective reading instruction is complex, with several related key components that are informed by scientific research. The way we help teachers apply this knowledge is by demonstrating instructional routines, activities, and approaches that will allow them to address the needs of all their students.*

Moats, L., 2020

There is significant evidence about the characteristics of teacher professional learning activities that work to improve student learning, and those that do not. The Teacher Development Trust (Cordingley et. al., 2015) report shows that didactic approaches to professional learning are not effective, nor are models in which research findings are simply reported to teachers or studied by them, even with mentors. Successful programs are sustained over an extended period (at least two Terms), identify the needs of participating teachers, provide opportunities for peer learning through a rhythm of observation, practice and peer feedback and have a clear purpose that is expressed in terms of student learning outcomes. No single approach is uniquely successful; many different approaches can contribute to enhancing teacher practice and improving student learning, provided they meet the above success criteria.

A cautionary note is warranted. In her synthesis of research into teacher professional learning, Timperley (2007) found little evidence to support the claim that “teachers should be

treated as self-regulating professionals who, if given sufficient time and resources, are able to construct their own learning experiences and develop a more effective reality for their students through their collective expertise” (pxxv). Similarly, she noted that the “alternative extreme is where outside experts develop recipes for teaching (typically based on research about what works for students) then present prescribed practices to teachers with an underpinning rationale and monitor their implementation carefully to ensure integrity. The overall evidence is that these processes can be effective in changing teaching practices, but either the changes have limited impact on student outcomes, or they are not sustained once the providers withdraw” (pxxvi).

There is an abiding need to understand the conditions for effective implementation processes to give force and form to PL that demonstrably improves student learning. Recently, there has been another field that has evolved with the stated aim of improving PL experiences by bridging the laboratory to classroom gap: the Science of Learning. Not unlike the field of Implementation Science, it is primarily concerned with ensuring vital knowledge from decontextualised studies, that by necessity have controlled or eliminated as many variables as possible, is given to practitioners in usable form (Hovarth, Lodge and Hattie, 2017). What this emerging field recognises is the need to break the epistemological stalemate between quantitative and qualitative studies.

Preceding these are two other notable attempts at bridging the ‘lab to classroom’ gap: *Mind, Brain and Education* and *Educational Neuroscience* (ibid. 2017). The main differences with the subsequent fields of Implementation Science and the Science of Learning comes down to breadth and scope. The first two have a consistent orientation towards laboratory-based research methods and how findings from the lab could benefit education. The second two are oriented towards field-led research methods with a strong focus on iterative experimentation. Importantly, it is the second two that are attempts to encompass both.

When research is communicated in terms of isolated strategies with little or no recourse to either an instructional framework or the complexity of the school setting in which teachers work then there is no stable bridge to practice, no framework for understanding the necessary moves to enact, observe and refine. In other words, concern for fidelity to what worked in a controlled environment dominates, rather than adaptive and iterative processes for identifying how a given strategy or program, ‘what works’, can be implemented to greatest effect in differing, messy and context-laden environments. It is an issue of fidelity and probability.

The Science of Learning and Implementation Science seek to address this issue through a disciplined process of generalisation and amalgamation, placing a premium on external

validity as the bridge to informed implementation of variable-controlled studies. This process is driven by four goals: determination of learning principles, correlation of learning principles with current practice, generation of novel practices, and elucidation of the biological processes of learning (ibid. p2). This account posits fidelity in relation to principles, goals and context rather than prescribed practices, and probability in terms of practices that have been shown 'to work'. There is no silver bullet in this scenario or strict adherence to laboratory practices; its recourse is always to the practical, to implementation as an adaptive process that iterates with the accumulation of evidence of learning towards a clearly articulated goal(s).

This is the situation in which the project leader/researcher/author and project mentor operated. The aim here is to shed light on their general conduct and that of the PL days. The complexity of the situation and the research enterprise it drives was not only going to require a complex, ongoing and adaptive PLP as described, but also the development of a novel relationship between the researcher (the self-talk network) and the expert-research and collegial-practitioner networks that could sustain participants' efforts to assimilate and adjust the MLL principles and practices into their preexisting instructional frameworks. This relational effort to nurture and sustain practice change was deemed essential if the MLL Approach to languages and literacy education and the ongoing PLP that was its vehicle for dissemination and implementation was to be of use to the participating teachers. As Elbaz points out: "...the researcher inevitably brings his (sic) own perspective to bear on his (sic) work, as does the teacher; the development of a common perspective takes much time and shared experience..." (1983, p169).

One of the first and ongoing moves to collaborative action centred on demonstrations. In the 1960s, social psychologist Bandura pioneered the study of observational learning. He asserted that a great deal of human behaviour was learned from imitating others. However, as Shanahan (2020) identified, very little modelling by educators involves demonstrations of thinking. If thinking is absent from examples, then observers are not well equipped to understand the process of implementation for their context. In other words, external behaviours aren't the most important driver of lasting and effectively adapted change in teacher practices. That's where mental modelling or metacognitive demonstrations are important.

When designing and demonstrating models of exemplar practices as objects of study supporting implementation of the MLL principles three further considerations emerged of paramount importance: cognitive load, marking (or noticing) and distributed practice. The first is a constraint on the design of PL demonstrations as it is based on an understanding that observational learning can be stymied by cognitive overload. This idea is commonly

referred to as cognitive load theory (Sweller, 1988). The critical tenet of this idea is that most of the knowledge and skills targeted by education programs, including PL programs, falls within a secondary biological domain, one that is not prioritised by neural architecture as critical for survival. This type of learning requires significant attentional, memory and general cognitive processing reserves. To date, there has been little or no evidence that the teaching of domain general cognitive skills, such as metacognitive strategies relevant to organising information and generating mental schemas, are transferable (Sweller in Mestre & Ross, 2011). In other words, these cognitive skills and strategies are domain dependent.

This had significant implications for the design of demonstrations and conduct of the PL days. In addition, the amount of face-to-face PL time was limited. To account for these implications in a manner that ensured the time to learn about the implementation of the MLL principles and tasks was protected it was necessary to break demonstrations down into their constituent parts using a task analytic approach. Had the project leader and project mentor demonstrated synchronous interactive reading across multiple languages without prompts related to a single, specific focus, there would have been too much information for participants to be able to remember and the expectation that they would be able to transfer such a demonstration to another language and/or different text would be a bridge too far for most.

Chunking demonstrations of exemplar practices into smaller sub-elements and steps was central. The adopted teaching sequence for demonstrations was demonstrate, prompt, practice, and reflect.

Research is clear that observational learning is valuable, but it has also shown that expert demonstrations on their own aren't as powerful as the opportunity to contrast expert and flawed examples (Rohbanfard & Proteau, 2011). This was the second consideration that led to deliberately planned demonstrations of 'non-examples' or flawed examples of tasks in action, as well as opportunities to practice demonstrations with guidance and explanatory feedback at PL days, and access video recordings of expert demonstrations for self-reflection after initial attempts at implementation. These scaffolds were an important driver of the teacher self-talk network that the participants needed to develop in their own thinking to sustain their adoption and implementation of the MLL Approach. And what was central to the enactment of these scaffolds was a constant recourse to metacognitive demonstrations or thinking aloud.

Research by Palincsar (1986) offers clear support for this idea of using think alouds to reveal to participants the cognitive moves, or practitioner self-talk that is happening while demonstrating a novel practice or practice adaptation. Notably, this is also an idea that has a

long history in the literature on explicit instruction (Pearson & Gallagher, 1983; Reutzel, et al, 2013; Rupley, Blair & Nichols, 2009). A valuable insight from this work was the need to tip the participants off as to what they needed to notice prior to a demonstration. This was the second consideration when designing models of exemplar practices for demonstration. It is what Mason refers to as the 'discipline of noticing,' or the heart of teacher change (2011).

Noticing matters, according to Mason, because it is only when teachers notice something that they are able to give it attention. Throughout the PLP there was an abiding need for participating teachers to reflect and take action. It was a call to action research in naturalistic settings, to become practitioner-researchers. And so it was that the PLP was designed to make salient points cognitively apparent, to stand out from what might otherwise become a familiar rhythm that obscures critical teaching moments. Mason refers to this as something more concrete and definite than noticing: marking, which he describes thus:

*It requires more energy than ordinary noticing, for even though we may resolve in the moment to 'remember that', whatever the 'that' was is often quickly overlaid by subsequent events and forgotten. Perhaps something someone says resonates it back for us. Temporarily we have fresh access to that experience, and we can choose to mark it for future reference. Sometimes we not only mark and make a remark but actually make some sort of note to ourselves that we can regain access in the future. This is recording. It requires even greater energy, greater commitment, but proves vital when professional development moves into research.*

Mason, 2003, p5

This is a form of self-reflection as it involves more than noticing something that is demonstrated, or part thereof. It requires the capacity to recognise and reflect on one's self-talk about what is happening, what is to be done and the development of conscious markers to tell oneself to do something differently when encountering that task in the future and to become aware in the moment of what happens as a consequence of doing it differently.

Mason points out that

*To make a change, to become more consistent and hence more effective, I need to become aware in the moment just before a habitual posture, gesture, voice-tone etc. takes over, so that I can exercise a choice. I need to notice an opportunity to act differently to an established habit, and I need an alternative to the habit to choose to activate.*

Mason, 2003, p2

In order for the practitioner-researchers to make sense of the PL demonstrations they needed awareness of their instructional schemas or frameworks and signposts for marking salient aspects of novel practices being demonstrated.

The third consideration when designing models of exemplar practices for PL demonstrations was distributed practice with guided reflection and explanatory, process-oriented feedback. An in-depth review of this spacing effect is provided by Gerbier & Toppino (2015). When the

goal is to modify, enact and improve performance of certain tasks, as was the case with this PL program, segmented and systematic demonstrations of exemplars and non-exemplars were the foundation, or an initial condition to be satisfied. But to arrive at sustained enactment that improves performance over time it was determined that there were two more conditions to be met: repeated opportunities to experience and mark demonstrations; and repeated opportunities to enact them and reflect on their outcomes that were spaced over PL days and differing contexts (see PL Agendas in attachment folder Six and Plenary Day PowerPoints in attachment 4 that incorporate repeated engagement with core content). This was considered a critical mechanism for designing into the program the noted benefits of retrieval practice (Agarwal et al, 2014; Hartwig & Dunlosky, 2012).

The driver of these conditions was a guided process of ongoing collaborative contemplative reasoning about tasks that had been demonstrated, followed by idiosyncratic enactments and the evidence of learning that arose. This guidance took the form of reflective questioning techniques that included prompts and provocations such as:

- What happened that most surprised you?
- What patterns can you recognise in your experience?
- What was the most fulfilling part of it? And the least fulfilling part of it? What does that suggest to you about your values?
- What happened that contradicted, and confirmed, your prior beliefs?
- How do you feel about the experience compared with how you felt about it at the time?
- What does the experience suggest to you about your strengths?
- What does the experience suggest to you about your weaknesses and opportunities for development?
- How else could you view the experience?
- What did you learn from the experience about how you react?
- What other options did you have at the time?
- Is there anything else about the experience that was familiar to you?
- What might you do differently as a result of that experience and your reflections on it? What actions do your reflections lead to?

Based on Bourner, 2003, p269

Rather than using all of these questions the list was used as a source of stimulus in accounting for the marked experiences. An important distinction, one which Mason made also, was that reflective dialogues need to be guided towards accounting *for* rather than accounting *of* the demonstrated phenomena or experience of implementation. The latter leads to a brief but vivid description that minimises explanation, justification, emotional commitment and theoretical interpretation while the former gives rise to explication and theorising about what has been observed and discussed.



Dialogic tasks that supported collaborative, contemplative reasoning were an integral design element that were construed to enable participating practitioner-researchers to devise testable theories that would inform their actions and help them to understand outcomes. They were able to reenter their classrooms after each PL day armed with a fresh understanding of their tasks at hand, how to approach them and what to be attentive to in order to expand, modify or even abandon them as fresh insights presented themselves. In other words, they were positioned to become their own agents of change as Guskey's model would predict.

#### **4.2.8** *Mentoring and coaching*

Research is clear that observational learning is valuable and that there are certain ways and certain traits that can ensure demonstrations are more effective at penetrating practice and outcomes than others. For instance, coaching has been shown to improve demonstrations (Davis, et al., 2018):

*... research at the Kansas Coaching Project (Knight & Cornett, 2009) indicates that teachers are unlikely to implement a practice successfully, if they implement at all, if they have had only workshops without coaching or other forms of follow-up support. Many teaching practices are sophisticated, and teachers can't be expected to learn them without an opportunity to watch model demonstration lessons, experience job-embedded support, and receive high quality feedback.*

Knight, 2009, p19

Similarly, the Teacher Development Trust (Cordingley, 2015) report found the role of PL facilitators to be particularly important:

*Facilitators of the most successful programs act as coaches and/or mentors to participants. They help teachers take on a degree of leadership around professional development, treating participants as peers and co-learners. Successful facilitators build a relationship with participants that allows them to share values, understanding, goals and beliefs with participants, while providing important challenge...*

Cordingley, 2015, p.24

The MLL PLP was designed and implemented with these characteristics in mind. The researcher adopted the role of coach, guiding the adjustment and implementation of practices across the range of sites and languages programs and the literacy expert accepted the role of mentor, providing further guidance and insight from the expert-research network.

While these roles may seem obvious, the move from classroom teacher to teacher educator who was at once a facilitator of teacher change and researcher of such changes was not. Much of the extant advice on leading professional learning and research centered on the importance of routines and procedures: participants would want to know what to expect from the project and how the PL days would operate, while researchers would want to garner commitment to the research process and protocols. Often absent from such discussion is the

notion of credibility: the knowledge, skills and dispositions that are important catalysts for working relationships. Fuchs et al recognised the central importance of this notion with the observance that

*... relationship building is time consuming, is not always easy, and may go beyond some researcher's definitions of their roles. However, by forging personal connections with practitioners, we gain their trust.*

Fuchs et al, 2001, p265

Fuchs, Fuchs, Thompson, Al Otaiba, Yen, & Yang (2001), along with Fisher and Frey (2018), indicate that trust, competence, dynamism and immediacy are critical foundations for credibility and working relationships. Trust implies embracing uncertainty and vulnerability. As this study was concerned with understanding how the MLL Approach could be disseminated and implemented in a wide range of settings the researcher had to become at ease with a less traditional, naturalistic approach to researching.

On the one hand, a naturalistic approach to research increased the likelihood that teachers would implement and iterate the suggested ideas, tasks and practices while on the other it had to be accepted that the collection of fine-grained data of learning could not supersede their teaching programs. The researcher had to trust in the validity and utility of a non-traditional researcher role, one that was concerned more with knowledge building through application than theory building.

Trust opened the door to effective working relationships, to the possibility of 'jointness' in the tasks at hand that would build new knowledge. But it was on the basis of competence, dynamism and immediacy that these relationships were able to flourish and evolve into a genuine experience of jointness in pursuit of new knowledge that spoke not only to *what* worked in terms of the MLL Approach but *how* it worked to improve languages and literacy learning across varied settings. The collegial-practitioner network needed to know that the researcher and project mentor knew their 'stuff' and how to teach that 'stuff'.

Demonstrations, site visits, explanatory feedback, provision of appropriate resources, opening of the research agenda to comments and questions were all critical steps that were taken, but it was through the open questioning, clarifying and challenging of ideas between the researcher and project mentor during PL sessions that the collegial-practitioner network came to appreciate and 'see' them as competent, as practitioners who could not only demonstrate but defend and adjust their beliefs, practices and recommendations in the moment of teaching: it was a demonstration of risk-taking and fallibility that initially caught many participants off guard and outside their comfort zones, but ultimately, and deliberately, it established conditions of psychological safety that invited participants to deprivatise their beliefs and practices in the presence of their collegial-partners.

Dynamism and immediacy are somewhat obvious. The researcher and mentor had to be demonstrably passionate about what they were sharing to hook the collegial-practitioners into disciplined noticing and planning for implementation: they needed to have their interest captured and their curiosity for what might be possible fueled (this was presented in the form of a value proposition for prospective participants and stakeholders). And immediacy was at once a mark of competence and valuing of the collegial-practitioners' time and commitments but also a mark of urgency: that this 'stuff' really matters. The sessions always started on time and were well prepared.

Efforts to establish joint commitment to tasks and working relationships are not necessarily standard research tasks. And while trust, competence, dynamism and immediacy were at the heart of this, there were two capstone dispositions that proved critical to maintaining this engagement and enthusiasm for implementation and experimentation, namely: hospitality (towards different ideas and views) and humility (to being a learner in service of a community of educators).

#### **4.2.9** *Professional learning communities (PLCs) as an improvement vehicle*

The establishment of working relationships set the scene for the effective conduct of this research project. The Australian Institute for Teaching and School Leadership – AITSL (2014) document 'Looking at classroom practice' provides yet another useful lens for understanding those conditions that were sought to build working relationships and ensure full and frank participation. It focuses on professional learning (PL) within sites and on observations of teacher practice where the control over what is seen, when and for what purpose is initially in the hands of the observed: a strategy that was deployed to promote what has been referred to in this chapter as conditions conducive to psychological safety. Once a non-judgmental culture of reciprocity was in place, the practice of observational rounds and impromptu, responsive coaching became a more natural occurrence that was owned and sought by practitioners as a means of improvement.

The MLL PLP was built around the idea of a professional learning cycle to carry out implementation efforts. The cycle was based around the rhythm of the school Term to minimise disruptions to programs and maximise the opportunity for changes to occur and stick. These cycles were driven in action by site-based implementation teams that focused on, but did not limit individual teachers to, the same practice(s) and task(s). The structure that supported these cycles of iterative experimentation can be readily identified as a PLC and was supported by the researcher and mentor who became known operationally as the implementation support team.

The project-specific PLC structure was based on site-based implementation teams, language-specific inter-school collegial-practitioner networks and partnership with a research institution. This design was a deliberate effort to ensure that rigorous opportunities for mobilising, understanding and integrating appropriate research knowledge with teachers' professional knowledge would occur as a matter of routine practice, whether the context was an off-site PL day, site-based PLC meeting or impromptu reflections on evidence of learning with or without a colleague. The PL cycle was further established and guided by the implementation support team's demonstrations, mentoring and coaching that was, as discussed, and in this working context, especially focused on developing teachers' ability to "...sharpen the operational meaning of evidence-based strategies, and determine how and when to use them with (their) own students" (Hargreaves & Fullan, 2012, p52).

The rhythm of this cycle of PLC activity was initiated by input training at PL days. This was when the general collegial-practitioner network received information, demonstrations and guidance on tasks and practices as well as supplemental readings. Then, they were prompted to engage in what was known as 'safe practice' either on the PL day but most commonly back at their sites. This was when they experimented, adapted, adjusted and refined tasks and practices in an iterative fashion drawing upon other members of their site-based implementation team and/or language-specific inter-school practitioner network for feedback and perspective on early evidence of learning, successes, challenges and next steps (iterative, adaptive actions). It was also a time when communication with the researcher and literacy mentor from the partnering research institution was sought for analysis of confounding and unexpected outcomes and the suitability of (further) adaptations to demonstrated tasks and practices.

The next stage involved peer observations, sometimes in the moment and other times through video recording. Some of the site-based implementation teams shared teaching spaces that provided for ongoing and dynamic recourse to peer feedback. This was the time when the researcher and mentor tended to visit sites and provide cognitive coaching mini cycles. These focused on decisions in and for action as well as reviewing theories of observed phenomena and how best to respond (evidence-based and contextually appropriate theories of action). The final two stages involved measuring, modifying and validating through collaborative reasoning and analysis at site and collegial-practitioner network levels of the sort described by Mason, who might have been describing Lonergan's judgment process when he stipulated that

*We need communities of practice of which we are a part... as foils for checking that what we think we see is visible to others as well... The most desirable form of validation is the largely or wholly spontaneous utterance which indicates that someone has noticed something freshly and meaningfully for themselves.*

Reporting back findings for analysis and feedback from peers was critical to enhancing the learning potential that was obtainable by this design and rhythm of PLCs, or implementation teams. But such a rhythm required a willingness on the part of the teachers to invite scrutiny: to deprivatise their practice. Commentary from one experienced classroom teacher illuminates this dynamic: "I have been teaching for nearly 30 years and I always believed that languages achieved very little and that it was better to spend the time teaching English, which is hard enough. I now see that languages education can help children learning to read and write in English and I will continue to look for ways to use it in my classroom."

It can now be said that this approach to the design and delivery of PL, especially as a vehicle for building new knowledge through implementation, is qualitatively different from isolated 'make it and take it' PL sessions and PLCs. It demands a certain credibility of the PL provider(s) that is tied to the domain of learning in question. Without the researcher's and mentor's deep knowledge and experience of the in-focus domain of practice it is unlikely that they would have amounted to more than expert facilitators. As was noted by one of the participating principals "having (the project leaders) available with deep expertise and understanding is what makes these types of sessions work."

#### **4.3.1** *Data collection: collegial-practitioner network journals*

As an agreed part of the program, teachers were asked to engage in recording, and reflecting on, their own teaching practices through the regular keeping of a journal. Such journals were a key space for their developing comments and reflections on what was intentionally a data-gathering and data-using teaching development exercise.

In this way the gathering and use of different kinds of data was expected to feature in the teachers' journal accounts as background and evidence to support any claims they made. It was also expected that they would comment there on the process of data-informed instructional monitoring and development generally. As the teachers were required to complete journals, appropriate funding had been provided by DECS (now DfE) to support this activity, with specific time (equivalent to at least 1 day of release time per Term) allocated to teachers for recording activities during teaching time and during the plenary sessions at Flinders University.

The program leader/researcher/author and university mentor also kept journals of similar scope and intent as the teachers, allowing them to produce their own reflections and observations, leading to developing and defining issues and questions for interactions with the teachers and each other as the program progressed.

The general guideline or instruction to participants was for the regular and structured recording of their learning and experiences as they formed their judgment on what the Approach was asking them to do, i.e., significant teaching innovations and learning events that they attributed to their following this Approach. The focal points were the teachers' independent, professional judgments of the validity and applicability of the Approach and whether observed learning and teaching events might be attributed to their own professional learning and/or adoption of the Approach's curriculum-design principles and exemplar tasks. This was the core content asked for, around which teachers were instructed freely to reflect and comment in addition. Journals were kept up to the end of the PLP. To ensure that undue influence was not brought to bear on the data recording process (and thus skewing of the offered data) the researcher would receive the journals for analysis at the completion of the PLP and not before.

The journals were structured around three elements: site meetings, PL days and classroom observations and records. This latter domain was where teachers recorded their evidence of student learning from the prescribed assessments that were discussed in Chapter Three. If it was thought that some journal report was insufficient or needed clarification, the matter could be followed up with a written or spoken inquiry and then noted in their journal.

#### **4.3.2** *Data collection: collegial-practitioner network interviews*

A series of interviews were planned as part of the external evaluation process that was required by DECS (now DfE) to ascertain unbiased views on the strong and weak points of the Approach and PLP, the general reaction to them as contributing to school effectiveness, and the probability of this Approach having a continuing influence on their teaching. The research project plan included collection of certain standard measures relating to student and teaching outcomes, but it was crucial from many points of view to get straightforward opinions, fairly briefly, given the time pressures at the appropriate point, on the character and success of the MLL Approach and PLP.

A face-to-face conversation with most of the participant teachers, and a sample of principals chosen to represent the different kinds of schools and multiple languages, was arranged as the basis of this evaluation. These 'conversations' were undertaken and tape-recorded by the local expert-research network member who had not participated in the project and was not known to the participants. School Principals were talked with in their office at their school, at a time specified by them, for about half an hour. The Teachers were talked with mainly in focus groups during the final PL day. A summary report for DECS (DfE) was made available to members of the program to confirm its' accuracy but did not identify any schools or individuals.

The conversations were called interviews, but the questions were announced to be 'guiding questions' rather than strictly defining or constraining. With principals the interaction was an individual conversation, lightly guided around the topics of interest, and with the teacher groups the discussion was allowed to develop naturally. Additional comments were specifically encouraged so that participants did not feel that they were limited in any way. Further comments were prompted on any relevant matter, particularly towards the end of each session. If it was felt necessary the reporter raised the possibility of other views, to check that nothing was left unsaid, and comment had been received from the entire group. Three principals and twenty-five teachers contributed. The L2 teachers (9) and class teachers (16) were separated for the interviewing. L2 teachers were grouped according to the L2 taught, of which there were five. Class teachers were grouped simply as was convenient during their plenary day activities.

The texts used for the introductory statement recorded and the guiding questions were as follows:

*Introductory Remarks:*

I am ..., adjunct Senior Lecturer in the Flinders University School of Education. I am conducting this interview on \*\*/\*\*/2011 with a principal/ with a teacher/ with teachers as a neutral listener as part of an independent evaluation of views and perspectives arising from the Multilingual Literacy Project.

The interview is confidential and anonymous and will be used only by me to produce a brief general summary based upon this and other similar interviews. It may help confidentiality if people other than the project leaders are not referred to by name, but please do whatever is comfortable in this regard. The confidentiality of the interview will be maintained. The interviewee is completely free to decline to answer or comment and free to terminate the interview at any time. I anticipate the interview taking about 30 minutes (principals) / 15-20 minutes (teachers). Thank you for agreeing to talk with me. Have you any questions for me, or about my role in this?

I have about 15 (for principals) / 8 (for teachers) guiding questions, but please feel free to take up other matters that are relevant at any time, particularly anything you think important that has not been raised already.

*Guiding Questions - Principal Interviews:*

- Have you been associated with many projects of this type, departmental or whatever?
- How did this one arise here?
- Did you see it as particularly novel?

- What sorts of things, good or bad, would you have been expecting?
- What expectations were, or were not, met?
- What have been the key achievements of the exercise?
- How has involvement affected the different staff, the students?
- What is a major consequent difference?
- What strengths were demonstrated, from a school/community/system view?
- What are people saying to you about these things?
- What conditions were important for the outcomes, in your view?
- Were there pressures and costs? Could these have been avoided?
- Were there specific problems/weaknesses that should be tackled in future implementations?
- What would you like to see happen now?
- What would be needed for this to happen?
- Any further comments?

*Guiding Questions - Teacher Interviews:*

- How did you get involved in this exercise?
- What happened? Did your teaching change?
- What impact has your participation had on students' learning?
- What would you like to do, or to see happen, next?
- What was the role or effect of coaching or mentoring in the exercise?
- What was the role or effect of technology use/development?
- What was the role or effect of the Edublog facility set up?
- What were the pressures, costs or problems of the exercise?
- Any other comments?

The data gathering involved in the summary interviews can be seen as feedback from a typical most valuable source, namely knowledgeable teachers. It was designed to be the kind of feedback that professionals working together routinely seek and provide for each other in a flow of collaborative activity.

The necessary scale of the overall interview summaries to be presented in Chapter Six dictates that many details of specific comments must be set aside. Nevertheless, the aim of the summary messages is to point to a pattern of identifiable research findings based on an overall triangulation of data from the different techniques employed, such that the reader can have confidence that any stated new knowledge generated by this study would not be contradicted by any input from one or other of the data elicitation techniques employed: reflective journal entries, measures of student learning and interviews.



### **4.3.3** *A preliminary note on the principles of data analysis*

The research questions concern the Approach as it develops in the hands of those to whom it is taught, given that it is taught to them as active and creative collaborators and not imposed upon them in some rigid fashion. Thus, this thesis that reports on these activities will reflect a type of naturalistic inquiry with an underlying process readily identifiable as action-research. The content is naturalistic in the sense that the teachers are given a role with discernible agency to assume professional self-direction and affect the progress of the exercise. It may be called action-research because the teachers are asked to record and reflect on decisions and outcomes and to take further action in light of such decisions and outcomes.

Analysis of these applications of the Approach will proceed by looking for the principles, practices and tasks as presented and received, with particular attention being paid to developments, modifications and omissions, and the conditions under which these occurred.

While ten teams of teachers at ten separate sites made their data, or 'case', available for study it was anticipated that some limits on the overall amount of data would be required. As there is some duplication in the range of languages represented and even some overlap in site characteristics within the overall 'research sample' the decision was made that, in the absence of any genuine and significant distinctiveness, the total number of case studies reported would be six. Any unique events reported within omitted case studies would be suitably acknowledged and accounted for.

The principles of the analysis (see below) follow from the research problem and questions, which arise, as in all empirical studies, from certain practices becoming seen as linked with underlying patterns of justification (sometimes called theory). So, there are here, on the one hand, professional language and classroom teachers developing their teaching, and, on the other, the introduction of an Approach with some key ideas and justifications. The analysis is not specifically concerned with the success or failure of the Approach, but with a rich and accurate account of what happened leading to a discussion of implications for future practices and justifications.

For this, a case-study approach to analysis and reporting is appropriate. A factual core in the information, relating to each teacher's actions, will shape analysis of each case and the specific decisions enacted by each teacher. The accounts of what they adopted, adapted, and omitted, and in what conditions and on what basis, will provide a firm basis on which to try to answer the research questions and promote further discussion.

#### 4.3.4 *Analysis procedures*

The task in this final section is to provide an outline of the general process by which the mass of data collected and reported by the teachers was handled and prepared for case study presentations in the following chapter. The researcher did the overall sorting of material. His language and literacy teaching background and collaboration in the work of these professionals allowed unique patterns and complicated relationships to be identified and described properly in context.

Checks on this process included the account and comments of the university mentor, the approval by the teachers of the analysis reported from their material, and the final program report to DECS (DfE) from the external reviewer. There was no reason to expect the teachers would find problems reporting their work, nor the researcher to have difficulty in organising it for equally accurate reporting.

Each journal was assigned a suitable anonymous code for all reference in the research activity. The teachers likewise were given anonymous code labels for analysis and reporting purposes. Furthermore, teachers were instructed to only enter aggregated and/or de-identified student data.

The first stage of the analysis involved 'open' coding of individual journals to establish: general content, general style, individual style, key patterns and sequences of information (e.g., factual report, comment, reflection, problem treatment, decision, outcome, and so on), and timescale (early, middle, late) as appropriate. There was an attempt to establish brief standard descriptions and tables to help guide further analysis and reporting.

The second stage of the analysis involved each journal being assessed for independence from undue influence, reliability, scope and depth. The researcher's and the university mentor's journals were used to assist this process as necessary.

The third stage of the analysis looked for overall similarities and differences between accounts and noted links between journals from teachers within each school; a process of data consolidation, correlation and comparison. These three stages are reported in generalised, case-study format in Chapter Five, but they were essentially preparatory to the fourth stage of analysis that sought to identify the journal material relevant to dealing with the Research Questions.

A final stage of analysis identified remaining questions arising from the naturalistic approach to data capturing and recording by teachers and provided any necessary clarification for that fourth stage.

#### 4.3.5 *Specific research questions*

Four formally stated research questions summarise the key elements from the progressive activity pursued and discussed in Chapters Two to Four. These questions will be answered on the basis of data from the PLP implementing and testing the MLL Approach. The first two questions probe the creation and extension of the MLL Approach. The further two questions probe the implementation and development of the MLL Approach through the PLP:

1. Can a model (Spanish exemplar) curriculum, developed from general curriculum-design principles and tasks, be used as a basis for an integrative collaborative Approach to languages acquisition and literacy development in (South) Australian junior primary/primary school settings?
2. What modifications, schemas and tools are needed for such an Approach to be transferred to other languages in (South) Australian junior primary/primary School settings?
3. Can practicing professional teachers accept a research-based approach related to their teaching activity and, on such a basis, would teachers be encouraged to adopt the role of research-partners in adapting and iterating their instructional frameworks?
4. Can certain conditions be indicated in this process that could be thought to increase the likelihood and sustainability of such reciprocating transmission between research and individual professional practice.

These specific questions are as it were the final narrow formalising of a much more complex exercise set down so far as a justified planning process. This exercise is an attempt to solve a teaching problem, a curriculum problem, a planning problem, to be approached in action by specifying an Approach. This solution is suggested by comprehensive analysis of what is to be taught and of the learning involved. Because the knowledge sought is knowledge of what to do, a decisive, defined plan of action is the result. This scheme of action, derived from theoretical reflection and capable of unlimited extension, is set out in order to be tried and tested.

The obvious subsequent questions are 'can it be done?' and 'will it work?' - issues of practical possibility and effectiveness. But, as in an experiment, the underlying general question is simply about what happens when these planned things are done, why that happens, how that happens and who does what to help it happen.

What happens is prepared and prefigured in various ways in the planning and enacting of the scheme. It is not left to chance or accident, but both will be at work in a dynamic schedule, as ever. The plan must encourage the necessary flexibility and room to manoeuvre to meet many specificities and variations of people and situations.

The plan is also about gathering data on a wide front, recording whatever those involved in the action might want to report, to provide a panoramic, detailed, detached and instructive foreground record, a picture of the action unfolding, against a background for the action that

is woven from the biographical/historical, the philosophical and the communicational strands introduced initially as necessary for this kind of exercise in real-life classroom researching. The picture overall connects from different directions the activity of schools, of teachers and of pupils, to send instructive messages about the what, why, how and who of the teaching and learning events and outcomes involved. The participants speak. Their judgments carry weight by virtue of their experience as professionals. Such is the aim and purpose of the study. It is in a sense both experimental and experiential as the participants interpret and use the data of their own teaching to establish secure knowledge for action from action. The whole scheme of the researching may be described as about definition and communication of cycles of instruction, practice and feedback (in the activity of schools, teachers and pupils alike). The cycles and the demonstration of them are 'bounded' for the purpose of the study. But potentially they are as generative of further knowing and further studies as the patterns of intelligence in action will allow.

Professional judgments are at the heart of the data and discussion to come, because they are secure in their own particular validity in meeting the problems and questions at work in the dynamic at work producing the study data and revealing the potential of the record of 'what happens' to inform future action, as much as to illuminate the action leading up to judgments.

The teachers are to teach young children and teach themselves and each other in the process. The catalyst is a communication network set up and fostered by the researcher, an experienced teacher who participates in the teacher dialogues in a 2-way exchange around the basic matter of reorganising the junior primary language work of classroom teachers and second language specialist teachers over a two-year period.

As it approaches and prepares for judgment, human understanding relies on insights which pivot between the concrete experience and the abstract character of the move to insight (Lonergan, 1957, pp. 3-5). The communication of an understanding from and for action will still express itself formally in some sort of universalisation, and definition, at least in the form of definite maxims or instructions for similar future circumstances. The knowledge aim of this study can therefore be expected to be somewhat specifiable, with reference to both the universal and the particular and the things that mediate between them in the effort to know.

Thus, the first Research Question probes the data for evidence of universality. It asks whether this Approach which has been devised from the research background can be generalised for the teaching across the range of second languages taught in South Australian primary schools so that their instruction can be part of a joint scheme with instruction in the mother tongue for joint literacy goals.

The second Research Question focuses more on particularities of the actual implementation here, asking what potentially variable aspects of the activity are seen contributing to the adequacy of the implementation in meeting the demand specified in the first question.

The two further Research Questions refer to the mediating activity between the general and the particular represented by the professional teachers involved, who act and then interpret and communicate what happens. The questions ask whether these practitioners appreciate what they are doing as they enact the logic of being collaborative teacher-researchers, universalising their experience and judging procedures and outcomes. This appreciation may be looked for in their activities in common and the communication of these, in their absorbing more abstract formulations and universalisations into their individual schemes of action and finding them apt for sharpening professional judgment for ongoing practice.

It is a matter of their knowledge being increased in the process of this exercise, but equally of their increasing their awareness of the value and validity of the available knowledge messages, certainly from research, but including their own judgments from the results of putting research to work for them with their own colleagues and in their own classrooms. There is the promise of a resulting message web which they can move in and contribute to. It is hoped that connecting with this study, which integrates background history, a plan of activity, guiding questions and data gained, can open up such a possibility as practical for professionals with the necessary support. Practitioners may come to appreciate in practice that their own activities and judgments can take their place with research activities and research findings in the service of communicating better ways of instructing to both themselves and others.

From one point of view this is a study of teachers teaching collaboratively and researching that practice, and from a complementary point of view it is an enacting or demonstrating in action of implications of linguistic, philosophical and communicational universals. In fact, they are two sides of a single coin. The cautious hope in the planning of this study in this way was that it would enable instructive messages generally, but also that specific answers to formulated research questions would be able capture the more definable element in a dynamic pattern of activity planned to foster, in typical everyday teaching settings, real educational improvement in literacy outcomes through an innovative teaching collaboration. It is to the judgments of the participating teachers who take on the role of self-researchers that the reader may now look for the evidence of the real value of what was done and of the validity of the judgments themselves.

The procedures for analysis of the data and answering of these questions can be shown here using a general research flow chart:

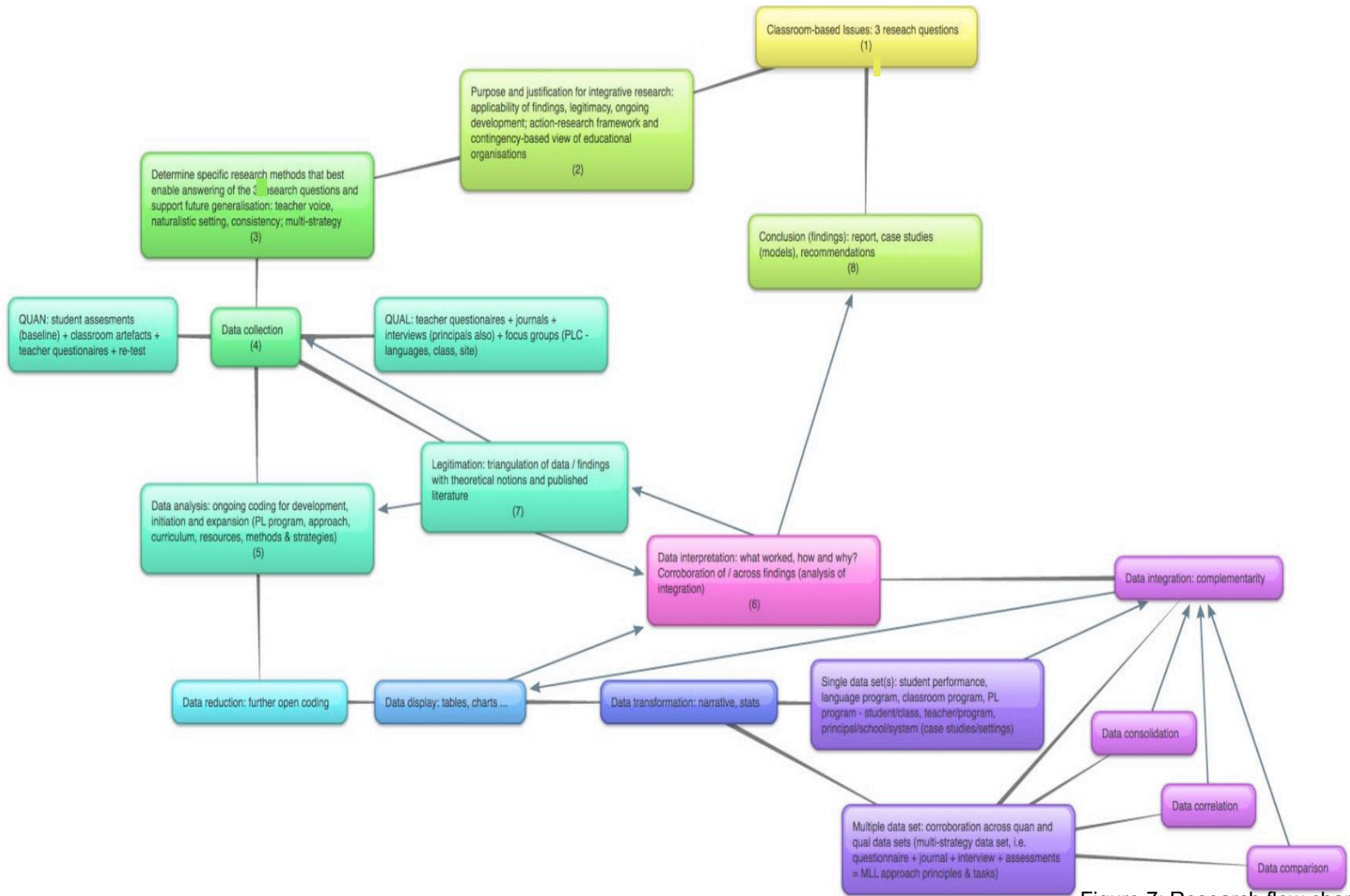


Figure 7: Research flow chart

## CHAPTER 5: Case Study Data

*The great paradox in schools policy is we know what works. It has all been measured and reported on hundreds of times in educational research projects across the world. Yet the things that work are not automatically built in school curricula, teaching programs and practices.*

Latham report, Feb 2020

### 5.1 *Introductory remarks on data handling*

In a 2005 Education Indicators Report, The OECD Reported:

*At The Level Of The Education System, Professional Development Of Teachers Is A Key Policy Lever.*

p20

In this chapter codified data from the teacher journals will be presented in preparation for analysis and discussion. The first three stages of journal analysis (see 4.3.4) were the basis of the general patterns of case study results. The fourth stage of analysis, helped by any clarifications needed from teachers, and by visits to and observations at their schools, provided the details relevant to the research questions to be discussed later. Here are their messages about what was relevant, what did or did not work and occasional signposts from the teachers as to why. These messages from the teacher-researchers capture a narrative of sorts, one that begins to shed light on how they were able to implement 'what works,' as introduced through the MLL Approach, and the conditions they reported conducive to adaptation and adjustment in their contexts.

Only those teachers who were a part of the full, two-year PLP have been included, to allow for longitudinal comparisons. This selection process enabled further refinement of the total amount of data to be presented from ten case studies to six. Given that the teachers in the remaining four case studies and those who joined the program in the second year continued with the same pattern of programming and had markedly similar messages as their originating site-based colleagues, there is little to be gained from the inclusion of the extra data other than increased emphasis. However, all teachers from all ten case studies were included in the interview process and the presentation of this data from the total sample in Chapter Six offers a probative informant checking of the data presented here.

The identified six case studies are progressively developed in four stages. The first stage begins with a brief overview of the setting of each case study and then progresses to tabulate baseline views of each teacher's pre-existing approach to languages and literacy curriculum design and instruction, and their instructional framework for English and second languages (combined).

The second stage provides discursive data on teachers' program modifications, the adaptations and adjustments in action of the offered MLL ideas, practices and resources reported by teachers during phases one and two of the PLP. These are supported by brief overviews of each teacher's qualitative statements or professional judgments about student learning that they recorded as sources of evidence guiding and sustaining their planned and actual implementation efforts.

The third stage provides a summary of each teacher's reports of student learning outcomes at the end of the project in terms of their 'distance travelled' or growth. The fourth and final stage provides a summative statement about each teacher's continuing approach to curriculum design and instruction at the end of the project.

The data elicitation process has been discussed in Chapter Three (sections 3.5.3 & 3.5.4). Comment about what was identified in the cycles of reading the journals that facilitated coding the four stages of presentation is appropriate here as it will illuminate how interpretative rigour has been maintained and assist overall interpretation of the journal data in four successive stages. Further comment will be found around the relevant Tables themselves, sections 5.8.1 and 5.8.2, and subsequent.

As discursive data collection tools the journals were open to individual expression. Each participating teacher came to the PLP with their own unique set of training and professional experiences that informed and shaped their particular set of pedagogical beliefs. However, they all chose to participate in the same program, shared open and frank dialogue around their beliefs, the PLP messages and their enactment of the MLL Approach. So, while it is true to say that each teacher had their own unique pedagogical framework through which they evaluated the offer to participate in this study and through which they considered the messages emanating from the PLP, the matters that they reflected on in their journals did share a similar orientation from the outset and in the growing fullness of the program a converging character. As the reports from journals progress, therefore, it became possible to condense and standardise some of the accounts, as the joint teacher-researchers were increasingly saying the same things.

The task of assimilating, sorting and judging the mass of reported material within the teacher journals was undertaken by the author as an experienced teacher of languages and English, designer of the MLL Approach and lead researcher of the MLL PLP. This particular perspective enabled the identification of common themes and tasks irrespective of the language used, as the author was familiar with the participants' particular vernacular through the PLP and site visits. Absorbing and transmitting these messages was aided by the stage-like presentation of data by the teachers that flowed from the three-phase design of the PLP.



The literacy-expert mentor provided probative checking of material as necessary while overall informant checking was undertaken through interviews. At all times, the assimilation and transmission of the teachers' data was constrained and guided by the need to preserve the naturalistic character of their implementation efforts and accounts.

## **5.2** *Case Studies: settings and participants*

The following Table (Table 5: initial conditions) shows the general school and class demographics from the six distinct case study sites or schools. Teachers, principals, the State Education Department, and the Australian Government Early Development Census (AEDC) provided relevant data.

The State Education Department uses an Index of Education Disadvantage (IED) to allocate resources to schools to address educational disadvantage related to socio-economic status. It is based on a measure of parental economic resources, parental education and occupation, Aboriginality, and student mobility. It uses Australian Bureau of Statistics (ABS) data calculated by mapping the addresses of students to ABS collection districts. As a district measure it is not fine-tuned to the distribution of students between public and private schools in an area and it was reported by teachers and principals in these case studies that the data was not truly reflective of their cohorts. They felt as public schools they had a disproportionately higher level of educational disadvantage related to socio-economic status than the IED reported. There are seven categories determined using a statistical clustering technique. Schools in category 1 serve the most disadvantaged, category 7 the least.

The AEDC also provides school-level information about children in their first year of full-time school whose family or guardian consented to screening by teachers using the Australian version of the Early Development Instrument. Results include clustered details on the number and percentage of children considered to be developmentally vulnerable, at-risk or on-track in five domains. The data presented in the following table is from the two domains most relevant to this study: language and communication. The instrument defines language as: 'child is interested in reading or writing, can count and recognise numbers and shapes'. Communication is defined as: 'child can tell a story, communicates with adults and children, articulate themselves'. Children who score between the 10<sup>th</sup> and 25<sup>th</sup> percentile, determined using the cut-off points established in 2009, are classified as 'developmentally at-risk'. Children who score below the 10<sup>th</sup> percentile are classified as 'developmentally vulnerable'. The top data set in this column is the site's, the data below is the State average. An R signifies 'at-risk and V 'vulnerable' students (as a percentage of the total number of students in the sample/sites).

Only 2012 IED and AEDC data were available for reporting. Teachers were asked to judge if this sample was representative of the cohorts in their classes during the study. All teachers agreed with the statement that ‘the 2012 data is representative of the student cohorts I taught during the MLL study in 2010 and 2011.’

The data is arranged into five broad sections: school demographics, class demographics, first and second language timetabling (hours of instruction in the first year, 2010) and general resource allocations, data elicitation cohorts (only those students who were tracked for the two-year project), and special variations noted by teachers and/or principals.

In general, it shows that these sites were representative of the mid-range of socio-economic status in South Australia; five of the six sites had higher than average levels of developmentally at-risk and vulnerable learners in the domains of language development and communication competencies, while all sites provided the basic amount of resources and 50 minutes teaching time per week (approximately 35 hours per year) for second language programs as required by the State Education Department (ACARA, 2009).

<b>Table 5: initial conditions</b>	<b>School Demographics (2010-2011)</b>								<b>Class Demographics (2010)</b>	<b>Data Elicitation Cohorts (over two years)</b>	<b>L1 &amp; L2 Timetabling (2010)</b>	<b>L2 Resources (and teaching space) 2010 IWB = Interactive Whiteboard</b>		<b>Special Variations</b>			
	Location	Languages		IED	AEDC				Year levels (2010)	No. of students	Teacher sample (1 L2 teacher in each)	Student sample	Hours of instruction (Year 1: 2010)		L2 in L1 room	L2 resources and space	
		Com muni ty	L2 prog ram		Lang.		Com.						L1	L2			
<b>Case Study 1: setting 1</b>	Regional	Engli sh	Indo nesia n	4	R 6.2	V 10.1	R 17.8	V 12.4	Rec/Yr. 1	18	3	18	300	30	None	Posters, TV-DVD & CD. L2 classroom	N/A
					10.3	6.8	17.4	8.9	Yr2	23		23	600	60	None	3 autism spectrum students	
<b>Case Study 2: setting 2</b>	Metro	39% Non Engli sh	Indo nesia n	4	R 15.2	V 13.9	R 23.3	V 22.2	Rec/Yr.1	15	2 (third class teacher joined in year 2)	15	300	45	None	Posters, some books, TV-DVD, CD. L2 classroom	10 students with diagnosed learning difficulties, including 1 with severe anxiety managed by a psychiatrist
					10.3	6.8	17.4	8.9									
<b>Case Study 3: setting 3</b>	Regional	16% Non Engli sh	Ger man	5	R 17.5	V 7.8	R 14.4	V 13.5	Rec/Yr. 1	Not provided	3	6	200	35	None	Limited games & books. TV-DVD, CD. L2 classroom	20% of students reported to be diagnosed with language impairment, speech disorder or global delay
					10.3	6.8	17.4	8.9	Rec/Yr.1	Not provided		19	200	35	None		
<b>Case Study 4: setting 4</b>	Regional	Engli sh	Japa nese	5	R 13.0	V 20.0	R 25.5	V 12.7	Yr.1/2	Not provided	3	21	560	35	None	Limited games & books. An IWB, TV- DVD, CD. No classroom	25% on student card (low SES fee exemptions)
					10.3	6.8	17.4	8.9	Yr. 1/2	Not provided		25	560	35	None		
<b>Case Study 5: setting 5</b>	Inner city	Engli sh	Fren ch	7	R 9.4	V 5.2	R 14.2	V 6.5	Yr. 1	22	2 in first year (third joined in year 2)	22	200	35	None	Limited games & books. An IWB, TV- DVD, CD. No classroom	Class teacher in first year took extended sick leave (6 months). Relief teacher joined
					10.3	6.8	17.4	8.9									
<b>Case Study 6: setting 6</b>	Metro	Spec ial non Engli sh site	Italia n	4	R 14.8	V 9.9	R 16.0	V 12.3	Rec/Yr.1	14	2	14	200	35	None	Limited games & books. TV-DVD, CD. No classroom	Specialist intensive English school for new arrivals to Australia
					10.3	6.8	17.4	8.9									

### 5.3 *Tabulated initial Teaching Approaches*

The initial teacher records used notably different language, timbre and focus compared with those from the end of the project; messages about the MLL Approach had not yet taken prominence within the PLP or evidence of their effectiveness in context and were thus unavailable to assist. A different frame of reference had to be adopted to establish a baseline of their instructional approaches from which consideration could be given to the impact of the MLL Approach. The first frame of reference that proved to be useful was derived from the literature reviewed in the establishment of the MLL Approach, around the schisms that have arisen out of and driven perennial cycles of change in languages curricula and languages teacher education programs over the last 50 years. This was discussed in Chapter Two (sections 2.2.2 & 2.3.2) and Tables in Chapter Two (Tables 1 & 2) provide the coding frame for monitoring change in language teachers' practices and beliefs (see Tables 6 & 7).

In reading the journals it became clear that the effects of these schisms and policy imperatives were not isolated to languages curricula; they were generalised or universal. Thus, the experiences of the participating teachers of English also reflected concerns over the relative import and significance of the rules and structures, skills and strategies, culture and interaction debates. In addition, the classroom teachers were also keenly focused on the debates in the literature from the disciplines with an interest in literacy studies. And so, through reflecting on the first reading cycle of the journals in light of the literature, Table 3 was added to the coding frame for understanding and clarifying the teachers' messages about Languages and Literacy Curricula.

Table 3 (literacy curriculum design) became a general guide to interpreting and monitoring every teacher's belief and orientation towards the teaching of literacy from inception to conclusion of the PLP. The languages teachers' beliefs and orientations towards literacy development could also be included on this Table (see Table 8). The coding scheme from Table 3 evolved out of the working definition of literacy that would prove acceptable to all participating teachers, based on Kern's view (2000) and the Science of Reading and Writing. It wove together linguistic, cognitive and sociocultural views.

Perhaps the greatest challenge was extracting those tasks and activities that truly reflected the specific beliefs of each teacher from their programming considerations that were a result of the prescribed curriculum framework in operation at the commencement of the PLP. The value and significance of each teachers' narrative was greater than could have been provided by any key terms, as the hook for identifying what teachers would actually preference in their day-to-day teaching lay not in any specific terms used (as these were not

consistent enough) but rather in the relationships between the aforementioned theoretical schemas, their preoccupations and what they communicated, how they communicated it and in reference to which tasks and activities. The teachers' task/activity focus was always strong, even as they came to appreciate the role of theory and method in general in task analysis and specification.

### **5.3.1** *Tabulated initial classroom-teacher Approaches to languages education*

A definition of the characteristics of each 'model' of classroom languages education listed in the template (Table 1) was provided in chapter Two and is restated at the top of Table 6 which shows that initially all the classroom teachers followed the practice of handing over their class to the specialist language teacher, and also that they did not use the second language in their teaching. About half, however, would collaborate with the language teacher on using curriculum themes or having cultural material in focus.

**Table 6:** Overview of classroom teachers' initial Approaches to languages education

Table 6 A continuum of classroom-based Approaches to languages education (coding template)										
Classroom Approaches to languages education	Awareness		Encounter		Subject Teaching		Embedding		Immersion	
	5% L2 use - 95% L1 use		10% L2 use - 90% L1 use		30% L2 use - 70% L1 use		50% L2 use - 50% L1 use			
	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks
	How language works	Sharing stories and participating in cultural events	Basic communicative competence	Sharing stories, learning songs and participating in cultural events. Some explicit learning of functional vocab and formulaic phrases	Academic study; ongoing development of linguistic competence	Targeted teaching of vocabulary and syntactical units. Exploration of written genres	Development of linguistic competence driven by curricula areas; functional	Contextual teaching of vocab and syntactical units; thematic lists and functional phrases	Systematic study of the language and through the language	Systematic study of linguistic and syntactical units, progressive development of reading and writing skills; explicit examination and composition of genres and styles
Teachers A & B (case study 1: classrooms)					Specialist lesson with L2 teacher	Some collaboration over themes: cultural focus				
Teacher D (case study 2: classroom)					Specialist lesson with L2 teacher	Some collaboration over themes: cultural focus				
Teachers F & G (case study 3: classrooms)					Specialist lesson with L2 teacher	Some collaboration over themes: cultural focus				

Classroom Approaches to languages education	Awareness		Encounter		Subject Teaching		Embedding		Immersion	
	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks
	5% L2 use - 95% L1 use		10% L2 use - 90% L1 use		30% L2 use - 70% L1 use		50% L2 use - 50% L1 use			
Teachers I & J (case study 4: classroom)					Specialist lesson with L2 teacher	No reported use of L2 or collaborative planning				
Teacher L (case study 5: classroom)					Specialist lesson with L2 teacher	No reported use of L2 or collaborative planning				
Teacher N (case study 6: classroom)					Specialist lesson with L2 teacher	No reported use of L2 or collaborative planning				

### **5.3.2** *Tabulated initial Approaches of L2 teachers to languages curriculum design*

It was in the description of key shifts along the continuum of preoccupations, tasks and activities from Table 2 (Chapter Two), that the key to coding the languages teachers' messages lay.

Table Seven provides the overview of each language teacher's account of their initial approach to curriculum design. It gives a comparative view of each teacher's pre-existing instructional approach while also establishing a basis for identifying and analysing any curriculum design and programming modifications enacted throughout the PLP. More detail regarding the coding that was employed for tracking and recording curriculum modifications based on Kern's imbricated definition of literacy will be provided from section 5.5 (Table 9).

It should also be noted that as the process for recruiting teachers into this study was invitational it is not unexpected that they shared similar beliefs about languages and literacy education. As a result, the teachers' identified approaches in the following table show a clustered character that represents common preoccupations and orientations with communicative and sociocultural aims. The use of red texts indicates that while these teachers' reports of their beliefs fit the identified category, their actual programs did not owing to a paucity of resources.



**Table 7: overview of languages teachers' initial Approaches to curriculum design (coding template)**

Table 7: Languages teachers' initial Approaches to curriculum design						
Teacher	Theoretical School	Pedagogical Orientation (belief)	Program Foci	Teaching Emphasis	Core Learning Tasks	Approach
	Structural	Language is learnt as decontextualised units; texts and syntax				<b>Grammar Translation</b>
	Functional	Language is learnt through defined communicative events				<b>Situational</b>
	Functional	Language is learnt through the internalisation of expressions: habits				<b>Audio-lingual</b>
	Functional	Language is learnt through functional analysis of speech acts				<b>Functional – Notional</b>
Teacher C (case study 1: Indonesian) Teacher E (case study 2: Indonesian ) Teacher M (case study 5: French) Teacher O (case study 6: Italian)	INTERACTIONAL Functional	Language is learnt through meaning – making in authentic situations	Contrived oral exchanges Cultural discourses and practices Positive attitude to language and culture	Speaking and listening skills Vocabulary development Authentic cultural practices	Speaking and pronunciation Vocab walls and worksheets (thematic) Sharing cultural texts	<b>Communicative Language</b>
Teacher H (case study 3: German) Program is out of alignment with beliefs due to lack of resources	Structural & Functional	Language is learnt through the performance of tasks requiring negotiation of meaning	Contrived oral exchanges Cultural discourses and practices Positive attitude to language and culture	Speaking and listening skills Vocabulary development Authentic cultural practices	Speaking and pronunciation Vocab walls and worksheets (thematic) Sharing cultural texts	<b>Task – Based</b>
	Structural & Functional	Language is learnt through subject-defining activities				<b>Content Based (bilingual and immersion)</b>
Teacher K (case study 4: Japanese) Not a 'true' genre-based program due to lack of resources	Structural, FUNCTIONAL & Interactional	Language is learnt through analysis of the purposes and wordings of texts used for making meaning in differing sociocultural contexts	Cultural exchanges and oral exchanges Language as social semiotic Positive attitude to language and culture	Intercultural skills Vocabulary for social exchanges Authentic cultural experiences	Intercultural exchanges Oral language and skills through worksheets and contrived dialogues	<b>Genre – Based</b>
	Structural, Functional & Interactional	Language is learnt through analysis of what is happening in a context, how language is integral to what is taking place				<b>Text - Based</b>

### 5.3.3 *Tabulated initial Approaches to literacy curriculum design*

Using Table 3 as a basis, Table 7 shows that participating teachers all sent clear messages that they thought literacy to be neither natural, nor universal, nor ideologically neutral, but culturally situated. Hence, differences in their reported approaches to literacy curriculum design at the outset can be viewed as matters of degree, measured by the extent to which specific preoccupations about schisms regarding linguistic knowledge and skills (rules and structures), cognitive processes (skills and strategies) and sociocultural practices (culture and interaction) in literature and policy had affected their professional experiences.

As noted in 5.3 messages from, and observations of, all the teachers can be positioned in this literacy scheme. Table 8 shows that classroom teachers were no different than the languages teachers in the overall character of their approaches to curriculum design; their messages constituted an amalgam of the aforementioned literature's theoretical preoccupations. But only two of the fifteen teachers were noted to have privileged linguistic rules and structures and only five teachers privileged cognitive processes (functional skills and strategies). Overall, the teachers' literacy programs at the start of the PLP eschewed the teaching of linguistic rules and structures as well as the individual development and internalisation of skills and strategies for language learning and language use in favour of communicative, culturally-situated Approaches that treat language and literacy development as dynamic, interactive processes inextricably linked with sociocultural practices and constantly evolving norms, as their prior professional learning and expertise would suggest. Eight of fifteen teachers reported this to be their dominant consideration when planning, five of whom were languages teachers; and another five stated this to be a medium focus. The preponderance of language teachers in this context is an interesting finding. It may well be argued that this is a result of the shifts in pre-service teacher training programs and prescribed curricula first from a focus on linguistics to internal cognitive processes, and then to an external social-interaction focus in the last two decades. As can be expected of a range of teachers working in separate schools with colleagues and communities emphasising particular priorities and with access to different resources, there can be noted content variations within the columns. This is a faithful representation of their reports, site observations by the lead researcher and is indicated by the colour scheme identified in the row above the first row named 'Teacher'.

**Table 8: overview of all teachers' initial Approaches to literacy curriculum design (coding template)**

Table 8: A continuum of initial Approaches to literacy curriculum design												
	Text-centric or <i>Linguistic Approach</i>				Cognitive-centric or <i>Cognitive/Metacognitive Approach</i>				Culture-centric or <i>Sociocultural Approach</i>			
	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks
	Literacy involves mastery of a writing system and its attendant conventions (knowledge about language and linguistic conventions)	Language and knowledge of how to use it: lexical, morphological, syntactic, semantic, pragmatic knowledge	Linguistic / syntactical units, normative genres and text types (styles)	Memorise 'rules' of language (normative conventions), learn lexical and syntactical structures and relationships to communicative functions (medium and mode), practice macro skills using set texts	Literacy involves active thinking and problem solving (knowledge about language and skills to create and transform knowledge)	Decoding and encoding skills; relational thinking skills – predicting, inferring and synthesising	Linguistic and syntactical units – closely aligned to reading and writing strategies. Meta and relational language and strategies	Practice reading and writing for discrete purposes and learn sub-element skills sequentially. Development of mental schemas, goals and self-monitoring skills	Literacy is a socially constructed phenomenon. Texts are not natural or universal, they are formed through interaction	Critical examination of social discourses and conventions used for creating and interacting with texts	Language, macro skills and strategies in context of use not as discrete units or skills	Shared literacy activities: collaborative reading and writing. Linguistic and syntactical units problematised in contexts of meaning making in learning areas
Teacher		Red reflects major focus				Orange reflects medium focus				Blue reflects minor focus		

**Table 8:** Teachers' initial Approaches to literacy curriculum design

Teacher	Text-centric or <i>Linguistic Approach</i>				Cognitive-centric or <i>Cognitive/Metacognitive Approach</i>				Culture-centric or <i>Sociocultural Approach</i>			
	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks
Teacher A (case study 1: classroom)	Literacy involves mastery of a writing system and its attendant conventions (knowledge about language and linguistic conventions)	Constituent elements of language; vocab, spelling, punctuation, semantics and pragmatics (turn-taking)	Oriented to commercial programs	Individual reading with levelled readers Morning talks (show and tell)	Literacy involves active thinking and problem solving (knowledge about language and skills to create and transform knowledge)	Strong focus on macro skill development and cognitive strategies such as phonics	Oriented to commercial programs	Phonics lessons Word walls Semantic mapping Handwriting	Literacy is a socially constructed phenomenon. Texts are not natural or universal, they are formed through interaction	Critical examination of popular stories and cultural events Contextual development of macro skills	Whole-class read-alouds and participation in local and national discourses (songs / plays)	Teacher read-alouds Composition of oral texts for cultural events (remembrance day)
Teacher B (case study 1: classroom)	As above	Constituent elements of language; vocab, spelling, punctuation, semantics and pragmatics (turn-taking)	Oriented to commercial programs	Individual reading with levelled readers Genre-based writing		Strong focus on macro skill development and cognitive strategies for reading and writing	Oriented to commercial programs	Phonics lessons Word walls Semantic mapping Guided reading Handwriting	As above	Critical examination of popular stories and cultural events Contextual development of macro skills	Whole-class read-alouds and publication of texts for inclusion in local and national discourses / celebrations	Teacher read-alouds Composition of oral and written texts for cultural events (remembrance day)
Teacher C (case study 1: Indonesian)	As above	Constituent elements of language; vocab, semantics and pragmatics (turn-taking)	Thematic vocab: lists for colours, numbers, cultural events etc.	Reciting set dialogues Practising vocabulary (worksheets)					As above	Critical examination of popular stories and cultural events	Set dialogues and songs for cultural events Critical discussion of cultural discourses	Teacher read-alouds Interactive visits from native speakers Viewing videos of cultural events

**Table 8: Teachers' initial Approaches to literacy curriculum design**

Teacher	Text-centric or <i>Linguistic Approach</i>				Cognitive-centric or <i>Cognitive/Metacognitive Approach</i>				Culture-centric or <i>Sociocultural Approach</i>			
	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks
Teacher D (case study 2: classroom)	Literacy involves mastery of a writing system and its attendant conventions (knowledge about language and linguistic conventions)	Constituent elements of language; vocab, spelling, punctuation, semantics and pragmatics (turn-taking)	Oriented to commercial programs	Individual reading with levelled readers Morning talks (show and tell)	Literacy involves active thinking and problem solving (knowledge about language and skills to create and transform knowledge)	Strong focus on macro skill development and cognitive strategies such as phonics	Oriented to commercial programs	Phonics lessons Word walls Semantic mapping Handwriting	Literacy is a socially constructed phenomenon. Texts are not natural or universal, they are formed through interaction	Critical examination of popular stories and cultural events Contextual development of macro skills	Whole-class read-alouds and participation in local and national discourses (songs / plays) Fiction narratives and non-fiction recounts (oral emphasis)	Teacher read-alouds Composition of narratives for cultural events (remembrance day) Recounts of activities Aural foci
Teacher E (case study 2: Indonesian)	As above	Constituent elements of language; vocab, semantics and pragmatics (turn-taking)	Thematic vocab: lists for colours, numbers, cultural events etc. Worksheets	Reciting set dialogues Practising vocabulary (worksheets)	As above				As above	Critical examination of popular stories, cultural events and pragmatics	Set dialogues and songs for cultural events Critical discussion of cultural discourses and practices	Teacher read-alouds Viewing and responding to videos of cultural events Whole class and small group recitals
Teacher F & G (case study 3: classrooms)	As above	Constituent elements of language; vocab, spelling, punctuation, semantics and pragmatics (turn-taking)	Oriented to commercial programs Focus on recount and narrative genres	Individual reading with levelled readers Genre-based writing	As above	Strong focus on macro skill development and cognitive strategies for reading and writing	Oriented to commercial programs: particularly for sub-element skills	Phonics lessons Word walls Semantic mapping Handwriting	As above	Critical examination of popular stories and cultural events Contextual development of macro skills	Whole-class read-alouds and publication of texts for inclusion in local discourses / celebrations	Teacher read-alouds Composition of oral and written texts for community events

**Table 8: Teachers' initial Approaches to literacy curriculum design**

Teacher	Text-centric or <i>Linguistic Approach</i>				Cognitive-centric or <i>Cognitive/Metacognitive Approach</i>				Culture-centric or <i>Sociocultural Approach</i>			
	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks
Teacher H (case study 3: German)	As above	Constituent elements of language; vocab, semantics and pragmatics (turn-taking)	Thematic vocab: lists for colours, numbers, cultural events etc.	Reciting set dialogues Practising vocabulary (worksheets)	As above	Lack of resources to pursue			As above	Critical examination of popular stories and cultural events Contextual development of macro skills	Whole-class read-alouds and publication of texts for inclusion in local discourses / celebrations	Teacher read-alouds Composition of oral and written texts for community events
Teachers I, J & K (case study 4: classroom & Japanese)	As above				As above	Focus on macro skill development and cognitive strategies for reading and writing (classroom teachers)	Commercial programs: particularly for sub-element skills Teach skills and strategies in context of use	Phonics lessons Word walls Semantic mapping Handwriting	As above	Critical examination of popular stories and cultural events Functional approach to linguistic units (all teachers)	Whole-class read-alouds and publication of texts for inclusion in local discourses / celebrations Strong play-based approach	Teacher read-alouds Composition of oral and written texts Functional analysis of texts and grammar
Teacher L (case study 5: classroom)	As above	Constituent elements of language; vocab, spelling, punctuation, semantics and pragmatics (turn-taking)	Oriented to commercial programs Focus on recount and narrative genres	Individual reading with levelled readers Genre-based writing	As above	Focus on macro skill development and cognitive strategies for reading and writing	Oriented to commercial programs: particularly for sub-element skills	Phonics lessons Word walls Semantic mapping Handwriting	As above	Critical examination of popular stories and cultural events	Whole-class read-alouds and publication of texts for inclusion in local discourses / celebrations	Teacher read-alouds Composition of oral and written texts for community events

**Table 8:** Teachers' initial Approaches to literacy curriculum design

Teacher	Text-centric or <i>Linguistic Approach</i>				Cognitive-centric or <i>Cognitive/Metacognitive Approach</i>				Culture-centric or <i>Sociocultural Approach</i>			
	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks
Teacher M (case study 5: French)	As above	Constituent elements of language; vocab, semantics and pragmatics (turn-taking)	Thematic vocab: lists for colours, numbers, cultural events etc. Worksheets	Reciting set dialogues Practising vocabulary (worksheets)	As above				As above	Critical examination of popular stories, cultural events and pragmatics Contextual development of macro skills	Set dialogues and songs for cultural events Critical discussion of cultural discourses and practices	Teacher read-alouds Viewing and responding to videos of cultural events Whole class and small group recitals
Teacher N (case study 6: classroom)	Literacy involves mastery of a writing system and its attendant conventions (knowledge about language and linguistic conventions)	Constituent elements of language; vocab, spelling, punctuation, semantics and pragmatics (turn-taking)	Oriented to commercial programs	Individual reading with levelled readers Morning talks (show and tell)	Literacy involves active thinking and problem solving (knowledge about language and skills to create and transform knowledge)	Strong focus on macro skill development and cognitive strategies such as phonics	Oriented to commercial programs	Phonics lessons Word walls Semantic mapping Handwriting	Literacy is a socially constructed phenomenon. Texts are not natural or universal, they are formed through interaction	Critical examination of popular stories and cultural events	Whole-class read-alouds and participation in local and national discourses (songs / plays)	Teacher read-alouds Composition of oral texts for cultural events (remembrance day)
Teacher O (case study 6: Italian)	As above	Constituent elements of language; vocab, semantics and pragmatics (turn-taking)	Thematic vocab: lists for colours, numbers, cultural events etc.	Reciting set dialogues Practising vocabulary (worksheets)					As above	Critical examination of popular stories and cultural events Contextual development of macro skills	Set dialogues and songs for cultural events Critical discussion of cultural discourses	Teacher read-alouds Interactive visits from native speakers Viewing videos of cultural events

#### **5.4** *Aggregated English and Languages assessment data*

The final baseline developed to enable analysis of the impact that the MLL PLP had were measures of student learning. There were two sets of measures: one specifically related to the English language program and the other to the target language. These assessment measures were introduced and discussed in Chapter Three, and arise in association with the iterative and adaptive design of the teaching in the Approach and program.

Such baseline data is more informative in the context of the progress data and not on its own and is presented later as the progress data comes from later. Table 13 will provide aggregated data on the specified linguistic knowledge and capacity of all the learners in English. Table 14 (and section 5.8.1) presents the aggregated data on the specified linguistic knowledge and capacity of all the learners in each target language.

Taken together these tables of student learning data provide a basis for cross-linguistic monitoring and comparative analysis of the impacts of the MLL Approach on languages and literacy learning across the range of settings and languages as established in chapter Three (section 3.5.3 & 3.5.4) and chapter Four (sections 4.3.1 & 4.3.4).

#### **5.5** *Tabulated modifications at the mid-point of the Research*

Teacher's records of their inner and interpersonal dialogues delivered the signposts for coding curricula modifications made in light of the ongoing and evolving MLL PLP, but not any specific lexical items or properties. It was noted in section 5.3 that the focus of the teachers was to see things through a lens of tasks and activities for instruction. Much of the development that occurred in the PLP dialogues, once the initial theory and structure had been covered, was in discussion of the teachers' and researchers' suggestions of tasks and activities to address the enactment of the Approach. These things, examples of which feature in Table 9, best convey the effort of the professional learning involved in producing practical solutions to demands for coherence and alignment in languages teaching programs. Thus, of particular significance here is the absence of any tabulated presentation of teachers' beliefs and any overarching instructional foci in the mid-point coding table/frame. Instead, tasks and activities presented through the PLP have been categorised and provided in this table in line with each of the three overarching dimensions of literacy that informed the development of the MLL Approach as discussed. By focusing on the links between classroom tasks, activities and linguistic, cognitive and sociocultural dimensions of literacy each teacher's context-laden messages concerning their implementation of the MLL Approach can now be accounted for in a manner that is consistent with the initial literacy curricula coding scheme and the five key organising theories of the MLL Approach. The focus is upon messages from those teachers who were part of the full, two-year PLP which



allows for longitudinal comparisons and not so much from those teachers who joined the program in the second year as they were found to continue with the same pattern of programming and had markedly similar messages as their site-based colleagues.

The use of the colours red, orange and blue will be employed again to note the amount of emphasis each teacher placed on the tasks, activities and pedagogical techniques they were introducing. Red entries identify those aspects that a teacher conveyed as most significant, orange next and blue the least. The absence of an entry reflects the absence of any messages about that aspect.

These tabulated overviews of program modifications now follow, as one would expect, from the tabulated overviews and descriptions of each teacher's reported instructional stances at the beginning of the program in a logical, linear fashion and will subsequently give way to the mid-point case study (school-based) narratives and then final case study (school-based) narratives and tables that encompass messages about those acts and events specific to each setting. These final two data sets will provide further, comparative data to help illuminate the new knowledge that was generated through this study for discussion and analysis.

Table 9 shows clearly that the teachers, now working on literacy teaching jointly with their colleagues in a way that is multilingual and embraces the target language in each school, have in practice re-balanced the emphasis in their teaching by the mid-point (end of first year) of the PLP. If anything, their activities now favour linguistic and cognitive tasks/activities. The case study records that follow further elucidate the PLP mid-point situation.

**Table 9: Overview of teachers' mid-point planning considerations and modifications**

Table 9 Teachers' planning considerations and modifications: red = major focus; orange = medium focus; blue = minor focus												
Teacher	Text-centric considerations + <i>Linguistic Tasks and Activities</i>				Cognitive-centric considerations + <i>Cognitive/Metacognitive Tasks and Activities</i>					Culture-centric considerations + <i>Sociocultural Tasks and Activities</i>		
	Lexical and semantic (e.g. vocab, semiotic activities)	Morphological and syntactical (e.g. punctuation tasks)	Pre and early reading (e.g. phonemic awareness activities and formulaic readers)	Pre and early writing (e.g. building knowledge of text types)	Decoding and encoding strategies (e.g. reading conferences, systematic phonics tasks)	Metalanguage development (e.g. contrastive analysis, analogic reasoning tasks)	Orthographic mapping schemas (e.g. phonological skills and mapping principles)	Task analysis and in-step planning (e.g. modelled reading and writing cycles)	Use of developmental schemas and translanguaging (e.g. formulaic phrases tasks and building reading on writing on oral)	Critical analysis and discussion of texts and stories	Intercultural understanding and skill development (reflecting on otherness', L2 culture days)	Pragmatics (especially authentic L2 social exchanges)
Teachers A & B (case study 1: classroom)	High-frequency word lists ( <i>Dolch</i> 100) Daily Indonesian vocab challenge	Class books of functional phrases (composition and editing in Indonesian)	<i>Smartboard</i> readers (IWB) Rhymes (in a pocket chart) and songs Alphabet readers (Indonesian and bilingual)	Text type wall charts Use of visual prompts for writing - apps ( <i>Photostory</i> , <i>Extranormal Storybird</i> )	1:1 reading conferences Guided reading Modified <i>Letterland</i> phonics program	Contrastive analysis integrated into spelling and grammar activities; used for explicit teaching segments and self-correction strategies	Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T) IWB-based mapping activities (spoonerisms) Worksheets (cloze – jumbled words)	Sharing the pen activities – interactive story writing Integrated spelling programs	Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Further develop developmental schemas in relation to general programming schemas at site	Interactive class read alouds Interactive viewing of Indonesian festivals	Daily Indonesian life challenge Contrived social exchanges Indonesian village and vegetable garden	Indonesian day (whole school) Visits from Indonesian people Authentic class exchanges in L2
Teacher C (case study 1: Indonesian)	Thematic, formulaic and functional word lists (including focus on synonyms and antonyms) Daily Indonesian vocab challenge Use of DVDs (pronunciation)	Class big books of functional and thematic phrases (composition and editing with target sentences) Flashcard sentence construction activities (word order)	Rhymes and songs ( <i>Songs For Teaching</i> ) Alphabet readers Use of authentic CD and DVD recordings (phonemic awareness)	Text type wall charts <i>Budi</i> Indonesian program for laptops <i>Silly sentence flashcard games</i> Genre focus in oral program	Shared reading Modified <i>Letterland</i> phonics program Cognate strategies Sound family focus (wall charts, word jumbles and word ladders)	Contrastive analysis integrated into all classroom activities; used for explicit teaching segments, self-correction strategies, spelling, reading, genre compositions	Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T) IWB-based mapping activities (spoonerisms) Letter-sound worksheets	Sharing the pen activities – interactive story writing Integrated spelling programs Genre focus in-step with classroom (recounts)	Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Scaffolding reading onto writing onto oral activities Provide L2 word wall charts for staffroom	Interactive class read alouds Interactive viewing of Indonesian festivals	Daily Indonesian life challenge Contrived social exchanges Indonesian village and vegetable garden	Indonesian day (whole school) Visits from Indonesian people Authentic class exchanges in L2

Teacher	Text-centric considerations + <i>Linguistic Tasks and Activities</i>				Cognitive-centric considerations + <i>Cognitive/Metacognitive Tasks and Activities</i>				Culture-centric considerations + <i>Sociocultural Tasks and Activities</i>			
Teacher D (case study 2: classroom)	High-frequency word lists ( <i>Dolch</i> 100) Daily Indonesian vocab challenge Environmental print in Indonesian displayed Bilingual vocab games ( <i>Who am I? etc</i> )	Class books of functional phrases (composition and editing in Indonesian)	<i>Smartboard</i> readers (IWB) Rhymes (in a pocket chart) and songs Alphabet readers (Indonesian and bilingual)	Text type wall charts Use of visual prompts for writing - apps ( <i>Photostory</i> , <i>Extranormal Storybird</i> ) <i>Budi</i> Indonesian program for laptops	1:1 reading conferences Guided reading Modified <i>Letterland</i> phonics program	Contrastive analysis integrated into spelling and grammar activities; used for explicit teaching segments and self-correction strategies	Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T) IWB-based mapping activities (spoonerisms) Worksheets (cloze – jumbled words)	Sharing the pen activities – interactive story writing Integrated spelling programs Inter-school visits for resource development	Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Further develop developmental schemas in relation to general programming schemas at site	Interactive class read alouds Interactive viewing of Indonesian festivals	Daily Indonesian life challenge Contrived social exchanges	Indonesian day (whole school) Visits from Indonesian people Authentic class exchanges in L2 Inter-school visits
Teacher E (case study 2: Indonesian)	Thematic, formulaic and functional word lists (including focus on synonyms and antonyms) Daily Indonesian vocab challenge Use of DVDs (pronunciation) Bilingual vocab games ( <i>Who am I? etc</i> ) Individual dictionaries	Class big books of functional and thematic phrases (composition and editing with target sentences) Flashcard sentence construction activities (word order)	Rhymes (flashcards) and songs ( <i>Songs For Teaching</i> ) Alphabet readers Use of authentic CD and DVD recordings (phonemic awareness) Choosing to read 'hooks	Text type wall charts <i>Budi</i> Indonesian program for laptops Silly sentence flashcard games Genre focus in oral program Comic strip sentence writing prompts and frames	Shared reading Take-home readers Cognate strategies Word family focus for phonics program + (wall charts, word jumbles and word ladders) Syllabification strategies	Contrastive analysis integrated into all classroom activities; used for explicit teaching segments, self-correction strategies, spelling, reading, genre compositions	Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T) IWB-based mapping activities (spoonerisms) Letter-sound worksheets	Sharing the pen activities – interactive story writing Integrated spelling programs Genre focus in-step with classroom (recounts)	Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Scaffolding reading onto writing onto oral activities	Interactive class read alouds Interactive viewing of Indonesian festivals (DVD)	Daily Indonesian life challenge Contrived social exchanges	Indonesian day (whole school) Visits from Indonesian people Authentic class exchanges in L2 Inter-school visits

Teacher	Text-centric considerations + <i>Linguistic Tasks and Activities</i>				Cognitive-centric considerations + <i>Cognitive/Metacognitive Tasks and Activities</i>					Culture-centric considerations + <i>Sociocultural Tasks and Activities</i>		
Teacher F & G (case study 3: classrooms)	High-frequency and thematic word lists German prop-box for oral prompts Environmental print in Indonesian displayed Environmental print	Class books of functional phrases (composition and editing in German)	Class big books translated <i>Anybook</i> digital reader pens used to translate and 'read' library books German station in literacy block routine	Progressive modelling of writing with increased use of linguistic items in German 'Sharing the Pen' writing using functional phrases as scaffold	1:1 reading conferences Guided reading	Contrastive analysis integrated into spelling and grammar activities; used for explicit teaching segments and self-correction strategies	Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T) IWB-based mapping activities (spoonerisms) Worksheets (cloze – jumbled words)	Sharing the pen activities – interactive story writing Integrated spelling programs	Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Further develop developmental schemas in relation to general programming schemas at site	Interactive class read alouds Interactive viewing of German festivals	Contrived social exchanges	German day (whole school) Authentic class exchanges in L2
Teacher H (case study 3: German)	Thematic, formulaic and functional word lists (including focus on synonyms and antonyms) Use of DVDs (pronunciation) Bilingual vocab games ( <i>Who am I? etc</i> )	Class big books of functional and thematic phrases (composition and editing with target sentences) Flashcard sentence construction activities (word order)	Rhymes and songs ( <i>Songs For Teaching</i> ) Alphabet readers Use of authentic CD and DVD recordings (phonemic awareness) Dr Seuss books translated for phonemic awareness tasks	Text type wall charts German program for laptops Genre focus in oral program 'Sharing the Pen' writing using functional phrases as scaffold	Shared reading Cognate strategies Word family focus for phonics program + (wall charts, word jumbles and word ladders)	Contrastive analysis integrated into all classroom activities; used for explicit teaching segments, self-correction strategies, spelling, reading, genre compositions	Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T) IWB-based mapping activities (spoonerisms) Letter-sound worksheets	Sharing the pen activities – interactive story writing Integrated spelling programs	Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Scaffolding reading onto writing onto oral activities Provide L2 word wall charts for staffroom	Interactive class read alouds Interactive viewing of German festivals (DVD) German challenge in newsletter	Contrived social exchanges	German day (whole school) Authentic class exchanges in L2 Inter-school visits

Teacher	Text-centric considerations + <i>Linguistic Tasks and Activities</i>				Cognitive-centric considerations + <i>Cognitive/Metacognitive Tasks and Activities</i>					Culture-centric considerations + <i>Sociocultural Tasks and Activities</i>		
Teachers I, J (case study 4: classroom)	High-frequency word lists ( <i>Dolch</i> 100) Daily Indonesian vocab challenge Environmental print in Indonesian displayed Bilingual vocab games ( <i>Who am I? etc</i> ) Japanese prop box	Modified <i>Jolly Grammar</i> program Class books of functional phrases (composition and editing in Japanese)	<i>Smartboard</i> Japanese and bilingual readers (IWB) Rhymes (in a pocket chart) and songs Alphabet readers Japanese book box	Text type wall charts Use of visual prompts for writing - apps ( <i>Photostory</i> , <i>Extranormal Storybird</i> ) <i>Michio</i> Japanese program for laptops	1:1 reading conferences Guided reading Modified <i>Jolly Phonics</i> program	Contrastive analysis integrated into spelling and grammar activities; used for explicit teaching segments and self-correction strategies Inferencing focus	Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T) IWB-based mapping activities (spoonerisms) Worksheets (cloze – jumbled words)	Sharing the pen activities – interactive story writing (recounts) Integrated spelling programs Cross – linguistic numeracy lessons	Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Further develop developmental schemas in relation to general programming schemas at site	Interactive class read alouds Interactive viewing of Japanese festivals Strong focus on discourse awareness	Contrived social exchanges	Japanese assembly items Visits from Japanese people Authentic class exchanges in L2 Use of prop box to stimulate authentic exchanges
Teacher K (case study 4: Japanese)	Thematic, formulaic and functional word lists (including colour coding lexical groups) Use of DVDs (pronunciation) Bilingual vocab games ( <i>Who am I? etc</i> ) Numeracy vocabulary focus Environmental print displays Label classroom objects	Modified <i>Jolly Grammar</i> program Class big books of functional and thematic phrases (composition and editing with target sentences) Flashcard sentence construction activities (word order) Sentence of the week task	Rhymes and songs ( <i>Songs For Teaching</i> ) Alphabet readers Use of authentic CD and DVD recordings (phonemic awareness) Dr Seuss books translated for phonemic awareness tasks <i>Smartboard</i> readers (IWB) Jap book box	Text type wall charts Japanese ( <i>Michio</i> ) program for laptops Genre focus in oral program (recounts) 'Sharing the Pen' writing using functional phrases as scaffold Writing book template (recounts)	Shared reading Modified <i>Jolly Phonics</i> program Syllabification strategies – CVC clusters (wall charts, word jumbles and word ladders)	Contrastive analysis integrated into all classroom activities; used for explicit teaching segments, self-correction strategies, spelling, reading, genre compositions	Decode, Cover, Write, Check + Translate – mapping (D, C, W,C,T) IWB-based mapping activities (spoonerisms) Letter-sound worksheets Syllabification flashcards	Sharing the pen activities – interactive story writing (recounts) Integrated spelling programs Cross – linguistic numeracy lessons	Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Scaffolding reading onto writing onto oral activities Provide L2 word wall charts for staffroom	Interactive class read alouds Interactive viewing of Japanese festivals (DVD) Use prop box exchanges for critical analysis	Contrived social exchanges	Japanese assembly items Visits from Japanese people Authentic class exchanges in L2 Use of prop box to stimulate authentic exchanges

Teacher	Text-centric considerations + <i>Linguistic Tasks and Activities</i>				Cognitive-centric considerations + <i>Cognitive/Metacognitive Tasks and Activities</i>					Culture-centric considerations + <i>Sociocultural Tasks and Activities</i>		
<p>Teacher L (case study 5: classroom)</p> <p>Teacher M (case study 5: French)</p>	<p>Thematic, formulaic and high-frequency word lists (including Dolch/bedrock lists and colour coding lexical groups) Use of DVDs (pronunciation) Bilingual vocab games (<i>Who am I? etc</i>) Environmental print displays Label classroom objects Interactive Wikispace (vocab &amp; pronunciation) Dictionary supported word study program</p>	<p>Class big books of functional and thematic phrases (composition and editing with target sentences) Flashcard sentence construction activities (word order) Sentence of the week task (shared IWB file) Daily French challenge (grammaticality)</p>	<p>Rhymes (known), plays and songs (<i>Songs For Teaching</i>) Alphabet readers Use of authentic CD and DVD recordings (phonemic awareness) Dr Seuss books translated for phonemic awareness tasks <i>Smartboard</i> French and bilingual readers (IWB)</p>	<p>Text type wall charts French program for laptops Genre focus in oral program (recounts) 'Sharing the Pen' writing using functional phrases as scaffold Writing book template (recounts) Thematic vocab used for handwriting Bilingual plays as prompts for writing</p>	<p>Shared reading of class books Modified <i>Jolly Phonics</i> program Syllabification strategies (wall charts, word jumbles, families and ladders) Bilingual guided reading program (including parent helpers) 1:1 bilingual and monolingual reading conferences Use plays as basis for reading comprehension tasks</p>	<p>Contrastive analysis integrated into all classroom activities; used for explicit teaching segments, self-correction strategies, spelling, reading, genre compositions Learning recap at end of French lessons for subsequent teaching of classroom teacher and other classes (use of Bloom's taxonomy – revised)</p>	<p>Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T) IWB-based mapping activities (spoonerisms) Letter-sound worksheets Syllabification flashcards Explicit focus on orthographic patterns across English and French</p>	<p>Sharing the pen activities – interactive story writing (recounts) Integrated spelling programs Cross – linguistic numeracy lessons Follow-up lesson template for classroom teacher (translanguage contrastive tasks) target material from French lesson (use of TRT days for planning) French vocab session in staff meetings Two-year integrated planning cycle</p>	<p>Morning talks using formulaic phrases, integrated phrases and thematic vocabulary Scaffolding reading onto writing onto oral activities Further develop developmental schemas in relation to general programming schemas at site Provide L2 word wall charts for staffroom</p>	<p>Interactive class read alouds Interactive viewing of French festivals (DVD) Weekly French challenge Critical analysis of French and Australian norms through literature (discourse analysis) French focus for morning talks</p>	<p>Contrived social exchanges (use of MP3 recordings and iPods) Compose and present plays with a focus on deconstructing cultural norms (class and whole school assemblies) French village week</p>	<p>French assembly items Authentic class exchanges in L2 and with visiting French assistant Use of prop box to stimulate authentic exchanges</p>

Teacher	Text-centric considerations + <i>Linguistic Tasks and Activities</i>				Cognitive-centric considerations + <i>Cognitive/Metacognitive Tasks and Activities</i>				Culture-centric considerations + <i>Sociocultural Tasks and Activities</i>			
<p>Teacher N (case study 6: classroom)</p> <p>Teacher O (case study 6: Italian)</p>	<p>Thematic, formulaic and high-frequency word lists (including Dolch/bedrock lists)</p> <p>Use of DVDs (pronunciation)</p> <p>Bilingual vocab games (<i>Who am I? etc</i>)</p> <p>Environmental print displays</p> <p>Label classroom objects</p> <p>Interactive Wikispace (vocab &amp; pronunciation)</p> <p>Dictionary supported word study program</p> <p>Use <i>Flip Cameras</i> to support pronunciation development</p>	<p>Class big books of functional and thematic phrases (composition and editing with target sentences)</p> <p>Flashcard sentence construction activities (word order) integrated with handwriting lessons</p>	<p>Rhymes (known), plays and songs (<i>Songs For Teaching</i>)</p> <p>Alphabet readers</p> <p>Use of authentic CD and DVD recordings (phonemic awareness)</p> <p>Dr Seuss books translated for phonemic awareness tasks</p> <p>Smartboard Italian and bilingual readers (IWB)</p> <p>Use of extended language code by teachers in both languages</p> <p>Use magnet boards for phonemic awareness activities</p>	<p>Text type wall charts in line with planning for cross-linguistic study of genres beginning with procedures then recounts and reports</p> <p>Italian program for laptops (<i>Chatter Chatter</i>)</p> <p>Genre focus in oral program (recounts)</p> <p>'Sharing the Pen' writing using functional phrases as scaffold</p> <p>Writing book template (recounts)</p> <p>Thematic vocab used for handwriting</p> <p>Bilingual plays as prompts for writing</p> <p>Comic strip sentence writing prompts and frames</p>	<p>Shared reading of class books</p> <p>Modified <i>Jolly Phonics program</i></p> <p>Syllabification strategies (wall charts, word jumbles, families and ladders)</p> <p>Bilingual guided reading program (including parent helpers)</p> <p>1:1 bilingual and monolingual reading conferences (focus on decoding AND comprehension strategies)</p> <p>Use plays as basis for reading comprehension tasks</p>	<p>Contrastive analysis integrated into all classroom activities; used for explicit teaching segments, self-correction strategies, spelling, reading, genre compositions</p> <p>Learning recap at end of Italian lessons for subsequent teaching of classroom teacher and other classes (use of Bloom's taxonomy – revised)</p>	<p>Decode, Cover, Write, Check + Translate – mapping (D, C, W, C, T)</p> <p>IWB-based mapping activities (spoonerisms)</p> <p>Letter-sound worksheets</p> <p>Syllabification flashcards</p> <p>Explicit focus on orthographic patterns across English and Italian</p>	<p>Sharing the pen activities – interactive story writing (recounts)</p> <p>Integrated spelling programs</p> <p>Cross – Follow-up lesson template for classroom teacher to use in literacy blocks (translanguage contrastive tasks) target material from Italian lesson (use of TRT days for planning)</p> <p>Focus on designs for explicit teaching and modelling</p> <p>Develop cross-linguistic portfolios to monitor student progress</p>	<p>Morning talks using formulaic phrases, integrated phrases and thematic vocabulary</p> <p>Scaffolding reading onto writing onto oral activities</p> <p>Further develop developmental schemas in relation to general programming schemas at site</p> <p>Provide L2 word wall charts for staffroom</p>	<p>Interactive class read alouds</p> <p>Interactive viewing of Italian festivals (DVD)</p> <p>Critical analysis of Italian and Australian norms through literature (discourse analysis)</p> <p>Italian focus for morning news (not talks or show and tell)</p>	<p>Contrived social exchanges</p> <p>Compose and present plays with a focus on deconstructing cultural norms (class and whole school assemblies)</p>	<p>Italian assembly items</p> <p>Authentic class exchanges in L2</p> <p>Cultural artefacts and stories used to stimulate authentic exchanges</p>

### 5.5.1 CASE STUDY 1 (Teachers A, B, C modifications)

#### 5.5.1.1 Teacher A (Classroom, Reception / Year 1)

Over the course of the PLP this teacher noted in the provided journal the emergence of new and modified activities that created space for the target language in both the class daily routines and their daily English language and literacy teaching segments.

After discussions, demonstrations and training within the PLP this teacher initially modified the class program to include the target language in their morning routine: greetings were conducted in Indonesian. By the mid-point assessment in Term Four 2010, students had been receiving additional exposure to the Indonesian language on a daily basis with their classroom teacher, accumulating approximately 31 hours more of Indonesian language learning opportunities. In the second year of the project, specialist Indonesian language instruction was augmented with a further 37 hours of Indonesian language learning tasks provided by this classroom teacher.

In consultation with the specialist language teacher, an appropriate Indonesian word (a word that they had been exposed to in Indonesian classes) was included in spelling lists and flashcards for fast mapping of Indonesian greetings, and words that related to their 'vegetable garden' theme were introduced.

These first steps toward language integration, it was reported, aimed to develop the students' Indonesian language competence rather than any insights into specific language patterns and structure(s) of language. It can be likened to an encounter or sensitisation model (Ellis & McCartney, 2011).

At the end of the first year the classroom teacher, in collaboration with the specialist language teacher, collated evidence from both formative and summative assessments to inform the planning on reflection process of the PLP, to decide which modifications they would keep, which they would discontinue and which areas of practice they wanted to develop. The classroom teacher reported that the students were 'excited, enthusiastic and doing really well'.

Students were also reported to be using Indonesian spontaneously in the class (for example, counting in Indonesian was noted when doing an addition activity with the whole class on the IWB in math), correcting the class teacher and instructing the librarian (including action games like *Simon Says* and *Heads, Shoulders, Knees and Toes* in Indonesian). Children were also stated to be working collaboratively when brainstorming vocabulary for writing, for example: one child knew *malam* (inferred from good evening) and another knew *makan* (for eat) and together they were able to generate *makan malam* for eating dinner. Similarly, another group was reported to have collaboratively constructed from their known vocabularies the phrases *saya sekali* (I once) and then *dan saya tidak suka sekali* (and I do



not like that at all) which they then went on to use in their creative writing session. The children were also reported to have been working in pairs during the morning literacy 'block' on translating books read to them in Indonesian by strategically identifying known words and then inferring the rest / meaning from context and grammatical markers. As noted by the teacher, this would not have been possible if they weren't embracing the notion of translanguaging: "the translanguaging in story writing and spelling has been great. Sometimes I have had to ask chn what it means in Indonesian". Interestingly, it was also reported that the child who had been identified with 'global delay' would only say thank you in Indonesian and not English.

After collaborative reflection on these learning outcomes the teacher decided to move beyond an 'encounter' model and towards systematic embedding of Indonesian within the daily teaching and learning program:

- Literature in Indonesian was sought and shared with the children.
- Environmental print in Indonesian was provided in the classroom.
- Flashcard use was expanded to include each Term's thematic focus (vocabulary).
- Indonesian flashcards were developed and routinely used with diminishing cues for securing classroom-based nouns, phrases and the Indonesian alphabet (retrieval practice for functional vocabulary and sound families).
- Games were introduced and/or modified to include the Indonesian language.
- Use of Indonesian in the morning routine was expanded beyond greetings to include the weather, feelings, time and general requests (such as going to the bathroom).
- Songs began to be employed in the Indonesian language.

By the end of the first year this teacher had been working closely with the specialist Indonesian teacher on the development and use of alphabet mini-books, counting books, basic instructional language to support translanguaging and analogic reasoning as well as simple reading and writing tasks that satisfied the principle *write what you can say and read what you can write* introduced through the PL sessions.

It was conveyed by this teacher that planning for continued oral language development based upon the provided developmental sequence(s) was occurring without any modifications, that teachers were discussing how to integrate (sequence / interleave) both analytic and synthetic approaches to phonics instruction, as well as the importance of: teachers using an extended language code; the use of life experiences for writing; the use of nursery rhymes for phonological skill development and phonemic awareness across languages (and Dr Seuss stories); reading and re-reading to children in both languages on a daily basis; the lack of available literature in Indonesian; reading and writing conferences and the use of contrastive analysis and analogic reasoning to develop phonological and general language patterns; and children reading aloud and choosing their own books to read. Discussions were noted in relation to the 'Big 6' framework from the *Principals As Literacy Leaders* project (see Konza, 2014) and the MLL PL sessions that explored these

elements using a cross-linguistic perspective of the reading and writing processes. Specifically, the journal discussed the idea that there are six essential elements for reading (and writing) development but only one, vocabulary development, was considered to be language specific while the others (oral language patterns, phonological skills, phonics, fluency and comprehension) were considered to have cross-linguistic application that would benefit overall literacy development.

At this point, the teacher noted that 'learning is superior for bilingual students'. This teacher declared an intention to investigate the possibility of learning Indonesian through the Open Access College.

#### **5.5.1.2 Teacher B (Classroom, Year 2)**

In the first phase of the PLP this teacher identified with three particular notions: that literacy development occurs with oral language development; that languages and literacy learning is hard work; and that games can sustain languages learning. Thus, some of the initial modifications reported revolved around the modification and introduction of language games such as *Guess Who*, *Bingo*, *Simon Says* and *I hear with my little ear*. Other ideas were also drawn from resources (e.g., *Games for Language Learning*, *Keep Talking*, *35 Strategies for Developing Content-area Vocabulary*, *Speaking in Sentences* and *Flips*) that were provided at the PL sessions. Another game that was reported, which this writer was unfamiliar with, was *bang* (a game they play in math).

This teacher introduced Indonesian to the morning routine for greetings and was passionately active in the development of sets of interactive flashcards (semantic mapping: gradients, morphology, etymology-based etc.). These were identified as an important tool for oral language development and fast mapping of key vocabulary as introduced in the PLP. This teacher also noted the following developmental progression that was presented: *say what you can think, write what you can say and read what you can write*. The notions that teaching in the languages and literacy domains requires both explicit as well as discovery learning and that no one program is ever likely to be productive for a class of individual students if employed in a wholesale fashion were also recorded.

At the end of the first Semester this teacher decided to undertake a probe into the value of the flashcards. A vocabulary test was introduced based upon the Indonesian words presented on the flashcards (semantic not orthographic mapping focus). It was a translation activity that required students to work from Indonesian to English in the first instance and then from English to Indonesian. There were 42 separate test items for each section. The aggregated scores were reported as follows: 76% accuracy for Indonesian to English and 73% accuracy for English to Indonesian.

Flashcards were initially developed for Indonesian phonemes (starting with letter sounds) and concept or thematic vocabulary. It was noted that I “can’t do everything but I agree with the thematic approach”. Thus, these flashcards were designed in consultation with the Indonesian teacher to reflect concepts present in other subject areas so that language development across languages could also occur “through other subjects”. Consideration was given in this teacher-researcher’s journal to the adaptation, development and/or use of alphabet books, a class letter-to-sound book, and a class rhyme book for Indonesian.

What was clear from this teacher-researcher’s journal was that the ideas and activities of the MLL PLP resonated such that they were broadly applied in the classroom. Early in the second half of the first year this teacher observed that “some of the children are substituting more than one word per sentence” in English with Indonesian when undertaking their extended spelling activities (putting words into sentences). It was added that the use of Indonesian vocabulary was semantically accurate and appropriate, thus simple sentences such as “ I am delapan years old so I am muda but (the teacher) is tua” (I am eight years old so I am young but (the teacher) is old) developed into more complex sentences such as “*saya kumar is jingga sembilan*” (my room is orange nine). Furthermore, when this teacher re-tested the students’ uptake and recall of vocabulary introduced through interactive flashcard activities the following aggregate score of 79% was recorded for 63 test items presented in Indonesian for translation into English in late Term 3 of the first year. This was a larger test sample that drew upon different vocabulary; nonetheless the student achievement level was 4% higher (rounded to the nearest whole number).

By the mid-point assessment in Term Four 2010, students had been receiving supplementary two-way engagement with the Indonesian language on a daily basis with this classroom teacher, accumulating approximately 41 more hours of Indonesian language instruction. In the second year of the project, leading up to the final assessment, these students received a further 50 hours of Indonesian language instruction with this teacher. The school timetable was adapted to enable this class to receive two specialist Indonesian lessons per week on average in the second year.

At this point in the project the classroom teacher related that the students were “excited about the Indonesian activities, loved the games and were showing improvement already” and that they were “telling their parents words”. It was also reported that the use of the game *bingo* for consolidating colour words led to the students’ becoming “able to read, hear, recognise the colours”.

These first steps toward language integration, it was reported, aimed to develop the students’ Indonesian language competence rather than any insights into patterns and structure(s) of language or to cultivate positive attitudes towards the future learning of Indonesian. As with the other class, these initial undertakings can be likened to an encounter

or sensitisation model (Ellis & McCartney, 2011). Nonetheless, the curriculum development cycle provided through the PLP was identified by this teacher as significant, in particular that pedagogical actions needed to be grounded in a clear rationale, that the material needed to build upon prior learning in logical ways, that effective learning strategies should be demonstrated, that diagnostic assessments are especially important as they provide fine-grained information on student performance of tasks and that goals are particularly salient for planning as they are not as opaque as outcomes. Interestingly, this teacher-researcher began to question the dominant view of constructivist learning as it failed to adequately account for what they had observed: that learning is built upon prior experiences but through explicit teaching, that connections with other perspectives and experiences merge concepts into those which are generally experienced rather than subjective.

By the end of the first year this teacher was reporting that taking an approach to languages and literacy pedagogy that integrated specific, explicit teaching moments in the first language within a rich, two-way immersion environment “cuts the hours needed to teach language”. The teacher also commented “one of the other benefits that has come out of this initiative is the amount of interest from parents and the fact that I am also learning a second language. It has been fun and the children ask can we do the flashcard games all the time and they can see the pile of cards getting bigger. Besides the time taken to make the Indonesian books and flashcards it has not taken any extra time or teaching of routines. Parents made lots of favorable comments.”

In the second year this teacher-researcher was interested in attempting greater integration of the languages for writing tasks. This began by refining the previous approach to vocabulary acquisition to more closely follow the developmental sequence introduced through the PL program. Specifically, the foundation remained basic nouns and functional language for the classroom and social interactions. However, the oral language program progressed in the second year to verbs, adjectives and the agreement principle. This led to a focus on simple verb tenses and adverbs. At this point, the plan became basic sentence construction. This was undertaken in-step with the English program using the introduced ‘sharing-the-pen’ methodology with an initial focus on recounts. The teacher observed that the “children are really pleased with themselves. Their sentences are becoming more complex and challenge me to mark. They are excited, even the slower children who have issues”. It was recorded that this teacher believed the extra, structured practice at writing in Indonesian had helped to solidify their knowledge and even bring about levels of automaticity in their independent written work.

### 5.5.1.3 Teacher C (Indonesian)

In the first phase of the PLP this teacher identified quite strongly with the systematic and explicit teaching notions as presented; they resonated with this teacher's beliefs and experiences. However, what was noted in the journal was a particular interest in the idea that languages and literacy tasks share universal characteristics and that learning of one language or literacy task could be used as a scaffold for learning in another language. Thus, this teacher was immediately interested in how a task-analytic approach could be used to systematically plan for languages acquisition and literacy development in Indonesian, how such analysis could support in-step, or collaborative planning with English and what difference such modifications could make to student achievement.

An initial consideration for this teacher was whether the two classes engaged in this study should be treated the same or not. And if not, on what basis would differentiation occur? After careful discussion it was deemed that neither class had been engaged with the literacy tasks as presented in the PLP and that the materials and activities for such teaching and learning would be relevant and novel for both groups. Thus, the starting point for both classes was the same. However, through a process of collaborative reasoning with the researcher it became apparent that an important planning consideration would be to monitor and account for a likely differentiated pace and depth of learning between the two classes: the year 2 class was likely to progress faster and be able to manage more complex, in-depth activities and tasks because of their prior learning experiences.

This teacher stated that the collection of learning data had previously just meant student reports, while planning had been ad-hoc owing to the vague 'outcomes statements' of the contemporary curriculum framework. Planning was based primarily on prior experience and the availability of resources. A positive disposition was recorded with respect to the observation schedules provided to support ongoing monitoring of student achievement and subsequent planning. In particular, it was noted that the following options were deemed relevant and useful for recording any differentiation in the rate and depth of achievement within and across the two classes:

- Observation checklists for aptitude, interactions with others and linguistic knowledge.
- Work samples of tasks undertaken combined with anecdotal records.
- Criterion-referenced assessments.

Notes from the first planning day reveal that this teacher was immediately giving thought to 'what to do together, what separate?' The *Second Language Developmental Sequences* (for Spanish) from the PLP (see attachment 2) were of immediate value for planning Indonesian lessons and for collaboration with the classroom teachers, beginning with an emphasis on oral language constructs that are either functional, thematic or occur regularly in texts.

Phonics instruction was also identified as an immediate priority. Pedagogical decisions and actions that were listed in this context included:

- Create listening posts – but how and with what?
- Develop bilingual big books.
- Purchase ‘Budi’ software program.
- How to begin a phonics program? What about syllables?
- Make flashcards.
- Develop *Decode, Cover, Write, Check and Translate* activities for orthographic mapping and retrieval practice.
- Copy games and songs into Indonesian (purchase demonstrated resources).
- How can oral language (including use of Smartboard software and iPod apps be acquired) be moved into writing?
- Use of DVDs for exposure to authentic, native pronunciations.
- Research Indonesian grammar (syntax and morphology) using the Spanish template as a guide.

An early focus of the PLP was an analysis of language and literacy tasks, in particular, the sub-element skills for listening and speaking, reading and writing. One of the messages that this teacher related to was how complex and imbricated they were and thus why it is often hard to sustain student interest and engagement to the point where they become successful with them. Accordingly, the notion of purposefully using games as a learning tool rather than viewing games as a reward or of little educative value was reportedly important to this teacher. It was decided to begin to explore the use of the following games as a mechanism for engaging students in meaningful, repeated use of the target language (specific vocabulary and language constructs/conventions for discussion/negotiations):

- Verb games (‘run, run’).
- Guess who?
- Guess where?
- Twister.
- Headbands.

The reported observations from these initial concerns and actions were encouraging. It was noted that by the end of Semester One, 2010 some of the ‘weaker students’ had surprising answers and that they were undertaking basic sentence constructions appropriately. Flashcards (sound, semantic and sentence stems/parts) were reported to be “very helpful” while at a global level it was stated that there had been “no negative impact on students’ English”. In fact, it was reported that by the end of the first Semester the year 2 class recognised and understood the devised 100 most common words based on the flashcard activities. Information had begun to go home, enter staff meeting discussions and in concert with the television coverage on Channel 7 it was noted that other teachers and parents were “so supportive of the project”. It was relayed that the evidence and argument for the

universality of languages and literacy skills, combined with discussion about these skills as one of the emerging National Curriculum's 'general capabilities', had proven useful in bringing Indonesian into the dialogue at staff meetings for the first time. It was reported that prior information and dialogue around an intercultural approach had not had the same impact or desired outcome; the arguments had not resonated with teachers' beliefs and experiences of 'what works'.

While these activities had been occurring, the participating group of teachers at this site had also begun to meet as a team and that led to the Indonesian teacher's role evolving into that of an unofficial facilitator for languages and literacy integration. At this point the core issue was the supply of resources for the classroom teachers to support their daily use of Indonesian and reinforcement of the target vocabulary from the Indonesian program. The specialist teacher began by providing appropriate Indonesian dictionaries for the classroom teachers, phrases for greetings and translations of thematic language for each class's focus topic for the Term. Games such as *Bingo* were also elaborated on to allow for small group work in classes on specific vocabulary. As a result of such work, it was reported by this teacher that it was "really pleasing to see children switch from Indo to English when reading and easily translate. They were also writing mixed sentences in books, also coming up to me and talking (in) sentences with a mixture of Indo/English ... the students involved in the MLLP are more confident to initiate Indo conversations". At the commencement of the second year it was stated that the "students have remembered more than I expected for the big break" based on what had been recalled at the beginning of previous years.

The mid-point of the PLP called for guided reflection on the tasks and activities undertaken by teachers to date. While this teacher-researcher reported a positive disposition towards the MLL principles, tasks and activities from the outset it was clear from the journal entries that the MLL approach had now become an integral part of this teacher's pedagogical framework. In addition, the guided process of reflection on classroom observations led to this teacher reporting a much deeper and now elaborated understanding of literacy as not only a universal construct but one that has three highly imbricated aspects: linguistic, (meta)cognitive and sociocultural (see Teacher C's exit program summary details in Table 12). What was now reflected in the journal was an understanding that the presented linguistic and metacognitive aspects of literacy provided a sure footing for integrated teaching and cumulative learning as they related positively to general human physiological development while the socio-cultural element was more closely related to surface level variations in human communication, to language-specific constructs that evolve out of, or are constrained by, underlying universal elements. Moreover, the reported acts and outcomes from these teachers' programs demonstrates that given a 'universal' framework for planning language and literacy instruction, teachers can successfully address surface-level

typological/orthographic variations across languages through a process of contrastive analysis and analogic reasoning that begins with an awareness of the target linguistic feature(s) in the learner's first language, their medium of thought.

The aforementioned period of guided reflection and PL dialogue reportedly brought this teacher to sharper awareness of the fundamental tenet of the Linguistic Interdependence Hypothesis: that second language acquisition and literacy skill development are partly dependent upon literacy competencies in the learner's first language (Cummins, 1979, 1984). Specifically, this teacher noted that despite some earlier predictions to the contrary, students who were struggling with literacy skill development in English were having similar challenges with Indonesian. Underlying neurological structures were as yet underdeveloped for the task in the learner's first language and hence were not available for recruitment in the second language. These difficulties were reported to be mostly with respect to understanding of the phonological-orthographic mapping systems which is particularly interesting as this was one of the findings that Sparks and Ganschow reported in their studies that led to the LCDH (Sparks, 1995; Sparks & Ganschow, 1991, 1993, 1995). However, with time and consistent engagement with sound-to-symbol activities in Indonesian this teacher believed that it should be possible to measure a positive washback to English phonological skill development due to the greater consistency in the Indonesian orthographic system. That is, depth of the orthographic system and hence the task's cognitive load is less in Indonesian, which under conditions such as those presented through the MLL PLP should enable the development of Indonesian sound-to-symbol neurological structures and understandings that could become available resources for developing the same skills and understandings in English.

This was an interesting hypothesis by the teacher-researcher for two reasons. First, it provided further evidence to support the notion that the neural mechanisms recruited and developed for enacting literacy-based tasks and activities are universally recruited regardless of socioculturally derived linguistic variations and secondly, it demonstrated this teacher's understanding of a fundamental tenet of the MLL approach: that languages, literacy and learning all share universal characteristics born of and constrained by (in particular neuro) biology. The importance of these characteristics, and hence this teacher's understanding of them, resonates throughout this case study.

At this mid-point the teacher reported a continuing use and engagement with the developmental sequences for second language learning (Spanish models) as presented but a concern for both pedagogy and resourcing, particularly the development of writing abilities and linguistic knowledge, was recorded. The sessions demonstrating use of IWB Smartbook software (activity toolkit, Smart Exchange etc...), 'reading pens', talking dice, recordable speech bubbles, iPod apps (This is My Story, Story Kit, Book Creator, Creativity Builder,



Songbird / Story Bird), web2 tools, wikispaces and blogs were deemed useful. However a lack of ICT infrastructure and a limited budget meant that they remained out of reach for this teacher and these students at that time.

In planning for the second year of the program this teacher stated that the pedagogical, or methods-based, sessions helped to give form to the developmental sequences being used. Of particular note were the more advanced sessions on translanguaging and contrastive analysis that were embedded with strategies for teaching reading and writing across languages: sharing the pen and interactive reading for second language learners. The declared plan was to finish the initial phonics work with the single sounds of the Indonesian alphabet, move into syllabification strategies as suggested, expand the use of flashcards for syllabification strategy practice and vocabulary acquisition (on interactive word walls) following the thematic, high-frequency and functional foci, develop a prop box for oral storytelling and provide key functional phrases as a scaffold to story writing. This was all indicated to be following the given sequence as outlined: hear, think, say, write, read.

Based on analysis of the first year's records of teaching and learning from both classes it was deemed by this teacher that it would be appropriate to continue with this general scheme in the second year of the program for both classes. However, while the teaching and learning tasks remained the same, the level of linguistic sophistication in Indonesian was extended further for the older class to reflect their relatively larger vocabulary and more advanced English language skills.

The MLL curriculum development cycle (simplified) was stated to be a valuable heuristic for integrated planning and also highlighted aspects of planning that had been hitherto omitted from the process: notably direct and indirect learning strategies. This teacher reported that previously there had been no explicit consideration given to memory, cognition and compensatory strategies or metacognitive, affective and social strategies. Whilst it was noted that some of these were implied in previous planning they had not emerged on their own.

Ideas, resources and data gathered through the program to date were reportedly forming the basis of collaborative, fruitful work amongst the local cluster of schools and in newsletter articles for the school community.

## **5.5.2 CASE STUDY 2 (Teachers D & E modifications)**

### **5.5.2.1 *Teacher D (Classroom, Reception / Year 1)***

Over the course of the PLP this teacher noted in the journal the emergence of new and modified activities that created space for the target language in both the class daily routines and their daily English language and literacy teaching segments.

As a result of discussions, demonstrations and training within the PLP this teacher initially modified the class program to include the target language in the class' morning routine: greetings were conducted in Indonesian. In consultation with the specialist language teacher, planning for language program integration began with consideration initially given to sharing of resources to support tasks relevant to numbers, shapes, senses and colours. Specifically, this teacher decided to begin providing children with a language journal for writing Indonesian words and songs for subsequent reading and singing. This teacher also planned to provide Indonesian language charts and posters as a part of the environmental print on regular display. These activities were primarily aimed at the development of Indonesian vocabulary. This approach can be likened to an encounter or sensitisation model (Ellis & McCartney, 2011).

By the mid-point assessment in Term Four 2010, students had begun receiving supplementary exposure to the Indonesian language with their classroom teacher, accumulating approximately 15 hours more of Indonesian language learning. In the second year of the project, leading up to the final assessment, these students received a further 30 hours of Indonesian language learning tasks.

At this point in the project the classroom teacher reported that the students were "happy to go to Indonesian lessons" were "proud of their work, like to show me their work" and "often take written work home. They have also started to bring work from the Indonesian lesson back to class to show me and discuss."

The increased use of the Indonesian language was reported to be occurring on the basis of the teacher's awareness of improved literacy skills. That is, the comment was made that as students were generally becoming more competent with the four macro modes in English, the teacher felt comfortable introducing more Indonesian.

By the end of the first year this teacher had been working closely with the specialist Indonesian teacher on the development and use of mini-books. Topics or themes that were developed in this context reflected both the English language program and more general topics. Children began with alphabet mini-books, counting or number sense books and mini books about the senses that reflected a major unit of work in Science. Basic instructional language to support translanguaging and simple reading and writing tasks that satisfied the principle *write what you can say and read what you can write* introduced through the PL sessions began to emerge as a topic of discussion amongst the teachers in this journal.

At the end of the first year the classroom teacher, in collaboration with the specialist language teacher, collated evidence from both formative and summative assessments to inform the planning on reflection process of the PLP. Of particular note was a discussion about their work around number sense. As alluded to already, this teacher was acutely

aware of the challenges this cohort of children were facing as they engaged with the curriculum and had therefore been cautious about introducing Indonesian to the everyday classroom. This echoes questions that remain in the literature and in commonplace debate about the potential for language contamination, confusion and thereby learning delays as a result of bilingual or multilingual education – these questions have led to languages being taught separately and in isolation (the ‘Twin Solitudes’ paradigm, see Cummins, 2005). However, in the course of teaching children the base ten principle in mathematics an interesting, cross-linguistic phenomenon was observed: in undertaking counting tasks in English there was a great deal of difficulty, anxiety and lack of progress recorded; however, based on the universal, generative ideas of language presented through the PLP, this teacher decided to explore the children’s disposition and alacrity with the same tasks in Indonesian. The results were illuminating. It was reported that Indonesian has a simpler and more regular linguistic coding for the base ten system of counting than English and that this was regarded as the core reason for the reported trial and the near immediate success that the entire class had once the task was shifted to Indonesian rather than English. Indeed, it was reported that students immediately ‘saw’ the pattern and were able to move from Indonesian to English with a rather puzzled bewilderment about the complexity of English relative to Indonesian. A child with severe anxiety, who spent the majority of whole class instruction under their desk, reportedly emerged, engaged and contributed to these lessons. It was also conveyed by this teacher that planning for continued oral language development based upon the provided developmental sequence(s) was occurring without any modifications needed and that this was deemed an excellent resource to use when planning for English oral language development. Discussion was provided that reflected a growing understanding of the role of life experiences for writing, of the use of nursery rhymes for phonological and phonemic awareness across languages; reading and re-reading to children in both languages on a daily basis (and the lack of suitable literature in Indonesian) and of reading and writing conferences and the use of contrastive analysis. Lastly, discussions were noted in relation to the ‘Big 6’ framework from the *Principals As Literacy Leaders* project and the MLL PL sessions that discussed these elements from a cross-linguistic perspective. Specifically, the discussion centred on the notion that there are six essential elements for reading (and writing) development but only one, vocabulary development, was considered to be language specific.

Students were reported to be using Indonesian spontaneously in the class (for example counting, greetings, feedback and requests) while correcting the class teacher’s pronunciation was noted to be very popular. In this context, the teacher reflected positively on the hitherto unconsidered benefits to learners of having the teacher working side by side with them, demonstrating strategies for (Indonesian language) learning.

Discussion occurred on increased student motivation for language learning, including English, which in the context of a high proportion of English as a Second Language (ESL) learner was highly unexpected. Moreover, it was stated that children in this class were taking what they had learned in Indonesian home and introducing it to their parents and teaching it to their siblings: "I have noted a marked improvement in their oral skills and a great interest in reading and writing activities – as in the English language". Another interesting progression was noted that reflects well what the MLL PLP predicted teachers could find, namely "writing is leading to reading". This was of note because it was the reverse sequence of what this teacher generally observed in mother tongue classes and represented a key point of consideration when planning for multilingual development: oral – written – reading in L2 rather than oral – reading – writing.

A number of comments were also made about students' invented spelling in the context of writing activities and less directly, phonemic awareness and vocabulary activities. However, there was no clear discussion around how this was managed or whether there was any notable washback to English or bilingual spelling ability other than noting the interactive use of flashcards for vowel and then syllable awareness in Indonesian. Children were noted to be using single sound and syllabic decoding strategies when reading in both languages and those students were persevering with syllabification in English despite their difficulty with identifying the syllables in English as compared with Indonesian. Despite this, both the classroom teacher and relief teachers recorded that students in this class now surpassed their like-age peers at the school in language tasks, motivation and attention. This last point is salient as the school has a high proportion of students with identified hearing difficulties that the teacher suggested was being ameliorated through the integrated use of two different sound systems for communicating. Furthermore, it was recorded that "I have a student with autism who doesn't always answer ... yet when I call the roll in Indonesian ... straight away the answer is given with a complete sentence ... this is a great achievement".

At this point, the teacher noted that 'children often discuss how they love writing in Indonesian now, that the new activities are fun and that they now feel a sense of pride knowing two languages'. Similarly, 'the feedback from parents is now great'.

#### **5.5.2.2 Teacher E (Indonesian)**

In the first phase of the PLP this teacher identified quite strongly with the systematic and explicit teaching notions as presented; they resonated with this teacher's beliefs about what would work that had been developed through prior post-graduate studies into Teaching English as a Second Language (TESOL). However, what was also noted was a particular interest in the data collection tools, how these related across languages and could be used to generate comprehensive learner profiles. In part, this interest may be attributable to the

high percentage of ESL students at the school. It was also noted that the proposed schedule of assessments does “not sound as if it is going to be any more difficult than the information I already collect from the students”. Thus, this teacher was immediately interested in how a systematic approach to student assessment could be used to plan for languages acquisition and literacy development in Indonesian, how such analysis could support in-step, or collaborative planning with English and what difference such modifications could make to student achievement.

An initial consideration for this teacher subsequent to the first plenary session was resourcing. The previous orientation towards communicative competence had led to lists of vocabulary that were routinely revisited, and added to, and a strong emphasis on appreciating the culture of Indonesia. Thus, there was a dearth of resources to support literacy development as introduced through the PLP. This led to an initial review of the Indonesian curriculum, networking with other schools in the project to share resources and a successful application to the school’s Governing Council for project-related funding in the order of \$3,000.

It was stated that previous planning was based primarily on prior experience and the availability of resources. A positive disposition was recorded with respect to the provided observation schedules to support ongoing monitoring of student achievement and subsequent planning. It was noted that the following were deemed relevant and useful for recording the rate of learning and depth of achievement:

- Observation checklists for aptitude, interactions with others and linguistic knowledge.
- Work samples of tasks undertaken combined with anecdotal records.
- Criterion-referenced assessments.

Notes from the first planning day reveal that this teacher was immediately giving thought to the discussed foundation for literacy development: oral language skills. Understanding of the unique contribution that oral language experiences provide for the acquisition of vocabulary and grammar initiated the first reported steps undertaken: development of interactive word/sentence wall flashcards for ‘useful classroom words and expressions’, greetings, labels for classroom objects and songs. By mid-Term 3 of the first year it was recognised that the existing Indonesian curriculum document needed to be “revamped ... inline with pedagogies and methodologies discussed and trialled with MLLP”. In particular, a greater emphasis upon developmental sequencing of content, concepts and skills was noted as important elements to establish an effective scope and sequence for cumulative literacy development within and across languages. This teacher was fortunate to be provided with an extra 45 minutes of planning time per week to undertake tasks such as these on the basis of reported improved learning outcomes.

An early concern reported by this teacher was how to engage and support classroom colleagues to capitalise on opportunities for cross-linguistic transfer. This was an early focus of the PLP carried by analysis of language and literacy tasks, in particular, the universal sub-element skills for listening and speaking, reading and writing. Such input was reported to provide the context for collegial discussions about how to maximise the universal properties of languages and literacy skills for their subsequent and cumulative development by learners.

Initial observations were reportedly encouraging. It was noted that by the end of the first Semester the children in the reception-year 1 class both surprised the teacher with their knowledge and confidence with the newly acquired vocabulary and in some instances they were outperforming students in older classes with years more experience: “when doing peer mentoring activities many of the older students show astonishment on their faces when the reception-year 1 students confidently participate in language games”. The children reportedly had the confidence and ability to teach their classroom teacher a number of new games, songs and the ability to adapt them to introduce new vocabulary to their teacher. Confidence and enthusiasm were noted early outcomes.

A final message that was of initial significance to this teacher relates to the longstanding belief in total immersion learning environments. This notion was challenged early on in the PLP and a counter approach that builds upon the idea of translanguaging, or mixed production, was introduced. However, what was central to this idea was that language learning opportunities ought to be relevant and reflect purposeful, real-world use. Many methods and activities for doing this were interrogated and one that was reportedly adopted by this teacher was the use of puppets. These were used to create interactive plays and importantly, they became the objects of study rather than the students. By allowing students to use both languages enabled them to create more meaningful, fluent interactions that reportedly had a significant impact upon retention and retrieval.

While these activities had been occurring, the participating teachers at this site began to meet with leadership and other members of staff and that led to the Indonesian teacher’s role evolving into that of an unofficial coordinator for languages and literacy (integration). Two core issues emerged: the supply of resources for the classroom teachers to reinforce target Indonesian vocabulary acquisition; and, moving vocabulary acquisition into writing as discussed in the PLP. Class books were the reported basis for this latter work and once combined with their growing vocabulary created the opportunity for interactive writing sessions. These tasks were of interest to this teacher who noted that learners were now able to begin applying basic phonics-based reading and writing skills (decoding, encoding and syllabification strategies).

The mid-point of the PLP called for guided reflection on implemented tasks and activities. While this teacher-researcher reported a positive disposition towards the MLL principles, tasks and activities from the outset it was clear from the journal entries that the MLL Approach had now become an integral part of this teacher's instructional framework. This teacher went on to report that guided reflection on learning outcomes had led to a deeper and more elaborate understanding of literacy as not only a universal construct but one that has three highly imbricated aspects: linguistic, (meta)cognitive and sociocultural. What was reflected in the journal was an understanding that the presented linguistic and (meta)cognitive aspects of literacy provide a sure footing for integrated teaching and cumulative learning as they are closely aligned to general human physiological development while the sociocultural element is more closely related to surface level variations in human communication.

This teacher reported a continuing use and engagement with the proforma devised to support participants' analysis of language and literacy tasks: to consider whether proposed activities were cross-linguistic in nature and hence available for in-step planning or whether they were language specific and potentially valuable for contrastive analysis. In this context, the Indonesian teacher relayed a significant orientation towards integrated planning, reporting that the presented curriculum development cycle was "very logical and thought provoking, but at the same time was able to critically reflect on where to change some strategies etc, the selection of some activities that I have done and how I could have improved the learning outcomes for students". This latter statement can be understood to represent a shift in thinking such that joint planning was now viewed as a useful tool to advance learning outcomes.

In planning for the second year of the program this teacher's foci were notably similar to Indonesian teacher C (case study 1), such that further discussion here would amount to little more than a replication. The messages here are ones of amplification that underscore the sense of jointness that developed amongst this network of teacher-researchers.

### **5.5.3 CASE STUDY 3 (Teachers F, G & H modifications)**

#### **5.5.3.1 *Teacher F (Classroom, Reception / Year 1)***

This teacher initially reported modifying the daily class program to include the target language in the morning routine: greetings were conducted in German. In consultation with the specialist language teacher, planning for program integration began with consideration initially to sharing of resources that support vocabulary learning tasks relevant to numbers, the calendar, body parts and colours. This teacher decided to provide children with a tracing (words) journal for writing German words to be used for subsequent reading. This approach can be likened to an encounter or sensitisation model (Ellis & McCartney, 2011).

The classroom teacher reported that students were then “automatically responding to greetings and requests in German” and were “correcting the teacher”. The teacher was reportedly “impressed by the students’ use of German (manners) when responding to each other in class, in particular, when the monitors are handing out sports equipment”.

The teacher then reported an intention to move beyond an ‘encounter’ model and towards systematic embedding of German within the daily teaching and learning program:

- The morning ‘Show and Share’ routine was moving towards complete production in German (a poster for this routine was developed and displayed).
- Environmental print in German was provided in the classroom.
- Flashcards (bilingual with English phonetic spelling) were developed and routinely used for fast semantic mapping and cued recall of classroom objects, phrases, and greetings (long and short versions).
- Question and answer routines were introduced and/or modified to include the German language, as were basic classroom instructions.
- Songs in German were now being used to support vocabulary development also.
- Translanguaging techniques were being experimented with when reading big books and singing.

Interestingly, it was reported that the parent of one child wrote to the school principal about the calibre of their child’s engagement and acquisition of German, stating this child was more willing and capable than an older sibling and that was attributed “to the fabulous work I have observed your staff doing in the classroom”.

By the mid-point assessment in Term Four 2010, students began receiving supplementary German language learning with this classroom teacher, accumulating approximately 20 hours of extra German instruction. In the second year of the project, that was further augmented by 30 hours of additional German language instruction.

By the end of the first year this teacher had been working with the German teacher on the development and use of class books in German and translation of big books into German. Children began with their own pages in theme-based books such as *I like...* and basic instructional language to support translanguaging and simple reading and writing tasks that satisfied the principle *write what you can say and read what you can write* began to emerge in the teachers’ reported planning.

At this point the classroom teacher, in collaboration with the specialist language teacher had collated evidence from both formative and summative assessments to inform the planning on reflection process of the PLP. It was noted that they were very pleased to observe students in the class library reading the big books to each other using the German overlays / vocabulary, self-correcting in German and that the extension of the morning share and show routine to include the German vocabulary and structure for questions was becoming ‘very successful’.



It was conveyed in this journal that planning for continued oral language development based upon the provided developmental sequence(s) was occurring without any modifications and that this was deemed an excellent resource to use when planning for English oral language development as well. Discussion was provided that reflected a growing understanding of the role of life experiences for writing, of reading and re-reading to children in both languages on a daily basis (and the lack of suitable literature in German), and of reading and writing conferences using contrastive analysis and analogic reasoning. Lastly, discussions were recorded in relation to the 'Big 6' framework (see Konza, 2014) and the MLL PL sessions that discussed these elements from a cross-linguistic perspective.

There was supportive discussion at this stage in the journal around the four fundamental questions presented in the PLP regarding curriculum development (in the teacher's words):

- *What educational purposes should the school seek to attain?*
- *What educational experiences can be provided that are likely to attain these purposes?*
- *How can the educational experiences be effectively organised?*
- *How can we determine whether these purposes are being attained?*

This led to constructive discussion around the five core elements of curriculum development presented:

- *Rationale.*
- *Strands and sequences.*
- *Tasks (and activities).*
- *Strategies (teaching/learning, direct/indirect).*
- *Assessment (observations, diagnostic, formative, summative).*

The one lament was regarding the lack of L2 resources to support this planning process for non-L2 speakers and teaching and learning tasks that could logically arise.

Some recorded observations as a result of this course of programming and classroom activity were:

- Show and Share sessions are now involving whole sentences and question and answer interactions entirely in German.
- Students are experimenting with more German in their class work, especially writing and in the yard as they explain to teachers what is in their food and describe objects (toys) to each other using German vocabulary.
- Parents and grandparents are initiating conversations about the mixed use of languages and how they might support this development. Requests are being made in IEP meetings (Individualised Education Plans) for increased German study and take-home work from children as well.
- Children are now using the German environmental print and labels effectively in their literacy activities and without prompting (such as labelling of body parts in Health using German vocab – from translating songs such as Heads, Shoulders, Knees and Toes).

- Students are correctly following directions given in German, especially prepositional phrases.
- Students who are or were at risk and have been in the program for the full duration have progressed further in their learning than the average for the class (they are now only a small margin behind the class average).

### 5.5.3.2 Teacher G (Classroom, Reception / Year 1)

The core tasks that this teacher initially identified for planning and enactment were of the same orientation and nature as the previous class teacher and do not warrant description other than noting this congruence in planning was not identified as being a pre-existing phenomenon.

This teacher reported that by the mid-point of the project (grammatical editing only):

- *Children are using German words in classroom situation without prompts.*
- *German is integrated into our weekly literacy groups with great success, including for English.*
- *Young children are correcting classroom teacher's pronunciation of German words.*
- *Parents and children are looking for German activities to do at home.*
- *The program has ended the isolation of the German program within the school curriculum: the Principal has asked all teachers to begin using most common functional and high-frequency words in German.*
- *Children are responding to teachers on yard duty in German.*
- *New intakes midway through have responded really well, they are clearly able to follow instructions after 3 weeks even those with identified speech and behaviour issues. I feel that the MLL is a real success again.*

As the first year of the project unfolded this teacher reported the development of a German Day Committee. Initially this teacher noted: "I just feel that the appreciation from other staff is lacking. I feel rather upset at how other staff are not supportive as I would have hoped they would be". Two Terms later it was reported that the German Day was "a huge success". It was reported that students' enthusiasm for German activities was infectious to the point that other teachers are now "paying attention to what we are doing" and want to be a part of this innovation as they can "see the benefits to the children's learning". There was a similar report about the Town Show; children developed pinecone critters in the same way that German children create chestnut critters. In this instance, children were asked to write a description about their critter and despite the monolingual audience and absence of instructions; all of the children employed the translanguaging technique with their writing.

Two final comments from this teacher: the first was a note about the impact of a final year student teacher placed at the school. The point was made that MLL innovations came to a standstill during this time and that concurrently the level of restlessness increased and the level of frustration was rising in the class as the student teacher was either unable or unwilling to respond to students' everyday use of German. The other observation was about

a 'moderation visit' from the District Office. The first comment was that the class was now greeting all people that visit the school in German, regardless of how they are spoken to. The second was with regards to the presentation that the class was asked to give about the current topic of bees. The district personnel commented that they were not used to being greeted in another language by such young children and that they were highly impressed by the class's use of German in their presentation (translanguaging). The journal reports that this was made possible by the professional development the teachers had made through the MLL PLP.

### 5.5.3.3 Teacher H (German)

In the first phase of the PLP this teacher reported that the systematic and explicit teaching notions accorded with their beliefs. This teacher described an immediate engagement with the notion of collaborative or in-step planning with the classroom teachers of English. There was comment made about the scarcity of time for children to acquire the German language, a process that was recognised required time for explicit teaching, immersion in support of consolidation and time for retrieval practice. The first task this teacher reported flowed from the macro-pedagogical considerations of the PLP: planning for explicit teaching and strategic, or supported, immersion driven by an integrated teaching and learning cycle. Namely, the language teacher provided the explicit teaching of core elements of the target language and core literacy skills while the classroom teacher adopted a supportive role, providing time and resources for immersion activities and the application of this learning to real-world communicative tasks. In this context it was noted that the data collection tools could be usefully related across languages to generate comprehensive learner profiles that focus joint planning and reporting.

The diagnostic (criterion-referenced) assessment templates remained generally operative in the planning process: the identified cognitive tasks and their relationships to the sub-element skills for literacy development were reported to be of value for planning German lessons and for collaboration with the classroom teachers.

This teacher reported that evidence of learning from Semester One of the first year was surprising; in some instances these students were outperforming students in older classes with years more experience:

- *Kids seem to be becoming more receptive in class. They are asking questions about German vocab and showing interest in using the language.*
- *Kids in ... and ... classes are much more enthusiastic and receptive to German than any other R/1 class I have taught. Students are constantly learning new German every day.*
- *Kids want to know how to say everything in German. They seem to pick up concepts quicker than yr 7s.*

At the mid-point of the PLP this teacher-researcher reported a positive disposition towards the MLL principles, tasks and activities. In addition, this teacher communicated a much deeper and elaborated understanding of literacy development as a global process with three highly imbricated aspects: linguistic, (meta)cognitive and sociocultural. This teacher-researcher also communicated an understanding of the value and bases for program integration as conveyed through the PLP: universality, cross-linguistic transfer, translanguaging, contrastive analysis and in-step planning. The tasks identified as necessary for the subsequent year centred on ensuring clear scaffolds were in place across language programs.

In planning for the second year of the program this teacher-researcher reported that the pedagogical, or methods-based sessions brought substance and form to the curriculum development cycle. The more advanced sessions on translanguaging and contrastive analysis that were embedded with strategies for teaching reading and writing across languages were highlighted.

The MLL curriculum development cycle (simplified) was stated to be a valuable heuristic for integrated planning although this teacher's journal did not provide any further details on this matter or any subsequent, fine-grained discussion of program development. Records from conversations on the plenary day that were recorded in the researcher's journal indicate that the general schema of planning and teaching established in the first year was progressed in accord with the exemplar scope and sequences provided with only one caveat; that progress, especially with reading development, was severely hampered by a lack of resources.

#### **5.5.4 CASE STUDY 4 (Teachers I, J & K modifications)**

##### **5.5.4.1 *Teacher I (Classroom, Year 1 - 2)***

This teacher commented that the daily class program was initially modified to include the target language in the morning routine. In consultation with the language teacher, planning for program integration began with consideration given to classroom functional / instructional language in Japanese. This teacher also decided to provide children with Japanese language activities such as spelling and vocabulary development as part of the class' guided reading program. This shift was described as occurring synchronously with a shift to joint planning for literacy blocks between the classroom teacher and Japanese language teacher.

At this point in the project the classroom teacher reported that the students were "transferring routines to Japanese ..." while "... students who previously wouldn't speak in class in Japanese are now".

This teacher communicated a distinct interest in the range of assessment tools presented and the rationale for their use. It was recorded that this led to productive discussions with site colleagues and modifications to the current assessment regime to include a sharper focus on the sub-elements of literacy development in a manner that would allow for the recording of students' complete, or bilingual, reservoir of language and literacy skills.

By the mid-point assessment in Term Four 2010, students began receiving supplementary instruction on the Japanese language with their classroom teacher, representing approximately 20 hours more of Japanese language learning. It was then reported that children were "now very engaged, very articulate [and] receptive". It was also noted that children who were "not progressing quickly with English language skills" were "quickly and accurately able to read and articulate in Japanese".

By the end of the first year this teacher reported working closely with the Japanese teacher on the development and use of literacy testing tools across languages; there was a genuine reflection that the development of literacy skills should be considered comprehensively rather than in isolation. More emphasis on the development of cross-linguistic resources and vocabulary development for teachers was considered necessary. It was decided that teachers needed to know more functional vocabulary and phrases and that resources were needed to support the process of contrastive analysis and analogic reasoning. In this context it was noted that hitherto approaches to teaching spelling had not adequately grasped the fact that while Japanese Romaji uses an alphabetic code, Hiragana and Katakana use a syllabic code (or orthographic mapping size) which required the development of syllabification strategies that are not as prevalent for English literacy development: there is a different mapping principle at work for linking sounds with symbols and their decoding from print. An initial approach that was considered was the development of 'syllabification flashcards'.

In the second year of the project these students received an additional 30 hours of Japanese language instruction provided by the classroom teacher. As a result, the program that this teacher reported as having been implemented in the second year of the project was based upon a newly formed belief that instructional efforts need to focus on:

- Word recognition.
- Vocabulary knowledge.
- Grammar knowledge.
- Discourse awareness.
- Inferencing.
- Monitoring.
- Fluency.
- Extended reading and writing practice.
- Motivation (to read & write).

It was also conveyed by this teacher that planning for continued oral language development based upon the provided developmental sequence(s) was occurring without any modifications needed and that this was also deemed an excellent resource to use when planning for English oral language development. It was noted that the “easiest pathway for my children is greetings, numbers, colours, instructions and animals”. As with the other teachers, discussion was also provided that reflected a growing understanding of the role of life experiences for writing, of reading and re-reading to children in both languages on a daily basis (and the lack of suitable literature in Japanese), and of reading and writing conferences and the use of contrastive analysis. Lastly, reflections were noted in relation to the ‘Big 6’ framework (see Konza, 2014) and the MLL PL sessions that discussed these elements from a cross-linguistic perspective: “how do these apply to multilingual reading development?” was considered. The outcome of this reflective process was recorded in the same developmental frame provided in the PL sessions: *what I can think about, I can talk about; what I can say, I can write; what I can write, I can read.*

This teacher, in common with others, noted the supportive discussion at this time around the four fundamental questions presented in the PLP regarding curriculum development (in the teacher’s words):

- *What educational purposes should the school seek to attain?*
- *What educational experiences can be provided that are likely to attain these purposes?*
- *How can the educational experiences be effectively organised?*
- *How can we determine whether these purposes are being attained?*

This led into constructive discussion around the five core elements of curriculum development presented:

- *Rationale.*
- *Strands and sequences.*
- *Tasks (and activities).*
- *Strategies (teaching/learning, direct/indirect).*
- *Assessment (observations, diagnostic, formative, summative).*

The overall comments made were that these were helpful frameworks for planning, especially planning for local contexts and individual learner differences and that such a program of work would provide effective and timely data for reporting and ongoing planning: “a decentralised curriculum gives teachers greater autonomy and leads to a diversified language curriculum”. Again, the only lament was with respect to the lack of joint planning time and the lack of L2 resources to support implementation of teaching and learning tasks that would logically arise.

#### **5.5.4.2 *Teacher J (Classroom, Year 1 - 2)***

This teacher was reportedly able to quickly integrate with the teaching schema of the Japanese teacher and the other class teacher at this site perhaps, it was suggested, in part due to the established 'rotational' routine developed in the first year of the program in the common teaching centre (3 classes co-located).

The core tasks that this teacher reported undertaking were of the same orientation and nature as the previous class teacher and do not warrant description other than noting that this congruence in planning was not identified as being a pre-existing phenomenon.

As the project unfolded this teacher recorded those same general outcomes as mentioned in classroom 1 and the same intended focus for the subsequent year: moving oral language into writing for reading. However, there were repeated reflections on whole school activities where children were increasingly drawing upon Japanese in their presentations without prompting and that the JP classes were already advancing to a level where the older students were struggling to keep up: "the children love to write and present their stories in Japanese at whole school assemblies using PowerPoint slides and the action songs the [Japanese teacher] has been working on with them are a hot favourite of theirs to run with the whole student body".

#### **5.5.4.3 *Teacher K (Japanese)***

This teacher responded quite strongly to the systematic and explicit teaching notions as presented early in the PLP. However, what was of prominence was this teacher's immediate engagement with the notion of joint or in-step planning with the classroom teachers. There was comment made about the scarcity of time for children to acquire the Japanese language; a process that it was recognised required time for explicit exposure, immersion time for consolidation and explicit reflection time for purposeful retrieval and consolidation. It was also noted that this teacher was unsure of their own level of understanding of literacy development, of Japanese linguistic structures, and in particular how to address the teaching of the syllabic script for Hiragana and Katakana.

The first reported task flowed from the idea that effective languages education has two overarching pedagogical aspects; explicit, systematic teaching and strategic, supported immersion. As in other cases, this was communicated in terms of roles; the language teacher provides the explicit teaching of core aspects of language and attendant literacy skills while the classroom teacher provides a supportive role; programming time and resources for immersion activities and the application of this learning to real-world communicative tasks. As in other cases also, it was noted that the data collection tools could be usefully related across languages and employed to generate comprehensive learner profiles to support two-way planning and reporting.

It was these considerations and discussed evidence that were reported to have led to productive discussions with the whole JP team and the site leader eventually leading to the co-located arrangement of JP classes, embedded role of the Japanese teacher beyond specialist language instruction and the shared programming for Japanese.

The introduced diagnostic assessment templates remained generally operative in the planning process: the identified cognitive tasks and their relationships to the sub-element skills for literacy development generally were seen to be of value for planning Japanese lessons and for collaboration with the classroom teachers, beginning with an emphasis on vocabulary items that were either functional, thematic-conceptual or occur regularly in texts (high-frequency vocabulary). Phonemic awareness and systematic phonics instruction were also identified as immediate priorities and it was decided that these aspects of the teaching and learning program would initially be structured around the Romaji script in line with the analysis and discussion provided in the PLP.

The observations from these decisions and actions were reportedly encouraging. It was noted that by the end of Semester One the children had surprised the teacher with their knowledge and confidence with the newly acquired vocabulary and in some instances they were outperforming students in older classes with some years' experience:

- *During report back time ... students are regularly using key words in answering questions and in posing them. The answers given have continued to surprise me across the Term.*
- *Students are using Japanese in their daily math work and are starting to be able to blend sounds in Japanese. They even interrupted Mem Fox's presentation to teach her how to count in Japanese.*
- *Relievers have been commenting on the amount of Japanese being used by children, especially in nursery rhymes and songs.*
- *Children wanted the Japanese writing "hiragana" on the word lists now.*
- *So many of the children wrote and spoke positively about Japanese in their reports and interviews.*
- *Student confidence and independence has skyrocketed!*

The mid-point of the PLP called for guided reflection on the tasks and activities undertaken to date. While this teacher reported a positive disposition towards the MLL principles, tasks and activities from the outset it was clear from the journal entries that the MLL approach had now become an integral part of this teacher's pedagogical framework. In addition, as in other cases, the guided process of reflection on classroom observations led to this teacher reporting a much deeper and now elaborated understanding of literacy development as not only a process with universal characteristics but one that has three highly imbricated aspects: linguistic, (meta)cognitive and sociocultural.

This teacher communicated a continuing use of, and engagement with the curriculum planning proforma devised to support analysis of language and literacy tasks in isolation and from a cross-linguistic stance. The Japanese teacher again demonstrated a commitment to



integrated planning but mentioned that more time was needed for this to happen (removing planning from NIT timetables) and for improving teachers' understanding of English and Japanese linguistics to support guided reading of more complex texts.

Based on analysis of the first year's records of teaching and learning it was deemed by this teacher that it would be appropriate to continue with this general scheme in the second year of the program. It was also stated that the pedagogical, or methods-based, sessions helped to give form to further iterations of the curriculum development cycle. The more advanced sessions on translanguaging, contrastive analysis and analogic reasoning, along with strategies for teaching reading and writing across languages received special mention.

There was supportive discussion at this time in this journal, as in others, around the four fundamental questions presented in the PLP regarding curriculum development (in the teacher's words):

- *What educational purposes should the school seek to attain?*
- *What educational experiences can be provided that are likely to attain these purposes?*
- *How can the educational experiences be effectively organised?*
- *How can we determine whether these purposes are being attained?*

This led into some constructive discussion around the five core elements of curriculum development presented:

- *Rationale.*
- *Strands and sequences.*
- *Tasks (and activities).*
- *Strategies (teaching/learning, direct/indirect).*
- *Assessment (observations, diagnostic, formative, summative).*

The overall comments made were not substantively different from those of the classroom teachers.

### **5.5.5 CASE STUDY 5 (Teachers L & M modifications)**

#### **5.5.5.1 Teacher L (Classroom, Year 1) & M (French)**

The French teacher at this site took overall responsibility for the collection, recording and transmission of messages about the implementation of the MLL Approach; it was a collaborative effort where decisions occurred through consensus and were enacted in unison. Thus, this case study maintains a different flavour to the others as it needs to capture the specific team teaching culture that was in play. The opening Approach by each teacher was stated and recorded separately in Tables Five to Seven as this was how they were presented in the journal, however, subsequent deliberations, decisions and enactments

were recorded as they occurred, collectively. No attempt has been made here to depart from this scheme as established by the teachers.

The teachers reported that; they reflected together, they planned together, and they enacted the same pedagogical modifications with minor allowances for context (classroom or specialist French). Interestingly, this last distinction reportedly diminished over time because of the influence of the PLP. It was noted that there was a clear translation of theory into practice throughout the PLP that emboldened them to follow a course of teaching that they were intellectually, or professionally predisposed to.

In the first phase of the PLP these teachers identified quite strongly with the systematic and explicit teaching notions as presented; they accorded with their experiences of unsatisfactory outcomes from culture-based, language awareness, constructivist approaches to teaching. What was initially communicated was these teachers' immediate engagement with the notion of collaborative or in-step planning. There was comment made about the scarcity of time for children to acquire the French language; a process that it was recognised required time for explicit exposure, immersion time for consolidation and explicit reflection time for purposeful retrieval and consolidation. It was also noted that they were unsure of their own level of understanding of literacy development, especially in multilingual settings, and in particular how to support the future needs of the students as their French literacy skills became increasingly sophisticated.

In response to this orientation, the first task modification that the French teacher undertook flowed from the idea that effective languages education has two overarching pedagogical aspects; explicit, systematic teaching and strategic, or supported immersion that lent itself to a collaborative stance to the teaching and learning cycle: namely, that a specialist teacher can provide the explicit teaching of declarative aspects of languages acquisition and literacy development while a classroom teacher can undertake a supportive role by providing time and space for immersion activities and the application of declarative learning to procedural, or real-world tasks. In this context it was communicated that the data collection tools, and how these could be usefully related across languages, and employed to generate comprehensive learner profiles, was of significant interest in relation to collaborative planning in the first instance and reporting in the second.

It was these considerations and discussed evidence that were reported to have led to productive discussions with site leadership, leading to a briefing on the project to the whole staff. It was stated that the staff were particularly interested in the joint planning notions and began discussion of how the MLL approach could form part of the school's literacy site plan.

The introduced assessment protocols remained generally operative in the planning process: the identified cognitive tasks and their relationships to the sub-element skills for literacy development were seen to be of value for planning French lessons and for collaboration beginning with an emphasis on vocabulary items that are either functional, thematic or occur regularly in texts (high-frequency vocabulary). Phonemic awareness and systematic phonics instruction were also identified as immediate priorities and it was decided that these aspects of the teaching and learning program would initially be structured around the classroom teacher's use of the Jolly Phonics program.

It was reported that by the end of Semester One the children had surprised the teacher with their knowledge and confidence with the newly acquired vocabulary and in some instances they were outperforming students in older classes with some years' experience:

- *Testing showed improvement in all areas – the most impressive being recall of vocabulary.*
- *The students made many positive comments about the number of words they could remember without prompting and how they were better than their older siblings.*
- *I think that the classroom teacher's use of flashcards, alphabet and general language songs has made a significant impact on retention.*
- *Students grizzle if they miss their Literacy Block turn if they are away or have excursions etc. and want to make up their time in another group.*
- *There was an obvious lack of transfer of knowledge in grapho-phonological correspondence based on the baseline testing results and the alphabet knowledge is still not as strong as I'd hoped for at this stage of the project. I have decided to change my lesson format for 2011 to follow a more phonics-based link to the programme.*

It was communicated that on this basis the MLL principles, tasks and activities had now become not only an integral part of these teachers' pedagogical frameworks but was becoming a central aspect of the planning process across the JP years. As in other cases, these teachers also reported a much deeper and more elaborated understanding of literacy development as not only a process with universal characteristics but one that has three highly imbricated aspects: linguistic, (meta)cognitive and sociocultural. In this regard, it was noted that the introduced approach to assessment, monitoring, planning and reporting was particularly helpful as it enabled clear, developmental perspectives that deepened understanding of the essential tasks. It was also communicated that these assessments were of greater use for planning and reporting than those previously used and that the provided schema yielded data that were readily comparable across languages. This final point was of particular significance in the journal as it was also noted that this enabled a clearer picture of the whole child's language and literacy learning, illuminating issues and opportunities through comparative analysis that had hitherto been an unattainable perspective.

By the mid-point assessment in Term Four 2010, students began receiving supplementary exposure to the French language with their classroom teacher, accumulating approximately 15 hours more of French language instruction.

Based on the program of collaborative planning being promoted by the PLP, analysed student learning outcomes from the first year of innovations, and the level of interest from the JP teaching team, leadership wished to propose that this school move in a slightly different direction to others. These considerations were presented to the researcher along with the fact that the JP classes would now be co-located within the same new building and that a dedicated classroom would also be made available for the French program.

Accordingly, the French teacher took a lead role in providing in-servicing to all JP teachers after each plenary day at FUSA and that while the original cohort of students would now be spread across three different albeit co-located classes, data for this case study would continue to be collected on each original student by the specialist French language teacher based on general classroom and specialist French lessons.

It was documented that these organisational changes led to these students receiving a further 30 hours of French language instruction and a second 50-minute French lesson in the second year on the basis of the school's desire to build upon what it considered to be 'notably improved learning outcomes'.

The aforementioned period of PLP reflection and intra-school dialogue reportedly reinforced these teachers' awareness of the value and bases for joint planning: universality, cross-linguistic transfer, translanguaging, contrastive analysis and in-step planning. In response, it was noted that the preponderance of new or modified tasks in the second year centred on capitalising on developmental scaffolds across language programs.

The teachers reported a continuing use and engagement with the curriculum planning frameworks, but this was qualified by comments noting more time was needed for the joint focus to happen (removing planning from NIT timetables was seen as important in this regard) and more support for classroom teacher coaching. In this regard, two key strategies were employed above and beyond the successful case for a dedicated French room and doubling of the timetable allocation for French: use of parent volunteers in the mainstream classrooms and employment of a French assistant.

Both were reportedly successful. The language teacher began weekly meetings with a group of interested parents to coach them on tasks, activities, basic techniques, and in conjunction with a local high school, a French assistant was employed on a part time basis. The assistant's core role was to support the inclusion of French into the JP classes' weekly literacy blocks, predominantly focused on expanding the oral language work initiated in French classes and supporting the class teachers' use of French (pronunciation, phrases,

instructions etc...). This work gained much of its structure from the weekly French lesson flow-on planning chart which was expanded to include a specific focus on the use of songs for vocabulary building, phonemic awareness and grammatical knowledge as discussed in the PLP.

It was decided that this initiative warranted ongoing monitoring with the possibility that an advanced class would need to be established to accommodate graduates from this primary school. However, the heightened focus on reading and writing also generated another connection; year 11 students acting as mentor buddies for reading and writing in French beginning with readers' theatre activities.

Planning in the second year, as in other cases, reportedly benefited from the pedagogical, or methods-based, sessions as these were deemed to help guide the MLL principles into action through the curriculum development framework. Of particular note were the more advanced sessions on translanguaging and contrastive analysis that were embedded with strategies for teaching reading and writing across languages; *write what they can say and read what they can write* was recorded as a particularly helpful developmental frame for planning writing and reading tasks along with the joint construction of texts technique demonstrated in the PLP.

The declared plan was to finish the initial phonics work with the single sounds of the French alphabet, move into blends as suggested in the PLP, expand the use of flashcards for fast mapping of sound-to-symbol correspondences using sound-families with thematic, functional and high-frequency foci where possible, develop plays for oral language development and as an anchor for introducing and reinforcing blends in French (digraphs etc.) and provide key functional phrases/sentences as a scaffold to story (play) writing. This was all indicated to be following the given sequence as outlined in chapter Five, attachment Two and the developmental progression: hear, think, say, write, read.

As a result of the reported program modifications two sets of observations were provided: one from the group of parent volunteers and the other from the teaching staff. One of the parents was a grandparent of a child in the program and committed to providing a daily French activity as a part of the classrooms' morning literacy block. These were their reflections (only minor grammatical editing), beginning with the parent group:

- Students are excited to greet us in playground and out of school in French and because of the translanguaging ideas they have been holding ever longer conversations with us.
- Students are keen to hear the adults talk in French and try to understand what the conversation is about, before they used to shy away.
- Older siblings are now copying with French greetings in the yard and want to know why they aren't getting 'extra' French time.

- Students love trying to trick us with the new French they learn in class and always ask for new material to trick the teachers.
- Students are asking their parents to buy them French books to read and dictionaries for schoolwork, they want to be able to write more in French and less in English.
- Students love reading and performing plays in French at assemblies and they love the readers' theatre activities.
- Students are spontaneously using French at home now and it is a highly valued program by every parent we speak with – will it continue is everyone's question.

The teaching staff recorded the following observations and judgments about student behaviours, or learning outcomes:

- The children in the program know more grammatical structures, rules and have a higher metalinguistic awareness of French and English; for example, they can all explain why and when words are made masculine or feminine in French and how this is handled in English with the use of pronouns etc.
- Children love the plays' focus and this has influenced the way I plan using more vocab from them to scaffold writing activities and in modifying the plays to include target vocab and grammatical structures (using the AIM program plays has been helpful). This has also been a useful springboard for some phonological skills work such as letter-sound relationships and rhyming work. The results have been beyond anything I have seen before or thought would be achievable and the students have had no issue with the direct instruction that the PL program advised and which I had been concerned about – not anymore!
- Children are very excited about their Wikispace page and use it all the time – they are very excited that their classroom teacher is learning French with them.
- It is very powerful when French is integrated into normal class time – children end up valuing French before they even hit the specialist classroom so half the game is won already.
- The reception teacher is keen to be involved and has noticed how quickly her class is picking up French – she now wants more flashcards, IWB activities, songs and word charts.
- The year 5 teacher is now using French for her handwriting lessons and is also using not only an encode-led version of the decode, cover, write, check (and translate) technique for spelling now but is also using French vocabulary. This teacher has reported a measurable improvement in spelling since.
- Parents are now being overheard filling out lunch orders and school forms with their children in French, asking them how to say and write things in French – I don't know how the deli is coping!
- The year 7 teacher is now using French for morning routines and has asked for a range of conversation starters in French to use with the class around day-to-day activities.
- The year 2 teacher is also using French for morning routines as well as Smartboard games and activities.

The overall comments made were that these were very helpful frameworks for planning, especially planning for local contexts and individual learner differences: the MLL curriculum development cycle (simplified) was stated to be a valuable heuristic for integrated planning.

## 5.5.6 CASE STUDY 6 (Teachers N & O)

### 5.5.6.1 *Teacher N (Classroom, Reception / Year 1) & O (Italian)*

The Italian teacher at this site took overall responsibility for the collection, recording and transmission of messages about the implementation of the MLL Approach; it was a collaborative effort where decisions occurred through consensus and were enacted in unison. This case study also maintains a different timbre to the others, as it needs to capture the specific effects of teacher mobility and young learners gradually entering from Non-English Speaking Backgrounds (NESB) or Intensive English Language Classes (IELC).

In this case study the Italian teacher's journal acted as a collaborative journal; all meeting notes and classroom data from this site's participating teachers were recorded and reported to the researcher through this journal.

In the first phase of the PLP, as in other cases, the Italian teacher identified quite strongly with the systematic and explicit teaching notions as presented; they accorded with this teacher's experiences with poor outcomes from culture-based, language awareness, and constructivist approaches to teaching. However, what was of interest was this teacher's immediate engagement with the notion of collaborative or in-step planning with the classroom teachers of English using a systematic plan across languages. There was comment made about the scarcity of time for children to acquire the Italian language, especially the cohort of New Arrival Program students (NAP) exiting the IELC. It was also noted that this teacher was unsure of their own level of understanding of literacy development and in particular, how to support the future needs of these students as their Italian literacy skills became increasingly sophisticated.

In response to this disposition, the first reported task flowed from the proffered idea that languages education has two overarching pedagogical aspects; explicit, systematic teaching and strategic, or supported immersion. It was communicated that on this basis the Italian teacher would provide the explicit teaching of declarative aspects of the language and core literacy skill instruction while the classroom teacher would provide time and space for immersion activities and the application of declarative learning to purposeful, real-world, tasks.

It was also noted that the data collection tools and how these could be usefully related across languages to generate comprehensive learner profiles was of significant interest in relation to collaborative planning and general reporting on all children. This teacher conveyed a keen interest in how a systematic approach to literacy assessment could be used to plan for Italian language and literacy instruction, how such analysis could support in-step, or collaborative planning with English and what difference such modifications could make to student achievement for both Australian-born and newly arrived students.

It was these considerations and early evidence of learning that were reported to have led to productive discussions with site leadership and a briefing to the whole staff. It was noted that staff were particularly interested in the joint planning notions and began discussion of how the MLL approach could form part of the site's literacy plan. It was also noted that explicit and systematic phonological skills and phonics-based reading and writing strategies were not a core part of the school's early years planning and were identified as the first change to be implemented across classes.

The MLL assessment protocols remained generally operative in the planning process: the identified cognitive tasks and their relationships to the sub-element skills for literacy development were seen to be of value for planning Italian lessons and for collaboration with classroom teachers, beginning with an emphasis on phonics instruction and vocabulary items that are either functional, thematic or occur regularly in texts (high-frequency vocabulary). Phonemic awareness and systematic phonics instruction was reported to be structured around the classroom teacher's adoption of the Jolly Phonics program with modifications made to suit the structural properties of the Italian language guided by the PLP.

The recorded observations from these initial decisions and actions were communicated as encouraging. It was noted that by the end of Semester One the children had surprised the teacher with their knowledge and confidence with the newly acquired vocabulary and in some instances they were outperforming students in older classes with some years experience (grammatical editing only):

- *What is to be done with the Year 4/5 classes that are falling behind relatively speaking?*
- *Need to develop a plan for resourcing the program ... Prop box materials, reading materials and environmental print are needed now!*
- *Need to negotiate how to use Italian in daily literacy blocks across the Early Years.*
- *Students are already writing their own sentences in Italian and are asking (in English) for words they don't know (translanguaging is marvellous as it has enabled this to happen for the first time).*
- *It is incredibly difficult to keep up with the demand for reading material and resources for general class use.*

The mid-point of the PLP called for guided reflection on the tasks and activities implemented by teachers to date. While these teachers reported a positive disposition towards the MLL principles, tasks and activities from the outset it was clear from the journal entries that the MLL Approach had now become an integral part of these teachers' instructional framework. The Italian teacher reported a much deeper and more elaborate understanding of literacy development as not only a process with universal characteristics but one that has three highly imbricated aspects: linguistic, (meta)cognitive and sociocultural.



By the mid-point assessment in Term Four 2010, all students received an additional 15 hours of supplementary Italian language instruction with their classroom teacher. In the second year of the project, leading up to the final assessment, these students received a further 30 hours of Italian language instruction with their classroom teacher.

The following comments about all children in the target class were collected and reported on with respect to the first year's activities (grammatical editing only):

- *Children are recognising Italian words in rooms.*
- *Comments being made "Signora ... did you know that some of the letters are different ... that's the English 'a' sound but we need to use the Italian 'a'.*
- *Children are becoming very familiar with the meanings of words now.*
- *Other classes wanted to be included so those teachers are now coming on board.*
- *There is becoming a need for an Italian section in the teacher's resource centre.*
- *Children are noticing sounds that are absent in one language from the other.*
- *Children who have exited the NAP can easily tell me the sounds ... we need a consistent approach to phonics in the early years for all.*
- *Children are beginning to use initial, medial and final sounds as decoding strategies in Italian.*
- *Children are beginning to use their knowledge of blends in their writing (spelling).*
- *Students are noticing pronunciation errors and correcting each other.*
- *Using children's names has been a helpful strategy for teaching phonics to new arrivals students.*
- *I am beginning to change my thoughts about when to introduce the sounds of Italian, especially the exceptions. Before I used to start around year 3 or 4 feeling that the students needed to be more confident about the sounds in English. I no longer feel that.*
- *Children are already developing a metalinguistic awareness of gender rules, particularly for colours and now pronouns that they can articulate to me in the abstract – reasoning out loud when reading and spelling.*
- *Children are recognising the relationship (agreement) that is necessary between nouns and adjectives – they now know what looks and sounds right.*
- *More students are using the correct forms of greeting to adults who visit the school as well as other teachers and even other parents.*
- *Translanguaging is having a marked impact on their use of Italian – it is much more than before.*
- *Students are beginning to draw on environmental print to help with writing.*
- *Students are no longer complaining that they can't write in Italian and can be heard using phonics strategies.*
- *Thematic dictionaries are now being used to help keep pace with students' writing ... now the older classes are wanting to write more and use these after seeing the younger classes.*
- *I have noticed that the classroom teacher with the most usage of Italian in daily routines and with the most environmental print was with the class who remember more vocabulary.*

The end of year one program reflection, data analysis and intra-school dialogue reportedly reinforced these teachers' awareness of the value and bases for joint planning: universality, cross-linguistic transfer, translanguaging, contrastive analysis and in-step planning. In response, it was noted that the preponderance of new or modified tasks in the second year centred on capitalising on developmental scaffolds across language programs.

In the second year it was stated that teachers continued using the curriculum planning proformas. In this context, the Italian and classroom teacher again communicated a significant orientation towards joint planning but also mentioned that both more time was needed for this to happen (removing planning from NIT timetables was seen as important in this regard) and providing increased support for coaching classroom teachers. What made the planning process particularly challenging was the student transition dynamic. It was reported that new arrival students had a limited time in IELCs before they were placed into a mainstream class. This meant that classes constantly had to accommodate new learners without the background experiences of the rest of the class. It was considered that this was especially problematic with assessments. However, after careful discussion it was communicated that the developmental assessment schema devised could be helpful, in particular because of its orientation towards cognitive tasks (or literacy skill development) on the one hand and criterion-referencing / norm-referencing on the other (the former for Italian and the latter for English). Observation schedules and portfolios were reportedly viewed in a similar light and modifications made as necessary. However, while this was an adaptation to allow the teachers to continue to work with whole classes whose demographics were very fluid and yet track individual progress, only those students in the project from the outset were routinely monitored and whose test results were reported.

When planning for the second year of the program it was communicated that the demonstrated techniques and methods were clearly in line with the Department's *Teaching for Effective Learning (TfEL)* pedagogical framework (DECD, 2010) and that this reinforced their confidence in both the system and their ability to meet its accountability requirements. Of particular note were the advanced sessions on translanguaging and contrastive analysis that were imbedded with strategies for teaching reading and writing across languages; *write what they can say and read what they can write* was recorded as a particularly helpful developmental frame for planning writing and reading tasks along with the joint construction of texts technique demonstrated in the PLP. It was identified that what had previously been absent from planning, and likely a core cause for the ongoing separation of languages programs, were clear developmental schemas for the modes of language use in Italian (as an L2). The Spanish exemplars provided were stated to be of great interest and readily adaptable to Italian. They were reportedly used to support planning both within and across languages.

The declared plan was to finish the initial phonics work with the exceptions to the single sounds of the Italian alphabet and then move into blends as suggested in the PLP. However, the Italian teacher was unsure about how many blends there are in Italian and how closely these related to syllables. The Spanish model provided in the PLP was reportedly used as a beginning template. The use of flashcards for vocabulary and sentence-level grammar acquisition was expanded following the thematic, high-frequency and functional foci, along with the development of activities for oral language development (using the prop box ideas) that were also used as an anchor for introducing and reinforcing syllables/blends in Italian. Cogent discussion was recorded in relation to students' readiness to begin engaging with different genres of writing in Italian as with English and that key functional/formulaic sentences would be provided as a scaffold to genre writing following the in-step, mixed-production developmental path as outlined; the stated intent was to reserve texts that rely heavily on the past tense until later and texts reliant on conditional clauses for last. These activities were indicated to be following the integrated, or multi-modal scaffold for young L2 learners as outlined: hear, think, say, write, read.

The Italian teacher was demonstrably engaged and thinking broadly about the messages from the PLP. Consideration was repeatedly given to ease of linking the presented Approach with the emerging Australian Curriculum and local departmental curriculum and pedagogical policies. The staff noted collaborative planning and integrated teaching might redress the perceived insufficient allocation of time in the new curriculum.

As a result of these reported program modifications the teaching staff recorded the following observations and judgments about student behaviours, or learning outcomes (grammatical editing only):

- The final assessments demonstrate significant progress, especially with oral language development.
- Students felt more comfortable with the formal assessment “we’ve done this before, I know what to do”.
- Children are often heard singing the phonics songs when they are trying to spell words, or while they are writing.
- The children are enjoying the Smartboard activities – it adds engagement value.
- One of our Greek students is reportedly using Italian at home more and more and he finds it easier now than the Greek he speaks with family.
- Children are routinely helping each other with phonics strategies and are working with these across languages; “remember the Italian a sounds like the English u”.
- NAP (New Arrivals Program) children are doing this with their home language now too such as “the Italian a is like the a in my language (Arabic)” which wasn’t noted before.
- Students are a lot more confident now and even the NAP students are joining in with games and songs – the third language of Italian helps to level the field.

- One of the NAP children who struggles with grapho-phonetic relationships in English is now performing this task more effectively in Italian and talks of how proud she feels.
- Parents are now starting to talk about the songs the children sing at home, the rhymes and basic vocabulary; “don’t you know that, it’s Italian!”
- I rarely have any problems now in the early years classes but I will have to increase the pace as they progress to keep them engaged and challenged.
- Students are now correcting teachers in various ways, including the NAP kids who sternly advise that I did the wrong thing if I greet them in English and then proceed to tell me how to do it in Italian.
- Students are becoming more accustomed to using Italian whenever they can due to the translanguaging approach; they didn’t use Italian at any opportunity before other than in the Italian class.
- The school concert was a hit and even though I had more complex songs for the older classes, the younger ones learnt it themselves and proceeded to join in at the concert!
- Magnetic letters have been a huge hit with spelling – why hadn’t I been shown this before?
- The children now take testing very seriously; they even put books up between themselves. In fact, they seem to enjoy them now and see them more as quizzes and relate them to my teaching ... why hadn’t I thought of that strategy?

Records in the researcher’s journal on conversations at the plenary days indicate that the general schema of planning and teaching established in the first year was progressed in accord with the exemplar scope and sequences provided with only one caveat; that progress, especially with reading tasks, was severely hampered by a lack of resources and collaborative planning time. Nonetheless, it was recorded that the teaching staff wished to continue with this integrated approach to languages and literacy education.

### **5.5.7** *Overview*

The case study PLP mid-point data strongly reinforce the effect shown in Table 9 earlier. Further information is now given below on the situation at the PLP endpoint or exit.

### **5.6** *Tabulated exit results*

Table 10 shows the pattern encouraged by the PLP towards embedding L2 teaching into their L1 programs through joint planning with L2 teachers to have been perceived successful and the preferred Approach of all classroom teachers.

Table 11 shows the pattern encouraged by the PLP towards a developmentally appropriate emphasis and integration of linguistic, cognitive and sociocultural elements planned jointly with their L1 classroom colleagues to have been perceived successful and the preferred Approach of all L2 (languages) teachers.

Table 12 is more complex and will be elucidated better with the following case study specific exit records. However, significant and similar 'balancing' shifts towards cognitive and then linguistic tasks/activities can be seen across all presented case studies. The colour-coding scheme in each box represents the on-balance reported shifts from all teachers at each site/case study. Any individual variance from the stated norm is noted at the top of each box using the teacher's letter code (e.g., teacher A), written in the same colour scheme as used in the text boxes, to signify their particular emphasis/focus.

**Table 10: Classroom teachers' Approaches to languages programming upon exiting the project (black = initial; red = exiting)**

Table 10 Classroom teachers' exiting Approaches to languages education										
Classroom models of languages education	Awareness		Encounter		Subject Teaching		Embedding		Immersion	
	5% L2 use - 95% L1 use		10% L2 use - 90% L1 use		30% L2 use - 70% L1 use		50% L2 use - 50% L1 use		Program / teaching focus	Core learning tasks
	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks	Program / teaching focus	Core learning tasks
Teachers A & B (case study 1: classroom)					Specialist lesson with L2 teacher: no L2 in class	Some collaboration over themes: cultural focus	Specialist lesson with L2 teacher integrated into class program	Daily use of the target language and use of translanguaging methods in subject areas		
Teacher D (case study 2: classroom)					Specialist lesson with L2 teacher: no L2 in class	Some collaboration over themes: cultural focus	Specialist lesson with L2 teacher integrated into class program	Daily use of the target language and use of translanguaging methods in subject areas		
Teachers F & G (case study 3: classroom)					Specialist lesson with L2 teacher: no L2 in class	Some collaboration over themes: cultural focus	Specialist lesson with L2 teacher integrated into class program	Daily use of the target language and use of translanguaging methods in subject areas		
Teachers I & J (case study 4: classroom)					Specialist lesson with L2 teacher: no L2 in class	Some collaboration over themes: cultural focus	Specialist lesson with L2 teacher integrated into class program	Daily use of the target language and use of translanguaging methods in subject areas		
Teacher L (case study 5: classroom)					Specialist lesson with L2 teacher: no L2 in class	Some collaboration over themes: cultural focus	Specialist lesson with L2 teacher integrated into class program	Daily use of the target language and use of translanguaging methods in subject areas		
Teacher N (case study 6: classroom)					Specialist lesson with L2 teacher: no L2 in class	Some collaboration over themes: cultural focus	Specialist lesson with L2 teacher integrated into class program	Daily use of the target language and use of translanguaging methods in subject areas		

**Table 11: Languages teachers' exiting Approaches to languages curriculum design (black = initial; red = exiting)**

Teacher	Theoretical School	Pedagogical Orientation (belief)	Program Foci	Teaching Emphasis	Core Learning Tasks	Approach
	Functional	Language is learnt through defined communicative events				<b>Situational</b>
	Functional	Language is learnt through the internalisation of expressions: habits				<b>Audio-lingual</b>
	Functional	Language is learnt through functional analysis of speech acts				<b>Functional – Notional</b>
Teacher C (case study 1: Indonesian)  Teacher E (case study 2: Indonesian )  Teacher M (case study 5: French)  Teacher O (case study 6: Italian)	INTERACTIVE Functional	Language is learnt through meaning – making in authentic situations	Contrived oral exchanges Cultural discourses and practices Positive attitude to language and culture	Speaking and listening skills Vocabulary development Authentic cultural practices	Speaking and pronunciation Vocab walls and worksheets (thematic) Sharing cultural texts	<b>Communicative Language</b>
Teacher H (case study 3: German) Program is out of alignment with beliefs due to lack of resources	Structural & Functional	Language is learnt through the performance of tasks requiring negotiation of meaning	Contrived oral exchanges Cultural discourses and practices Positive attitude to language and culture	Speaking and listening skills Vocabulary development Authentic cultural practices	Speaking and pronunciation Vocab walls and worksheets (thematic) Sharing cultural texts	<b>Task – Based</b>
	Structural & Functional	Language is learnt through subject-defining activities				<b>Content Based (bilingual and immersion)</b>
Teacher K (case study 4: Japanese) Not a 'true' genre-based program due mostly to resources	Structural, FUNCTIONAL & Interactional	Language is learnt through analysis of the purposes and wordings of texts used for making meaning in differing sociocultural contexts	Cultural exchanges and oral exchanges Language as social semiotic Positive attitude to language and culture	Intercultural skills Vocabulary for social exchanges Authentic cultural experiences	Intercultural exchanges Oral language and skills through worksheets and contrived dialogues	<b>Genre – Based</b>
All languages teachers	Structural, Functional & Interactional	Language is learnt through analysis of what is happening in a context, how language is integral to what is taking place	Oral and written texts as constituted by social practices within and across cultural contexts	Language units, grammatical units, cognitive strategies and skills for text creation, negotiation and analysis aligned to social practices	Text-based spoken and written activities aligned with social purposes including reflexive text analysis	<b>Text - Based</b>

**Table 12: Overview of teachers' Approaches to literacy curriculum design upon exiting the PL program**

Table 12 Teachers' exiting Approaches to literacy curriculum design: red = major focus; orange = medium focus; blue = minor focus												
Teacher	Text-centric or <i>Linguistic Approach</i>				Cognitive-centric or <i>Cognitive/Metacognitive Approach</i>				Culture-centric or <i>Sociocultural Approach</i>			
	Pedagogical Beliefs	Program Foci	Teaching Emphasis		Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks
<p>Teachers A &amp; B (case study 1: classroom)</p> <p>Teacher C (case study 1: Indonesian)</p>	<p>Literacy involves mastery of a writing system and its attendant conventions (knowledge about language and linguistic conventions)</p>	<p>Teachers A &amp; B medium C minor</p> <p>These teachers planned to continue with the general schema of text-centric teaching and learning established through the MLL PL program.</p> <p>Linguistic considerations received a moderate focus.</p>	<p>Literacy involves active thinking and problem solving (knowledge about language and skills to create and transform knowledge)</p>	<p>Teachers A &amp; B major Teacher C none (reported)</p> <p>These teachers planned to continue with the general schema of cognitive-centric teaching and learning established through the MLL PL program.</p> <p>Cognitive and metacognitive considerations received the greatest focus.</p>	<p>Literacy is a socially constructed phenomenon. Texts are not natural or universal, they are formed through interaction</p>	<p>Teachers A &amp; B minor Teacher C minor</p> <p>These teachers planned to continue with the general schema of culture-centric teaching and learning established through the MLL PL program.</p> <p>Sociocultural considerations received the least focus.</p>						
<p>Teacher D (case study 2: classroom)</p> <p>Teacher E (case study 2: Indonesian)</p>	<p>As above</p>	<p>Teacher D medium Teacher E minor</p> <p>These teachers planned to continue with the general schema of text-centric teaching and learning established through the MLL PL program.</p> <p>Linguistic considerations received a moderate focus.</p>	<p>As above</p>	<p>Teacher D major Teacher E medium</p> <p>These teachers planned to continue with the general schema of cognitive-centric teaching and learning established through the MLL PL program.</p> <p>Cognitive and metacognitive considerations received the greatest focus.</p>	<p>As above</p>	<p>Teacher D minor &amp; E minor</p> <p>These teachers planned to continue with the general schema of culture-centric teaching and learning established through the MLL PL program.</p> <p>Sociocultural considerations received the least focus.</p>						
<p>Teachers F &amp; G (case study 3: classrooms)</p> <p>Teacher H (case study 3: German)</p>	<p>As above</p>	<p>Teachers F &amp; H medium; G minor</p> <p>These teachers planned to continue with the general schema of text-centric teaching and learning established through the MLL PL program.</p> <p>Linguistic considerations received a moderate focus.</p>	<p>As above</p>	<p>Teachers F, G &amp; H major</p> <p>These teachers planned to continue with the general schema of cognitive-centric teaching and learning established through the MLL PL program.</p> <p>Cognitive and metacognitive considerations received the greatest focus.</p>	<p>As above</p>	<p>Teachers F, G &amp; H minor</p> <p>These teachers planned to continue with the general schema of culture-centric teaching and learning established through the MLL PL program.</p> <p>Sociocultural considerations received the least focus.</p>						



**Table 12** Teachers' exiting Approaches to literacy curriculum design

Teacher	Text-centric or <i>Linguistic Approach</i>				Cognitive-centric or <i>Cognitive/Metacognitive Approach</i>				Culture-centric or <i>Sociocultural Approach</i>			
	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks	Pedagogical Beliefs	Program Foci	Teaching Emphasis	Core Learning Tasks
Teachers I, J & K (case study 4: classroom & Japanese)	Literacy involves mastery of a writing system and its attendant conventions (knowledge about language and linguistic conventions)	Teachers I & J medium; K (none reported)  These teachers planned to continue with the general schema of text-centric teaching and learning established through the MLL PL program.  Linguistic considerations received a moderate focus.			Literacy involves active thinking and problem solving (knowledge about language and skills to create and transform knowledge)	Teachers I & J major; K medium  These teachers planned to continue with the general schema of cognitive-centric teaching and learning established through the MLL PL program.  Cognitive and metacognitive considerations received the greatest focus.			Literacy is a socially constructed phenomenon. Texts are not natural or universal, they are formed through interaction	Teachers I & J minor; K medium  These teachers planned to continue with the general schema of culture-centric teaching and learning established through the MLL PL program.  Sociocultural considerations received the least focus.		
Teacher L (case study 5: classroom)  Teacher M (case study 5: French)	As above	Teacher L major Teacher M minor  These teachers planned to continue with the general schema of text-centric teaching and learning established through the MLL PL program.  Linguistic considerations received a moderate focus.			As above	Teacher L medium; M major  These teachers planned to continue with the general schema of cognitive-centric teaching and learning established through the MLL PL program.  Cognitive and metacognitive considerations received the greatest focus.			As above	Teacher L minor Teacher M medium  These teachers planned to continue with the general schema of culture-centric teaching and learning established through the MLL PL program.  Sociocultural considerations received the least focus.		
Teacher N (case study 6: classroom)  Teacher O (case study 6: Italian)	As above	Teacher N medium Teacher O minor  These teachers planned to continue with the general schema of text-centric teaching and learning established through the MLL PL program.  Linguistic considerations received a moderate focus.			As above	Teacher N major Teacher O (none reported)  These teachers planned to continue with the general schema of cognitive-centric teaching and learning established through the MLL PL program.  Cognitive and metacognitive considerations received the greatest focus.			As above	Teacher N minor Teacher O medium  These teachers planned to continue with the general schema of culture-centric teaching and learning established through the MLL PL program.  Sociocultural considerations received the least focus.		

## 5.7.1 CASE STUDY 1 (Teachers A, B, C summative remarks)

### 5.7.1.1 *Teacher A (Classroom, now Years 1-2)*

It can now be seen that an emphasis in this teacher's program has become developing students' phonological skills, orthographic mapping skills, fluent reading and writing, and vocabulary acquisition for classroom and everyday interactions in the target language. This reflects the general format of the core activities for literacy development across languages that were communicated to the teachers through the PLP.

Moreover, these activities and language operating tasks represent a discernible shift in the teaching and learning program offered by this teacher and in this teacher's beliefs about languages and literacy development. Notably, this teacher was including the target language in the everyday activities of the class and was drawing upon the target language for comparative analyses of the sounds, symbols and grammatical features of the English language using analogic reasoning processes. This signifies an awareness of the universality of languages and of literacy development and both an understanding and valuing of ways in which two or more languages can be drawn upon to support general language and literacy development.

This classroom teacher reported a positive disposition towards such ideas and in concert with the second MLL principle proceeded to plan and then implement key activities for phonemic awareness and oral language development as presented in the MLL PLP. Specifically: activities to build oral language patterns, games to continue to develop and reinforce phonological aspects, activities for awareness of sounds and systematic phonics, vocabulary, and activities that foster the development of a metalanguage (decontextualised) for analysing differences and similarities in language systems (analogic reasoning).

Tasks and activities that had been successfully employed for these purposes in their English language program were now being integrated with Indonesian and at times modified solely for use with Indonesian. Integration was stated to be occurring on the basis of cross-linguistic analyses of the target matter and introduced using translanguaging methods that allowed for mixed production, contrastive analysis and analogic reasoning.

However, owing to the stated lack of knowledge and experience with the target language, prescribed activities by the education system and the absence of readily available literacy-based resources such as simple, decodable readers in the target language, further progress or modifications were deemed limited by this teacher at the time.

### 5.7.1.2 Teacher B (Classroom, now Year 3)

In the reflective journal submitted by this teacher a summary statement about the project that offers constructive feedback on key areas of the PLP and the MLL Approach was given. Key points were (in the teacher's own language):

- *Early sessions on brain and how it works and how we learn English rang bells.*
- *Doing a second language daily instead of once a week made sense to me.*
- *Starting with the nouns, labelling objects and having tags all around the room also made sense as a scaffold for speaking.*
- *Each day I was amazed at how many words they could remember; started with greetings, then nouns, verbs and adjectives.*
- *The big question about whether learning the second language interferes or confuses the first language gets a big no from me. The children can ALL tell me the differences in the alphabet e.g. c always sounds like ch in Indonesian.*
- *By using the same methodology of D C W Ch (and T) all children could progress and learn Indonesian words at the rate they could cope with. Those that could write sentences in Indonesian did.*
- *All children experienced success.*
- *The children find it easy to flip from Indo-English and back again. I am the one who struggles with it most.*
- *I have been amazed with how many words and the skills in conversation that many of my students have and in discussions with (the Indonesian teacher) it has been noticed how much more this class can write and say compared to the other classes.*
- *Collecting the data has been really interesting and it has proven that the children have not become confused with 2 languages in fact many of the children are above their age in language skills.*
- *Improvement over time has been interesting as well.*
- *Knowing what I now know and have learned in the last 18 months I will continue to have daily Indo lessons to support the specialist teacher.*
- *Another highlight has been the engagement of all the teachers in this project on the Asian Studies Committee. This has now become a genuine whole of school approach with market days, festivals and even a visiting teacher from Indonesia.*
- *It would be great to introduce an Indonesian word wall to the staffroom.*
- *In 33 years of teaching this study has had a big impact on my teaching as well as reinforcing the fact that I was already on the right track with many of my beliefs and strategies.*

In addition to the above acts and comments this teacher was in the interesting position in the second year of the project to be administering the National Assessment Plan for Literacy and Numeracy (NAPLAN) tests with this class as they had moved into year 3. It was reported that for the literacy test this class was now above both the 'similar' school comparison and was above the other year 3 classes at the school.

It can be understood from these communications that an emphasis in this teacher's program has become integration of the target language with the English program on a daily basis.

Core methodologies such as translanguaging, contrastive analysis and analogic reasoning

were important foci for this teacher; also using the target language to compare and contrast phonemes, vocabulary and linguistic structures and scaffolding students' global language development through mixed production and transfer tasks. This teacher noted that this development was born of the understanding, developed through the PLP, that language is stored in a global reservoir in the brain rather than in discrete modules for discrete languages and that fostering mixed production was a significant strategy for developing students' linguistic and cognitive skills as it meant that students were able to use whichever language was most efficient for them as their medium of thought.

The programming of vocabulary input also followed the general format provided through the PLP and Australian Curriculum: a functional approach (see: Halliday, 1975). It was reported that this approach was particularly successful for vocabulary acquisition supporting everyday interactions, and emergent reading comprehension and writing compositions. These functional domains of vocabulary were also noted to be helpful with the selection of sound-family word lists for the tasks designed to develop orthographic mapping skills and knowledge in the target language.

These activities and language operating tasks represent a discernible shift in the teaching and learning program offered by this teacher and in this teacher's beliefs about languages and literacy development.

However, this teacher echoed teacher A's concern for future rates of growth based on the same constraints.

At the end of the project this teacher decided to continue with the MLL Approach to teaching and was hopeful that further professional learning would become available to support continuation of the MLL Approach into the middle and upper primary years.

### **5.7.1.3 Teacher C (Indonesian)**

The specialist Indonesian teacher's summative comments that were attributed to the PLP (no editing of remarks undertaken):

- *The year 2 teacher has gone to a lot of effort in making resources and changing classroom routines to support the program and I feel that with only one lesson per week I am not doing (the teacher) or class justice.*
- *I think that the class teachers being involved has been a very powerful thing. They have reinforced the value of Indonesian – not just the NIT subject. They have also modelled to their students being good learners.*
- *Performance at assembly has parents singing along now as students have coached younger siblings and parents.*
- *My plan now is to purchase bulk Indonesian readers and big books – and digital readers that can be read as a whole class, small groups and individually. Also purchasing more songs, karaoke etc. to encourage language. These can also be used by the classroom teachers. This, I think, is one of the biggest problems is locating resources that are interesting and motivating for students.*

- *Acquiring an IWB has made a significant impact.*
- *Should have developed common words list for Indonesian at the beginning of the project as it was very valuable to discuss with other Indo teachers what words need to be included and what don't.*
- *I thought that the children would get bored with the alphabet books but there have been no complaints.*
- *This has helped for kids to 'value' other cultures and language so that students from other backgrounds ... can be proud of their background rather than hiding it.*
- *It has also given credence to students who have English as their 2<sup>nd</sup> language. Rather than hiding their differences – they can be proud to share them with the class.*
- *It worked to break down the barriers for students, staff and parents.*

Upon acceptance into the MLL research project this teacher was of the opinion that it would “be a good opportunity to raise the profile of Indonesian amongst class teachers ... I did not know that it would reinforce the ‘translanguaging’ I already did rather than the previously accepted immersion which I knew was not a success with all students.” Moreover, “I did not know that the classroom teachers would embrace this program as they have. And I had no idea just how much effect it would have on the students.” These were common themes for this teacher that were stated many times throughout the submitted journal. For instance, it was noted that discussion of the Indonesian program was very limited in staff meetings and that many teachers seemed to tune out because there was no perceived relevance to their teaching programs – the language teacher’s voice was seldom heard. The project created new opportunities for staff meeting discussions that were being led by classroom teachers, were longer and had the general engagement of staff. This was reported to be largely the result of the fact that classroom teachers were now reporting on Indonesian language teaching and learning and that the reports were of substantive learning that could be readily related to the rest of the curriculum and that struck an accord with the pedagogical belief systems of the classroom teachers. Equally, it was noted that none of the participating teachers thought the MLL Approach would have a dramatic impact on students’ Indonesian learning: “I did know that this would improve, but maybe the extent of the improvement was still a shock ... their language acquisition is a lot better than other classes.” As a result of observations such as these a number of new and ongoing actions were planned:

- Regular newsletter articles.
- Parent workshops.
- Creation of a ‘master’ folder of flashcards, games, posters, worksheets, letters for parents, language conventions information sheet to assist with pronunciation, sentence construction etc. all aimed at supporting the engagement of other class teachers, relief teachers and parents.

This teacher was in a unique position to be able to provide direct comment from a parent’s perspective. It was indicated that no extra work on Indonesian was undertaken outside of the

school program. Thus, "(my child's) knowledge is on a par with the other children in the class." While it was reported that this teacher's child was now progressing faster than before and faster than similar age children in non-project classes at the school what was of note was the recounting of a family trip to Indonesia mid-way through the project (no editing of teacher comment other than the omission of names):

- *I was very impressed with (child) Indo while we were away. (Child) was confident enough to go play with the local kids. (Child) would question: (mum/dad) why did you say ... after listening to a conversation and (child) would string words together to make sentences asking: (mum/dad) is this how you say...?*

## **5.7.2 CASE STUDY 2 (Teachers D & E summative remarks)**

### **5.7.2.1 Teacher D (Classroom, now Years 1-2)**

This teacher reported an overall shift in their programming to privileging the development of students' Indonesian oral language skills, vocabulary for the classroom and everyday interactions, for reading comprehension, written compositions, and for developing orthographic mapping skills and knowledge in Bahasa Indonesia. This reflects the general format of the core activities for literacy development across languages that were communicated through the PLP.

These activities and language operating tasks represent a discernible shift in the teaching and learning program offered by this teacher and in this teacher's beliefs about languages and literacy development. This teacher reported increasing use of the target language in everyday activities and was drawing upon the target language through transfer tasks for comparative analyses of sounds, symbols and grammatical features of the English language. This signifies an understanding of the universality of languages and of literacy development and both an understanding and valuing of ways in which two or more languages can be drawn upon to support global language and literacy development.

This teacher reported a positive disposition towards such ideas and in concert with the second and fourth MLL principles proceeded to plan and implement activities for phonemic awareness and phonics, oral language development and tasks that foster the development of a metalanguage (decontextualised) for analogic reasoning across language systems as presented in the MLL Approach / PLP.

Tasks and activities that had been previously employed for these purposes in this class's English language program were now being integrated with Indonesian and at times modified solely for Indonesian. Integration was stated to be occurring on the basis of cross-linguistic analyses of the target matter and introduced using analogic reasoning techniques, contrastive analysis and mixed production carried by translanguaging methods and transfer tasks.

### 5.7.2.2 Teacher E (Indonesian)

The specialist Indonesian teacher's summative comments on their reported pattern of teaching and learning as a result of the PLP are (only editing of significant grammatical errors undertaken):

- *Listening to all other school's reflections/highlights was wonderful and enlightening to see how positive the project has been for ourselves professionally and our students as well.*
- *Will add Multilingual Literacy Project Info into whole school literacy plan (site plan) as well as added again in EYLP 2012 (EYLP = Early Years Literacy Plan).*
- *Check on Linking Languages and Literacy project (the follow on from this research project) – involvement could also include teachers already involved as part of their Step 9 process as mentors for other teachers at school.*
- *Literacy block – NIT (languages) teacher needs to be involved with class teachers.*
- *Have observed that children from last year were able to respond quicker to greetings, number sense tasks, songs, reading etc... These children exhibit more enthusiasm ... they even approach me in the yard and say can we have Indonesian today.*
- *Parents are reporting that their children are teaching them what they have learnt in Indonesian at school but when asked about other subjects they don't have anything to tell.*
- *Have noticed the difference between having the classes for 1¾ hours per week as compared to 3 hours in the first year. Have also noticed that despite the other children having the other Indonesian teacher for a whole day per week for Indo, those children do not perform as well as mine; vocab learning is not as high, what has been planned is not completed. I will have to check with the teacher what is going on as compared with our new MLL curriculum framework and the outcomes we wish to achieve each term.*
- *The 'Sharing the Pen' book has been very useful and the interactive writing activities we undertook in conjunction with the vocab from songs was a great idea from the PL sessions.*
- *It has been interesting when being in the classrooms and looking at children's writing that some children are using some Indonesian vocab in their daily writing, or asking for a particular word. This is not evident in rooms where the classroom teacher wasn't involved.*
- *Children are regularly making up their own Indonesian homework and bringing it in to show me.*
- *I have observed the students from the program who have moved into other classes acting as coaches or mentors willingly and effectively.*
- *Due to staffing issues I was unable to deliver the usual Indonesian program for a Term. The reliever was unable to keep the pace going but the classroom teachers were actually able to do this. Very surprising and pleasing.*
- *A new child has joined the school from the Philippines. What has been very interesting to note is how this child is willing and able to communicate in Indonesian more effectively than English after only one Term.*
- *Due to staffing issues this year I have been wearing many hats; NIT teacher, Assist Principal, Class teacher. This has meant that the classroom teachers in the project and I have had to meet more regularly and put aside more time for planning and monitoring.*

- *Watching the children undertake the diagnostic/criterion tests has been interesting. Some of them have been writing down the sounds of Indonesian as words (mostly syllables) but this is what they have been practicing saying and I think it reinforces the ‘write what you can say’ principle from the project.*
- *The other Indo teacher at the school has been using some of the strategies that have been discussed in this project. We have had many discussions about this project. One of the strategies ... has been the emphasis on alphabet sounds etc. What has been observed with all students R-7 that she teaches is that ... all students are achieving a higher rate of accuracy with reading and writing activities – the teacher also commented that the students were more confident to attempt to spell, write or read unknown words in Indonesian since beginning this exercise daily.*

It is clear from these comments that this teacher was passionate about teaching language and, it can be suggested, open to new ideas and perspectives that show potential to improve student learning. It was stated that an immediate and ongoing engagement with the offered curriculum development cycle and planning tools was a constant driver of modifications and implementation efforts. Significant effort to support and collaborate with other teachers, including relief teachers was relayed. The notion of in-step planning at the heart of this collaboration was clearly seen to be an important and effective tool for advancing student learning: “... teaching language 2 the same way has had a significant impact on chn’s reading as well as writing. Also an attitudinal shift to being confident enough to take risks”.

It was reported that as a result there was a significant increase in core vocabulary learnt and retained over the two years, especially sight word and written vocabulary. Equally, with reading tasks it was reported that the reception and year 1 students were not only attempting to read in Indonesian but also employing decoding strategies that had previously been observed in the mainstream, English, classroom only. Thus, there was a trail of evidence reported that was considered as supporting the ongoing use of both the systematic, explicit teaching of vocabulary within a translanguage, or mixed production, oral language environment and the notion of cross-linguistic transfer of reading and writing skills (e.g. phonics).

In the final analysis it was stated that the biggest increase in student learning outcomes, their distance travelled, occurred with the “... students who were at risk, students with a verified disability and ESL students”. This was noted to be a very encouraging finding, as the default position for the school had tended to lead to the removal of these students from the opportunity to learn a subsequent language.

### **5.7.3 CASE STUDY 3 (Teachers F, G & H summative remarks)**

#### **5.7.3.1 Teacher F (Classroom, now Years 1-2)**

It can be understood from this teacher’s communications that an emphasis has become developing students’ oral language skills in the target language, vocabulary acquisition for



the classroom and everyday interactions, reading (automatic decoding) as well as improved orthographic mapping skills and knowledge (sight vocabulary development) in the target language (ascribed to explicit phonics instruction).

These activities and language operating tasks represented a discernible shift in the teaching and learning program offered by this teacher and in this teacher's beliefs about languages and literacy development. This teacher was including the target language in the everyday activities of the class and was drawing upon the target language for teaching the sounds, symbols and grammatical features of the English language using analogic reasoning and transfer tasks.

In the final analysis, this teacher communicated a clearer understanding of their instructional role, through practices and tasks that have a high probability of advancing students' two-way transfer of language skills and knowledge. Productive discussion was provided on ways in which contrastive analysis and/or translanguaging techniques and transfer tasks were being employed in classrooms to facilitate use of prior learning in one language for improved learning of phonological awareness, decoding/encoding skills, reading and writing strategies (word attack, comprehension & composition), and metacognitive and pragmatic skills in the other language in a two-way manner starting with linguistic items and/or cognitive processes from the language that were less cognitively demanding.

Final comments from this teacher (no editing):

- *I have often wondered about L2 teachers who do not share same culture/ experience of school as their students. When I was a student my L2 teacher was from another culture where schooling is treated differently and my classmates and I never saw those lessons as a positive thing. I can't help but think that maybe a project like this where the L1 and L2 teachers are brought together would promote a more positive attitude towards L2 learning in sites where the attitude is not positive at all (sadly I've seen a few) and help create some cross cultural connections.*
- *It has been a pleasure being part of this project. I feel that the benefit for not only the children but for myself and the other staff members involved is huge and I have learnt so much.*

#### **5.7.3.2 Teacher G (Classroom, now Year 1-2)**

This teacher reported that the pace and durability of learning in English was consistently maintained by all learners and in general terms it was increased. Moreover, students were reported to be displaying a clear command over grammatical constructs that had not been evident before. These were ascribed to translanguaging methodologies, transfer tasks, contrastive analysis, analogic reasoning techniques and a focus on systematic and explicit teaching in meaningful contexts. This teacher concluded their journal with a stated intention to continue this program of teaching and learning and was actively supportive of expanding

the MLL Approach across all years and classes. The final comment from this teacher echoes this summary (no editing included):

*Thank you for allowing me the opportunity to participate in such an interesting and rewarding project. I have really enjoyed learning German with my students and working closely alongside ... and ... It has been amazing to watch kids develop a love for learning a second language. German is no longer seen as a subject that happens behind closed doors for an hour a week and left until the German teacher comes again next week. The classroom is enriched in German and the connections that is made on a daily bases still continues to amaze me! This way of language learning is paving the way for the future! Once again danke!*

### 5.7.3.3 Teacher H (German)

The German teacher's summative comments on their pattern of teaching and learning that were attributed to the PLP are (only editing of significant grammatical errors undertaken):

- *Parents are now commenting to teachers that they enjoy connecting with kids thru German.*
- *Child X (speech and lang probs) is trying really hard. ... has developed the ability to copy some very difficult sounds. I have put emphasis on vowel sounds being rounder as suggested in the program and also on some tricky sounds in German (*ich*) ...'s not perfect yet but has shown great increase in confidence, mouth and tongue awareness and persistence that are not seen with others with similar issues.*
- *Kids know everything we put onto flashcards and the class's knowledge of language basics has really improved.*
- *I can't get over how quickly kids are picking up new concepts. The yr 2s doing a similar program are struggling but the ones in this program just seem to accept and take things on board.*
- *Students in room ... have been showing amazing progress. They do many routine language events in German, but also use translanguaging for many tasks. Kids from this class come up to me in the yard and ask for words in German all the time.*
- *It would be great if we had reader standard texts at an age appropriate level for the kids. There seems to be nothing like this available – even in Germany. Books go from board books with 1 word/page to texts that are too difficult for yr2s. As a class we have created some texts but this is very time consuming and repetitive for the kids to do frequently.*
- *The class teacher needs time/instruction on how to read/speak/pronounce the German words properly. Both ... and ... have been hesitant to say new words/read without running it past me first.*
- *It's funny coming to write more. Everything I observe seems to be something I've written about! Students continue to surprise me in the amount they translanguange and try to use German at any opportunity. It would be interesting to know whether I'm the only teacher they do this for.*

### 5.7.4 CASE STUDY 4 (Teachers I, J & K summative remarks)

#### 5.7.4.1 Teacher I (classroom, now Years 2-3)

In the final analysis this teacher communicated a clear understanding of their role and tasks that could support students' two-way transfer of L1 to L2 skills and knowledge. Productive

discussion was also presented on ways in which the classroom teacher could engage the parent community around the benefits that a fully operationalised bilingual program could confer on learners. A salient note was added about the different script that Japanese Hiragana and Katakana employ and how it proved productive to employ Romaji as a bridge between early years English literacy instruction and early Japanese instruction. This was likened to the bridging role played by translanguaging, transfer tasks, and contrastive analysis and analogic reasoning strategies. In a similar fashion, it was noted that having the Japanese teacher instruct students first and then have them instruct the classroom teacher was very successful and clearly linked back to not only the Department's pedagogical framework, *TfEL*, but also the impact of student-led learning (both as instructor and as transfer of learning tasks) as well as retrieval practice that was presented through the PLP: deep learning and efficient retrieval can be promoted by tasks that require teaching of target material.

Final comments from this teacher (no editing):

- *It has been very affirming to see the growth of the children.*
- *Afternoon automaticity sessions great for vocab development.*
- *Individual book making which were then shared across JP was effective.*
- *The rotational afternoon blocks where students would visit the specialist teachers for a particular curriculum area such as Japanese was loved by the children.*
- *Thematic units have enabled us to integrate Japanese language.*

*Special moments:*

- *Partnership, sharing the journey and being empowered with new knowledge about Japanese language and culture, trialling new ideas like guided reading with Japanese booklets. Excitement!*
- *Children translanguaging during their writing time without being prompted.*
- *Numeracy coach had to learn to count and subitise in Japanese – brilliant!*
- *Natural progression of working with two languages and how effortless this is for young children.*
- *Sense of belonging for global parents who are now so proud to share their backgrounds.*
- *Personal enrichment.*

#### **5.7.4.2 Teacher J (Classroom, now Years 2-3)**

The ongoing tasks that this teacher communicated for planning and implementation were of the same orientation and nature as the previous class teacher and do not warrant description other than noting that this congruence in planning was not deemed to be pre-existing.

This teacher reported that (grammatical editing only):

- *It is very important for me, as a monolingual teacher, to have access to the resources demonstrated that carry the Japanese oral language into my class such as the talking books and read me a story pens.*
- *Children are using Japanese words and functional phrases in classroom situations without prompts.*
- *Young children are correcting classroom teacher's pronunciation of Japanese words.*
- *Parents and children are looking for Japanese activities to do at home.*
- *The Approach has ended the isolation of the Japanese program within the school curriculum: the Principal even supported trialling a new space for the JP classes with the Japanese teacher embedded into the daily operations of all classes with great success.*
- *Using themes as a part of the collaborative planning process, flowing into oral language development, spelling and grammar has been very effective.*
- *Children are responding to teachers on yard duty in Japanese.*

In sum, this teacher reported that the learning outcomes, especially the pace and durability of learning in English, was consistently maintained by all learners and in general terms it was increased; "all current year 2s are at year 3 level!" Moreover, the students were reported to be displaying a clear orientation towards, and engagement with, the Japanese syllabic scripts (Hiragana and Katakana) that had not been evident before; "they are no longer viewed as pictures". These outcomes were ascribed to contrastive analysis techniques and a renewed orientation towards systematic explicit teaching. This teacher's journal concluded with a stated intention to continue this program of teaching and learning and it was actively supportive of expanding the MLL Approach across all years and classes; "it is imperative that this work spans across all year levels to ensure durability of learning and student engagement. Of course, this means the High School will have to change its program to accommodate more advanced language users from our school".

#### **5.7.4.3 Teacher K (Japanese)**

This teacher's summative comments on the reported pattern of their Japanese teaching and learning that they attributed to the PLP are (only editing of significant grammatical errors undertaken):

- Using Romaji as the starting point has helped students to read and compose in Japanese sooner than ever before; these children were even able to independently compose poems using a template.
- Data collected around when the students recognised Hiragana as an alternative style of writing in testing came up as generally end of year 2.
- Children with learning difficulties across year 2 still did not recognize Hiragana as a text; most improved across oral language.
- It is very interesting to note that when students know their alphabet and understand word and sentence structures that the differences in Japanese Hiragana are more understood and its relationship to "English" is better.
- Parents were very impressed at the level of Japanese by the students.

- Their translinguaging has been excellent, unexpected and led to more wide-ranging use of Japanese than before (even using instructional language in other tasks and settings).
- The task-based sequential development framework has been brilliant; they are now recycling prior vocabulary in current activities without difficulty.
- Previously I have not accomplished the making of books and the reading of Japanese until at least year 4, 5, 6. This is quite remarkable that this has happened over 2 years (year 1-2).
- Noted considerable improvement across all year levels.
- The level of support from all the JP teachers has been outstanding. It has been difficult to get them to continually use Japanese in their classes I wish I could have taught alongside of them on more occasions.
- Next year it will be interesting to see if improvement continues, as new teachers become involved.
- The program works best when there is commitment from other teachers and is supported by leadership.
- The rotation of classes through a Japanese station/centre during combined literacy blocks is highly effective as that involves everyone and program not seen as different but incorporating all.
- Current challenges remain ways to involve and engage teachers and keep them using Japanese daily, ongoing valuing by the department of the importance of language teaching and all the different languages that are taught – finding the common ground.

This teacher found value in the communicated ideas about languages and literacy development and in particular the response of students to both teachers use of translinguaging techniques and their own freedom to do so. This is an important finding in relation to the theoretical arguments in its favour as the preponderant approach to languages education at this site had been of a sociocultural nature rather than literacy based.

*'Moral support was excellent and the journey worthwhile,'* was a final comment.

#### **5.7.5 CASE STUDY 5 (Teachers L & M summative remarks)**

##### **5.7.5.1 Teachers L (Classroom, now Year 2) & M (French)**

These teachers' summative comments on the reported pattern of teaching and learning, that they attributed to the PLP, and their intentions for the Approach in the future, are reported below. As part of this school's internal evaluation of the project parents were asked to talk with their children about the French program over the last two years and provide feedback about any changes in the use of French at home, their child's skill development in French and what they do or do not like about the French program. Here is a summary provided by the teacher (only grammatical editing to ensure clarity of message):

- All parents reported that their child uses French spontaneously outside of school for basic greetings, manners, and requests. All parents reported that their children regularly sing French songs at home, can count in French, know the sounds of the alphabet and loved all the work with the French plays.

- We are very excited that ... is fluently learning another language at her age. We can really see the benefit it brings to her in learning about another culture too.
- ... really enjoys speaking French. The two lessons a week are really helping her “to make sense of the language”. She feels very proud when she teaches us how to pronounce the words.
- Seems as though the younger son enjoys learning French because he is always using French words at home.

The French teacher summarised the last two years as a gradual, step-by-step process of trial and error that has led to the point where clearly measurable improvements were observable in all children. A strong focus on a systematic and explicit phonics program was recorded as one of the most significant changes along with a similar approach to oral language development. It was then noted that the assessment tools and schedule were particularly helpful for monitoring student growth and subsequent planning. The next modification of significance was the help provided by parents, the French assistant and the high school buddy classes. These reportedly enabled a much greater exposure to French, targeted reinforcement of learning and support to ‘nervous’ classroom teachers. In support of these activities was the school Wikispace for French that was judged to have been a huge success in managing the flow of resources across classes and for providing access to sound files of native speakers.

These teachers’ final summative comments were as follows (only grammatical editing to ensure clarity):

- I believe I’m now at the stage where I can confidently sell the MLL to all staff. There have been ups and downs over the past two years particularly with time required to make suitable resources.
- The use of the wiki has been my saviour and is so readily accessible by the whole staff and wider community.
- I have applied for SSO (teaching assistant) time to coordinate my parent volunteers and feel this is a real necessity moving forward.
- Although I have found quite a few e-books for French, and have translated and put on Smartboard files some of the reception sound-family readers but I am really hoping there will be some funding to make this easier. I would love the receptions to have their English reader plus a French version to practice each night at home.
- We have used flip cameras a lot this year and they are great motivational tools for the students. The class can hear and assess their pronunciation and conversation skills in plays. I will continue using these often.
- The music teacher and I will plan to present music-based French to class teachers to consolidate phonics and vocab.
- I will approach the library for funds to purchase French readers (if I can find any suitable ones).
- I will attend each Term’s planning meetings and tailor a group approach to integrate French into their literacy block.

## 5.7.6 CASE STUDY 6 (Teachers N & O summative remarks)

### 5.7.6.1 Teachers N (Classroom, now Years 1-2) & O (Italian)

These teachers' summative comments on their reported pattern of Italian and integrated English-Italian teaching and learning, that were attributed to the PLP, and their intentions for the MLL Approach at this site in the future are reported below.

The specialist Italian teacher summarised the last two years thus:

- *I have thoroughly enjoyed participating in the MLLP in 2010 and 2011. Not only has it changed the way I teach Italian but it has also given the Languages programme a higher profile at our school.*
- *My objective at the beginning of the topic was to apply my Early Years methodologies to a languages programme. I feel I have successfully done that by reflecting on the readings, discussions and information collected from the programme.*
- *Thank you again for the opportunity. I look forward to continuing to use the methodologies throughout 2012 and beyond and to continuing my association with you.*

There were two final summative comments from these teachers that had been echoing throughout this account (only grammatical editing to ensure clarity):

- With a literacy-based programme we are in desperate need of readers that are suitable for teaching/practising reading with beginning learners, so properly levelled, and we need good non-fiction texts.
- I (Italian teacher) was so pleased when my new principal wanted to discuss the project with me and what I had learned. It is interesting how much difference a change in leadership can have. [My principal] attended the first session with me in the second year and when we returned to school I was asked to devise a plan for sharing this input with the whole staff. This led to changes in budget, considerations of timetabling more for Italian and the first discussions around the links between languages and literacy.

### 5.8.1 An introductory note to the reported measures of student learning

Measures of student learning, as noted in section 5.4, were developed and deployed as tools to identify and enable ongoing iteration and adaptation of tasks and practices as well as analysis of the impact that the overall MLL PLP achieved. There were two sets of measures that teachers from each school reported on, one specifically related to the English language program and the other to the target second language. These measures were introduced and discussed in chapter Three (sections 3.5.3 & 3.5.4).

The first table (Table 13) presents aggregated data on the growth in all learners' specified English linguistic knowledge and capacity to undertake specific literacy tasks that have been identified in the literature as important to the development of effective listening, reading, speaking and writing behaviours in English (e.g. National Institute of Child Health and Human Development, 2000; & Coch in Horvarth et al., 2017). The second table (Table 14)

presents aggregated data on the growth in specified linguistic knowledge and capacity of all learners to undertake specific literacy tasks, in a second language.

Taken together, these tables provide a basis for analysis (to be taken up in chapter Eight) of the impacts that implementation of the MLL Approach had on languages and literacy learning across the range of settings and languages involved.

What can be stated about the results reported in Tables 13 and 14 at the outset, is that there was a general tendency towards improvement in all assessed areas of language and literacy development. This improvement takes the form of teacher-reported increases in the identified knowledge (e.g., vocabulary) or skill that was a focus of their delivered programs of instruction (e.g., sentence reading in L1; reading comprehension in L2).

These assessments were developed and delivered in accordance with test specifications where available or in accordance with the training and direction provided through the PLP (see: 3.5.2, 3.5.3, 3.5.4). Moreover, teachers were given explicit instruction to ensure reliability, validity, and trustworthiness. This process was guided by Mason's principles for disciplined noticing and marking (see: 3.6.1) and Lonergan's transcendental precepts (see: 3.2.2, 3.2.3). The driving force was always knowledge in and for implementation, Lonergan's triple chord of knowing, (see: 3.2.2, 3.2.3). It was not an attempt at formal, quantitative validation of any tool, construct, practice, or program.

The impact on learning reported in Tables 13 and 14 were derived using a simple percentage change over time formula, aggregated at the class level for reporting here (see: William, 2015, 46-48 and 67 for supportive discussion on the increased reliability of aggregated data on groups; and 43-46 for supportive discussion on use of percentage change for measuring progress). The absence of norms for L2 learning in Australia negates the possibility of direct cross-linguistic comparisons. But the goal was not to quantitatively validate learning or any tool or construct, rather, it was to provide reliable data for actionable insights in the hands of practising teachers. It was their professional, experience-based judgments, aided by reference to expected tasks and outcomes from the new National Curriculum, that were sought and relied upon. This was an important approach if the findings were to speak directly to other practising teachers and system authorities, enabling rapid and coherent generalisation and implementation.

The percentage change over time formula, routinely used in treasury and finance settings as well as targeted use in medicine, was applied to the norm-referenced results from the L1 assessments to enable a consistent point of reference across L1 and L2 findings. The import of this relates to providing teachers with data to judge cross-linguistic impacts, principally from L2 to L1. That is, to identify in their view whether the increased and targeted focus on L2 literacy development negatively, or otherwise, impacted on L1 learning.



The formula used by teachers to identify change in student learning was as follows:  
aggregated end score (Term 4, 2011) – aggregated baseline score (Term 1, 2010), divided  
by aggregated baseline score, multiplied by 100 (this last step establishes the percentage  
change figure).

**Table 13: Summative English Language Assessments Term 1 2010 & Term 4 2011 (Percentage change during project)**

Overview: 9 classes with incomplete sets as noted in the text (chapter Three gives details of standard tests).

		ASSESSMENTS										
Q.	Record % of class compared with age Norms or CA with Norm	Peabody Picture Vocabulary IV (percentile + GSV) (9 classes)		Salford Sentence Reading (CA / RA) (8 classes)		Phonemic Awareness: PAST (pass/fail) (7 classes: 2 @ 100% pass before/after= no change)	Who am I? (44 marks) (5 classes)	Westwood SA Spelling Test (CA / SA) (7 classes)		Writing Assessment (Lang Level, Message, Directional = 18) (6 classes)		
1	Term 1 2010	56.2	150									
	Term 4 2011	59.8	165									
	Percentage change	6.4%	15 (10.2%)									
2	Term 1 2010											
	Term 4 2011			8.4	8.5							
	Percentage change			RA 1 month > CA								
3	Term 1 2010					17.66						
	Term 4 2011					27.48						
	Percentage change					55.6%						
4	Term 1 2010						36.7					
	Term 4 2011						43.5					
	Percentage change						18.5%					
5	Term 1 2010							8.2	8.5			
	Term 4 2011							SA 3 months > CA				
	Percentage change											
6	Term 1 2010									4.1	4.5	4.8
	Term 4 2011									5.3	5.7	5.8
	Percentage change									29%	27%	21%

Table 14: Summative Second Language Diagnostic **Term 1 2010** & **Term 4 2011** (Percentage change during project)

		COGNITIVE TASKS						
Q.	Record Total Avg Scores / No. of classes (9)	Oral Comprehension	Grapho-Phonological Correspondence (8 classes)	Word Knowledge – Translation (8 classes)	Recall of Vocabulary	Written Composition – linguistic sophistication (4 Classes)	Use of L2 Grammatical Conventions (3 classes)	Word Recognition / Reading Comprehension (8 classes)
1	Term 1 2010	1.52						
	Term 4 2011	2.98						
	Percentage change	96%						
2	Term 1 2010		2.08					
	Term 4 2011		5.59					
	Percentage change		169%					
3	Term 1 2010			6.64				
	Term 4 2011			4.55				
	Percentage change			74%				
4	Term 1 2010				8.43			
	Term 4 2011				23.54			
	Percentage change				179%			
5	Term 1 2010					2.81	2.45	
	Term 4 2011					6.89	3.12	
	Percentage change					145%	27.2%	
6	Term 1 2010							2.27
	Term 4 2011							3.87
	Percentage change							70.5%

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### **5.8.2** *Preliminary analysis of the reported evidence of learning in light of the theoretical model (MLL): reflections on growth using the Science of Reading (the Big Six framework)*

The Science of Reading (and Writing) is a constellation of accepted theories about the dynamic process of learning to read and write (and then using reading and writing to learn). It is most aptly and comprehensively identified by three well-known national inquiries into the teaching of reading (and literacy): in the USA there was the National Reading Panel Report (2000), in Australia there was the National Inquiry into Reading that is also known as the Rowe Report (2006) and in the UK there was the Rose Report (2008). The targeted focus of these reports, and the credibility they carry, underscores the specific use of the Big Six framework for reading (see Konza, 2014) when analysing the reported evidence of learning here. However, writing development has been reported on and included here in accord with the rationale established in section 2.3.3.

The 'Big Six' framework for understanding the reading process and early literacy development was adopted in this study. However, to be effectively operationalised some clarification and adaptations were needed to bring the Big Six framework into a discourse that was inclusive of multiple, different language programs and the MLL Approach principles, tasks and practices.

Through consultation with the expert-research network it was decided that the following alignments between the 'Big Six' and the MLL Approach were both useful for the purpose of analysis, and defensible in light of the Science of Reading, Writing, Kern's 'working theory' and the five MLL constituent theories (see 2.2.2):

1. **Vocabulary** was used as a measure of oral language development.
2. **Phonological awareness** was a universal measure of awareness of speech sounds.
3. Understanding of sound to symbol relationships was a universal construct for measurement of **phonics**-based knowledge and skills (e.g., decoding, encoding, blending and segmenting).
4. **Linguistic knowledge** (this was an additional indicator supporting the MLL Approach's focus on syntax, morphology and composition as well as the attendant learning principles: contrastive analysis and analogic reasoning).
5. **Fluency** was a consistent construct by definition but was not able to be assessed with standardised measures across languages at the time. Teachers were directed to make anecdotal records in their journals relating to the rate, accuracy and expression of their students' oral discourse, reading and writing that teachers of English were able to augment with the Salford Sentence Reading Test and Marie Clay's Writing Assessment (see 3.5.4).
6. **Comprehension** was also a universal construct that encompassed both oral and reading comprehension. This construct was constrained by the developmental boundaries noted in chapter Five: many of these students were in their first year of school and were not yet able to read in English nor did they have any vocabulary, oral or written, in the target language that could be assessed for the purpose of establishing a baseline. A normed, standardised assessment of vocabulary knowledge in English was available and used (PPVT IV: see 3.5.4) and the progression of Australian Curriculum learning outcomes within the literacy strand was also drawn upon as time progressed. Similarly, as instruction progressed in the L2s,

oral comprehension exercises and curriculum-based measures of reading comprehension were drawn upon in addition to anecdotal records of classroom communications and tasks.

What follows here is an aggregated account of the reported findings from these measures with overarching analysis provided by the project leader/researcher's journal records as necessary. These records account for the collaborative, contemplative dialogue at PL days surrounding the teachers' judgments in action of the impact of the MLL Approach on their students' learning.

#### 1. *Vocabulary development (oral language)*

The aggregated student assessment data reported here by the teachers indicate a 179% increase in their L2 vocabulary and a 6.4% increase in their normed percentile ranking for English vocabulary during the intervening period between testing. In the first instance, the L2 data was a very encouraging indicator of the success of the two-way, translanguaging practices employed by the classroom teachers in conjunction with the daily usage of the target language for classroom routines, games and oral language activities. On the other hand, there was one class that reported a 14% decline in the students' English language vocabulary relative to the normed scale that required further examination. Firstly, it was necessary to look beyond the normed percentiles to the assessment's (PPVT IV) Growth Scale Value (GSV) for vocabulary to grasp a fuller picture of what happened. In this case, the reported GSV data indicated a 'statistically significant' change in the class's aggregated vocabulary development with a score of 13 points or 8.6% increase. In terms of the PPVT IV scoring guidelines this was understood to indicate that while the norm for this age range of the population grew faster than the class's there remains an identifiable, significant increase in the class's English vocabulary, in the number of words that they understood.

Further analysis required a slightly different perspective to be taken from the language specific view offered by each set of discrete point data: an integrated stance. In relinquishing a monolingual oral language developmental position the operative understanding became one that viewed this class's vocabulary acquisition for English as one part of a cumulative, multilingual vocabulary for English and L2. Thus, an account of their oral language (vocabulary) development was made using both sets of data. There was a precedent in the Bilingual Verbal Ability Tests (BVAT). While specifically intended for students who are learning English as a second language, the BVAT is recommended for measuring bilingual verbal ability, or the specific constellation of cognitive/academic language abilities developed by bilingual individuals in English and another language. The rationale for this test is based in the reality that bilingual persons know some things in one language, some things in the other language, and some things in both languages. A subsequent premise is that there is a finite amount of cognitive processing to support vocabulary development and that this may mean cognitive effort expended on L2 vocabulary learning may come at the cost of L1

vocabulary learning. The Bilingual Verbal Ability Tests are comprised of three subtests from the Woodcock-Johnson-Revised Test of Cognitive Ability: Picture Vocabulary, Oral Vocabulary, and Verbal Analogies. This test overcomes the limitations of traditional procedures such as the PPVT IV that only allows for assessment of English language development. Unfortunately, the BVAT was not available in all the L2s in this project. But the test provided a framework and reference point for considering students' overall vocabulary acquisition.

While it was not feasible to simply combine the results of the two measures for the one class presenting as a negative anomaly into one meta-score, identifying the magnitude of development in both languages was rather straightforward. Firstly, this class aggregated growth in English vocabulary was statistically significant as indicated by the instrument's scoring guidelines (although no specific p-value can be reported using these guidelines); second, this class's aggregated increase in L2 vocabulary was 222%. The overall change, then, was positive.

On this basis, it was argued that the student-derived quantitative data (tests) supported the assertion that the overall, bilingual vocabulary (an oral language measure) development of all classes was positive and significant. Furthermore, when combined with the total, aggregated teacher qualitative data from chapters Six and Seven (classroom activities) it can be argued that the MLL principles, tasks and activities for vocabulary development as interpreted and enacted by each teacher was sufficient to maintain an overall increase in this key pillar of literacy development across the represented languages.

## *2. Phonological awareness (in particular, phonemic awareness)*

The teachers reported a 55.6% increase in overall phonological awareness in English as indicated by the PAST assessment and a 169% increase in the phonological awareness and grapho-phonological correspondence skills assessment in L2s for the intervening period between tests.

While the two measurement tools employed did not provide for an immediate summation into a single meta-score, owing to the coherence of the test objects and their referents, they did enable the identification of the overall performance in this key element of literacy development such that judgments could be made about the impact of the teachers' enactment of the MLL principles, tasks and activities.

The overall change in student performance, according to the given scoring and tables, was both positive and statistically significant. These data support the assertion that the MLL principles, tasks and activities for phonological/phonemic development as interpreted and enacted by the teachers and with these classes was sufficient to increase development of this key pillar of literacy development across the represented languages.

### 3. *Understanding of sound to symbol relationships (grapho-phonological correspondences: GPCs)*

Teachers of reception classes decided that no useful data on the students' grapho-phonological understandings in English could be gathered in advance of any instruction. Instead, these teachers were able to employ a norm-referenced assessment (Westwood, 2005) during and at the end of the project to determine how this cohort performed compared with the norm for the South Australian population. In terms of aggregated data, this protocol became the default for the classroom teachers as a whole. However, the L2 teachers took a different view and proceeded to assess these students' understanding of sound to symbol relationships at the beginning and the end (of the project). One explanation provided centred on the early print awareness experiences perceived to have occurred in the preschool setting.

It was reported that the aggregated development of grapho-phonological understandings at the end of the project was three months ahead of the norm for their chronological age in SA. As a whole, they were performing at a level commensurate with students who were three months older than them after six Terms of concerted use of the MLL Approach. Across the L2s it was reported that this student cohort's increase in their GPC understandings was 169%.

The overall change in student performance, according to the given scoring and provided tables, was both positive and statistically significant. These data support the assertion that the MLL principles, tasks and activities for understanding of sound to symbol relationships as interpreted and enacted by these teachers and with these classes was sufficient to increase development of this key pillar of literacy development across the represented languages.

### 4. *Linguistic knowledge (grammar; syntax and morphology)*

With respect to the performance of tasks requiring linguistic knowledge, the classroom teachers were able to collect data from two different tools: *Who am I* and the *Marie Clay Assessment of Writing*. Student performance on the first tool was reported to have improved by 18.5% by the end of the project. In fact, it was reported that nearly all students scored a perfect 100% on the final testing. Performance on the second measure is divided by the testing instrument into an assessment of the level of linguistic sophistication employed, the complexity of the message conveyed and the use of appropriate syntactical markers. On the first measure it was reported that the aggregated increase was 29%, on the second it was 27% and on the third it was 21%.

In terms of student performance in L2, questions 5 and 6 of the tool provided combined data on the level of linguistic sophistication as well as the appropriateness and accuracy of

syntactical markers. The aggregated increase in these areas was 145% and 27.2% respectively.

The overall magnitude of improvement in student performance reported, according to the given scoring, was both positive and significant when compared with the instrument's table of norms. These data support the assertion that the MLL principles, tasks and activities for the development of linguistic knowledge as interpreted and enacted by the participating teachers was sufficient to increase development across the represented languages.

#### *5. Fluency*

There were no developmentally suitable, readily available testing instruments for fluency in English and the represented L2s that could be reasonably employed by all teachers. Nevertheless, the assessments of linguistic knowledge noted above did provide some basic insight into students' written fluency. These measures were positive.

Interestingly, through the teachers' journals, annotated discussions in the project leader/researcher's journal during the course of the PLP, and subsequent interviews, it was reported by the teachers that the level of ease, accuracy and sophistication of oracy, oral reading, and writing across all languages was 'dramatically improved' over the course of the project and 'exceeded expectations' based on these teachers' prior years of teaching. Indeed, it was noted that not only were the students correcting and teaching the class teachers and school librarians their second languages but also their level of oral skills had progressed to the point that classroom teachers required assistance from the L2 teachers to determine the accuracy of their classroom oral communications. This was verified through site visits and in conjunction with the reported observations and assessment of linguistic knowledge can be said to be supportive of the statement that these students' aggregated fluency in L2 and English improved.

The overall change in student performance reported, according to the given scoring and teacher records, was positive. These data support the assertion that the MLL principles, tasks and activities for the development of oral, reading and writing fluency as interpreted and enacted by these teachers and with these classes was sufficient to increase development across the represented languages.

#### *6. Comprehension*

Given the age and level of schooling of these classes at the commencement of the project it was deemed by the teachers that no suitable test was available that could provide any more meaningful data on their English language comprehension than a combination of the PPVT IV and classroom observations (ongoing, formative curriculum-based assessments). Discussion on the results of the PPVT IV has already been provided (see chapter Three and above). In addition, these teachers reported that the aggregated performance of all classes



on age-appropriate written and oral comprehension tasks at the culmination of the project was on par with, or above, the year level requirements of the (then draft) Australian Curriculum for English, literacy strand, and the Australian Curriculum for Languages, Communication and Understanding strands

Similarly, the age and educational background of these classes at the commencement of the project required careful consideration by the L2 teachers with regard to performance on comprehension tasks. Again, the solution arrived at by the language teachers was to assess their oral comprehension (question 1) and their reading comprehension (question 7) using material presented through the school L2 program: they were curriculum-based measures. Given that the questions were grounded in the school program, the final L2 test instrument did remain faithful to the original questioning format, but the substantive elements reflected the ongoing classwork. That is, each of the final testing items were more sophisticated and detailed than their initial counterparts. This was reflected in the scoring rubrics and does not undermine reliability or validity (see Wiliam 2015, pp10-16 for argument on this point).

The L2 teachers reported that their classes' performance on the oral comprehension items increased by 96% over the course of the project while their performance on the reading comprehension section indicated a 70.5% increase.

The overall change in student performance reported, according to the given scoring, was positive for comprehension with one exception, in one of two Indonesian classes at one site (case study A). This last finding was interesting and invited further scrutiny given the preponderance of positive performance indicators in the other areas. An initial observation from the L2 teacher was that this did not reflect the formative data collected during the course of the project and that the increased sophistication of the written comprehension questions relative to the delivered program may be the cause. After further investigation into the fidelity or coherence between the language and content of this test item and the delivered teaching and learning program the project leader/researcher and project mentor confirmed the teacher's initial hypothesis. However, it is an interesting finding that the same result was recorded for this class in English comprehension using the Peabody measure of receptive language (see the aforementioned vocabulary analysis in this section). Such a discrete yet consistent finding is suggestive of a possible common underlying causative factor. Further investigation into the nature of the delivered program, pedagogical practices and learner characteristics would be an interesting exercise that would be necessary to ascertain what was happening. However, given that the measures remained positive (i.e., there was improvement) it may also be the case that a subsequent measure of students on this sub-element skill in six or twelve months may find that they have re-joined the normal rate of growth or surpassed it. This is also the nature of learning in action commonly noticed by teachers, that development does not always progress at a linear, uniform rate even if

teaching and learning stimuli remain consistent. On the basis of this and the linked, preceding discussion in chapter Six the view taken here is that this finding does not adversely affect the aggregated positive findings reported.

Hence, the overall and reviewed data supports the assertion that the MLL principles, tasks and activities for the development of comprehension as interpreted and enacted by these teachers and with these classes was sufficient to increase both oral comprehension and written composition (language sophistication, cohesion and print/punctuation, see points 4 & 5 above) across the represented languages other than one case of Indonesian written composition.

The findings presented in this chapter will receive further discussion in Chapter Seven (7.2.1). The next chapter presents and offers preliminary analysis of data from anonymous final interviews with participants and from occasional questionnaires they completed.

### **5.8.3** *Summary note on the teacher-researcher journal reports*

The insights and judgments offered by these teacher-researchers began with their specific experience of the general problem of practice described in Chapters One and Five (e.g., 5.2.1, 5.5.2.1), namely the 'Twin Solitudes' paradigm. Their accounts progressed to their judgments of the knowledge value of the MLL Approach and the PLP, in responding to that general problem, through reports of which elements they chose to adopt, adapt and develop, and the impacts those choices had on their students' learning.

These rich reports of adaptations of practice promoted by the MLL Approach and PLP reveal a general pattern of rebalancing curricular emphases involving the linguistic and cognitive dimensions of languages and literacy development, and report general improvements in student engagement and learning.

## **Chapter 6: Interview Data**

### Summary Messages

#### **6.1** *Project Data*

Most of the data in the preceding chapter were extracted from the teacher-researchers' reflective journals and presented with these were data from a second method of collection, namely the assessments of student learning. A third method of data collection within the research project is the focus of this chapter which considers the results of the end-of-project interviews with principals, languages teachers and their classroom teacher collaborators, to identify some patterns in these data and derive some key messages.

Mostly the interviews are presented here as observation and confirmation from an interconnected network of professionals: the participating teachers. This informant checking protocol offers the possibility for triangulation with the teacher-researcher journal data and the learning assessment data. In the next chapter, as a result of this process, summary messages will become available as preliminary research findings and research messages. The final chapter will then offer summative remarks and conclusions.

#### **6.2.1** *Interviews*

At the heart of this interview summary is the new knowledge these people represent and expressed in action. It is their knowledge, because it guided and continues to guide their professional activity, and it is a shared knowledge that guided and is guiding a shared activity, through which they manage as best they can to work together, and in concert with larger systems.

The data gathering involved in the summary interviews might be seen in such a context as feedback from a typical most valuable source, namely knowledgeable teachers. It was designed to be the kind of feedback that professionals working together routinely seek and provide for each other in a flow of collaborative activity. But in this instance the data gathering had a formal, evaluative aspect also, being a requirement to inform this researcher and the wider system about activities suggested through the PLP undertaken by the specified teachers acting in their professional capacities.

The transcriptions and summaries to follow were provided to the researcher by the interviewer, an experienced researcher and educational psychologist as noted earlier. There were no direct interactions between the researcher (project leader) or the project mentor and any of the participating teachers or principals with regards to the conduct or outcomes of the interviews.

### 6.2.2 Principal Interviews

Given the distinctly different issues confronting people with responsibility for such complex institutions as schools, the comments and opinions elicited by the interviews were surprisingly consistent. Each was in general extremely positive about the results of the involvement of their school in the project. The following are typical statements from the three principals:

- *It has worked to fulfil the expectations... it has made a difference.*
- *I have learned so much about the components of literacy and how L2 contributes.*
- *I would like to see it as permanent. It has worked for our children. I enjoyed being part of it.*
- *I am very positive... I would like to take it further.*

Equally, from each conversation an extremely important underlying theme was the establishment and promotion of partnership or 'jointness', as having value for the professional group and valuable outcomes for students:

- *We're a really open staff... we started learning together... it works well, works with us.*
- *I love the idea of assisting research that links to school activities.*
- *It strengthened and formalised the links between two teachers and has grown beyond.*

Each of the principals outlined in a number of statements at different points the important elements that go to ensure that messages are received, handed on and made effective. The principal's viewpoint and role may be expected to make them especially sensitive to the conditions of collaboration, of joined-up activity that make novel ideas travel and gain force. Productive partnerships are fostered and made more effective through the amplified message that the activity of those involved gives to the wider group. Steadily, more and more colleagues may be drawn in as staff actions become integrated around successful patterns established by a smaller core, building curiosity and a sense of anticipation and expectation in their colleagues:

- *There is increasing steady uptake as people see others' work. We need to continue this, progressing... a change process related to teacher confidence.*
- *I'm a 'teaming' person. The project is creating its own momentum. They all are learning.*
- *It is good to see teachers re-energised, good to see bonds between teachers strengthened, in new learning.*
- *We have led, and we could take a role in widening the impact of the message, possibly in a companion school.*
- *We got lots of ideas from the networking with other schools.*
- *I would like to extend this to the other staff.*

The principals naturally had views on the quality of the messages from the PLP that had offered them something that might or might not be of use at first hearing:

- *I ignored it at first, thinking it wouldn't work (because of our situation), but then I realised that it could complement what we were already on about.*
- *From the first session the quality of the professional development was brilliant.*
- *I always felt supported. When you asked something, you always got a response.*
- *The data focus and the knowledge of that they brought, enabling us to see improvement at regular intervals, I would like to keep pushing on with, with their help.*
- *We need to keep this connection with research.*
- *My expectations were very good, from conversations with the project leaders.*
- *People with current research knowledge, and keen to interest, relate to and listen to practitioners are invaluable working in school. They value-add.*
- *How X (a project leader) operates is a very positive factor, and teachers react well. I would like to have even more of this input for the whole staff, at staff meetings.*
- *We all have a place and need to go together to create fruitful interactions.*

The role of a researcher, as an external communicator of ideas, is certainly seen as a vital element, as long as they can demonstrate that the relevant research knowledge has connection and credibility for the practitioner. It was relayed to the interviewer that this was clearly the case here.

It was also clear that in each case the message from outside, knowledgeable and relevant as it was, was received productively because of some already existing internal patterns of communication at the schools involving key individuals. Success, it is beginning to appear, came from the two-way interactions, in which both researcher and practitioners could move together. In addition to the principals, each of whom showed great interest in supporting organisational change partnerships, within and outside their schools, one of the key individuals was usually the other-language teacher, whose position necessitates communication to establish and maintain diverse connections and joint activity with many other staff:

- *We already had this language and literacy focus. So, we started learning (the language) together. Being in the place of the learner was very useful for us... I realised that it (the project) could complement what we were already on about.*
- *She has visibility in the school, because of her commitment and knowledge and how she operates with other staff. She has credibility and the school supports this. She had contact with this work before in its formative stages, and she was able to engage the school in it... and through it I am happy to increase some necessary pressure for change.*
- *She looks for these projects so as to re-energise her work, and she had also already linked with the Literacy specialist. I was involved in a Literacy project, and I thought I could expect some useful connections to develop from this.*
- *It's good to see teachers re-energised. They themselves are doing this, not from outside. These teachers have a lot of trust and credit built up with their colleagues*

*- that's the credibility factor. Seeing the impact and spread and seeing it making a difference - the way it's gathered its own momentum - has kept the trust. People are confident to try new things... after a year new people were on board. I hope the established practice will run from year to year now. It's a continuity issue, and the group (of teachers involved) will decide.*

What needs to be appreciated, it is becoming clear, is that the existence of a complex reciprocal network of communicating individuals may need to exist, or its development be attended to, before messages hit their target and release their potential for improvement in action. The external source is a vital element, but so is the prepared seed ground. The parable of the Sower and good soil is always relevant.

Equally, the communicational conditions allowing the Multilingual Literacy Approach to show its value only have importance given that the Approach had real benefits to offer, and on that score the principals were united again, and in no doubt of the improvements in Approach, practice and outcomes for their teachers and students:

- *The focus on L2 learning helping Literacy keeps it going. I can see the spark, the focus, the re-energising. The results in the pupils are amazing.*
- *There has been a change of speed of children moving ahead in reading. We do not have a 'select' population, but all are now above the average level according to the 'Running Record'. All the different levels of students have shown improvement in recent measures.*
- *We have been shown new technology, and the new testing procedures which have both supported teacher alertness and broadened the teachers' view of what is happening in their classrooms.*
- *There is greater pupil interest, and kids voluntarily use both languages in the classroom.*
- *There is greater visibility of L2 in the school's culture, in the assemblies and so on.*
- *Positive feedback comes from parents, particularly at Junior Primary level. They are picking up, appreciating and supporting the way things are being done.*
- *My focus is on standards, on student learning. We need efforts like this when we seek quality.*

The principals were invited to think in system terms about conditions that facilitated the positive involvement in this project that they were reporting. Each of them gave prominence to the availability of funds to allow the teachers time from class duties for the planning exercises and networking exercises arranged as face-to-face interactive sessions for all teachers involved in the project, both L2 teachers and class teachers. This it seemed was another element of the constellation of conditions allowing the project to reveal its potential so consistently:

- *The special funding support was very important, otherwise the principal has to find resources.*
- *We were very supportive here, but the time off for the teachers really made the difference. The whole days off site provided time to plan, and with two people going the learning was amplified.*

- *Having the time for purposeful planning was a major condition of the success, as well as the data focus, to enable us to see improvement more immediately.*
- *You have got to have money to fund teacher release. This is really important. You have got to give staff time to do the work needed. Their time involved has to be valued.*

All the principals believed the Approach needed to be continued and extended but emphasised that the lesson about resources was clear. The problems of extending the Approach while encountering changes of staff and moving it to new levels, while real, seemed more soluble:

- *Having had at least a year to practice, and then having two more teachers on board, even the new teacher is caught up in the momentum.*
- *Staff want to do things better every year. We are trying to improve. I am heartened by this.*
- *We need resources and commitment. I've written it in as a strategy (in a school planning document). I would like to see it permanent. Relief teachers and visiting teachers can already be expected to follow the approach.*
- *We need a bit more pressure for change, with more people getting engaged. We need consistency across a broader front. A whole system approach could be research-based.*

The question about difficulties or problems with the Approach or the conduct of the Project only brought a mention of the problem all professionals have of finding time to do all the things they would find helpful, particularly in recording and planning. This is the other side to the positive reaction to the funding for teaching time release. In some ways the planning time encouraged the teachers to try to do even more in their teaching time, and to feel lacking when time ran out for recording events and suchlike follow-up.

The two country principals interviewed mentioned the need to take parent reaction seriously, as they felt misunderstanding might arise. According to one of them, the message that L2 helps L1 needed to be clearly sent. And one indicated a strategy for this based upon project experience, to the effect that it would be good to have a more formal parent meeting early in any such development, as parents would need to appreciate why the regular teachers might be absent from the classroom on occasion. On the other hand, the same principal reported some 'amazing community feedback' and told how the literacy project volunteers from outside had become interested and started to work between their own project and this one.

A final most important point remains to be highlighted. Each of the principals spontaneously identified the Project work fostering and maintaining confidence. One said that as the differences brought about by the Project became apparent, staff involved became 'confident to try things.' Another spoke of an increasingly steady uptake of the ideas of the Project as people saw results in the work of others involved, commenting that the change process was 'teacher confidence related'. Another comment elaborated several aspects of this confidence factor and its effects: staff saw a pattern of pupil interest emerge in the relations between

languages and had confidence to say, 'let's go with it'. Specifically exercises in 'translanguaging' (using both languages together to support current knowledge levels and try new patterns) had been 'confidence boosting', giving 'permission to experiment with language', making clear patterns of difference, and improving knowledge of sentence structure and vocabulary: 'they love doing it'. An overall comment from one principal about the Project was that they had a clear idea where they were going, and knew exactly what would happen, such that there were no surprises: 'putting it into action was no problem; it's given us the confidence.'

The confidence spoken of here may be related to the affirming of teacher knowledge, with a clear plan for building and extending, but also a freedom to experiment, reacting and adapting to the results and taking opportunities offered by the PLP's cycle of activity to iterate. This could not happen without messages that renew knowledge existing already, to direct attention clearly to ways of extending and using it and renew the energy and effort by allowing partnership and freedom to innovate and experiment. The emergence of confidence in professional knowledge in action is a key feature of the outcomes reported. These principals clearly appreciated that.

### 6.2.3 L2 Teacher Interviews

Overall, the messages from the nine teachers interviewed emerged clearly and consistently, across the teacher groups, and were consistent also with the views of the principals interviewed, such that the report can be given under five headings. Nothing said in any interview, nor the journal data would contradict these points according to the interviewer and project leader/researcher.

In the first place, no interviewee made negative comments about this project. All were positive and supportive:

- *I enjoyed it. There were no problems.*
- *I think it's been fantastic professional development for me. It's made a huge difference to my programming...professionally life-changing. Everyone needs to be involved in something like this.*
- *I had lots of wonderful moments learning with my colleagues.*

Secondly, it was reported that school effort was focused and energised, and that individual teacher skill and experience were re-affirmed by the conduct of this project. Some of the L2 teachers reported a particular sense of having their status in the school enhanced:

- *Aspects of my teaching have changed, not completely. It has explained what I already do, and offered new resources, more evaluation, and also brought in other teachers.*
- *There's a higher interest level across the teachers. We are working together, having regular meetings. The children now relate across all the teachers involved. We all had to teach differently.*



- *This project has reinforced things I learned before (in previous studies and projects), but with opportunities to develop further and liaise those skills with class teachers. The opportunities were fantastic... It (the message about L2 and literacy) is out there now. Principals are talking to us now.*
- *We are able to use our knowledge, and get the message across, that we are not just 'extra'. I have always tried to make this happen.*
- *I'm always selling L2. Now they (senior staff) are paying attention. I'm getting more of a say.*

Thirdly, the response of students involved was reported to be an increase in their enthusiasm and in the quality of their engagement with language studies, and an increase in their language knowledge and literacy skills:

- *Students are more positive. The middle years are more engaged, more willing to 'have a go'. In some Reception and Year 1 classes the growth has been huge.*
- *The students are a lot more enthusiastic and engaged, more willing to try things, and this continues with their class teacher. Parents comment that the children are more confident.*
- *Before, they learned, but did not have a deep level of understanding. Now they are going to a deep level of understanding, going from their interests, building on the class teacher's themes.*
- *There was a comment on better literacy levels in a class involved in the project. I can see better outcomes in L2 also, comparing the classes involved in the project with those not in it.*

Fourthly, it was reported that the professional learning provided was of high quality, particularly in bringing to participants' attention relevant and important current research:

- *The time off (for plenary project sessions) was really valuable. We were introduced to re-affirming background knowledge, new resources, networking and the various connections. We got more knowledge as to the 'why?' of what we were doing.*
- *Meeting the others was useful, to bounce ideas off, to check 'am I doing this properly?'*
- *I've grown in building my understanding of literacy. It has been a great team-building exercise, and the project directed us. We understand how each other works.*
- *This research - there's a lot of positives in it. There needs to be something (like this) in place if you want successful L2 acquisition.*

Lastly, it was reported that the Project Leaders (researcher and literacy mentor) communicated exceptionally well with participants, and were extremely responsive to the interacting variables and needs of the different settings and the strengths of the different teachers as they involved the teachers as partners in developing the implementation of the ideas at the core of the project:

- *There was not much specific coaching: you could do what you thought and see what the results were. We received guidance. We all shared what worked.*
- *Meeting regularly has had a huge impact. The Term (plenary session) days have been excellent. The continuing nature of the project has had real impact, re-*

*affirming our knowledge of how literacy operates, making us think about what works and what doesn't, with this ongoing reviewing. The Project Leaders sharing their expertise was really valuable.*

- *They (the Project Leaders) valued our professional judgment. Each setting is very different. The key to success is (appreciating) the intuitive nature of teachers.*
- *The project leaders supported, listened, provided resources. If you asked something, they were quickly on the line.*

There were some general characteristics of the L2 teachers and some general issues from them, which emerged from the interviews. Almost all were teachers who were seeking development and change for the better in their teaching. They tended to show commitment to the visibility of L2 in their school and were keen to be part of the mainstream, particularly with regard to literacy. Some were involved in other projects or had been. There was a particular propensity in some of them to seek closer team involvement with other teachers, despite valuing their own identity and independent professional judgment. The case studies contain several references to languages teachers acquiring a new role, sometimes formally and at other times informally, as literacy coordinator for their school (see 5.5.1.3, 5.5.2.2, 5.5.4.3, and 5.5.5.1). Links of this sort were in place before the project in only one case, so that the Project intensified what was already going on there. But this sort of role for, and linking with, languages teachers was far from common (then and now). Generally speaking, they sought credibility in their school by demonstrating their value in relation to the school's major goals and were seeking to educate their colleagues accordingly. The Project provided excellent opportunities of this sort, while at the same time extending their expertise in both L2 and literacy by exploring the link between them.

Teaching the teachers was a theme that occurred a few times in interviews. A couple of people referred to the fact that students took opportunities to tutor their class teacher in some of the L2 matters and gained confidence from seeing that their teacher was a learner too. The discussion and interaction between the teachers in school and in the special and highly regarded sessions organised for all participants each Term could also be seen as 'teaching the teachers'. But, as one of them said, it was a matter of understanding how each worked and of learning from each other. The role of Project Leaders was that of guiding a process very much operating among the teachers themselves and providing the background specialist knowledge to allow what was called 'teacher intuition' to get a little more formulation and become articulated for other individuals to grasp and learn from.

Most of the teachers referred to the value of the formal data gathering, and the importance of having it spread over sufficient areas of performance, and over a sufficiently extended period of time. They were not able to say much about results, as they would not yet have been able to study them, with the project data still being finalised at the time of interviewing.

Some matters were raised as difficulties, but not with the conduct of the project. They had to do with enabling conditions or future possibilities. A major comment was the usual issue of demand upon time for professional educators. They were unanimously exceptionally grateful for the release funding for the day meetings but felt that even then they lacked time to do aspects of the Project justice. Some had to learn more about the new technology on offer than others, and that could be relatively time-consuming. The Project's Edublog was regarded as having merit, but time was needed to learn how to interact with it if one wanted to get involved with it. However, it had some potential, it was generally felt. Like all technology, it needed to be used as a somewhat fallible tool, not a panacea. Most of these teachers had access to interactive whiteboard technology by the end of the Project and appreciated the chance to develop resources in relation to smart boards and other facilitating technology readily available. One school had its own computer page bulletin system, and this tended to be where the teacher worked, rather than the project Edublog. In talking to the teachers, one felt that even those most technologically advanced had been able to make useful teaching advances with technology through the work of the Project but lacked time and motivation to engage in major new learning.

Clearly the matter of school organisation is crucial for any work that demands a common pattern of activity from a number of teachers. In some ways this project in these settings was a test of the flexibility of the schools and their responsiveness to possibilities of improvement. There are, however, many pressures, and indeed many projects, that converge to influence school organisation. Changes of staff, class groups being split and re-distributed, and other such difficulties all occur for many different reasons. Trying to maintain continuity during the trial of an innovation that itself demands some commitment to consistency and stability is a test of administrative and political skill. Some of the teachers had had some difficulties in their schools relating to this kind of unforeseen change. But the prevailing message was that, at least for the duration of the project, schools had been supportive, some exceptionally so. There were, even in those cases, however, limits on what could be known about the future. This applied even where teachers felt that they had a great deal of say in what might happen with class groups going on and teaching responsibilities for those groups being decided. This is an uncertain world, subject to a 'constellation of causes'. One L2 teacher particularly reported expending quite a lot of effort in fostering the Project's pattern of organisational change but wondered whether some others who might have responded more fully had appreciated what they could have contributed. Most had had satisfactory or very satisfactory adaptations of work and interactions with colleagues. But almost all L2 teachers had these sorts of concerns about spreading the ideas and practice of the Project further, though all wished it to spread throughout their schools. Realistically they had to admit that in an uncertain organisational world even the continuity of the Project was

fraught with problems - those affecting the school from outside, and those lurking perhaps unrecognised within the current pattern of the school's and the teachers' organisational habits.

#### 6.2.4 Classroom Teacher Interviews

It would be easy to match the quotations from the language teachers, illustrating the five main stated points above, with strikingly similar statements from the sixteen class teachers interviewed. However, because of the different viewpoint involved, and the impact this way of working has upon classroom organisation and routine, the survey of comments below is organised to touch upon the points shedding light on different aspects of the particular perspectives of classroom teachers. Their positive overall view of the Project and support for the five major points already listed may, in the reported view of the interviewer, be assumed. This is despite the fact that some of the teachers had entered the Project only at the beginning of the second year. This seemed to have little effect upon either the success they reported or their enthusiasm for the experience they had undergone. It is clear that they had not lacked the necessary assistance from their colleagues in the Project or the Project Leaders in making up any lost ground.

The following summary comments are typical:

- *It was an enriching well-supported project with a really great balance of the theory and the practical, with opportunities to reflect and talk and work with colleagues.*
- *You were not on your own, as in many of these professional development exercises. I had time to reflect, and enough information to provoke thought, to challenge me and give me confidence to have a go, knowing that (the Project Leaders) were there to give advice and support when needed... and be rewarded with a celebration of what the children are doing.*
- *I can't think of anything I would change or do differently. It's re-affirmed a lot of beliefs I have had and how I do things... I can spread out into L2... It makes me feel even better about what I do and the way I do it. It was a positive affirmation of the journey I've been on... L2 is not a lesson the children just go off to. It's something we all share together, and it's been a learning curve for me... and after many years teaching sometimes you need that too.*

Turning to the more particular aspects of their comments, it should be noted in the first place that the class teachers were not usually initiators of their Project involvement. Commonly the invitation to the class teacher came from an already interested or involved L2 teacher, from the school leadership, or from both. A number of comments, however, suggested that these class teachers were approached selectively, because of some known propensity or characteristic - their willingness to engage in such things, their previous involvement with L2 or similar. Most of these teachers were from the JP classes, following from the Project emphasis upon early literacy development. A sample of their comments on their selection and invitation is:

- *I was invited by the L2 teacher. There was leadership support. I do speak another language.*
- *The invitation came from the Principal, knowing I was interested in professional development.*
- *I've been an L2 teacher.*
- *I was literacy co-ordinator and sharing a class with the L2 teacher.*
- *I was asked to participate by the L2 teacher and Principal.*
- *I was asked by leadership.*
- *I have a LOTE background.*
- *Another teacher declined, and I agreed.*

It emerges that these teachers were able to grasp what was required, engage in the necessary joint planning and consistently modify their classroom practices accordingly. Their willingness to do this and enthusiasm for the results suggests a high level of flexibility and professional learning awareness in this group of teachers. While, however, the Project did not create that potential for success, it clearly was able to capitalise upon it and exploit to the full. These teachers really appreciated what they received and experienced in the process. Though they had not been the initial promoters of this way of doing things, what they experienced in implementing the ideas involved made them convinced of the value for them and their pupils. Their appreciation of relating literacy practices in L1 and L2 was very clear:

- *It (the Project) showed me how you do acquire another language, and that L1 and L2 use the same pathway. The planning with my L2 teacher was great.*
- *The class routines are now different, to include L2. L2 is embedded.*
- *For me it was about the knowledge I've gained meshing the literacy learning in the L1 with the L2. Pupils are able to see these connections, to articulate them.*
- *I didn't have any L2 in the class before, now we have regular instructions, and so on. It's not a change of style, but it has extended my teaching I would say. The same activities I do in English I do in L2.*
- *I have a LOTE background. This meant I could use more of a different language for everyday routines. The Project validated what I was doing before. They (pupils) love having a different language. They really listen to it and respond. It keeps them sharp.*
- *Everything we are doing could be incorporated and adapted in class routines. Once I had learnt the language it wasn't hard. The big difference is the learning and working with a teacher I wouldn't have worked with. I've really enjoyed it. The kids' enthusiasm to learn is really positive.*
- *It's more meaningful and purposeful, and pupils are more enthusiastic. L2 is really embedded in the learning in general.*
- *They have been so enthusiastic. And I've seen in their English (with writing and reading levels) such a big improvement. It is amazing for 5–6-year-old Reception pupils.*
- *The kids are very enthusiastic. It's had an influence on phonological awareness, making a big difference in spelling, decoding and reading. I've had a lot of kids who had trouble with that. Now through the L2 experience they say, 'I know this sound in L2, and I know how it's different in English'.*

- *They love it, it's a challenge. It's the fun side of it too. They are learning to do things they find boring or mundane in English. It's a fun way by using L2. But they are still relating it back to their English learning.*
- *I've seen enthusiasm in my class. They are thrilled at picking up new words and using them.*
- *The pupils' translanguaging has been particularly powerful.*
- *The translanguaging gave the power to just 'go for it'.*
- *My class are Year 2 going to 3. They have been able to talk to L2-speaking visitors.*

In addition, some mentioned that the Project's results had included some particularly powerful and clear signals of its general value:

- *Last year I had a really difficult class. They have all improved and done fairly well, as a result of this. They are just so keen.*
- *(Deducing from NAPLAN) my class would seem to be ahead.*
- *It brings out abilities not previously recognised in some pupils and has highlighted gaps for others.*

Other, more extended and far-reaching, results were also singled out for mention:

- *There have been spin-offs in increasing (pupils') awareness of culture and identity.*
- *To see our school more aware of and embracing L2, and putting it out into the community, it's really rewarding.*
- *Parents have been asking for things to use at home.*

What was significant for many was that the process of the PLP altered their self-description of their experienced professional stance and gave them, as teachers in charge of a class, a different, broader and more productive relationship with their pupils:

- *What's been good about this project is that I've been a learner.*
- *I was learning alongside the children, and I was being supported in my own learning.*
- *I have learnt alongside the children. Then the children progressed faster. They now teach me. They love it.*
- *The daily visit to the L2 is important, and not a chore, just 10-15 minutes. I use an inquiry approach: they love it, especially as they are learning alongside me. At the start I was interested in knowing if I could support that.*

Clearly, what had happened following their Project involvement was decisive. Experienced teachers though they were, they were able to profit from new messages and to recognise that fact. They were impressed by what they had learned on the basis of the instruction and experience entailed, and were able to place this within the frame of their professional experience and operation in general:

- *The learning we've had from the Project leaders has had an impact on what I do and the way I do things.*
- *The message, the statistics, about L2 is important in making people want to do this.*
- *I've learnt a lot about literacy in general.*

- *It's good getting the research behind it, the brain research presented and so on. It makes things click and you understand where you are coming from and where to go next.*
- *We're experienced teachers and doing things automatically not necessarily thinking about theory behind it. But getting the theory is good. It validates what you are doing. It's then easier to justify it to others.*
- *The benefit was it made me look at my own teaching practices. It's re-energised me, to find out more information about L2 and get the children involved, and so they teach me. They love that.*
- *We have been given a lot of background research and what you can do from this. We have also been given the time to deal with it properly.*

A key aspect that emerges is that, in light of partly articulated or unarticulated messages to themselves about their tasks, they were able to lock into and accept the formal and articulated messages coming with the PLP, recognising in the process that such articulation was not only a message to themselves telling themselves what they were doing, but equally a message to other people not able to observe their activities or gain other messages. The PLP was therefore offering a frame for sharing of professional views, knowledge and purposes, to be expressed in action and further articulation in such a frame:

- *I work closely with the L2 teacher. The key is to collaboratively plan.*
- *The main thing is the need for time to get together and plan properly. You need at least half a day per Term.*
- *I communicate daily with the L2 teacher.*
- *When you can see the benefits for your class you put in extra time. Not every teacher would do this, or have the commitment, but this group would.*

It becomes clear that the group created in this way their own frame of open channels for such collaborative communication. This had to be a result of the chemistry between the validity of the Project ideas, the quality of the communication of those ideas by the Project Leaders, and the quality of the purposeful receptivity to those ideas by the participants. No single element in this constellation of causes was perhaps more decisive than the others. In this way a single field of force was brought into existence in which all participants felt valued, enriched and part of a joint activity:

- *Teachers new to this should come and see the enthusiasm of the Project Leaders. I didn't know what to expect till I saw them.*
- *The Project Leaders have been very supportive, giving a unified direction, but one adaptable to different settings. We have all been involved in professional dialogue. This has been very useful. The networking has been amazing. You want to be part of it.*
- *It's a group approach, a real team journey. It's not one person. Having the data to point to helps the message to spread.*
- *It was great to have time to get together and share.*
- *The Edublog was worth looking at, but not essential. The meeting once a Term is more beneficial. Face to face discussion is more valuable.*
- *The off-site meeting is important, to talk and reflect. It's more focused.*

- *All our (school) settings are different, but this (meeting together) linked everything together, and kept us motivated. At school on my own it would have fizzled out.*

As professional teachers, participants were sensitive to the need for clear and relevant feedback and aware of the variable nature of persuasive messages, for their knowledge base. They were particularly able to appreciate the value as messages to themselves and other professionals of clear results, achieved through systematic and regular assessment procedures when related to central purposes of their activities:

- *This is something we can take with us, because we have seen the results.*
- *Having the data to point to helps the message to spread.*
- *A lot of the assessment has really been useful, and authentic for us.*
- *Other teachers have been impressed by the tests and testing schedule.*

A related indication of their acceptance of the success of the exercise, above and beyond any tendency to bias or wishful thinking on the part of any interested party, is the commitment to accept, adopt and continue to act upon the insights gained. The interviewer noted that something had clearly changed for them, not merely based upon exercising their pre-existing knowledge and skills:

- *I'll definitely continue. I've already ordered resources and checked with the L2 teacher about working together. The kids who are used to it will help to teach the 'new' ones.*
- *You could continue it yourself in future teaching, for example by buddying-up with a colleague. People (like us) might act as leaders, taking the ideas to more people. I know I will continue. I am enthusiastic and am still learning.*
- *I'm enthusiastic about it. I see my role now... as sharing what I do with others. Not all would jump at the chance, but when they see how easy it is... Teachers may have the fear that they are getting yet another thing put on them they have to achieve. But it is just a part of what you already do... it's easy, and there the resources... you do it to the level you can. There are programs on the server at school... they can put them up on the web. They can see the success my class has had. My pupils have done really well and are enthusiastic.*
- *I would continue and would want to do more with my incoming class. We need to move it up into the Middle Primary too. This would need a bit of mentoring from us, sharing the resources etc.*
- *I intend to carry on. I've got the resources and I've got a bit more understanding of the process needed to go through. I'll be able to apply it to a new bunch of children very easily.*
- *We need to bring in other teachers. If they see the improvement they will come in, but they will need support. The L2 teacher is enthusiastic. The Principal and Department could support this.*
- *I hope it will spread through the Junior Primary... so the Primary levels who are reluctant L2 learners will become more enthusiastic and carry it on.*
- *In the short time we've had to discuss follow-up we've already come up with contingency plans that we'd like to do and take it on further... It's something worthwhile that we've started thinking about. In our early years group, there's not a lot of other people that need to be involved, but they are keen anyway. Hopefully we will carry it on next year.*



These teachers are already viewing themselves as people who will transmit an important message to other teachers through their words or professional actions. Indeed, for one the message has already gone before them:

- *I'm going to a different school. They are really keen to do this there.*

It should be borne in mind that these comments come from teachers who would not two years previously have seen the JP class teacher as having a great deal of responsibility in the L2 area. Now they are seeking to effect changes in the way class teachers operate throughout their schools, with or without the resources and support that would be desirable. Their commitment, and that of their colleagues or school leadership, had already indeed overcome a few problems, mainly created by school organisational issues and the usual education institution time pressures not particularly related to the Project:

- *(In the second year of the Project) I ended up with only 2 or 3 (pupils) who had done the first year.*
- *A lot got split up and I thought it beneficial that I would help it continue.*
- *There was support. The whole class had to come up together, and that needed whole school agreement.*
- *We are doing it with rotations and making it JP friendly. The whole school became aware of what was going on.*
- *They might not stay with this (L2) teacher when they go on, though. I hope that doesn't happen.*
- *We are trying to implement the resources in all classes, but it would be difficult to find funds without the project. Maybe it will be done by individuals, through their Training & Development responsibilities, or it might become a school priority.*
- *There could be a bit of a problem having the time to prepare resources, without support.*

These were largely concerns for the future, though all types of interviewee had mentioned how much more they could have done were more time available to them. By and large the participants were extremely grateful for the level of support the Project had received, most specifically, as already noted, for the all-day plenary meetings once a Term and the support of the Project Leaders:

- *We've been fully supported, coming to these all-day meetings regularly and having the Project Leaders come out to our setting and discuss things.*

There were those also who felt that they might have done more with the technology introduced into the Project but had problems with availability of technology at their site, lack of requisite expertise in their own case, or, again, pressures from the general lack of time for full utilisation of all opportunities the Project might open to them. By and large the class teachers did appreciate being given some introduction to some very useful technological tools, which were used by different teachers to varying degrees, as their situation and judgment might decide:

- *The tech resources were good tools.*
- *The smart board developments, talking speech bubbles, storyboards etc.... all provided a kit of tools we can use.*
- *The pupils go on-line with the language program they enjoy.*
- *We've had the interactive boards this year. It's been good to broaden my own knowledge of L2.*
- *The new technology, the resources coming with the smart boards. It takes time. But we've been provided with useful links etc.*
- *We only got the boards recently. With the technology we could improve more. We've done it the hard way, without it.*
- *I've looked at the blog but did not have the technology to follow it up properly.*
- *It depends on how used you are to blogging; otherwise, it takes time to use it more fully.*

One could have expected that the L2 teachers would have pushed for a new appreciation of the role of L2 and broader application of the benefits of L2 study, given how L2 teachers have to operate in primary schools in South Australia, as discussed above. The same expectation would not apply, however, to the ordinary classroom teacher, with major responsibility for the broad spectrum of the learning of the children in their class. So, these class teachers might have been thought somewhat less likely to have taken on a newer and rather more complicated view of their role and responsibilities, engaged in developing the pupils' literacy in both L1 and L2. However, it is clear that the teachers involved, whose views are excerpted above by the interviewer, were able, through participation in the PLP, to embrace some redefinition of their role in relation to that of the L2 teacher. It is equally clear that this happened through the successful communication of some notions of literacy found to be valid guides to successful classroom practice, linking the teachers in common purpose, and justifying in their eyes the abandoning of current practice in various ways.

### **6.3**    *Key Messages from Interviews*

This report of principal and teacher views and comments about the Multilingual Literacy Approach and implementation Project (2010-2011) was based upon relatively short interviews, guided by fairly general questions. Nevertheless, in the judgment of the interviewer adequate opportunity and encouragement were provided for the interviewees to air any opinions and judgments on all aspects of the Project in whatever way they wished. The message was overwhelmingly positive; adding weight to the PL questionnaires submitted anonymously after each all-day plenary session of the PLP. These had been used to inform the ongoing iteration of the program (see Table 15 below). And it can be commented that this Table shows a high level of satisfaction with the PLP design and delivery. Those few concerns raised during interviews were linked to site-based operational factors rather than the PL. No interviewee made negative comments about the Project, and

all were supportive. There were in summary four key messages underlying the views and comments:

1. *Firstly*, that school effort was focused and energised, that individual teacher skill and experience were re-affirmed, and at times extended, by the conduct of the Project.
2. *Secondly*, that the response of learners involved was an increase in their enthusiasm for and quality of their engagement with language studies, and increased growth in their language and literacy knowledge and skills.
3. *Thirdly*, that the professional learning provided was of high quality, particularly in bringing to participants' attention relevant and important current research.
4. *Fourthly*, that the Project Leaders communicated exceptionally well with participants, and were extremely responsive to the needs of the different settings and the strengths of the different teachers as they involved the teachers as partners in developing the implementation of the ideas at the core of the Project.

These are important preliminary research findings on the MLL and the PLP. Their importance is principally derived from the fact that they are the professional views from a trustworthy source: the participating teacher-researchers. This trustworthiness was aided by the informant-checking nature of the interview protocols undertaken by an independent evaluator. In the next chapter, these key messages will be shaped as research findings and research messages through an abductive process of triangulation and integration with the other data sources: teacher-researcher journals and learning assessment data.

#### **6.4** *PLP evaluation questionnaire summary*

Table 15 summarises the overall feedback provided by the participants after each of the eight, regular plenary days at Flinders University. It shows a clear pattern of positive feedback from those who responded. There was a small departure from this pattern on days three to five where the focus was data analysis, planning and induction of new staff. The questionnaire was also a mechanism for anonymous communications from participants to providers on the knowledge value and practical utility of the MLL, current state of implementation efforts and foci, indications of planned changes to curricular and expectations of support that would be sought, as well as the value and impact of plenary day techniques, tasks, activities and information.

This feedback provided for recursive cycles of program iteration that ensured techniques, tasks and resources considered effective by the participants were identified, maintained and built upon, such as: metacognitive demonstrations and supported in-step planning, collaborative analysis of learning, timely identification and provision of key resources for teachers' ongoing program iterations and implementation (e.g. developmental schemes and L2 literature), and identification of specific coaching foci for site visits. The tool also sought information about expectations and outcomes from each plenary day. This information was used to identify whether key input had been understood, or whether further attention would be required (e.g., recycling of key ideas; see PowerPoints in attachment 4).

**Table 15: Multilingual Literacy Approach: professional learning program evaluation summary**

<b>Plenary Days</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Vey Good</b>	<b>Excellent</b>
<b>Day 1 (2010)</b>				7	11
<b>Day 2 (2010)</b>				4	15
<b>Day 3 (2010)</b>			1	3	12
<b>Day 4 (2010)</b>			3	5	17
<b>Day 5 (2011)</b>			3	4	18
<b>Day 6 (2011)</b>				6	15
<b>Day 7 (2011)</b>				4	15
<b>Day 8 (2011)</b>				1	7
<b>TOTAL</b>			<b>7 (4.5%)</b>	<b>34 (22.5%)</b>	<b>110 (73%)</b>

## Chapter 7: Discussion and Summation of Data, with Triangulation of Data Sources

*Once we accept that evidence from carefully conducted research studies can help in the improvement of educational outcomes, the question that immediately follows is “what kinds of evidence”...*

William, D, 2019, p127

### 7.1 *The force of summary messages from and about implementation enacted through a collaborative, research-informed professional learning program*

The clear message from the independent interviewer’s summaries was that the PLP was very well received. Adding to this is the feedback provided after each plenary day by way of the questionnaire (see attachment folder Five and Chapter Six, Table 15). Again, this was extremely positive. Any difficulties that were mentioned related to site-based operational issues rather than the conduct or content of the PL provided. It was the opinion of the group that the classroom experiences, relational abilities and capacity to demonstrate the enactment of practical pedagogical solutions translated from theory and practice by the project leader/researcher and mentor were of a high standard and supported the resolution of questions, dichotomies, discourses and implementational matters encountered. The strategic use of site visits was seen to be a particularly valued strategy that maintained momentum and an effective mechanism for supporting group cohesion and the implementation of ideas, tasks, practices and resources interrogated on plenary days.

What is the best explanation for these messages? Why did the participating teachers deem the PLP to be particularly effective at establishing implementation conditions which can be reported to be important and productive (see pp.264-270)? Guskey’s general principles are instructive. The work of Guskey was a key point of reference in the design of the overall program, for reflecting on feedback given after each session, for ensuring ongoing responsiveness to participant needs and continual recourse to praxis. Guskey can be considered an early pioneer of viewing professional learning from the perspective of its impact on student learning, and while much has been said about this relationship and the adoption of student learning as a focus for the design and evaluation of professional learning since his seminal work *Evaluating Professional Development* (2000), the direction and momentum has not changed substantively. Much of the work in the field can be considered to be elaborations, and generally supportive of his findings.

Guskey (2000) argued that the main reasons for a lack of progress in identifying the general elements of effective professional learning relate to research efforts being confused about what constitutes ‘effectiveness’, focusing on a search for ‘main effects’ and neglecting issues around ‘quality’ and ‘adaptation’. His approach was to flip the established process of surveys and meta-analyses and instead start by looking for studies of programs or interventions that have caused measurable improvements in dependable measures of student learning rather than probing the literature to find specific elements that seem to make a difference. He was

calling for researchers to begin with real-life practice and its contextually rich data before looking for and isolating specific variables. His focus is upon praxis: upon disciplined noticing, marking, recording and interrogation of intelligence in action. His criterion for effectiveness, for claiming success "... is improved learning for all students. Effective efforts are those that have been successful in reaching that goal and have reliable evidence to prove it" (p35).

He goes on to explore what constitutes effective research into professional learning (p35, underlining is mine):

*The alternative approach suggested here involves a quantitative and qualitative analysis of multiple cases. It involves the careful synthesis of different kinds of data gathered in multiple settings. By analyzing results from successful efforts in a variety of contexts, the dynamic influence of specific elements within a context can be better understood, and the applicability of professional development elements across contexts also can be considered.*

While this study was not specifically designed as a research-oriented investigation into effective professional learning, what Guskey called for instructed its general shape and character. Hence, the messages from the teachers involved in the systematic PLP that was the research vehicle have value in regard to the canon of literature building around this PLP approach, aiding explanation of the conditions and variables that contributed to the measured and reported findings about the MLL Approach.

There were four overarching messages distilled from the final interview communications from participants about the conduct and content of the PLP. They are restated here for consideration in light of the principles of effective professional learning identified by Guskey:

*Firstly*, it was reported that school effort was focused and energised, and that individual teacher skill and experience were re-affirmed by the conduct of the PL program.

*Secondly*, it was reported that the response of pupils involved was an increase in their enthusiasm for and quality of their engagement with language studies, and an increase in their language knowledge and skills.

*Thirdly*, it was reported that the professional development provided was of high quality, particularly in bringing to participants' attention relevant and important current research.

*Fourthly*, it was reported that the Project Leaders communicated exceptionally well with participants and were extremely responsive to the needs of the different settings and the strengths of the different teachers as they involved the teachers as partners in developing the implementation of the ideas at the core of the Project.

Specific details of the PLP are provided in attachment folders One, Two, Four and Six. They are starting points for these messages and the logical place to begin to look for '*the dynamic influence of specific elements within a context and the applicability of professional development elements across contexts*'. Tantalising as it is to delve into these relationships and to explore the magnitude of resultant impacts from specific PL tasks and ideas, what

there is scope for here is to look to Guskey's general principles for any correlation and corroborations between what he and his colleagues have found from those types of investigations and the four preceding summative messages provided through the interviews. Essentially, corroborations will help to explain the success of the program while any incongruence will require more fine-grained analysis of the teachers' accounts and the literature.

On the basis of research efforts that provided detailed information gathered from multiple contexts using carefully considered combinations of both quantitative and qualitative data analysis procedures, the following four general principles were found by Guskey (2000) to underpin the diverse mixes of practices and strategies used in successful PL efforts:

1. A clear focus on learning and learners.
2. An emphasis on individual and organisational change.
3. Small changes guided by a grand vision.
4. Ongoing professional learning that is procedurally embedded.

It is perhaps instructive to use the words of the interview participants themselves in corroborating across Guskey's principles and the overall evaluation of the PLP.

1. A clear focus on learning and learners

- *This is something we can take with us, because we have seen the results.*
- *Having the data to point to helps the message to spread.*
- *A lot of the assessment has really been useful, and authentic for us.*
- *Other teachers have been impressed by the tests and testing schedule.*
- *Students are more positive. The middle years are more engaged, more willing to 'have a go'. In some Reception and Year 1 classes the growth has been huge.*
- *The students are a lot more enthusiastic and engaged, more willing to try things, and this continues with their class teacher. Parents comment that the children are more confident.*
- *Before, they learned, but did not have a deep level of understanding. Now they are going to a deep level of understanding, going from their interests, building on the class teacher's themes.*
- *There was a comment on better literacy levels in a class involved in the project. I can see better outcomes in L2 also, comparing the classes involved in the project with those not in it.*
- *The focus on L2 learning helping Literacy keeps it going. I can see the spark, the focus, the re-energising. The results in the pupils are amazing.*
- *There has been a change of speed of children moving ahead in reading. We do not have a 'select' population, but all are now above the average level according to the 'Running Record'. All the different levels of students have shown improvement in recent measures.*
- *We have been shown new technology, and the new testing procedures which have both supported teacher alertness, and broadened the teacher's view of what is happening in their classroom.*
- *There is greater pupil interest, and kids voluntarily use both languages in the classroom.*

- *There is greater visibility of L2 in the school's culture, in the assemblies and so on.*
- *Positive feedback comes from parents, particularly at Junior Primary level. They are picking up, appreciating and supporting the way things are being done.*
- *My focus is on standards, on student learning. We need efforts like this when we seek quality.*

2. An emphasis on individual and organisational change

- *We are trying to implement the resources in all classes, but it would be difficult to find funds without the project. Maybe it will be done by individuals, through their Training & Development responsibilities, or it might become a school priority.*
- *I'll definitely continue. I've already ordered resources and checked with the L2 teacher about working together. The kids who are used to it will help to teach the 'new' ones.*
- *You could continue it yourself in future teaching, for example by buddying-up with a colleague. People (like us) might act as leaders, taking the ideas to more people. I know I will continue. I am enthusiastic and am still learning.*
- *I'm enthusiastic about it. I see my role now...as sharing what I do with others. Not all would jump at the chance, but when they see how easy it is...Teachers may have the fear that they are getting yet another thing put on them they have to achieve. But it is just a part of what you already do...it's easy, and there are the resources...you do it to the level you can. There are programmes on the server at school...they can put them up on the web. They can see the success my class has had. My pupils have done really well and are enthusiastic.*
- *I would continue and would want to do more with my incoming class. We need to move it up into the Middle Primary too. This would need a bit of mentoring from us, sharing the resources etc.*
- *Aspects of my teaching have changed, not completely. It has explained what I already do, and offered new resources, more evaluation, and also brought in other teachers.*
- *There's a higher interest level across the teachers. We are working together, having regular meetings. The children now relate across all the teachers involved. We all had to teach differently.*
- *This project has reinforced things I learned before (in previous studies and projects), but with opportunities to develop further and liaise those skills with class teachers. The opportunities were fantastic... It (the message about L2 and literacy) is out there now. Principals are talking to us now.*

3. Small changes guided by a grand vision

- *We already had this language and literacy focus. So, we started learning (the language) together. Being in the place of the learner was very useful for us.... I realised that it (the project) could complement what we were already on about.*
- *She has visibility in the school, because of her commitment and knowledge and how she operates with other staff. She has credibility and the school supports this. She had contact with this work before in its formative stages, and she was able to engage the school in it.... and through it I am happy to increase some necessary pressure for change.*
- *She looks for these projects so as to re-energise her work, and she had also already linked with the Literacy specialist. I was involved in a Literacy project and I thought I could expect some useful connections to develop from this.*
- *It's good to see teachers re-energised. They themselves are doing this, not from outside. These teachers have a lot of trust and credit built up with their colleagues - that's the credibility factor. Seeing the impact and spread and seeing it making a*



*difference - the way it's gathered its own momentum - has kept the trust. People are confident to try new things.....after a year new people were on board. I hope the established practice will run from year to year now. It's a continuity issue, and the group (of teachers involved) will decide.*

- *I've learnt a lot about literacy in general.*

#### 4. Ongoing professional learning that is procedurally embedded

- *The Project Leaders have been very supportive, giving a unified direction, but one adaptable to different settings. We have all been involved in professional dialogue. This has been very useful. The networking has been amazing. You want to be part of it.*
- *It's a group approach, a real team journey. It's not one person. Having the data to point to helps the message to spread.*
- *The Edublog was worth looking at, but not essential. The meeting once a Term is more beneficial. Face to face discussion is more valuable.*
- *The off-site meeting is important, to talk and reflect. It's more focused.*
- *All our (school) settings are different, but this (meeting together) linked everything together, and kept us motivated. At school on my own it would have fizzled out.*
- *Meeting regularly has had a huge impact. The Term (plenary session) days have been excellent. The continuing nature of the project has had real impact, re-affirming our knowledge of how literacy operates, making us think about what works and what doesn't, with this ongoing reviewing. The Project Leaders sharing their expertise was really valuable.*
- *They (the Project Leaders) valued our professional judgment. Each setting is very different. The key to success is (appreciating) the intuitive nature of teachers.*
- *The project leaders supported, listened, provided resources. If you asked something, they were quickly on the line.*

It is clear from these reported comments that the Project had drawn in some very active and engaged L2 teachers, and some class teachers both interested in L2 and keen to develop their teaching in new ways. In some cases, school support might have been of particular import, but in many it built upon existing staff potential and commitment. These teachers, their schools and site leaders, were a valuable resource for the PLP. It is noteworthy perhaps that there seemed to be no difference in commitment and response whether the teachers had started with the PLP or entered only for year two of its duration. Participants seemed to have locked into the program of learning quickly, and the teachers as a group gave the impression to the interviewer that it was a good group to belong to, both in terms of professional focus and active dialogue. It was a group that had developed confidence in itself to implement and promulgate the MLL Approach and in the student learning data by which it was able to judge its effectiveness.

Clearly no one condition underlies the positive outcome of a PLP such as this. The ideas have to have value, their communication has to be clear and compelling, the professionals who are the recipients of the ideas have to be respected and engaged, and they have to have characteristics and attitudes conducive to their responding to the experience by suitable professional learning in action. Herein lies the corroboration with Guskey's four

principles. All these elements have been shown to be present in this PLP, on the basis of the views and comments reported here. Hence it was effective.

Teachers and leaders involved have stated the intention to continue to develop and extend this pattern of programming and teaching for the *grander vision* of integrated languages and literacy learning. A number indicated that they would like to help spread the messages through their school or to other schools. The interviewer commented that he felt as though he had stepped into a particular web of knowledge held together by unified messages about key educational tasks. It is perhaps this final statement that is most illuminating, or explanatory in respect of the effectiveness of the PLP that was both the vehicle for answering the research questions and the key strategy underpinning implementation and organisational change in sites.

### **7.2.1** *Summary messages: triangulation across the three data sets (journals, measures of student learning, and interviews)*

What is important now is to identify correlating messages, or evidence, from the other data sets to corroborate these results. Before any corroborating links are claimed it is worthwhile recalling the methods used for collecting evidence about the PLP: reflective journals, reliable measures of student learning, plenary day questionnaires and interviews. What they focused on is also important to recall so that a clear foundation of legitimacy is given for the general explanatory claims to follow.

1. *Teacher reflective journals* facilitated the collection of data about: teachers' reactions to the program; their acquisition and uptake of the intended knowledge, skills and practices; organisational support and change; their enactment of the MLL principles, tasks and activities; and reports of student learning (formative, summative and diagnostic).
2. *Questionnaires* facilitated the collection of data about teachers' reactions to the program; the intended learning; and their expectations for future input.
3. *Measures of student learning* facilitated the collection of data about student learning (formative, summative and diagnostic) reported via the teacher reflective journals.
4. *Interviews* facilitated the collection of data about: teachers' reactions to the program; their acquisition and uptake of the intended knowledge, skills and practices; organisational support and change; and their enactment of the MLL principles, tasks and activities.

The process of data triangulation is closely linked to the notion of trustworthiness as argued earlier in the thesis. The aim here is to assess summary messages and research findings from each data set through what is sometimes referred to as a phenomenological approach to interpretation or seeking confirmability of the reported phenomena as messages derived from patterned data sets from differing techniques (Lincoln & Guba, 1985; Ary, Jacobs, Walker & Sorenson, 2013).

Key summary messages from the interviews have been established (see section 7.3). The focus now is upon eliciting patterns from within each of the two remaining data sets and then attention will be turned to the task of identifying patterns across two or more of these sources of data.

The measures of student learning have been reported (5.8.1 & 5.8.2) using the general, pedagogical notion of 'distance travelled' or growth. In some instances, this distance was measurable against population norms and in others it was measured against a baseline established at the outset of the PLP using standardised, criterion-referenced tools. The data yielded was analysed and provided by the participating teacher-researchers in accord with the procedures outlined earlier (see Chapter Three and section 4.3.4). Tables 13 and 14 of Chapter Five give the aggregated results. Across these tables there are three clearly identifiable general patterns in the summation of measures of student learning: learners were found to have progressed at or above the average rate of development against those measures with normed scales; learners were found to have performed at or above levels of like-groups in standardised measures of literacy development; and, learners were found to have progressed at or above teacher expectations in standardised criterion-referenced measures of L2 acquisition and literacy development. These general practices were very solid, albeit containing individual variation and minor group variability.

In respect of the professional dialogue from the teacher-researchers' activity there were three sets of tables devised for Chapter Five (from Chapter Two) to code the impact that the ideas and practices of the MLL PLP had on their pedagogical beliefs, planning and practices at three points. These represent a distillation of their 'thick descriptions' of (teacher) change, from their records in journals and observations. Each teacher's responses to the ideas and acts of the MLL PLP were captured in the shifts between the starting point, mid-point and exit-point Tables in Chapter Five, the key final messages being that:

1. Classroom teachers were found to have categorically adopted, or transitioned to, joint L2 programs that were embedded across learning areas.
2. L2 teachers were found to have adopted a comprehensive program for early and foundational literacy development defensible in terms of the Science of Reading and Writing, and Kern's comprehensive view of the dynamics of literacy activity.
3. All teachers were found to have established integrated languages and literacy development curricula and curriculum development cycles that were collaboratively orchestrated, contextually responsive and iterated on evidence.

Looking now for points of congruence based upon the patterned results from the three available data sets, it can be suggested that the following summary messages appear:

1. Classroom and specialist languages teachers can productively plan for literacy development within and across languages using the research-based MLL Approach.
2. Classroom and specialist languages teachers can be encouraged and effectively trained to become trustworthy research-partners as part of their normal operational responsibilities and tasks.

3. Joint planning and teaching can effectively and efficiently develop from a broader research-based approach related to their teaching activity and be advanced upon a shared understanding of both universal and discrete schemas for language acquisition and cross-linguistic schemas for literacy skill development.
4. Languages programs can be comprehensively embedded across learning areas employing a literacy frame that acknowledges the essential interactivity of linguistic, cognitive and sociocultural tasks carried by translanguaging methodologies, contrastive/analogic reasoning techniques and transfer tasks.
5. Such programs do not hinder language acquisition or literacy development in either language, they improve them.
6. Contextual-cultural factors, such as openness to research and access to resources are variables that have a moderating effect on teacher, learner and school responsiveness to such novel ideas and their implementation effectiveness.
7. The effects of such moderator variables are significantly impacted by the availability, design and quality of professional learning, PL providers and their support for iterative implementation.

These themes have been drawn from triangulation, based on patterns in the three data sets as presented. They are overarching points of alignment and summary messages from the project. Taken together, they present an overview of the perspectives of the various participating teacher-researchers on the MLL Approach, the PLP and the effects that their various implementation initiatives had on their students.

### **7.2.2** *Preliminary research findings*

The main task for this chapter is to distil the summary messages into emergent research findings by aligning them with each of the research questions. The purpose is to provide a platform for further analysis of the development, enactment and findings of the Project, largely in light of the key working theory from Kern and the supportive theories used in the development of the MLL Approach and PLP including Anthony's schema of an Approach, Guskey's model of teacher change, the five cognitive-linguistic-neuroscientific theories underpinning the MLL Approach's curriculum-design organising principles and the Science of Reading and Writing.

It can be seen that particular data sets provide consistent entry points for aligning the summary messages and four research questions: as below:

- 1. Can a model (Spanish exemplar) curriculum, developed from general curriculum-design principles and tasks, be used as a basis for an integrative collaborative Approach to languages acquisition and literacy development in (South) Australian junior primary/primary school settings?**

Relevant data sets include:

Considerations of pedagogy (methods and tasks), student learning outcomes and assessments, evidence of cross-linguistic application of literacy skills learnt in one or both languages, evidence of student progression through the developmental sequences.

Relevant Summary Messages:

1. Classroom and specialist languages teachers can productively plan for literacy development within and across languages using the research-based MLL Approach.
2. Languages programs can be comprehensively embedded across learning areas employing a literacy frame that acknowledges the essential interactivity of socio-cultural, linguistic and cognitive tasks carried by translanguaging methodologies, contrastive/analogic reasoning techniques and transfer tasks.
3. Such programs do not hinder language acquisition or literacy development in either language, they improve them.

**2. What modifications, schemas and tools are needed for such an Approach to be transferred to other languages in (South) Australian junior primary/primary school settings?**

Relevant data sets include:

Teacher discussions, records of teaching and interviews.

Relevant Summary Messages:

1. Classroom and specialist languages teachers can productively plan for literacy development within and across languages using the research-based MLL Approach.
2. Joint planning and teaching can effectively and efficiently develop from a broader research-based approach related to their teaching activity and be advanced upon a shared understanding of both universal and discrete schemas for language acquisition and cross-linguistic schemas for literacy skill development.
3. Contextual-cultural factors, such as openness to research and access to resources are variables that have a moderating effect on teacher, learner and school responsiveness to such novel ideas and their implementation effectiveness.
4. The effects of such moderator variables are significantly impacted by the availability, design and quality of professional learning, PL providers and their support for iterative implementation.

**3. Can practicing professional teachers accept a research-based Approach related to their teaching activity and, on such a basis, would teachers be encouraged to adopt the role of research-partners in adapting and iterating their instructional frameworks?**

**4. Can certain conditions be indicated in this process that could be thought to increase the likelihood and sustainability of such reciprocating transmission between research and individual professional practice?**

Relevant data sets include:

School-based data from teachers, principals and the Education Department, PL questionnaires, professional learning participant input, actions and feedback.

Relevant Summary Messages:

1. Classroom and specialist languages teachers can productively plan for literacy development within and across languages using the research-based MLL Approach.
2. Classroom and specialist languages teachers can be encouraged and effectively trained to become trustworthy research-partners as part of their normal operational responsibilities and tasks.
3. Joint planning and teaching can effectively and efficiently develop from a broader research-based Approach related to their teaching activity and be advanced upon a shared understanding of both universal and discrete schemas for language acquisition and cross-linguistic schemas for literacy skill development.
4. Languages programs can be comprehensively embedded across learning areas employing a literacy frame that acknowledges the essential interactivity of socio-

cultural, linguistic and cognitive tasks carried by translanguaging methodologies, contrastive/analogic reasoning techniques and transfer tasks.

5. Contextual-cultural factors, such as openness to research and access to resources are variables that have a moderating effect on teacher, learner and school responsiveness to such novel ideas and their implementation effectiveness.
5. The effects of such moderator variables are significantly impacted by the availability, design and quality of professional learning, PL providers and their support for iterative implementation.

This alignment of summary messages with research questions presents an interesting platform from which to consider the conduct and outcomes of the research project. They are starting points of a general nature, and, like the tip of an iceberg, they are representative of something much larger: a constellation of tasks and messages.

### **7.2.3** *Responding to the research questions (restated): pointers, directions and explanatory messages*

- 1. Can a model (Spanish exemplar) curriculum, developed from general curriculum-design principles and tasks, be used as a basis for an integrative collaborative Approach to languages acquisition and literacy development in (South) Australian junior primary/primary school settings?**

Cogent discussion and analysis of the reported conduct and findings from each teacher that participated in the two-year PLP supporting implementation of the MLL Approach has now been provided in relation to this question. While the data considered in responding to this question necessarily encompass all aspects of the research project, and hence all four questions, what is pertinent here is the question of the general viability and ongoing coherence in action of the guiding curriculum-design principles and tasks called for by the MLL Approach. Of particular import then is the discussion in sections 7.2.1 and 7.2.2 of this chapter.

All of the available and identifiable messages point in one clear direction: that the principles and tasks as stated and demonstrated through the PLP were and continued to be effective in and for the development of MLL programs. But these principles and tasks were deliberately constrained by developmental considerations as discussed in Chapter Two, and hence there is no claim being made that they are in some way *Universal*. What is being claimed is that they were clearly identifiable through teachers' ongoing planning and programming decisions and classroom actions for their junior primary cohorts. This can be summarised thus: that

- Teachers recast literacy and languages planning as a two-way, in-step process between classroom and languages teachers.
- Sites were recasting their whole-of-school literacy plans to include languages other than English as part of their literacy strategy.
- Teachers were collaboratively developing and implementing languages and literacy resources.

- Teachers were generating a culture and mechanisms to support shared ownership and accountability for students' languages and literacy development.
- Planning for assessment and monitoring of literacy development was occurring both within and across language programs.
- All teachers reported student learning outcomes to be both positive and significant in and across languages.
- Teachers found that maintaining changes in their beliefs and practices to focus on the global development of literacy across languages did not require any extra ongoing effort.
- All teachers planned to continue with this Approach to languages and literacy teaching and learning.

## **2. What modifications, schemas and tools are needed for such an Approach to be transferred to other languages in (South) Australian junior primary/primary school settings?**

As it stands, what can be said about modifications relates not so much to the Approach itself but to the various ways in which it can be nurtured into life. There is a sense of a self-fulfilling prophecy at work here as there is an inbuilt expectation that no two instantiations of the Approach would be identical; they are all variations on a theme.

The Approach was never intended nor designed to be rigid and lock step but rather to guide and leverage the wisdom and judgment of teachers that have an awareness of the dynamics of their complex, interacting environs. The use of curriculum-design principles, pedagogical imperatives, task-analytic parameters, techniques and the specific ways in which they were worded all operated together as a collection of tugboats enabling a heavily loaded cargo ship to navigate education channels and backwaters. But each ship would make its own path depending on many things. Thus, differences or modifications observed might be more operational in nature, owing to the nature of the channel to be navigated, the cargo on-board and the rate of travel desired. For example, it was found that:

- Romaji was an important early steppingstone for learners of Japanese and that simple placement of Hiragana and Katakana symbols underneath Romaji was highly effective at establishing recognition of this different orthographic system.
- A different developmental pathway is beneficial for initial L2 learning that begins with focusing on what learners currently think about and then progressing that into speech acts followed by writing what can be said and then reading what has been written.
- The deep orthography of English means that linguistic-cognitive strategies, such as those relevant to phonic and syntactic patterns, are sometimes more efficiently learnt in L2 before or with English (L1).
- L2 linguistic and cultural elements provide stable bases for contrastive analysis that are supportive of at-risk and special needs learners of English and in developing increased capacity for analogic reasoning with signs of transference to other learning.

The exact way these issues and opportunities play out depends on the specific characteristics of the setting. What the MLL Approach sought to do was to help frame and guide the process not dictate it. There were three main drivers of this process that can be

turned to to identify what modifications to the Approach, schemas and tools were necessary to allow for the use of the Approach across the range of languages represented in the PLP, namely: guiding, curriculum-design principles (arising from the level of axioms in Anthony's schema), macro-pedagogic imperatives (the level of methods in Anthony's schema) and micro-pedagogic considerations of tasks (the level of techniques in Anthony's schema). A commentary on these follows:

- *Guiding principles:* there is only one modification of note to speak to, dealt with in chapter Two. This is the constraint imposed by the developmental readiness of the student cohort. The guiding principles of the MLL Approach were translated in this study for implementation with a particular cohort in view, the junior primary (and early primary) years of schooling. These constraints were spoken of as developmental boundaries. No modifications of these principles as presented were identified nor reportedly sought by any of the participants at any stage of the PLP or its evaluation process. However, further study and/or experimentation in light of relevant literature and praxis would be advisable for older learners.
- *Macro-pedagogy:* given that macro-pedagogy was referred to as an overall plan, or general method for the deliberate and orderly *presentation* of developmentally appropriate tasks and activities aligned to the organising theory through the guiding principles, it can also be expected that what was observed were contextually-mediated variations within a theme as established through the PLP-specific schemas and tools. What guided planning and use of these frames was a set of imperatives that enabled them to be used as a point of reference, as such schemas are generally intended to be and need to be used. These imperatives were identifiable in the accounts and reports of all teachers and no requirement for their modification, deletion or additions was called for at any point in the PLP or its evaluative phase. A certain emphasis was given to one practice seen to be particularly novel and pertinent from the literature: translanguaging that gives rise to particular opportunities for analogic reasoning related to linguistic features and cognitive strategies like phonics-based decoding. As to the core elements and functioning of this practice the pattern is repeated: no modifications were identified nor reportedly sought by any of the participants at any stage of the PLP or its evaluation process.
- *Micro-pedagogy:* considerations here related to choice of possible techniques, tasks and activities within the overall schema in play given the guiding principles and macro-pedagogic frame. What was front and centre at this point were the notions of task analysis, sequential schemas of intended learning, and contrastive analysis that gives rise to opportunities to leverage analogic reasoning to accelerate learning through recruitment of prior learning in another language (e.g., transfer tasks). A number of parameters were provided to support the process of task analysis while a number of schedules (see attachment 2) were also provided for sequencing speaking, listening, reading, writing, viewing and syntax development activities. While it was incumbent upon the L2 teachers to identify the relevant material for these schemas from their specific target language, they did not deviate from the original design provided for Spanish as an L2 nor did they report any requirement for



structural changes to these schemas. The only differences, such as they were, related specifically to the orthographic variations inherent to the L2 they were teaching, such as (for Japanese) introducing Romaji symbols prior to Hiragana and Katakana symbols. Similarly, contrastive analysis techniques proved to be regarded as highly valuable to student learning but there was no discernible variation of their use across the participating sites. This is an example of where the science of learning meets the art of teaching. Providing opportunities for and scaffolding of analogic reasoning was reportedly important to learning generally but the manner in which it was introduced and implemented depended on the context. In this instance, and not unlike the process of acquiring translanguaging practices, all observed and reported uses of this technique were consistent with the essential elements as described in chapters Two and Three and the previous point. On this basis it is defensible to argue that these practices promoted instances of learning transfer that are a plausible explanation for the repeated reports of a learning advantage in the form of improved rates of growth in learning. No modifications were identified nor reportedly sought by any of the participants at any stage of the PL program or its evaluation process.

3. **Can practicing professional teachers accept a research-based Approach related to their teaching activity and, on such a basis, would teachers be encouraged to adopt the role of research-partners in adapting and iterating their instructional frameworks?**
4. **Can certain conditions be indicated in this process that could be thought to increase the likelihood and sustainability of such reciprocating transmission between research and individual professional practice?**

One of the defining features of this study has been its naturalistic character, tracing, as it were, the real-world decisions of professional teachers in real-life classrooms as they set about implementing the MLL Approach. It would be accurate to say that one of the loudest messages from the participating teachers was a call to be excused from their day-to-day site and system administrative duties in order to concentrate fully on implementation and experimentation, but this would undercut the value and generalisability of this study afforded to it by the absence of any sanitisation of their real-world settings. Discussion has been provided in chapter Five around conditions found to be supportive of PL and implementation. Moreover, the case study presentations in Chapter Five identified a number of potentially volatile, disruptive and counter-productive conditions, such as absences that required the use of relief teachers. Despite these the implementation of the MLL Approach has been reported as a success in each instance. The question then is what conditions can explain this outcome?

The one condition that stands out as the most consistent and vocalised was the existence and performance of the implementation team, as the researcher (author) and project mentor can be called. In regard to the literature from the implementation sciences this comes as no surprise. For example, Fixsen, Blase, Timbers, and Wolf (2001) reported 80% success in about three years with implementation teams employing dynamic methods for

implementation. By contrast, Balas and Boren (2000) report just 14% success after about 17 years without implementation teams. Unfortunately, the existence and use of teams with the requisite knowledge, credibility, dispositions and implementation expertise may not be common.

The general force of messages about conditions found to have a notable effect on implementation of the Approach by different teachers resonates with or perhaps amplifies those of Dalin (2005), Guskey (2000) and Louis and Miles (1990) expounded in chapters Four and Five. But those were general conditions for effective PL and not messages arising from PL for languages education or for the specific case of second language teaching occurring jointly with first language literacy teaching.

There was no evidence identified or reported that would substantively change the view that effective implementation of the MLL Approach in any setting can be achieved when the following MLL implementation conditions are met:

1. An implementation team as described is provided (with credibility, suitable dispositions, domain expertise and experience).
2. An open invitational process is undertaken that actively nurtures buy-in by site-based teams (sparking curiosity about probabilities and possibilities) and develops readiness for change (removing compulsion and external control over who meets whom).
3. Relevant research messages are translated and demonstrated for practice with recourse to metacognitive think-alouds and prompts for noticing, marking and dialogic purposes.
4. Site-visits are responsive to implementation challenges, reflective of the evidence of learning and relevant research, affirming of novel ideas where justified by learning principles and working to build further momentum.
5. Well sequenced, off-site plenary days are enacted that provide appropriate schemas, tools, strategies, resources and opportunities for guided, collaborative reasoning at the appropriate time.
6. Systemic support and advocacy for creative local processes along with collegial co-operation and problem-solving cultures are nurtured.
7. Selection and/or design of an effective and feasible PL program is purposefully designed for adult learners, is actively supported by site leaders and iterates in accord with evidence of learning.
8. A clear, conceptual framework to support the change process linked to stage-matched tasks and implementation drivers is provided and agreed upon (a program logic/theory of change).
9. Appropriate data collection tools, schema and monitoring loops are deployed.
10. An agreed-upon, formative and summative evaluation structure that is transparent, not burdensome and clearly linked to practice is generated and implemented.

All of these implementation conditions were part of the PLP. The process of sifting and sorting them into necessary and/or sufficient categories for successful implementation of the MLL to occur will require future investigations to pull apart, to identify elements *necessary* for successful implementation and/or constellations of elements *sufficient* for ensuring successful implementation in specific settings or generally.

This study attracted a range of interested, enthusiastic and skilled teachers. Whether implementation would be as effective if the entire cohort were beginning teachers in their first year of practice or teachers eyeing retirement is speculative. But there were teachers in their first three years of teaching involved and there were those who had seen a multitude of innovations and programs pass through their schools in over three decades of practice. The one condition that was met by all of them was the voluntary basis of their involvement: it was a coalition of the willing but given the extent of the information sessions and their focus on igniting a sense of the possible, it might be 'coalition of the curious'. This is a significant point relating to motivation for and engagement in learning, as Willingham explains in his book *Why Students Don't Like School* (2009). There was no compulsion, there were no inducements or rewards and there were no penalties for exiting or discontinuing. Information and evidence of improvements in the breadth and depth of learning outcomes from small-scale experiments were communicated to point towards a new suite of tasks and practices, born of novel ideas, that invited teachers' interest in the promise of an Approach that suggested a high probability of improving outcomes, of working, and of extending outcomes, (see section 7.1 for comments from the participants and also Chapter Six). This is condition two in the list above. A similar discussion could be had in respect to learner characteristics. But again, this would be a departure from the scope and design of this particular study. What held merit in the judgments of these teacher-researchers is that a coalition of the curious, an interested and enthusiastic site-based team, is likely an effective if not necessary starting place for implementation efforts that aim to persist, learn, and scale-up.

It is possible that all of the listed conditions can be necessary but some, such as conditions 5, 6 and 8 may be neither necessary nor sufficient, depending on a situational analysis. This could be the case when an isolated technique is identified as the missing link in an instructional framework that already has clear and well-defined principles, methods, resources and assessment practices in operation: an Approach in Anthony's terms. On the basis of the reported experiences, changes and evidence from the participating teacher-researchers alone it is somewhat difficult to identify the necessary PL conditions from the sufficient: they responded to each of the aforementioned ten conditions with alacrity, commitment and appropriate professional judgment; there were no absences, no withdrawals from the program (outside of health issues that caused a teacher to take extended leave from school) and there was clear and compelling evidence of comprehensive uptake and implementation of the MLL principles, tasks and practices across site visits, records of PL exercises and the data presented in Chapters Five and Six.

Recourse can also be had to the general conditions identified by Timperley et al (2007) in her Best Evidence Synthesis on professional learning. They are general, and this is an important point: neither Timperley nor Guskey were looking into nor providing

recommendations specifically for PL related to languages education nor the specific case of teaching second languages jointly with first language literacy teaching. In her synthesis, Timperley (2007, pxxvi) noted seven conditions in the core studies as necessary for promoting professional learning in ways that impacted positively and substantively on a range of student outcomes:

1. Providing sufficient time for extended opportunities to learn and using the time effectively.
2. Engaging external expertise.
3. Focusing on engaging teachers in the learning process rather than being concerned about whether they volunteered or not.
4. Challenging problematic discourses.
5. Providing opportunities to interact in a community of professionals.
6. Ensuring content was consistent with wider policy trend.
7. In school-based initiatives, having leaders actively leading the professional learning opportunities.

This synthesis of findings is instructive, and it can be used here in the same manner (as described in Chapter Four) that the teachers in the MLL PLP were taught and supported to use the MLL Approach, schemas and tools as a point of reference to aid analysis and understanding of a body of evidence (the reported findings presented in Chapters Five and Six on the PLP). One can look to Timperley's synthesis for points of congruence and points of divergence. On this basis, some qualified declarations might be made that support Timperley's conditions as necessary for effective PL in general and the extra conditions provided by the MLL PLP as sufficient for ensuring teacher, curriculum, and organisational change that promoted improved learning in this naturalistic study of languages and literacy teaching and learning. The pattern arising from reading of these two overviews of findings is clear. It can be represented thus:

- MLL implementation conditions 4 & 5 accord with Timperley's condition 1.
- MLL implementation condition 1 accords with Timperley's condition 2.
- MLL implementation conditions 2, 3 & 8 accord with Timperley's condition 3 (however, the MLL process also embraced an informed-invitational and collegial-contagion process not recognised by Timperley)
- MLL implementation conditions 3, 4, 5 & 9 accord with Timperley's condition 4.
- MLL implementation conditions 2, 5 & 6 accord with Timperley's condition 5.
- MLL implementation conditions 3, 5 & 7 accord with Timperley's condition 6.
- MLL implementation conditions 7 & 10 are supportive of Timperley's condition 7

This pair-wise matching demonstrates that the MLL PLP satisfied, and possibly extended, all seven of Timperley's general conditions necessary for effective PL that positively and substantively impacts student outcomes. This adds weight to the judgments of the teacher-researchers about the PLP and to their reports of student learning: it intensifies the validity and reliability of the reported finding that the MLL PLP was an unqualified success (in

changing teacher practice) and that the MLL Approach was effective at improving the targeted range of learning outcomes. But before any claim is made that the MLL implementation conditions are corroborated by the Timperley meta-synthesis and are all therefore necessary and/or sufficient, further digging into the data is warranted. Timperley raised a number of caveats as noted in Chapter Four: there was a discernible spectrum of outcomes with outliers that contradicted the final suite of conditions offered. They are matters of detail. It is to these caveats, or qualifiers, that attention is now given.

**MLL implementation condition 1:** Timperley notes that expertise is necessary but in order for this condition to become sufficient, external expertise needs to know how to make the content meaningful to teachers and manageable within the context of teaching practice. These skills are referred to as *provider pedagogical content knowledge* (pxxix).

Chapter Four of this thesis refers to those qualities and attributes implied by the notion of *provider pedagogical content knowledge* and how they were embodied and operationalised to significant effect by the PL providers. This demonstrates that implementation condition one accords with Timperley's analysis.

**MLL implementation conditions 2, 3 & 8:** Timperley notes that ongoing engagement is more critical than 'volunteerism'. The basis for this is that prospective participating teachers do not usually understand the level of engagement and changes required at the outset and fail to appreciate the depth of learning and scope of change that will be asked of them. Learning then becomes 'uncomfortable' and potentially compromised (pxxix).

However, certain actions were undertaken prior to the commencement and during the MLL PLP that arguably redressed this concern. There were multiple modes of communication with the system, sites and teachers about the rationale, expectations, tasks and support prior to volunteering (which was, in actuality, an expression of interest that each teacher, their line manager and the system liaison were all signatories too). Moreover, the program design was open to negotiation and modification in light of the daily business of sites and supported by open forums structured to progress awareness of expectations into readiness for change. And MLL conditions three and eight worked in concert with condition two to nurture curiosity, professional interest and ensure ongoing engagement in the learning process. These qualifiers indicate how the MLL conditions two, three and eight accord with Timperley's analysis.

**MLL implementation conditions 4, 5, 6 & 7:** Timperley cites a number of confounding studies of short duration that had positive impacts on learning. However, these related to a specific practice or when narrow curriculum goals were targeted. Enabling teachers to effectively implement inquiry-based action-research approaches together with effective collection and use of evidence of learning was the acknowledged necessary condition (pxviii).

This was the process for changing teaching practice through the MLL PLP, involving substantive new learning that, at times, challenged existing beliefs, valued tasks, and/or the understandings that underpinned current practice. The learning process was longitudinal and iterative on evidence rather than time-limited and linear as the MLL principles, tasks and practices were revisited in terms of their impact on learning and subsequently, their implications for the ideas on which past and present practice was based. As Timperley noted “Providers who trained teachers to implement a defined set of preferred practices rarely had a sustained impact on student outcomes” (pxviii).

**MLL implementation conditions 9 & 10:** In some studies, Timperley noted that teacher discourse was problematic as it was usually based on the assumption that some groups of students could not or would not learn as well as others. This was indeed the case at the outset of the MLL PLP, although the false dichotomies in this instance were related more to the learning areas than the students. The prevailing assumption across sites was that languages were of no discernible benefit to the core business of primary schooling which itself was amplified by a second assumption, that learning English is sufficiently hard not to warrant time spent learning another language nor the risk of cross-linguistic contamination. Unsettling these beliefs and changing the basis of teacher discourse towards evidence of learning was arguably a necessary implementation condition.

Timperley also found that the role of leadership in the active support and promotion of PL generally was a necessary condition for successful teacher change as described (pxxx).

MLL implementation conditions nine and ten redressed prevailing discourse by leveraging, in no small measure, evidence of learning (see discussion of Guskey’s model of teacher change, Chapter Four). As new tasks and practices were mastered and assessments of student learning revealed unexpected rates of growth, teachers’ discourse around the role of languages education, the role of literacy development and what constitutes effective teaching changed in iterative, non-linear cycles. This led, as reported, to the elevation of languages teachers to informal, and at times formal, members (e.g., coordinator or deputy principal role) of school leadership teams.

MLL implementation conditions nine and ten worked in concert with implementation conditions two, four and seven to reposition languages teachers and leadership teams in participating sites. On the basis of evidence-driven iterative cycles of implementation, leadership teams were challenged and motivated to move beyond the manager-oriented organisational brief to embrace an instructional and transformational role. In response to data-driven conversations with staff and the PL providers, languages teachers and site leaders were observed shifting beyond this brief to systematically developing a learning culture in their sites around

the MLL, where they participated as learners rather than organisers of others' learning. The impetus provided by the enactment of these two implementation conditions leading to the noted change in L2 teachers and leaders' organisational role was a critical element that accorded with Timperley's analysis.

A final note here regarding the reports of the conduct of the PLP relates to the participating teacher-researchers' concerns. Those that were raised were neither in the present nor of the past but rather projections of future potential barriers as discussed in Chapter Six. These were mostly operational in nature, the most significant of which was the procurement of appropriate resources to support ongoing and increasingly complex L2 literacy development: 'where is the age-appropriate literature?' and 'where are the sets of early decodable readers?' were common needs. Secondary to this was a concern for their capacity to engage and support colleagues' implementation of the Approach without the full conditions listed above, while the final barrier to ongoing implementation of the Approach related to their ability to lead cultural change as a school community, helping parents in particular to make incremental yet meaningful steps to understanding and supporting two-way language and literacy education.

What can be said, in the end, is that in a naturalistic generalised study such as this, which drew in a range of teachers, from a broad cross-section of school settings, representing a range of different languages, this particular constellation of conditions produced success in each and every instance. For this reason, and the absence of a control group who received only those conditions identified by Timperley, it can be suggested that this study's findings are mutually supportive of Timperley's analysis, constituting the ten conditions as arguably necessary conditions for establishing effective PL, and that including those additional conditions provided by the MLL PLP in this specific study they were sufficient for ensuring teacher, curriculum, and organisational change that promoted improved languages and literacy learning in the junior primary and primary years. This process and development of new knowledge will be returned to in the final chapter.

### **7.3** *On researching as a recursive, imbricated two-way communication system*

The final task for this chapter is to comment on the recursive, two-way communication vehicle used to build new knowledge. This communicational research frame lies at a nexus between 'traditional' research paradigms and classroom practice. While the philosophical elements to this discussion will be returned to in the concluding chapter, some judgments are developed here about the effectiveness of the frame presented in Chapter Three, its capacity to meet the formalities of acceptable research and the demand from schools for research to be evidence from acts of effective implementation of new ideas and not laboratories for data mining.

Implementation has become the critical pathway between research and practice, establishing research legitimacy in terms of learning outcomes in real-world settings. Awareness of this 'gap' and its effect on the 'perceived and actual usability of research' was a driving factor behind the communicational research frame deployed in this study and an unintended consequence is that explanatory messages can now be discerned to help identify ways to counter the 'gap' situation and foreshadow the discussion on the legitimacy of this project's findings, outcomes, explanations and implications that will be offered in the final chapter.

The philosophical-methodological frame developed in support of this research endeavour had the notions 'intelligence in action' and 'recursive communicational systems' as central. What was held to be of paramount importance was the need to continually return to the tasks at hand and the contexts for them as well as the need to acknowledge that research is essentially a process of communication with certain formalities required in relation to reliability and validity. Herein lie the connections with Implementational Science and the Science of Learning. The legitimacy of research is determined, in broad strokes, through practical tests in real-world settings while the design of these practical tests and the methods used for collecting and analysing data must be undertaken with a high degree of fidelity. At the heart of these processes is a message transmission system. This communicational system is critical to ensuring the fidelity to research evidence as translated for praxis, to ensuring fidelity is maintained in relation to changing circumstances in the research setting(s) and for ensuring fidelity in messages elicited for research output. In this instance the communicational system required three interconnected message networks: an expert-research network, a collegial-practitioner network and a practitioner self-talk network. Together, these networks formed a self-regulating research activity, for and from praxis that has strong parallels with what Greenhalgh et al. (2004) described as a 'making it happen' approach to supporting implementation. This has demonstrated greater success than traditional dissemination methods. The most significant strategy held in common by both is the use of an implementation team.

Rather than traditional approaches that have been likened to 'letting it happen' or 'helping it happen', the use of expert implementation teams enables an initiative to be operationalised over time with the strategic and targeted use of external advice, resources and implementation drivers. One of the final remarks of the independent interviewer is worth repeating here: *that he felt as though he had stepped into a particular web of knowledge held together by unified messages about key educational tasks*. On the basis of the data, it can be stated with plausibility that the unifying messages are those discussed in Chapters Two and Three regarding the MLL Approach and the methods used throughout the PLP



discussed in Chapter Four. This 'web of knowledge' was generated and held together in terms of a philosophy sketched in Chapters One and Three.

Central to each explanatory message about the nurturing and 'stickiness' of this web is the role of the researcher (author) and project mentor who constituted the expert implementation team. The literature currently recognises a number of varied forms and structures for implementation teams. These range from those that act as purveyors of programs to designers of program models, and from those that utilise external organisations to those that are formed on-site (Franks, 2010). A central theme running through all variants is their role in providing a structure to move innovations through iterative and adaptive stages of implementation. Another theme is the credibility and dispositions of the team. There are three broad sets of competencies that the project leader/researcher and project mentor can be said to have possessed that had a bearing on the general and cumulative momentum of this implementation exercise:

1. Knowledge and practical understanding of relevant fields of research as already identified in chapters Three and Five; knowledge and practical understanding of the MLL Approach; and knowledge of how and what outcomes might be expected.
2. Knowledge and experience with dissemination and implementation practices and the research base that underpins them (e.g., sequencing content and deploying pedagogical practices specifically for adult learning, stage-based work and internal as well as external implementation drivers).
3. Profession-based experience in identifying and using appropriate data for adaptive cycles of program evaluation with a strong, iterative link to learning outcomes.

As an 'implementation team' the project leader/researcher and project mentor did not fall readily into any one pattern, but were more eclectic, drawing upon relevant models, organisations or on-site resources as appropriate. It was their aforementioned credibility and dispositions, or competencies, combined with humility, hospitality and pragmatism that can be best said to describe the form their roles took (see participant interview data in Chapter Six). There was no absence of clarity about their core task: *making it happen*. This team had a notable degree of experience in adult education: prior learning that was available to them when designing and enacting the PLP. A structure was developed and a stage-like schema of three phases devised to drive the implementation process, but what held it all together was the importance of understanding and responding to the needs and aspirations of adult learners. This point is well made by the participant teachers and site leaders themselves as reported in Chapters Five and Six and in section 7.1 of this chapter, where interview comments have been linked to Guskey's fourth general principle (ongoing learning that is procedurally embedded). This point is perhaps somewhat unrecognised or undervalued by the research literature on implementation science to date.

Nonetheless, three broad movements were planned for action with a view to the dynamics and needs of this group of adult learners. Establishment of adequate resources, time and

buy-in was achieved through the MOA process that had brought together a research institution (Flinders University) and an education authority (DECS/DECD/DfE) with a collaborative arrangement, rather than a tender or procurement relationship as is more usual. The resulting messages were aptly packaged when the project report and external evaluation were shared with the Executive levels of the collaborating institutions, thus:

- *I have never seen such positive outcomes and overwhelming engagement by teachers and leaders, this process must be widely disseminated in our system (DECS/DECD/DfE).*
- *The real treasure has been the way in which the issues, or perhaps aspirations, have been accurately identified and articulated at the start by having research input brought to bear to help clarify what teachers and leaders were saying (DECS/DECD/DfE).*
- *Having a two-way communication from the get-go has been an extremely valuable mechanism for ensuring success because it has enabled program calibration and resource procurement from the vantage point of researchers (Flinders).*
- *The cost relative to value, in terms of teacher change, curriculum development (including aligned resources), and outcomes for students is exceptional, and significantly less than programs designed and delivered by us (DECS/DECD/DfE), our post-graduate course (FUSA), and private consultants (both).*

The sense of 'jointness' arises again. An interconnected web of knowledge finds practitioners open and willing to share and scrutinise others' practices in light of messages from research activities. And flowing from this sense of jointness is that which is its vehicle: communication. While it may seem redundant to speak of the critical importance of communication, as this is a readily identified driver of efforts to disseminate findings and implement programs, what is not so common is to speak of communication as a two-way driver of implementation and research efforts undertaken concurrently. There is an art to this that was made present throughout the PLP (see 4.2.7, 4.2.8), presenting a clear demonstration of the sense of jointness and the ongoing interconnectedness of the 'web of knowledge' created.

There is no long bow being drawn in saying that this 'art' is the final element in the kit bag of the implementation team. Quite simply, the accounts of the participating teachers and site leaders are beating the same drum, that an essential quality found to be present in the communicational system driving the process of implementation research was the ability to guide and nurture purposeful and productive dialogue crossing from praxis to theory and back to praxis. The echo that comes from these beating drums is of the capacity of the implementation team to demonstrate the messages from theory in terms of practical pedagogy and to advocate throughout the organisation for the necessary resources to enable teachers to experiment with and systematically reflect on these. On the basis of the reports from this implementation effort it can be claimed that the implementation team did indeed possess the qualities and dispositions described in Chapter Four, the aforementioned competencies, and that these sustained the cohesion of the web of

knowledge that drove the iterative and adaptive implementation process and research output.

## Chapter 8: Concluding Issues

### 8.1 Preparatory remarks

Research related to identifying and developing evidence-informed programs and pedagogical practices that lead to demonstrable improvements in learning outcomes has improved dramatically in recent decades. However, research that illuminates implementation of these programs and practices with high legitimacy in and for real-life classrooms has lagged far behind. In fact, the lag time between translating research into effective practice has been documented to be as long as 20+ years. This lag time, the 'research-to-practice' gap, is now garnering heightened attention (Metz, Halle, Bartley & Blasberg, 2013; Petscher, Cabell, Catts, Compton, Footman, Hart, & Wagner, 2020; Solari, Terry, Gaab, Hogan, Nelson, Pentimonti, Petscher, & Sayko, 2020).

#### 8.1.1 Messages as insights and insights as messages: what has been learnt?

*We do not need more studies of strategies or practices, we have ample knowledge at present about what works. What we don't understand well is how to make it work. The challenge and focus for contemporary research is to show 'how' to implement with positive impact on learning.*

John Hattie, 2019, Corwin PLC Conference Address, Melbourne

The teachers in this research endeavour were both recipients and generators of messages and insights. Their implementation actions were the knowledge-building engine. And it was their engine and their knowledge because all communications were tied to their teaching activities, which constitute the essence of their professional world.

This process of knowledge building had a recursive and amplifying quality that emerged and developed through iterative cycles of communication between three interdependent networks: self, expert-research, and collegial (see section 3.2.5). Whether the starting point was the author's own experiences or those of the teachers in this research exercise, the cycles were the same. First, the teacher(s) had to engage in reflective dialogue with themselves about their teaching tasks and their performance in terms of statutory requirements and the learning outcomes of the students in their programs - teachers needed to know what they were doing and whether they were doing it as well as they could reasonably expect. This process of self-talk defined what can be referred to as the 'problem of practice' and was a hinge point for teacher engagement in the subsequent communication networks, based on whether the MLL was a perceived match and potential solution to their defined problem(s). Next, there was a move to engagement with key insights as messages, with expert-research. Communication at this point included a gap analysis - identifying divergences in practice with research-based insights into what has been shown to work. Lastly, there was a move to professional dialogue with colleagues centred on the sharing, challenging and confirmation of judgments about their problems of practice, potential

causes, potential expert-research treatments (the MLL), and in time, the character and impact of selected treatments and their implementation.

This knowledge-building exercise drove a patterning of messages that was both from and for generalisable teaching activity. Such activity provided the experiences from which problems and aspirations could emerge and new ideas from the MLL could be tested in an iterative and pragmatic process. And the fuel for this knowledge-building exercise was the adaptive-pragmatic process of teachers assimilating the MLL Approach into their pre-existing, context-laden schemes for teaching, leading to new, adjusted schemes (rather than supplanting teaching schemes and testing them under controlled conditions). This adaptive-pragmatic work rested on teachers' individual experiences in their specific settings, on their intelligence in action, but also on shared activity in the form of repeated checking, challenging, and judging by their colleagues using the expert-research messages provided through the PLP and their own professional experiences.

The critical focus for this process of knowledge-building action and for each communication network was teachers' reported activity combined with individual and collegial judgments about the impact and knowledge value of those activities. As this cycle of communications began, insights about the reported activities emerged. In the initial stages those insights were considered to be vulnerable to alternative explanations and in need of further clarification. To progress these insights towards invulnerability required a process of iterative action, of repeated cycles of communication and action that would allow for patterns related to choice and implementation of specific tasks, activities and their outcomes to emerge, and for shared judgments from colleagues about those patterns to cluster and be confirmed, leaving no further relevant questions.

There is value here in underscoring the general importance of the task analytic procedures provided as part of the MLL Approach and the PLP that was its implementation and research vehicle. Tasks provided an organising frame for definition of the MLL Approach in action and for the assessment blueprint that guided iterative implementation and eliciting of evidence about the knowledge value of the MLL Approach. This was a clear message from the interviews and journal data: task-analytic messages and procedures enabled teachers to clearly define the scope of their curricula and how they could join up second language programs with first language literacy learning. Notions of universality and transference were prominent guides, but it was through fine-grained analysis of the tasks called for by the MLL Approach that teachers developed the ability to accurately and comprehensively describe what they needed to teach, what learners needed to know how to do, what prerequisite (sub) skills and knowledge were needed, what strategies to use in teaching or to require to be learnt, what were appropriate sequences for content, what were the criteria for instructional goals in and across languages, what organisation of goals there should be into short term

(lesson-focused) and long term (Unit, Term or annual goals), and, what assessment schedules aligned with their instructional programs provided direct evidence of performance and long term learning of identified tasks, that supported feedback to learners and stakeholders as well as iterative development of programs. In this way task-analytic procedures were both an organising frame and driver of teachers' ability to iteratively design curriculum and assessment as called for by the MLL Approach and of the adaptive design process for the PLP that was both implementation and research vehicle. These teachers in action and research showed that the communication of clear, usable analysis for their classroom tasks is an abiding demand and focus of teachers who are attentive to the messages of research and practice alike.

The reported activity in the case studies sheds light upon the value and utility of task analytic procedures particularly and the MLL Approach generally as influencing and being incorporated into new teaching schemas. There is now the possibility for reflecting on implications for research practices that aim to shift theory into practice.

### **8.1.2** *Research messages*

The summation of this thesis comes down to a series of research messages that reflect the foci of the three research elements and major thrusts of the study: the MLL Approach, the PLP and, the communicational research frame.

Across a range of settings and languages, building on a variety of pedagogical beliefs and practices, this study has produced the following research messages that have been judged to be invulnerable by the teacher-researchers, researcher (author), mentor and evaluator (see 3.2.3 & 6.2.1). That is, the participating teachers did not qualify these messages in their journals, nor during the iterative PL dialogues nor the interviews that were structured as a summative probe into their initial insights.

Discussion of these insights as messages will be aided by a key insight: that all the crucial elements in these teachers' educational settings had agency, were self-aware and were part of a dynamic, complex networked system of communications. This insight points discussion of the messages about evidence again to the potential offered by two thresholds for consideration of new knowledge introduced in section 3.3.3 and featured in Chapter Seven: what is necessary and what is sufficient? It may be that RCTs are necessary, or at least a preferred method for identifying new knowledge about what works (efficacy trials), and that carefully designed and constructed applied studies (effectiveness trials), in naturalistic settings such as this one, are what can be claimed the sufficient element required to improve teacher judgment and cause iterative implementation efforts of 'what works' whether supported by formal PL programs or not. It is a matter of effect (getting results in implementation) and effectiveness (how these can result).

Regarding the MLL Approach the concluding messages define what was sufficient for achieving the goals of the Approach, namely rigorous and cumulative growth in language knowledge and the skills to use that knowledge across the range of communication modes. In terms of the PLP, the messages define those implementation conditions that were deemed arguably both necessary and sufficient for achieving sustained change in teachers' beliefs and practices that underpinned the success as defined by the student learning outcomes; and, in respect of the communicational research frame, the messages define the tasks, communication channels and analytic architecture that were sufficient to carry the whole research endeavour from inception to the ultimate point of arguably invulnerable research messages.

Three points frame this discussion of research messages. First, that the rich detail of the case studies of teachers adapting and rebalancing their approaches, and the unanimous feedback from interview and questionnaire data, together invite the inescapable conclusion that the patterns of judgments in action and summation communicate the facts of the case; second, that though the teaching situation is inevitably dynamic, there is no reason to question that the MLL and PLP as designed and delivered were successful, and that such overall judgment confirms and communicates what was the case with a high degree of invulnerability; third, that the findings have already been set out and discussed in research terms and can be finalised as below.

Regarding the MLL Approach it can be reported that:

1. Developmentally bounded principles, translanguaging practices, contrastive analysis and analogic reasoning techniques are effective and appropriate in promoting ongoing and at least normal rates of development in languages acquisition and literacy development irrespective of societal language and target language.
2. Task analysis, with staged schemas for vocabulary and the modes of language use, combined with assessment schedules as defined through the PLP are effective and appropriate for joint planning, monitoring and evaluation of two-way languages and literacy programs.
3. Two-way, or in-step (L1-L2) teaching schemas and tools are effective and efficient for teachers to design and implement and are both engaging and productive for learners as they are learning to read and write in their first language.
4. An expanded notion of literacy as constituting an imbricated set of relationships between linguistic, cognitive/metacognitive and sociocultural domains is an effective frame for teachers to conceptualise and drive languages and literacy planning and programming.

Regarding the PLP it can be reported that:

1. An implementation team that is suitably qualified, has significant domain-specific teaching experience and is knowledgeable in designing and delivering intentional learning programs for professional teachers that drive innovation and implementation exercises generally is central to successfully promulgating and embedding significant new teaching practices and instructional routines.

2. Efforts to change and improve the practice of teachers for the long term requires at least two years of sustained engagement and iterative, adaptive experimentation.
3. Time for reflection, contemplative dialogue, provocation and experimentation that are continually referenced to contexts of practice, beliefs and evidence of learning is essential and requires guidance and nurturing by an implementation team as described.
4. Theories and hypotheses have particular value when they are effectively translated for practice, efficiently demonstrated with open recourse to metacognitive processes and driven into practice through exemplar tasks and activities.
5. Building on pre-existing teaching schemes, actively respecting the judgment of teachers and building agency through flexibility and responsiveness are not only markers of respect but drivers of engagement in learning processes and iterative implementation.
6. Ensuring the curiosity and active buy-in of site and system leaders provides participating teachers with access to resources and a wedge for leading change in organisational culture around targeted ideas and practices.
7. Establishing a collaborative relationship between research and educational organisations from the outset is especially effective at designing a process that supports both the implementation of innovation and research output.

Regarding the devised communicational research frame, it can be reported that:

1. Professional teachers can be suitably trained and guided in methods of formal communication that enable them to be effective co-researchers without the need for recourse to formal studies.
2. Lonergan's notions of transcendental precepts and the three tasks of knowing provide an effective frame for guiding research acts, communications and the selection and use of curriculum planning and assessment tools that can also satisfy the more formal requirements for research output.
3. Pragmatism provides an ontologically rich and stratified structure within which research methods from differing traditions can be justified and integrated.
4. There are at least three communication networks necessary for the effective and efficient application of theories and hypotheses to educational practice; the self-talk network of the practitioner; an expert-research network; and a collegial-practitioner network. These reflect Lonergan's precepts and tasks for experiencing, understanding and judging.
5. Recursive cycles of triangulation between different data sets, different professional perspectives and established theories aid the identification of important insights and invulnerable research messages.

### **8.2.1** *Implications for educational research and practice*

It is clear from the insights and the research messages that the organising and contributing theories of the MLL Approach all had merit and through their project-specific presentation were found to have practical adequacy in the judgment of the participating teachers and site leaders. The case study narratives have also illuminated the value and importance of translanguaging practices, universal developmental schemas, integrated assessment schemas, contrastive analysis and analogic reasoning techniques as well as general task analysis as practices that support both the teaching and assessment of languages and literacy together through collaborative, two-way programs.



What will be provided now is a discussion of future research for and from teacher action and implications for initial teacher training and the role of teachers-as-researchers.

Adopting literacy as an organising frame for languages education establishes a broad agenda for research related to languages acquisition and languages pedagogy. Similarly, adopting an integrated, two-way stance to the teaching of multiple languages establishes a broad agenda for research related to literacy development and literacy pedagogy. There are a number of tasks that these agendas for a joint literacy-based Approach to teaching languages raise for further scholarship, notably:

- Identifying the factors that influence the development of academic language and literacy skills in an L2.
- Identifying the precise learning advantage, mechanisms and instructional practices that promote transfer of general and academic language and literacy skills between first and second languages.
- Mapping the impact and control of cultural differences, home language influences, and educational goals and settings on L1 and L2 learning and transfer.
- Establishing a continuum of L2 tasks and practices aligned to the way the language is used by the learner (and to the outcomes, or depth of proficiency such usage promotes), for example, from only using the language in a specialist language class to interleaved use across multiple subjects every day.
- Increasing understanding of monolingual language and literacy development in languages other than English and provision of valid developmental schedules.
- Increasing research into the developmental processes of L2 literacy development in the beginning years of schooling where learning to read cannot be viewed as a largely inevitable consequence of language learning.
- Understanding how to increase the accessibility and uptake of those skills that predict good language and literacy development in English in L2 programs through more precise understanding of the linguistic and orthographic challenges presented by the L2 (e.g., orthographic depth, multiple verb forms, noun markers, and use of syntactic and semantic pronunciation cues).
- Validating assessment tools for collecting and evaluating evidence of L2 learning at regular intervals across the years of schooling within the sub-elements of reading and writing as well as improved access to cross-age data for identifying the predictive value and importance of different elements at different ages.
- Identifying appropriate modifications and evaluation of instructional strategies, transfer tasks, resources and program frameworks that have been shown to be effective in English for L2 use (e.g., phonics programs and decodable readers in L2s with different orthographic mapping sizes/challenges).

In general, these agendas can be related back to the macro-pedagogic and micro-pedagogic frames provided by the Approach.

There is the particular matter of imperatives at the macro-pedagogic level (see 2.2.1). An important starting point is to consider whether they are sufficiently descriptive and what modifications these descriptions might need in light of the level of experience of the students or the teacher using them. Furthermore, what guidance is needed for teachers with strong pedagogical belief systems to effectively use them to guide their planning and evaluation? It

could perhaps be asked if all eleven imperatives are necessary for rich, measurable literacy learning to occur. This could be investigated.

Arising from the vulnerable insights provided by this study's participants are a number of matters relating to the micro-pedagogic frame of the Approach (see 3.2.3 for discussion of what constitutes 'vulnerable' here). In the first instance the need is for further evidence to accumulate around the notion of developmental schemas in terms of specific items for specific languages, the interplay between schemas for different languages and the specific utility of such sequences for planning, programming and evaluating learning. There is a particular need for this within the Australian education scene as none are currently known to exist outside of this study and the recent Australian Curriculum Literacy Progressions (ACARA, 2019). Moreover, the more expansive use of developmental schemes implied here is contingent upon valid and reliable assessment instruments and schemes. Here the identified need relates to tools that can be effectively deployed in day-to-day teaching.

It would seem appropriate for such work to be undertaken before or at least concurrently with investigation into refinement of the initial curriculum-design principles used to drive this study into application of the Approach in junior primary classrooms. A key question is what modifications to the original MLL principles are needed to effectively and appropriately drive the Approach in the middle years and senior years of schooling? Similarly, with the announcement by the Victorian Government of a \$17.9 million investment in early childhood languages programs in 2018 (Victorian Government, 2020), there is a need to extend this research to include preschools.

Ever-present has been a concern for tasks: those of the learner and those of the teacher, if one wishes to see the matter in discrete terms. The implication for future research in light of this study is less to do with redefining or establishing a new taxonomy of language learning tasks and more to do with the ongoing suitability of the five questions (p37) offered to guide teacher selection of learning tasks given the view that tasks are more often than not considered by teachers in terms of behavioural or, nowadays, learning intentions (see 2.2.6).

Contrastive analysis is a technique by which learners can be helped to leverage prior learning in one language to advance current learning in another, drawing upon a process of analogic reasoning and transfer tasks. They draw upon, as it were, what they have already 'internalised'. What is now needed is an exploration of the mechanics of this technique: of what prompts are especially effective, at what point in a learning cycle, and which prior learning can be anticipated to aid which subsequent learning.

### **8.2.2** *Implications for (initial and ongoing) teacher training and the role of teacher-as-researcher*

In preparing teachers to deal with the demands of an integrated, two-way Approach to languages and literacy education, teacher educators will have to redefine the scope of teacher development across the entire spectrum from initial-teacher education programs (ITE) to highly accomplished teacher certification programs (AITSL, 2017). These programs must prepare teachers not as isolated language experts or classroom specialists but also as literacy experts. In terms of the MLL Approach this means preparing or equipping them to teach not just isolated stock items of discrete languages, but about language and culture as universal and defining characteristics of humanity, about the interconnected and reciprocating relationships among linguistic elements, linguistic conventions, and life experiences both within and across languages and how these interact with communicative contexts, larger sociocultural contexts and discourse characteristics.

“As teachers of language and literacy, they are ultimately in the business of opening up to their students’ new signifying systems and all the power that goes with the mastery of multiple levels of symbols” (Kern, 2000, p316). There are two elements being called for here and they return discussion to the notion of being educated as espoused by Hans-Georg Gadamer towards the end of the twentieth century (Gadamer, 2001).

He emphasised the role of mother tongue learning and subsequent language learning as linked parts of a single movement. You learn about the familiar through learning the unfamiliar in his view: through comparing, contrasting and reasoning by analogy. To be precise, he emphasised the importance of mastery of the mother tongue and of the acquisition of linguistic resources but what was also an important corollary for him was that the learning of subsequent languages can be an introduction to genuine experiences of otherness, i.e., ‘of being-among-others in ways which unsettle and re-orient the at-homeness of one’s everyday experiences.’ This involves developing in learners the ability to think in new and responsive ways and also new ways of thinking about meaning and communication. Teachers of languages and literacy will need to be guided into realising that the true scope of their work is nothing short of education in the fullest sense (Gadamer, 2008). They will need the ability to address what Gadamer captured – mediating between the perspectives and meanings of each learner’s culture and those arising from the culture(s) of the target language being taught. This also implicates a need to be highly proficient with pedagogical practices that support the ongoing development of the skills necessary for deliberate and thoughtful use of languages through differing modes of communication.

The implication arising from this study is that mentoring and coaching into practice is called for. What was found during this investigation was that coaching and teachers researching

their own practice benefit from: a commitment and an openness to two-way mentoring with a colleague or researcher, as experience and task suggest, and metacognitive demonstration of novel ideas and tasks translated from research to practice. In this instance, both models follow an ongoing rhythm of stimulus, response, experimentation, reflection, and revision. The mentor (colleague or experienced researcher) initially drives stimulus for the pre-service and novice teacher, and for the experienced teacher it is driven more by their questions / problems of practice, or aspirations they have for their programs. In either case, the central focus is development of beliefs, knowledge and practices that implicates the need for guided change and activation of teachers' agentic properties.

At some point then, there will be a need to consider how change occurs and what drives change in educational organisations. This raises the need for teachers to be suitably versed in matters relating to organisational change, reculturing, implementation strategies and processes and what can be generally referred to as 'systems thinking'. But the arguably invulnerable insights in respect of the PLP also raise the need for further research into mechanisms that effectively enable teachers, teacher-researchers, researchers, and PL providers to design-in those conditions for effective PL as described in Chapter Seven and to ensure that an adaptive and iterative dynamic drives cycles of PL activity.

### **8.3.1** *A final note: what is researching this way like and where to now?*

Adopting an integrative, communicational frame for researching has established a broad agenda for research related to selection and integration of methods and for improving the actual and perceived usage of research findings. This communicational frame was constituted in action by three networks: a self-talk network, an expert-research network and a collegial-practitioner network. The entire enterprise centred on the identification, transmission and interpretation of recursive, amplifying messages about key tasks and practices.

The recursive, amplifying communicative dynamic was directly aided by the use of site visits and through a dialogic presentation of tasks and messages in general conveyed by two researchers simultaneously. Identification and transmission of tasks proved to be a critical element of the process as it provided participating teachers with a foothold, or conceptual anchor for discussions and action. This idea of site visits is relatively straightforward and obvious. However, the dialogic or collaborative communication of tasks and ideas by two (teacher-) researchers may not be. This was introduced in Chapter Four and warrants some emphasis here.

Collaborative, dialogic communication enabled constructive interactions with teachers to take place that demonstrated a viable process of research communication that participants subsequently employed on the plenary days and with their school-based colleagues. Clarity,

responsiveness, metacognitive demonstration of tasks and timely process-oriented feedback were core principles at work in this space. In addition, these communications invited teachers to take an active role in evaluating and implementing tasks and practices in order to build curiosity, interest and ignite the process of adaptation within a coaching environment that supported alignment with the recognised principles that drove it. The idea was to invite scrutiny by the very professionals who would be implementing the practices: a mark of professional respect but also a valuing of their agency. Further replications of this approach to research are warranted to establish which aspects of this process are pivotal to successful transmission and implementation and whether their characteristics apply generally or require modifications in relation to audience and/or purpose.

An ongoing, reciprocal cycle of communications between the three identified networks constituted the research 'method' in its general form. It was centred on real-life classroom activity that formed the basis for transmitting a dynamic task-analytic research message about languages and literacy education (although it could aptly apply to any curriculum or pedagogical innovation) by encouraging equal and open communication interplay between actors and networks, whereby actors and networks participate jointly in the research task.

As such, research communications are subsequently able to extend in two separate but related channels: one in which a thesis, papers and scholarly presentations are given through expert networks, and the other in which the professional teachers (formed into a network in the research communication) themselves promote their own separate or related messages through extending this network in their continuing professional activity. An obvious line of inquiry is to return to these professional teachers and trace what has been happening as a result of their involvement in this project: have they continued to build on the established scheme of teaching? If so, in which ways and if not, why? Have they maintained and indeed extended the established collegial network? If so, with whom, on what basis and what has been achieved and if not, why?

Nested within this recursive interplay between research and praxis are a number of discrete elements that are attractive sites for further study. There are four that are of specific import to furthering this approach to research and at one and the same time closing the (twenty-year) research to practice gap:

1. Establishing formal guidance, or a stage-like process, to the development of assessment instruments that are both pragmatic tools for teachers and at the same time viable research tools. This could then be applied to the collection of data on what learners can actually do as a result of (literacy-based) languages education in the Australian context across the years of schooling.
2. Pinpointing the necessary hooks and drivers needed to transform teachers into co-researchers and the essential qualities and inputs necessary for implementation teams to be effective guides, coaches and mentors of school-based innovations.

3. Articulating a collaborative, rather than competitive, process for research and education institutions to identify and respond to important educational questions that enables each to influence the process on the basis of their respective 'scopes of practice'.
4. Establishing a mechanism to build the capacity of teachers and researchers to make rigorous judgments of practice (in light of theory) and theory (in light of practice). This would likely give rise to a process for effective and disciplined discrimination between experience, understanding and judging; Lonergan's tasks of knowing, or triple cord.

Ultimately, this approach to research is calling for a synergistic process between those with practical expertise and those with research expertise. A simple answer is to seek out researchers with demonstrable classroom expertise to lead investigations into and subsequent implementation of ideas, tasks and practices that answer important questions arising from the practice of teachers (e.g., as they develop, implement and generally experiment with the MLL Approach). But there is another issue here. The sort of research activity that has been brought to light in this study has been done based on methods that have been hitherto separated on the basis of their overarching, distinctive philosophical paradigms (as discussed in 3.1.2).

There is thus an important crossroads that is in need of increased research efforts to establish, in the view of the field of methodology and indeed philosophy, an accepted basis upon which differing research practices can be drawn upon to answer important educational questions without sacrificing validity, reliability or generalisability in the judgments of practitioners and researchers. Such efforts would go a long way towards supporting genuine efforts to unite research and praxis.

### **8.3.2** *A final note: on research legacy and place*

At the time this formal research activity concluded, a new national Australian Curriculum was coming into force. As was the case with many progressive approaches to curriculum around the world, the notion of general capabilities and cross-curriculum priorities was deemed an important consideration. In the end there were seven general capabilities and three cross-curriculum priorities that were included on the basis of the Melbourne Declaration by all state, territory and federal education ministers (MCEETYA, 2009). These have been largely upheld by the recent Alice Springs Declaration (Education Council, 2019).

Importantly, literacy is one of the identified general capabilities that all teachers are to contribute towards through their teaching programs. In its original presentation, literacy was referred to as having a 'natural home' in the English learning area. Languages, on the other hand, were presented as being the natural home of another general capability: intercultural understanding. This represented a fundamentally different approach to the teaching of English and the teaching of languages and on this basis, it could be argued that it did not shift the Twin Solitudes paradigm in practice. More recently there has been an increased

emphasis on literacy learning such that languages education is now deemed to 'value-add' to literacy learning along with oblique references to the notion of translanguaging.

There is scant evidence upon which to make any claim as to the influence of this project on that subtle shift in orientation. However, it can be said that this Approach was at least ahead of the trend and was an enabler in the local, SA context. This latter claim can be made based on the following observations, eight years after the end of the project and with little further engagement with these teachers or the system by this researcher or the project mentor:

1. A post-graduate program within the Flinders University Graduate Certificate in Organisational Leadership and Management course was established around the MLL Approach and the first cohort of students (practicing teachers and leaders) were provided full scholarships by the Department for Education.
2. The 2018-2021 South Australian Department for Education Languages Strategy was designed with an attendant professional learning schedule. This program is designed around five key ideas, one of which is the development of literacy through languages that recognises outcomes from this research project.
3. Two self-organised and self-funded MLL PLCs (professional learning communities) remain in operation as of 2020. One is led by a teacher from this research project and has grown into a partnership-wide PLC (East Torrens Primary School / Campbell Partnership); the other has a broader scope across the state as it is coordinated by the Open Access College through teachers and leadership that were not directly involved with this research project, but a subsequent project led by this researcher.

This mapping indicates the MLL Approach's enduring relevance in and for practice and practitioner inquiry in the judgments of the profession. Those teachers and leaders who are involved in this ongoing promulgation report that much of their work centres around the elaboration of resources for literacy teaching across languages, the harmonising or synchronising of instructional routines and practices with the now declared Departmental position on reading (the 'Big Six' framework) and the in-servicing of new languages and classroom teachers to the curriculum-design principles, tasks and practices reported in this thesis. The demonstrable success in terms of their reported ongoing learning outcomes and the rigour of the conceptual schema, tools and PL processes were cited as key drivers of this ongoing engagement, with financial support as well as school and partnership reculturing and restructuring initiatives.

This overview of the enduring legacy of the MLL Approach and the PLP that was its implementation vehicle speaks to the recent past and current status quo; however, there is another chapter in the evolution of this scholarly work that deserves attention here: one that is drawn from earlier research efforts of the project mentor.

In the decade preceding this study, the project mentor undertook her own doctoral research with the careful guidance and support of the same principal supervisor as this thesis. This prior investigation was undertaken because research into the causes of learning difficulties

in literacy was not conclusive. As an experienced teacher, principal and then researcher, the project mentor was attuned to the importance of practical wisdom, indeed the dual goals of that thesis were stated as "...theoretical and practical knowledge: defining and clarifying causation to satisfy the need for theoretical knowledge, and the subsequent practical application of that knowledge to satisfy the need for commonsense or practical knowledge" (Nielsen, 2005, p199). To achieve these twin goals, she recognised the need for a novel relationship with practitioners in the site for the study. There was an abiding concern here: ensuring the active involvement of the practitioners in responding to the findings as well as questioning and challenging those findings. For this, certain formalities but also certain tasks became incumbent in the whole enterprise that were carried by this identified need to undertake research but to simultaneously, or at least consecutively, develop applications for the research, to set the scene for "...validating the research by aligning the research with practice in a real sense" (ibid. p199).

This earlier study also aimed to bridge the research to practice gap and by the participants' accounts it was successful. The crucible of the task and its reported success was the devised role for the researcher, one that was self described by the label Researcher-in-Residence, to note the obvious dynamic of being embedded within a single participating site's organisational structure and culture for two consecutive years. This role required all of her expertise as an experienced teacher, but in particular, it was found that the following knowledge, personal qualities and skills were especially important:

- A detailed understanding of the work of the class teacher.
- An understanding of the decision-making processes of the school.
- Thorough knowledge of the area of research.
- Excellent communication skills.
- Respect for the knowledge of the classroom practitioners.
- The ability to affirm and support all members of the school community.
- Endless patience, empathy and courtesy.
- The ability to be friendly yet to 'walk alone', a role similar to that of a deputy principal who is neither principal nor teacher.

ibid. p202

These qualities share a common theme or resonance with the notion of credibility and the attendant dispositions hospitality and humility used to describe the roles of project leader and project mentor in Chapter Four of this thesis. There is a sense of cumulative action emerging here, of building new knowledge on the success of this prior investigation that also had the intent of researching within the ordinary, everyday activities of a school community whereby hypotheses and findings would be arbitrated in the court of practical application: in the professional judgments of teachers in action.



The impact on the MLL project of the ongoing involvement of this inventive researcher, now project mentor, and the inventive principal supervisor were profound. The MLL research project owes a significant debt to their intellectual legacy: on the one hand, the opportunity afforded by access to the same principal supervisor ensured that what was learnt through the development of the Researcher-in-Residence role that carried that project's methods was continually available as a litmus test of sorts for the communicational research model developed in this study; similarly, ongoing access to the former Researcher-in-Residence herself was critical to the formation of the expert-mentor network and an ongoing pipeline to not only expertise in literacy but the conducting of research with professional teachers as partners rather than subjects. Together, these specific inputs guided the development of the evidence base and rationale for the iterative approach to professional learning that was the vehicle, or driver of this research project.

There is one particular matter of note, that attests to this impact and legacy, that will conclude discussion of the ongoing and iterative intellectual legacy provided by the project mentor and thesis supervisor: the cycle of intelligence in and for action that sat at the heart of the MLL PLP.

While Lonergan's triple cord of knowing and his framework of transcendental precepts, described in Chapter Three (sections 3.2.2 & 3.2.3), provided both structure and guidance to the conduct of the MLL PLP, it was the iterative cycles of action on contemplation that garnered momentum from the imbricated discourse between the three parallel communication networks: self-talk, expert-research and collegial-practitioner, which in a sense is Lonergan's scheme: the experiencing self gains understanding from those more expert and their subsequent judgments in action are challenged or corroborated by others around. This communication framework was guided in action (through the collegial-practitioner network) by recourse to Mason's activity cycle that had proven a valuable frame of reference for enactment of the Researcher-in-Residence model developed by the preceding doctoral study. Mason's cycle points to the importance of engagement within, rather than dogmatic adherence to, a sequence of steps when drawing upon practical reasoning and practical knowledge to make a plan for action. He suggests that it comprises:

*posing a problem;*  
*seeking data or evidence;*  
*proposing some action;*  
*carrying out the action;*  
*evaluating that action;*  
*re-posing the problem (perhaps making modifications);*  
*seeking new data;*  
*modifying the proposed action;*  
*carrying out that new action;*  
*...and so on in an endless cycle.*

Mason, 2002, p54

This was how the process of implementation was described to the participating teachers and enacted on the PL plenary days and site visits (see figures 3, 4, 5 & 6). It established the norms of conduct for this research on the basis of its prior success in the court of 'practical wisdom' or 'intelligence in action' of the preceding study. An interesting anecdote lies in the observance that many of these participating, professional teachers printed, laminated and displayed this description of their activity cycle above their desks and in their staffrooms.

It was speculated in the project mentor's thesis that "Perhaps the success or otherwise of this research project will in the end be judged on the basis of whether or not the resulting teaching practices are successful" (Nielsen, 2005, p204). On the basis of this thesis's reported findings from the network of participating teachers it is possible to suggest that another, posthumous judgment could be made that the success of the cycle of research activity established in that thesis resonates in the research messages and conclusion of this research project.

#### **8.4.1** *In Conclusion*

The Multilingual Literacy Approach arose out of the author's dissatisfaction with the status quo in languages education. The study described herein was given an initial breath of life by the interest and enthusiasm demonstrated by two expert-researchers and an education system in response to the desire of this teacher (the researcher) to investigate the potential of a collaborative, literacy-based Approach to languages education: specifically of the task of teaching second language jointly with first language literacy teaching in the junior primary and primary school years. It evolved into a rich and highly imbricated study through the passion of further teacher-colleagues who wished to follow in these steps.

While the initial intent of this investigation was to ascertain the potential of a particular, literacy-based Approach to languages education it would be somewhat remiss of this investigator to ignore what has been observed and judged about both the vehicle used for disseminating and supporting implementation of the Approach and the disciplined, project-specific process of noticing, recording and communicating what was done: the PLP and the communicational research frame respectively. There are thus three 'cords' conveying three constellations of research messages about three specific but necessarily interconnected task complexes. In summarising the legacy of these tasks and activities it is now apropos to indicate which currently acknowledged fields of research endeavour these messages contribute most directly to:

##### **1. MLL Approach;**

- As a functional, pedagogically sufficient, notion for improving learning, literacy is conceived as being constituted by linguistic, cognitive-metacognitive and sociocultural dimensions. These elements are sufficient frames for planning, programming, resourcing, assessment and evaluation considerations.

- The notions universality and transference are important and sufficient drivers of integrated and collaborative literacy teaching and learning within and across languages that lead to positive impacts on learning.

This cord of research messages is particularly relevant for *Science of Learning, Languages Acquisition, Literacy, Pedagogy, Curriculum Development and Assessment*.

## 2. Professional Learning;

- Ongoing capacity building that is strategically launched on the basis of practitioner questions and curiosity is effective and necessary if teachers are to iteratively program, plan, teach and evaluate literacy development as it occurs within and across languages over time.
- Appropriately experienced and skilled implementation teams are necessary drivers of innovation, knowledge creation and dissemination.
- Ongoing professional learning, when suitably structured, nurtured and attuned to project-specific communication channels is an effective driver of research output (an adaptive version of Guskey's model of teacher change and an extended version of Timperley's necessary conditions for effective PL).

This cord of research messages is particularly important for *Implementation Sciences (incl. Science of Learning), Professional Learning (Adult Education) and Educational Leadership and Management*.

## 3. Research;

- Lonergan's transcendental precepts and the notion of *Veritas*, in the sense of professional judgments as potentially invulnerable messages, provide for a pragmatic scheme enabling the identification, design and implementation of communication networks that serve both ongoing professional learning and research output.
- Lonergan's three tasks of knowing provide a viable schema for driving research into practice and for the identification of practically relevant investigations.
- These schemes offer pragmatism the potential to become a single philosophical paradigm with the capacity to guide and justify the integration of research processes from hitherto differing philosophical traditions.

This cord of research messages is particularly appropriate for *Methodology and Philosophy*.

In this communicative web of research each task-message built upon those preceding it while setting the scene for those to follow in a recursive fashion. In this example, messages were generally operative in defining, building and establishing the tasks for learning in action of both the researcher and teachers, each of whom became both researcher and researched. It was a dialectic, reciprocal movement from the concrete acts of classrooms to the abstractions of intelligent thought followed by a return to concrete intelligence in (research) action.

It was necessary for the communication system as a whole to embrace duplication, repetition, gradual refinement and experimentation in what can be rightly defined as an open task-analytic process.

The more general point to make is that all researching is a matter of communications. What makes it research is simply the attention to and awareness of the communication strands, channels and purposes. This particular study of real-life classroom languages and literacy teaching developed through its networks certain research insights, regarding new classroom and classroom-related tasks and practices, which were to become research messages not merely for communicating or generating research 'findings' but for doing researching tasks, to call forth and respond to successive movements of research activity which were to become research messages not merely for communicating or generating research 'findings' but for doing classroom researching tasks, to call forth and respond to successive movements of classroom research activity, such that practice and research merged.

The total communication network was set up so that it would naturally extend and continue. It is reasonable to predict that this research effect will be continuing and active in its percolation through the learning in action of relevant professional networks connected to and beyond those involved in the activities reported in this thesis.

#### **8.4.2** *Ergo veritas est*

This study succeeded in drawing the curiosity and engagement of experienced and astute educators who were guided into joint activity as research partners that built new knowledge in and through their intelligence in action. It was their knowledge, beliefs, skills and instructional frameworks that all developed into something new, something that in their professional judgments had a significant and positive impact on their students' learning. And this was achieved through an iterative and adaptive process of adult learning guided by suitably experienced and knowledgeable expertise with specific conditions and communications that proved sufficient for eliminating the research to practice gap. What was delivered was a change in teaching Approaches and a carefully documented account of those changes, the conditions that carried them and their impacts then and, in the years following the study (refer to 8.3.2, on research legacy).

It is against this background that what this thesis claims to be *truths* arising from the provocations provided by the initial research questions can be properly judged as vulnerable or invulnerable, so as to claim that it was the case that these phenomena really happened in this way.

## References

- ACARA. (2009). *Curriculum Design Paper v2.0*.  
[http://www.acara.edu.au/verve/resources/Curriculum\\_Design\\_Paper\\_.pdf](http://www.acara.edu.au/verve/resources/Curriculum_Design_Paper_.pdf) Accessed 9-12-09.
- ACARA. (2019). *National Literacy Learning Progression*.  
<https://www.australiancurriculum.edu.au/media/3673/national-literacy-learning-progression.pdf> Accessed 14-04-2020.
- Adams P. A., & Adams J. K. (1958). Training in confidence-judgments. *The American Journal of Psychology*, 71, 747–751.
- Agarwal, P. K., D'Antonio, L., Roediger, H. L. III, McDermott, K. B., & McDaniel, M. A. (2014). Classroom-based programs of retrieval practice reduce middle school and high school students' test anxiety. *Journal of Applied Research in Memory and Cognition*, 3(3), 131–139.
- AITSL. (2014). *Looking at classroom practice*. [https://www.aitsl.edu.au/docs/default-source/default-document-library/looking-at-classroom-practice.pdf?sfvrsn=f645e23c\\_0](https://www.aitsl.edu.au/docs/default-source/default-document-library/looking-at-classroom-practice.pdf?sfvrsn=f645e23c_0) Accessed 14-04-2020.
- AITSL. (2017). *Australian Professional Standards for Teachers*.  
<https://www.aitsl.edu.au/teach/standards> Accessed 16-04-2020.
- Allen, H. B. (1965). Dictation as a test of ESL proficiency. In H. B. Allen & R. N. Campbell (Eds.), *Teaching English as a second language: A book of readings* (pp.346-354). New York, USA: McGraw-Hill.
- Allwright, D., & Bailey, K. M. (1991). *Focus on the language classroom*. Cambridge, UK: Cambridge University Press.
- Anderson, J. (2008). Towards an integrated second-language pedagogy for foreign and community/heritage 1 languages in multilingual Britain. *The Language Learning Journal*, 36(1), 78-89.
- Anthony, M. E. (1965). *Approach method and techniques teaching English as a second language*. Oxford, UK: Oxford University Press.
- Aro, M., & Wimmer, H. (2003). Learning to read: English in comparison to six more regular orthographies. *Applied Psycholinguistics*, 24(4), 621–635.
- Ary, D., Jacobs, L. C., Walker, D. A., & Sorensen, C. (2013). *Introduction to research in education*. USA: Cengage Education.
- August, D., & Shanahan, T. (eds.) (2006). *Executive summary: developing literacy in second-languages learners: report of the National Literacy Panel on language-minority children and youth*. Mahwah, NJ, USA: Lawrence Erlbaum.
- Australian Education Union. 2015. Sentiments from another era. *AEU Journal SA*, 47(5), 3-4.
- Balas, E., & Boren, S. A. (2000). Managing clinical knowledge for health care improvement. *Yearbook of Medical Informatics*. 65-70.
- Beattie, J. (1788). *The theory of language. Part I. Of the origin and general nature of speech. Part II. Of universal grammar*. London, UK: Strahan.
- Bell, M., Cordingley, P., Isham, C. & Davis, R. (2010). *Report of professional practitioner use of research review: Practitioner engagement in and/or with research*. Coventry, UK: CUREE, GTCE, LSIS & NTRP.
- Berninger, V. W., Vaughan, K., Abbott, R. D., Begay, K., Coleman, K. B., Curtin, G., Hawkins, J. M., & Graham, S. (2002). Teaching spelling and composition alone and together: Implications for the simple view of writing. *Journal of Educational Psychology*, 94(2), 291–304.
- Berninger, V. W., & Winn, W. D. (2006). Implications of advancements in brain research and technology for writing development, writing instruction, and educational evolution. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research*, pp.96–114. The Guilford Press.

- Bialystok, E. (2017). The bilingual adaptation: How minds accommodate experience. *Psychological Bulletin*, 143, 233–262.
- Bialystok, E., Craik, F., & Luk, G. (2008). Cognitive control and lexical access in younger and older bilinguals. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 34, 859–873.
- Blackler, F. (1995). Knowledge, knowledge work and organizations: An overview and interpretation. *Organization Studies*, 16(6), 1021-1046.
- Bol. L., Hacker D. J., O'Shea P., & Allen D. (2005). The influence of overt practice, achievement level, and explanatory style on calibration accuracy and performance. *Journal of Experimental Education*, 73, 269–290.
- Bourner, T. (2003). Assessing reflective learning. *Education and Training*, 45, 267-272.
- Brito, N. H., Murphy, E. R., Vaidya, C., & Barr, R. (2016). Do bilingual advantages in attentional control influence memory encoding during a divided attention task? *Bilingualism: Language and Cognition*, 19, 621–629.
- Broadfoot, P. M., Daugherty, R., Gardner, J., Harlan, W., James, M. & Stobart, G. (2002). *Assessment for learning: 10 principles*. Cambridge, UK: University of Cambridge School of Education.
- Brunswick, N., McDougall, S., & de Mornay Davies, P. (Eds.). (2010). *Reading and dyslexia in different orthographies*, New York, USA: Psychology Press.
- Burns, T. & Stalker, G. M. (1961). *The management of innovation*. London, UK: Tavistock.
- Candlin, C. N. (1987). Towards task-based language learning. In C. Candlin, & D. Murphy (Eds.), *Language learning tasks* (pp.5-22). Lancaster Practical Papers in English. Lancaster, UK: Lancaster University.
- Carnine, D. (1997) Bridging the research-to-practice Gap. *Exceptional Children*, 63(4), 513-521.
- Carpenter, J., Sherman, M. T., Kievit, R. A., Seth, A. K., Lau, H., & Fleming, S. M. (2019). Domain-general enhancements of metacognitive ability through adaptive training. *Journal of experimental psychology. General*, 148(1), 51–64.
- Cartwright, K. B., Bock, A. M., Clause, J. H., Coppage August, E. A., Saunders, H. G., & Schmidt, K. J. (2020). Near- and far-transfer effects of an executive function intervention for 2<sup>nd</sup> to 5<sup>th</sup>-grade struggling readers. *Cognitive Development*, 56, 1-11.
- Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19, 5–51.
- Chiappe, P., Siegel, L. S., & Gottardo, A. (2002). Reading-related skills of kindergartners from diverse linguistic backgrounds. *Applied Psycholinguistics*, 23(1), 95–116.
- Chiappe, P., Siegel, L. S., & Wade-Woolley, L. (2002). Linguistic diversity and the development of reading skills: A longitudinal study. *Scientific Studies of Reading*, 6(4), 369–400.
- Chomsky, N. (1965). *Aspects of the theory of syntax*. USA: MIT Press.
- Coady, J., & Huckin, T. (Eds.). (1997). *Second language vocabulary acquisition*. UK: Cambridge University Press.
- Coch, D. (2017). Learning to read: The science of reading in the classroom. In J. C. Horvarth., J. M. Lodge., & J. Hattie. (Eds.). (2017). *From the laboratory to the classroom: Translating science of learning for teachers* (pp.191-2012). New York, USA: Routledge.
- Conner, U. (1996). *Contrastive rhetoric*. New York, USA: Cambridge University Press.
- Cook, G., & Seidlhofer, B. (1995). *Principle and practice in applied linguistics: Studies in honour of H. G. Widdowson*. London, UK: Oxford University Press.
- Corder, S. P. (1967). The significance of learner's errors. *IRAL: International Review of Applied Linguistics in Language Teaching*, 5(4), 161-170.
- Cordingley, P., Bell, M., Rundell, B., & Evans, D. (2003). The impact of collaborative CPD on classroom teaching and learning. In: *Research evidence in education library*. Version

- 1.1\*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Cordingley, P., Bell, M., Evans, D., & Firth, A. (2005). The impact of collaborative CPD on classroom teaching and learning. What do teacher impact data tell us about collaborative CPD? In: *Research evidence in education library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Cordingley, P., Bell, M., Isham, C., Evans, D. & Firth, A. (2007). What do specialists do in CPD programmes for which there is evidence of positive outcomes for pupils and teachers? Report in: *Research evidence in education library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Cordingley, P., Higgins, S., Greany, T., Buckler, N., Coles-Jordan, D., Crisp, B., Saunders, L. & Coe, R. (2015). *Developing great teaching: lessons from the international reviews into effective professional development, Project Report*. London, UK: Teacher Development Trust.
- Corey, S. M. (1949). *Action research to improve school practices*. New York, USA: Teachers College, Columbia University Bureau of Publications.
- Corson, D. (1999) *Language policy in schools*. NJ, USA: Lawrence Erlbaum Associates.
- Council of Europe. (2010). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge, UK: Cambridge University Press.
- Cronbach, L. J. (1971). Test validation. In R. Thorndike (Ed.), *Educational measurement* (2nd ed., p443). Washington DC, USA: American Council on Education.
- Crookes, G. (1989). Planning and interlanguage variation. *Studies in Second Language Acquisition*, 11, 367-383.
- Crookes, G., & Rulon, K. A. (1985). *Incorporation of corrective feedback in native speaker/normative speaker conversation*. Center for Second Language Classroom Research, Social Science Research Institute, Technical Report No. 3. Honolulu, USA: University of Hawaii.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Australia: Allen & Unwin.
- Cummins, J. (1979) Linguistic interdependence and educational development of bilingual children. *Review of Educational Research*, 49, 222-51.
- Cummins, J. (1984). Implications of bilingual proficiency for the education of minority language students. In P. Allen, M. Swain, & C. Brumfit (Eds.), *Language issues and education policies: Exploring Canada's multilingual resources*. Oxford, UK: Pergamon Press.
- Cummins, J. (1991) Interdependence of first- and second-language proficiency in bilingual children . In E. Bialystok (ed.), *Language processing in bilingual children* (pp.70-89). New York, USA: Cambridge University Press.
- Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. UK: Multilingual Matters.
- Cummins, J. (2005). Teaching for cross-language transfer in dual language education: Possibilities and pitfalls. *TESOL*.
- Dalin, P. (2005). *School development: Theories and strategies*. London, UK: Continuum Books.
- Davis, M. H., McPartland, J. M., Pryseski, C., & Kim, E. (2018). The effects of coaching on English teachers' reading instruction practices and adolescent students' reading comprehension, *Literacy Research and Instruction*, 57(3), 255-275.
- Deans for Impact. (2020). *The science of early learning*. <https://deansforimpact.org/about-us/> Accessed 24-3-2020.
- Deans for Impact. (2020). *The science of learning*. <https://deansforimpact.org/about-us/> Accessed 24-3-2020.

- Dehaene, S. (2009). *Reading in the brain: The new science of how we read*. New York, USA: Penguin.
- Department for Education. (2007). *Letters and Sounds*, UK: Crown Press.
- Department for Education and Child Development (DECD). (2010). *Teaching for Effective Learning*. Australia: SA Government.
- Derewianka, B., M. (2015). "The contribution of genre theory to literacy education in Australia". *Faculty of Social Sciences - Papers*. 1621.
- Diaz, R., M., & Klinger, C. (1991). Towards an exploratory model of the interaction between bilingualism and cognitive development. In E. Bialystok (Ed.), *Language processing in bilingual children* (pp.167-192). Cambridge, UK: Cambridge University Press.
- Doughty, C., & Pica, T. (1986). Information gap tasks: Do they facilitate second language acquisition? *TESOL Quarterly*, 20(2), 305-325.
- Edelsky, C., Hudelson, S., Altwerger, B., Flores, B., Barkin, F., & Jilbert, K. (1983). Semilingualism and language deficit. *Applied Linguistics*, 4(1), 1-22.
- Education Council. (2019). *Alice Springs (Mparntwe) Education Declaration*. Australia: Department of Education, Skills and Employment. <https://docs.education.gov.au/documents/alice-springs-mparntwe-education-declaration> Accessed 14-4-2020.
- Education Deans for Justice and Equity. (2020). <https://nepc.colorado.edu/publication/fyi-reading-wars>. Accessed 24-3-2020.
- Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5-21.
- Elbaz, F. (1983). *Teacher thinking: A study of practical knowledge*. London, UK: Croom Helm.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford, UK: Oxford University Press.
- Ellis, S. & McCartney, E. (Eds.). (2011). *Applied linguistics and primary school teaching*. Cambridge, UK: Cambridge University Press.
- First Alliance. (1998). Every child reading. *American Educator*, 22(1-2), 61.
- Fisher, D., & Frey, N. (2018). Show & tell: A video column / boosting your teacher credibility, *Educational Leadership*, 76(1), 82-83.
- Fisher, D., Frey, N., & Hattie, J. (2016). *Visible learning for literacy, grades K-12*. Australia: Corwin.
- Fixsen, D. L., Blase, K. A., Timbers, G. D., & Wolf, M. M. (2001). In search of program implementation: 792 replications of the Teaching-Family Model. In G.A. Bernfeld, D.P. Farrington, & A.W. Leschied. (Eds.), *Offender Rehabilitation in Practice: Implementing and Evaluating Effective Programs*. London, UK: Wiley.
- Foster, P., & Skehan, P. (1996). The influence of planning and task type on second language performance. *Studies in Second Language Acquisition*, 18, 299-323.
- Franks, R. P. (2010). *Role of the intermediary organization in promoting and disseminating best practices for children and youth*. Farmington, CT: Connecticut Center for Effective Practice, Child Health and Development Institute.
- Freidin, R. (1991). *Principles and parameters in comparative grammar*, London: MIT.
- Fried, L., & Konza, D. (2010, revised in 2013). *From sounds to spelling*, WA: Fogarty Learning Centre, Edith Cowan University.
- Fuchs, D., Fuchs, L. S., Thompson, A., Al Otaiba, S., Yen, L., & Yang, N. J. (2001). Is reading important in reading-readiness programs? A randomized field trial with teachers as program implementers. *Journal of Educational Psychology*, 93, 251-267.
- Fulcher, G., & Davidson, F. (2009). *Language testing and assessment*. London, UK: Routledge.



- Fullan, M. G., & Miles, M. B. (1992). Getting reform right: What works and what doesn't. *Phi Delta Kappan*, 73, 745-752.
- Gadamer, H-G. (2001) Education is self-education. *The Journal of Philosophy of Education*, 35(4), 529-538.
- Gallie, W. B. (1952). *Peirce and pragmatism*. Harmondsworth, Middlesex, UK: Penguin.
- Genesee, F., Lindholm-Leary, K., Saunders, W. M., & Christian, D. (Eds.). (2006). *Educating English language learners: A synthesis of research evidence*. Cambridge, UK: Cambridge University Press.
- Gentaz, E. (2018). The delicate passage from lab to school. *La Recherche*, 539, 42-46.
- Gentner, D. (1983). Structure-mapping: A theoretical framework for analogy. *Cognitive Science*, 7(2), 155-170.
- Gerbier, E. & Toppino, T. (2015). The effect of distributed practice: Neuroscience, cognition, and education. *Trends in Neuroscience and Education*.
- Geva, E. (2006). Second-Language oral proficiency and second-language literacy. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth* (pp.123–139). USA: Lawrence Erlbaum Associates Publishers.
- Geva, E., Yaghoub-Zadeh, Z., & Schuster, B. (2000). Understanding individual differences in word recognition skills of ESL children. *Annals of Dyslexia*, 50, 121-154.
- Gleick, (1987). *Chaos: making a new science*. NY, USA: Penguin Books.
- Gomez, P., & Zimmermann, T. (1992). *Unternehmensorganisation: Profile, dynamik, methodik*. New York, USA: Campus Verlag.
- Goodman, K.S. (1967). A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6(4), 126–135.
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6-10.
- Graham, S. & Harris, K. (2005). *Writing better: Effective strategies for teaching students with learning difficulties*. USA: Brookes Publishing Company.
- Green, A. (2014). *Exploring language assessment and testing*. Abingdon, Oxon, UK: Routledge.
- Greenhalgh, T., Glenn, R., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: systematic literature review and recommendations for future research. *Milbank Quart.*, 82, 581-629.
- Greenhalgh, T., & Papoutsi, C. (2018). Studying complexity in health services research: Desperately seeking an overdue paradigm shift. *BMC Medicine*, 16(1), 95.
- Griffin, G. A. (1983). Introduction: the work of staff development, in: G. A. Griffin. (Ed.) *Staff Development, Eighty-Second Yearbook of the National Society for the Study of Education*, Chicago, IL, USA: University of Chicago Press.
- Grundy, J. G., & Timmer, K. (2017). Bilingualism and working memory capacity: A comprehensive meta-analysis. *Second Language Research*, 33, 325–340.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp.105–117). Sage.
- Guskey, T. R. (1986) Staff development and the process of teacher change, *Educational Researcher*, 15(5), 5-12.
- Guskey, T. R. (2000). *Evaluating professional development*. USA: Corwin Press.
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching*, 8, 381-391.
- Hai, Li., & Perfetti, C. (1998). Phonological codes as early sources of constraint in Chinese word identification. *Reading and Writing*, 10, 165-200.
- Halliday, M. A. K., & Webster, J. J. (Eds.). (2009). *Continuum companion to systemic functional linguistics*. London, UK: Continuum International.

- Hamlyn, D. W. (1995). *The theory of knowledge*. USA: Macmillan Publishers.
- Hargreaves, A., & Fullan, M. (2012). *Professional capital*. New York, USA: Teachers College Press/Routledge.
- Harris, K. R., Graham, S., Mason, L., & Friedlander, B. (2008). *Powerful writing strategies for all students*. Baltimore, MD: Brookes.
- Hartwig, M. K., & Dunlosky, J. (2012). Study strategies of college students: Are self-testing and scheduling related to achievement? *Psychonomic Bulletin & Review*, 19(1), 126–134.
- Hattie, J. (2019). *Corwin Professional Learning Community Conference*, Melbourne, Australia: Corwin.
- Hernández, M., Costa, A., Fuentes, L. J., Vivas, A. B., & Sebastián-Gallés, N. (2010). The impact of bilingualism on the executive control and orienting networks of attention. *Bilingualism: Language and Cognition*, 13, 315–325.
- Hollingsworth, J., & Ybarra, S. (2009). *Explicit direct instruction (EDI): The power of the well-crafted, well-taught lesson*. Corwin Press.
- Holyoak, K. J. (2012). Analogy and relational reasoning. In K. J. Holyoak & R. G. Morrison. (Eds.). *Oxford library of psychology. The Oxford handbook of thinking and reasoning* (pp.234–259). Oxford, UK: Oxford University Press.
- Hope, D. (2001). *The complete phonic handbook*. RIC Publications, Australia.
- Horvath, J. C., Lodge, J. M. & Hattie, J. (Eds.). (2017). *From the laboratory to the classroom: Translating science of learning for teachers*. New York, NY, USA: Routledge.
- Howell, K. W., Morehead, M. K., & Fox, S. L. (1993). *Curriculum-based evaluation: teaching and decision making* (2nd ed). Pacific Grove, Calif, USA: Brooks/Cole Pub. Co.
- Hughes, A. (2002). *Testing for language teachers* (Cambridge Language Teaching Library). Cambridge, UK: Cambridge University Press.
- Indefrey, P., & Levelt, W. J. M. (2000). The neural correlates of language production. In M. S. Gazzaniga (Ed.), *The new cognitive neurosciences* (2<sup>nd</sup> ed., pp.845-865). Cambridge, MA, USA: MIT Press.
- Jespersen, O. (1904). *How to teach a foreign language*. London: Allen & Unwin.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33, 14-26.
- Johnstone, R. M. (1994). *Modern languages at primary school – Implications and approaches*. Edinburgh: Scottish Council for Research in Education.
- Katz, L., & Frost, S. J. (2001). Phonology constrains the internal orthographic representation. *Reading & Writing: An Interdisciplinary Journal*, 14, 297-332.
- Kegan, R., & Lahey, L. (2001). The real reason people won't change. *Harvard Business Review*. USA: Harvard Business School Publishing.
- Kelly, B. & Perkins, D. F. (Eds.). (2014). *Handbook of implementation science for psychology in education*. New York, NY, USA: Cambridge University Press.
- Kern, R. (2000). *Literacy and language teaching*. Oxford, UK: Oxford University Press.
- Kessen, W. (Ed.). (1983). *Handbook of child psychology*. Vol. 1. *History, Theory, and Methods*. New York, USA: John Wiley & Sons.
- Kidd, Celeste, Piantadosi, Steven, T., Aslin, Richard N. (2012). ["The Goldilocks Effect: Human Infants Allocate Attention to Visual Sequences That Are Neither Too Simple Nor Too Complex"](https://doi.org/10.1371/journal.pone.0181055). *PLOS ONE*. 7 (5): e36399. Accessed May 23, 2012.
- Kilpatrick, D. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. USA: Wiley.
- Kirschner, P. (2020). Ask a Research #5 – Dr. Paul Kirschner, in *The Effortful Educator*, <https://theeffortfuleducator.com/2020/07/07/ask-a-researcher-5-dr-paul-kirschner/> Accessed 8-7-2020.

- Knight, J. (Ed.). (2009). *Coaching: Approaches & perspectives*. Corwin Press.
- Koda, K., & Zehler, A. (eds.) (2008) *Learning to read across languages; Cross-linguistic relationships in first- and second-language literacy development*. NY, USA: Routledge.
- Konza, D. (2006). *Teaching children with reading difficulties*. Australia: Cengage.
- Konza, D. (2014). Teaching reading: Why the “Fab Five” should be the “Big Six”. *Australian Journal of Teacher Education*, 39(12).
- Krashen, S. D. (1981). *Principles and practice in second language acquisition*. Oxford, UK: Pergamon Press.
- Kumaravadivelu, B. (2003). *Beyond methods: Macrostrategies for language teaching*. USA: Yale University Press
- Ladefoged, P., & Maddieson, I. (1998). *The sounds of the world’s languages*, Oxford, UK: Blackwell.
- Lado, R. (1957). *Linguistics across cultures: Applied linguistics for language teachers*. USA: University of Michigan Press.
- Lange, D. (1990) A blueprint for a teacher development programme. In J. C. Richards and D. Nunan (Eds.), *Second language teacher education* (pp.245-268). Cambridge, UK: Cambridge University Press,.
- Larsen-Freeman, D. & Anderson, M. (2011). *Techniques and principles in language teaching*. China: Oxford University Press.
- Larsen-Freeman, D. & Long, M. H, (1991). *An introduction to second language research*. London, UK: Longman.
- Latham, M. (2020). *Measurement and outcome-based funding in New South Wales Schools*. <https://www.parliament.nsw.gov.au/committees/inquiries/Pages/inquiry-details.aspx?pk=2539> Accessed 14-4-2020.
- Law, B., & Eckes, M. (1995). *Assessment and ESL: On the yellow brick road to the withered of Oz*. CA, USA: Peguis Publishers.
- Lee, N., Mikesell, L., Joaquin, A., Mates, A., & Schumann, J. (2009). *The interactional instinct: The evolution and acquisition of language*: Oxford University Press.
- Lehtonen, M., Soveri, A., Laine, A., Järvenpää, J., de Bruin, A., & Antfolk, J. (2018). Is bilingualism associated with enhanced executive functioning in adults? A meta-analytic review. *Psychological Bulletin*, 144, 394–425.
- Lenneberg, E. H. (1967). *Biological foundations of language*. New York, USA: Wiley.
- Lesaux, N. K., & Geva, E. (2006). Synthesis: Development of literacy in language-minority students. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth* (pp.53–74). USA: Lawrence Erlbaum Associates Publishers.
- Lewin, K. (1935). *A dynamic theory of personality*. USA: McGraw-Hill.
- Lichtenstein S., & Fischhoff B. (1980). Training for calibration. *Organizational Behavior and Human Performance*, 26, 149–171.
- Limbos, M. M., & Geva, E. (2001). Accuracy of teacher assessments of second-language students at-risk for reading disability. *Learning Disabilities*, 34(2), 136-151.
- Lin, A. M. Y., & Martin, P. W. (Eds.). (2005). *Decolonisation, globalisation: Language-in-education policy and practice*. Clevedon, USA: Multilingual Matters.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA, USA: Sage Publications.
- Lo Bianco, J. (2009). *Second languages and Australian schooling*. Melbourne, Australia: ACER.
- Lonergan, B.J.F. (1957). *Insight: A study of human understanding*. New York, USA: Longmans.
- Lonergan, B.J.F. (1972a). *Method in theology*. New York, USA: Herder and Herder.

- Lonergan, B.J.F. (1972b). *Method in theology (revised edition, 1973)*. London, UK: Darton, Longman and Todd.
- Long, M.H. (1985): A role for instruction in second language acquisition: task-based language teaching. In Hyltenstam, K. and Pienemann, M., (eds.), *Modelling and assessing second language acquisition* (pp.77–99). Clevedon, UK: Multilingual Matters.
- Longcamp, M., & Zerbato-Poudou, M-T., & Velay, J-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta psychologica*. 119, 67-79.
- Louis, K. & M. Miles (1990). *Improving the urban high school: What works and why*. New York, USA: teachers College Press.
- Mackey, W. F. (1965). *Language teaching analysis*. London, UK: Longmans, Green.
- MacSwan, J., & Rolstad, K. (2005). Modularity and the facilitation effect: Psychological mechanisms of transfer in bilingual students. *Hispanic Journal of the Behavioral Sciences*, 27(2), 224-243.
- Mason, J. (2002). *Researching your own practice: The discipline of noticing*. London, UK: Routledge/Falmer.
- Mason, J. (2003). Structure of attention in the learning of mathematics, in J. Novotná (Ed.). *Proceedings, International Symposium on Elementary Mathematics Teaching* (pp.9-16). Charles University, Prague.
- Mason, J. (2011). Noticing: Roots and branches. In M. G. Sherin., V. R. Jacobs., & R. A. Phillipp. (Eds.). *Mathematics teacher noticing: Seeing through teachers' eyes* (pp35-50). New York, USA: Routledge.
- Melby-Lervåg, M., & Hulme, C. (2013). Is working memory training effective? A meta-analytic review. *Developmental Psychology*, 49(2), 270-291.
- Melby-Lervåg, M., & Lervåg, A. (2011). Cross-linguistic transfer of oral language, decoding, phonological awareness and reading comprehension: a meta-analysis of the correlational evidence. *Journal of Research in Reading*, 34(1), 114-135.
- Metz, A., Halle, T., Bartley, L., & Blasberg, A. (2013). The key components of successful implementation. In T. Halle, A. Metz, & I. Martinez-Beck (Eds.), *Applying implementation science in early childhood programs and systems* (pp.21–42). Paul H Brookes Publishing Co.
- Miller, D. M., Linn, R. L. & Gronlund, N. E. (2012). *Measurement and assessment in teaching (11th edn.)*. Upper Saddle River, NJ, USA: Prentice Hall.
- Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA). (2009). The Melbourne declaration on national goals for schooling in the twenty-first century. Australia: Ministerial Council on Education, Employment, Training and Youth Affairs.
- Mintzberg, H. (1991). The effective organization: forces and forms. *Sloan Management Review*, 54.
- Misak, C. (Ed.). (2004). *The Cambridge companion to Peirce*. United States: Cambridge University Press.
- Moats, L. C. (2000). *Whole language lives on: The illusion of "Balanced Reading" instruction*. Washington, DC, USA: Thomas B. Fordham Foundation.
- Moats, L. (2019). "[Whole Language Lives On: The Illusion of Balanced Reading Instruction](#)" *LD Online*. WETA Public Television. Accessed 29-01-2019.
- Moats, L. (2020). "A Conversation about the science of reading and early reading instruction with Dr. Louisa Moats." <https://www.collaborativeclassroom.org/blog/a-conversation-about-the-science-of-reading-with-dr-louisa-moats/> Accessed May 3, 2020.
- Monash University Q Project. (2020). *Quality Use of Research Evidence Framework*, [https://www.monash.edu/\\_data/assets/pdf\\_file/0008/2275082/Monash-Quality-Use-of-Research-Evidence-Framework-summary-report.pdf](https://www.monash.edu/_data/assets/pdf_file/0008/2275082/Monash-Quality-Use-of-Research-Evidence-Framework-summary-report.pdf) Accessed July 31, 2020.

- Morales, J., Calvo, A., & Bialystok, E. (2013). Working memory development in monolingual and bilingual children. *Journal of Experimental Child Psychology*, 114, 187–202.
- Moro, A. (2008). *The boundaries of babel*. England: MIT Press.
- Nakanishi, A. (1990). *Writing systems of the world*, Japan: Charles E. Tuttle.
- National Collaborating Centre for Methods and Tools. (2011). Evidence informed public health. <http://www.nccmt.ca/eiph/index-eng.html>. Accessed 24-08-2012.
- National Institute of Child Health and Human Development (NICHD). (2000). Report of the National Reading Panel. *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. (NIH Publication No. 00-4754). Washington, DC, USA: U.S. Government Printing Office.
- National Research Council (US) Panel to review the status of basic research on school-age children. (1984). *Cognitive Development In School-Age Children: Conclusions And New Directions*. Development during middle childhood: The years from six to twelve. Accessed 20-02-2020.
- Nichols, E. S., Wild, C. J., Stojanoski, B., Battista, M. E., & Owen, A. M. (2020). Bilingualism affords no general cognitive advantages: A population study of executive function in 11,000 people. *Psychological Science*, 31(5), 548–567.
- Nielsen, B. A. (2005). *Researching learning difficulties in literacy*. Unpublished Ph.D. thesis, Flinders University, Adelaide.
- Nielsen, P. (2006). Researching my practices: teaching Spanish for literacy, *Voces Hispánicas*, Government of Spain, 3, 50-51.
- Nielsen, P., & Nielsen, B. A. (2012). A multilingual approach to languages and literacy education: What can synthesizing theories, research and practice achieve? In Si Fan, Thao Le, Quynh Le, Yun Yue. (Eds.). International Conference Innovative Research in a Changing and Challenging World 16 – 18 May, *Conference Proceedings (B)* (pp.93-108). Phuket, Thailand: AUAMII.
- Nielsen, P., & Mageean, B. (2016). Communicating real-life classroom innovations as research. In J. Orrell. & D. Curtis. (Eds.), *Publishing higher degree research: Making the transition from student to researcher* (pp.55-64). Netherlands: Sense.
- Nietfeld J. L., & Schraw G. (2002). The effect of knowledge and strategy training on monitoring accuracy. *The Journal of Educational Research*, 95, 131–142.
- Norris, J.M., Brown, J.D., Hudson, T. & Yoshioka, J. (1998): *Designing second language performance assessments*. (Vol. SLTCC Technical Report #18). Honolulu: Second Language Teaching and Curriculum Center, University of Hawaii at Manoa.
- Norris, J. M., Brown, J. D., Hudson, T. D., & Bonk, W. (2002). Examinee abilities and task difficulty in task-based L2 performance assessment. *Language Testing*, 19(4), 395–418.
- North, B., & Schneider, G. (1998). Scaling descriptors for language proficiency scales. *Language Testing*, 15(2), 217–262.
- Nosek, B. (2015a). Estimating the reproducibility of psychological science. *Science* 349 (6251).
- Nosek, B. (2015b). In R. Jacobson. Massive international project raises questions about the validity of psychology research. *Scientific American (Mind)*. <https://www.scientificamerican.com/article/massive-international-project-raises-questions-about-the-validity-of-psychology-research/> Accessed 27-8-2020.
- Nunan, D. (1989). *Understanding language classrooms: A guide for instructor initiated action*. New York, USA: Prentice-Hill.
- Nunan, D. (1999). *Second language teaching & learning*, USA: Heinle, Cengage Learning.
- Odlin, T. (1989). *Language transfer: cross-linguistic influence in language learning*. Cambridge, UK: Cambridge University Press.

- Odom, S.L. (2009). The ties that bind: Evidence-based practice, implementation science, and outcomes for children. *Topics in Early Childhood Special Education*, 29(1), 53-61.
- OECD (2005), *Education at a glance 2005: OECD Indicators*, Paris: OECD Publishing,
- Orwell, G. (1946). *Politics and the English language*. London, UK: Horizon.
- Pae, H. K., Sevcik, R. A., & Morris, D. (2009). Cross-language correlates in phonological awareness and naming speed: Evidence from deep and shallow orthographies. *Journal of Research in Reading*, 33(4), 374-391.
- Palincsar, A. S. (1986). Metacognitive strategy instruction. *Exceptional Children*, 53(2), 118–124.
- Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, 8(3), 317–344.
- Perfetti, C. A. (2003). The universal grammar of reading. *Scientific Studies of Reading*, 7, 3-24.
- Perfetti, C. A., Landi, N., & Oakhill, J. (2005). The acquisition of reading comprehension skill. In M. J. Snowling & C. Hulme (Eds.), *Blackwell handbooks of developmental psychology. The science of reading: A handbook* (pp.227–247). Oxford, UK: Blackwell Publishing.
- Petscher, Y., Cabell, S., Catts, H. W., Compton, D., Foorman, B., Hart, S. A., & Wagner, R. (2020). *How the science of reading informs 21st century education*.  
<https://doi.org/10.31234/osf.io/yvp54>
- Piaget, J. (1977). In H. E. Gruber & J. J. Voneche (Eds.), *The essential Piaget: An interpretive reference guide*. New York, USA: Basic Books.
- Pinker, S. (2008). *The stuff of thought: language as a window into human nature*. USA: Viking Penguin.
- Poch, A. L., & Lembke, E. S. (2017). A not-so-simple view of adolescent writing. *International Journal for Research in Learning Disabilities*, 3(2), 27-44.
- Reichardt, C. S., & Rallis, S. F. (1994). The relationship between the qualitative and quantitative research traditions. *New Directions for Program Evaluation*, 61, 5-11.
- Renner C. H., & Renner M. J. (2001). But I thought I knew that: Using confidence estimation as a debiasing technique to improve classroom performance. *Applied Cognitive Psychology*, 15, 23–32.
- Rescher, N. (1995). Pragmatism. In T. Honderich (Ed.), *The Oxford companion to philosophy* (pp.710-713). Oxford, UK: Oxford University Press.
- Reutzel, D. R., & Cooter, R. B. (2013). *Essentials of teaching children to read: The teacher makes the difference, 3rd Edition*. USA: Pearson.
- Richards, J. C. (Ed.). (2009). *Curriculum development in language teaching, 11<sup>th</sup> Edition*. New York, USA: Cambridge University Press.
- Richards, J. C., & Theodore S. Rogers. (1986; 2009). *Approaches and methods in language teaching*. London, UK: Cambridge University Press.
- Riches, C., & Genesee, F. (2006). Literacy: Crosslinguistic and crossmodal issues. In F. Genesee, K. Lindholm-Leary, W. Saunders, & D. Christian (Eds.), *Educating English language learners*. New York, USA: Cambridge University Press.
- Rivers, W. (1991). *Teaching in college: Curriculum and content (Language – Professional Resources)*. USA: National Textbook Co Trade.
- Rivers, W. (1992). The program director or coordinator, the LTCS, and the training of college language instructors. In Rivers, W. (Ed.). *Teaching languages in college: Curriculum and content* (pp.295-312). Lincolnwood, IL, USA: National Textbook Company.
- Roberts, J. (1998). *Language teacher education*. London, UK: Arnold.
- Robinson, P., Ting, S., & Urwin, J. (1995). Investigating second language task complexity. *RELC Journal*, 25, 62-79.

- Rohbanfard, H., Proteau, L. (2011). Learning through observation: A combination of expert and novice models favors learning. *Experimental Brain Research*, 215, 183–197.
- Rose, J. (2006). "[Independent review of the teaching of early reading](#)" (PDF). *Department for Education and Skills*. Accessed on 24-08-2011.
- Rosen, H. (1985). *Stories and meanings*. Sheffield, UK: National Association for the Teaching of English.
- Rowe, K. & National Inquiry into the Teaching of Literacy (Australia), *Teaching reading: Report and recommendations* (2005). Canberra, Australia: Australian Council for Educational Research.
- Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). Effective reading instruction for struggling readers: The role of direct/explicit teaching, *Reading & Writing Quarterly*, 25(2-3), 125-138.
- Scarino, A. (2007). *Options in the development of national assessment processes for language learning in Australian schools*. Unpublished memo to (Australian) National Languages Working Party of the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA).
- Schumann, J. H., Crowell, S. E., Jones, N. E., Namhee, L., Schubert, S. A., Wood, L. A., Sharpes, D. K. (2004) *The neurobiology of learning: Perspectives from second language acquisition*. NJ, USA: Erlbaum.
- Seidenberg, M. S., Borkenhagen, M. C., & Kearns, D. M. (2020). Lost in translation? Challenges in connecting reading science and educational practice. *Reading Research Quarterly*, 55(1), 119-130.
- Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics*, 10, 209–231.
- Shakespeare, W. (2008). Gary Taylor (Ed.). *Henry V*. Oxford, UK: Oxford University Press.
- Shanahan, T. (2020). Does “modelling” have a place in high quality literacy teaching, in *Shanahan on Literacy*, <https://shanahanonliteracy.com/blog/does-modeling-have-a-place-in-high-quality-literacy-teaching> Accessed 10-01-2020.
- Share, D. L. (1995). Phonological recoding and self-teaching: sine qua non of reading acquisition. *Cognition*. 55(2), 151-226.
- Sharp G. L., Cutler B. L., & Penrod S. D. (1988). Performance feedback improves the resolution of confidence judgments. *Organizational Behavior and Human Decision Processes*, 42, 271–283.
- Shaywitz, S. E., (2003). *Overcoming dyslexia: A new and complex science-based program for reading problems at any level*. New York, USA: Knopf.
- Singleton, J. (2015). Head, heart and hands model for transformative learning: Place as context for changing sustainability values. *Sustainability Education*, 9.
- Skehan, P. (1996). A framework for the implementation of task-based instruction. *Applied Linguistics*, 17, 38–62.
- Slavin, R. E. (1987). Ability grouping in elementary schools: Do we really know nothing until we know everything? *Review of Educational Research*, 57(3), 347–350.
- Smith, D. L., & Lovat, T. J. (2003). *Curriculum: Action on reflection*. Australia: Social Science Press.
- Solari, E., Terry, N. P., Gaab, N., Hogan, T. P., Nelson, N., Pentimonti, J., Petscher, Y., & Sayko, S. (2020). *Translational science: A roadmap for the science of reading*. <https://edarxiv.org/8z7e6/> Accessed 12-5-2020.
- Sousa, D. A. (2006). *How the special needs brain learns*. Australia: Hawker Brownlow Education.
- Sparks, R. (1995). Examining the linguistic coding differences hypothesis to explain individual differences in foreign language learning. *Annals of Dyslexia*, 45, 187-214.
- Sparks, R., & Ganschow, L. (1991). Foreign language learning difficulties: Affective or native language aptitude differences? *Modern Language Journal*, 75, 3-16.

- Sparks, R., & Ganschow, L. (1993). Searching for the cognitive locus of foreign language learning problems: Linking first and second language learning. *Modern Language Journal*, 77, 289-302.
- Sparks, R., & Ganschow, L. (1995). A strong inference approach to causal factors in foreign language learning: A response to MacIntyre. *Modern Language Journal*, 79, 235-244.
- Stanovich, Keith (1994). Romance and reality. *The Reading Teacher*, 47, 280–291.
- Stenhouse, L. (1980). The Study of samples and the study of cases, *British Educational Research Journal*, 6(1), 1-6.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285.
- Sweller, J. (2011). Cognitive load theory. In Mestre, J. P., & Ross, B. H., (Eds.). (2011). *The Psychology of Learning and Motivation*. San Diego, USA: Academic Press.
- Taba, H. (1962). *Curriculum development: theory and practice*. New York, USA: John Wiley.
- Tashakkori, A., & Teddlie, C. (Eds.). (2003). *Handbook of mixed methods in social and behavioural research*. Thousand Oaks, CA, USA: Sage.
- Teddlie, C. & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. London, UK: Sage.
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher professional learning and development: Best evidence synthesis iteration*, Wellington, New Zealand: Ministry of Education.
- Tunmer, W. E. (2011). Forward. In S. A. Brady., D. Braze., & C. A. Fowler. (Eds.), *Explaining individual differences in reading: Theory and evidence*, pp.ix-xiv. New York, NY, USA: Psychology Press.
- Tyler, R. W. (1950). *Basic principles of curriculum and instruction*. Chicago, USA: University of Chicago.
- U.S. Department of Health and Human Services. (2000). *National Reading Panel*. USA: NIH.
- Van Dalen, D. B. (1962). *Understanding educational research, an introduction*. New York, USA: McGraw-Hill.
- van Gelderen, A., Schoonen, R., de Glopper, K., Hulstijn, J., Simis, A., Snellings, P., & Stevenson, M. (2004). Linguistic knowledge, processing speed, and metacognitive knowledge in first- and second-language reading comprehension: A componential analysis. *Journal of Educational Psychology*, 96(1), 19–30.
- van Gelderen, A., Schoonen, R., Stoel, R. D., de Glopper, K., Hulstijn, J. (2007). Development of adolescent reading comprehension in language 1 and language 2: A longitudinal analysis of constituent components. *Educational Psychology*, 99(3), 477-491.
- Verhoeven, L. (1994). Transfer in bilingual development: The Linguistic interdependence hypothesis revisited. *Language Learning*, 44, 381-415.
- Vermeire, E., & Hearnshaw, H. P., Royen, P., & Denekens, J. (2001). Patient adherence to treatment: Three decades of research. A comprehensive review. *Journal of clinical pharmacy and therapeutics*, 26, 331-42.
- Victorian Government. (2020). Early childhood language program. <https://www.education.vic.gov.au/about/programs/Pages/eclanguageprograms.aspx?Redirect=1> Accessed 20-10-2020.
- Villaume, S. K., & Brabham, E. G. (2003). Phonics instruction: Beyond the debate. *The Reading Teacher*, 56(5), 478-482.
- Vygotsky, L.S. (1962). *Thought and language*. Cambridge, Mass., USA: MIT Press.
- Wade-Woolley, L., & Siegel, L. S. (1997). The spelling performance of ESL and native speakers of English as a function of reading skill. *Reading and Writing: An Interdisciplinary Journal*, 9(5-6), 387–406.



- Weir, C. J. (2004). *Language testing and validation*. New York, NY, USA: Palgrave Macmillan.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. UK: Cambridge University Press.
- Widdowson, H. G. (1990). *Aspects of language teaching*. USA: Oxford University Press.
- Wheeler, D. K. (1967). *Curriculum process*. London, UK: University of London Press.
- Wiliam, D. (2015). *Redesigning schooling: Principled assessment design*. Australia: Hawker Brownlow Education.
- Wiliam, D. (2019). Some reflections on the role of evidence in improving education, *Educational Research and Evaluation*, 25(1-2), 127-139.
- Willingham, D. T. (2009). *Why don't students like school? A cognitive scientist answers questions about how the mind works and what it means for the classroom*. CA, USA: Jossey-Bass.
- Wood, D. (2010a). *Formulaic language and second language speech fluency: background, evidence and classroom applications*. London, UK: Continuum Books.
- Wood, D. (Ed.). (2010b). *Perspectives on formulaic language: Acquisition and communication*. London, UK: Continuum Books.
- Wray, A. (2005). *Formulaic language and the lexicon*. USA: Cambridge University Press.
- Zuieback, S. (2012). *Leadership practices for challenging times: Principles, skills and processes that work*. USA: DG Creative.

#### **Assessments:**

- Bookbinder, G. E., Crumpler, M., & Vincent, D. (Ed.). (2002). *Salford Sentence Reading Test (revised)*. UK: Hodder Murray.
- Clay, M. M. (2002, 2005, 2016). *An observation survey of early literacy achievement*. Portsmouth, NH, USA: Heinemann.
- de Lemos, M. & Doig, B. (2000). *Who am I?* Melbourne, Australia: Australian Council for Educational Research.
- Dunn, L. M., & Dunn, D. M. (2007). *Peabody Picture Vocabulary Test, 4<sup>th</sup> Edition (PPVT-IV)*. Australia: Pearson.
- Kilpatrick, D. (2010). *Assessment of phonological awareness: The phonological awareness screening test (PAST)*. <https://www.thepasttest.com/wp-content/uploads/2019/08/PAST-Forms-A-B-C-and-D-August-2019-update.pdf>  
Accessed 10-7-2020.
- Westwood, P. (2005). *Spelling: Approaches to teaching and assessment (2<sup>nd</sup> ed.)*. Melbourne, Australia: Australian Council for Educational Research,