The value of the secondary school certificate: industry leaders and employer perspectives on the quality and representation of graduating students' skills and capabilities.

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Glossary

ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum Assessment and Reporting Authority
ACER	Australian Council for Educational Research
AISC	Australian Industry and Skills Committee
AITSL	Australian Institute for Teaching and School Leadership
AQF	Australian Qualifications Framework
ATAR	Australian Tertiary Admission Rank
CA	Capabilities Approach
COAG	Council of Australian Governments
CSfW	Skills for Work Developmental Framework
DET	Department of Education (Australian Government)
DFAT	Department of Foreign Affairs and Trade (Australian Government)
NAPLAN	National Assessment Program-Literacy And Numeracy
NCVER	National Centre for Vocational Educational Research
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
RTO	Registered training organisation
SACE	South Australian Certificate of Education
TAC	Tertiary Admission Centre
TAFE	Technical and Further Education
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training

Declaration

I declare that:

This dissertation entitled: *The value of the secondary school certificate: industry leaders and employer perspectives on the quality and representation of graduating students' skills and capabilities*, presents work carried out by myself and does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any university.

To the best of my knowledge it does not contain any materials previously published or written by another person except where due reference is made in the text; and all substantive contributions by others to the work presented, including jointly authored publications, is clearly acknowledged.

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Abstract

A volatile global economy and a rapidly evolving workforce has educational and industry leaders sharpening their focus on defining the 21st Century competencies and capabilities necessary for future economic success and social mobility. How these capabilities are valued, evidenced and represented is a challenge of greater complexity. In Australia, the representation of current educational achievement is narrowly defined by the Australian Tertiary Admissions Rank (ATAR). Less than 50% of students who complete a senior secondary certificate go directly to university and there is little to show for graduating students entering the workforce.

Significant contributions to the literature have been made regarding the issue of school leavers' preparedness for employment and the workforce of the future. This research aims to extend the debate by investigating the value of the secondary school certificate through the exploration of industry leaders and employers' perspectives on the quality and representation of graduating students' skills and capabilities. The challenge is to investigate what can be inferred about students who achieve the certificate and how it is received and perceived by different stakeholders.

To undertake this research, a qualitative, constructivist approach was employed. The qualitative method used non-probability, purposeful sampling to identify participants and employed semi-structured interviews to capture the data. This research involved interviews with industry and employer representatives, combined with a document analysis of selected reports, case studies and policy documents.

Participants in this research articulated a level of confidence in students' achievement of Year 12, but found very little value in the representation of the certificate itself. It was evident that industry leaders and employers strongly believed that secondary school graduates were not adequately prepared for post school employment, but participants possessed limited understanding of the composition or requirements of the certificate.

The dissertation explores whether the purpose of 13 years of education is to develop human capital or human capability, as currently there does not appear to be any clarity regarding the value of the senior secondary certificate beyond a 'ticket' to the next stage of life. Not surprisingly, the 21st Century competencies and qualities that build human capability are the same skills industry leaders and employers are looking for in employees. The findings suggest educational policy makers, leaders and practitioners begin to prioritise the development of capabilities as integral to the purpose of education, and thus support the development of healthy humans and healthy economies.

To address these findings and further questions, the report identifies that curriculum and certification authorities are noticeably silent in the national narrative regarding the high school qualification and recommends aggressive promotion of the value of the certification. It also recommends closer collaboration between industry and education, as there is a distinct misalignment, between the expected and actual role education has, in preparing school leavers for successful transition into the workforce. Finally, the report recommends a re-conceptualisation of the substance and representation of the high school credential to allow students to capitalise on its use value and exchange value.

1 Chapter 1: Introduction

1.1 Background

This paper investigates the value of the secondary school certificate through the exploration of industry leaders and employer perspectives on the quality and representation of graduating students' skills and capabilities. As students move through primary, middle and secondary schooling, they develop a range of technical skills, discipline knowledge, capabilities and dispositions that culminate in their achievement of a Year 12 'certificate of education'. The challenge is to investigate what can be reasonably inferred about students who achieve the certificate and how it is perceived and used by different stakeholders. The dominant quality metric for secondary education in contemporary Australian society is the Australian Tertiary Admissions Rank (ATAR). Although the ATAR has been the numeric and symbolic representation of a student's educational achievement and a proxy for academic success, the literature increasingly highlights that the ATAR is not an accurate predictor of university retention, degree completion or grade point average (Pilcher & Torii, 2018; Wright, 2015; Blyth, 2014; Knipe, 2013; James, Bexley, & Shearer, 2009; Levy and Murray, 2005). Despite this, in the absence of any compelling alternative, the ATAR has been entrenched as the single measure of students' educational capital and predictor of future success. However, the narrative is beginning to change as educational thought leaders begin to distance themselves from the ATAR acknowledging, "a new imperative is emerging" (O'Connell, Milligan, & Bentley, 2019, p. 2).

Although the ATAR is dominant, only 40% of Year 12 completers go directly on to tertiary studies (Australian Chamber of Commerce and Industry (ACCI, 2017). For the 60% who do not, there is little else that celebrates and publically acknowledges their years of secondary

study. Parallel to this, employers and peak industry bodies have been seeking assurance that high-school completers are adequately prepared for the workforce (Chhinzer & Russo, 2018; ACCI 2017; Cunningham & Villasenor, 2016). A Business Council of Australia (BCA) report (2017) goes beyond a focus on work readiness by recommending a range of significant changes to Australia's schooling, VET and Higher Education sectors. The BCA report (2017) highlights that "we are living through a period of change, the pace and scale of which is unprecedented" (p.4) and identifies the significant local and global challenges facing the workforce. The report provides 14 proposals, which are aimed at what the BCA describe as "creating a culture of lifelong learning and building a universal education system for Australians" (p4). Although the BCA report (2017) proposes reforms to all forms and levels of education, there remains a gap regarding how to represent educational attainment in a way that might meet the needs of employers.

1.2 Secondary School Certificate in South Australia

The secondary school graduating qualification in South Australia will be used as a case study certificate for this research. Each state and territory in Australia awards its own local Senior Secondary Certificate of Education (SSCE); this research assumes that the discussion and findings in relation to the South Australian case study certificate are applicable to other national certificates. The South Australian Certificate of Education (SACE) is underpinned by a set of capabilities; an original set of five SACE capabilities were developed as part of the *SACE Review* (2006) and embedded in the SACE curriculum in 2009. These capabilities have since been replaced by a set of seven capabilities, which have as their basis the Australian Curriculum General Capabilities (ACARA, 2011). Through its subjects, the SACE Board claims to foster the development of a common set of capabilities to ensure that all students, regardless of their post-school pathways, are able to develop and demonstrate the knowledge, skills, and understandings for success in the SACE and beyond. Although the capabilities are integrated as part of the SACE subjects, there is currently no explicit way of evidencing student development of the capabilities as part of the certificate. Reinforcing this argument is the Education Council's (2019a) review, which acknowledges a key challenge nationally is "the

current presentation of the Senior Secondary Certificate of Education (SSCE) tends to outline only a student's grades, rather than providing a broader picture of [students'] skills, capabilities and maturity" (p. 8). The review also highlights the need to balance education with exposure to the workforce and "work-based learning through participation in work practice" (p. 14) is a critical part of this. In light of this challenge to capture the essence of a students' achievement and outcome of secondary education, the ATAR is limited as a suitable summary of Year 12 achievement for business and industry. Hence, it is significant that this research explores the views of various stakeholders regarding the representation of 13 years of schooling and its contributions to judgements about preparedness for future pathways. This study examines the views of employers and industry representatives about what might constitute useful representations of secondary education to provide information about skills, knowledge and capabilities for a work environment.

1.3 Research Questions

The focus question for this research is; to what extent does the high school certificate provide useful evidence of a student's capabilities to succeed in post-secondary employment, and how could student evidence be better represented? Five sub-questions will be examined:

i. How is the current high school certificate perceived and used by industry leaders and employers?

ii. To what extent are secondary school graduates adequately prepared for post school employment?

iii. What qualities are industry leaders and employers requiring in secondary school graduates?

iv. How do these qualities align with the General Capabilities of the Australian Curriculum and other '21st Century' transversal or soft skills that are the focus of a range of educational strategies and policies in different parts of the world?

v. To what extent will human capital theory, Credentialism theory (Labaree, 1997, 2004) and Capability Approach (Sen, 1985) help to reconceptualise the broader purposes of

education to better represent a student's educational capital and their readiness to successfully undertake post-secondary school pathways?

1.4 Summary

This research aims to investigate the value, quality and usefulness of the representation of achievement in senior secondary education. It is the intention that this research will contribute to deeper understandings of the alignment between the qualities the employment sector and global educators consider as most significant and the capabilities the high school certificate aims to develop in graduates.

This study aims to make a substantive contribution to scholarship by exploring how economic and philosophical frameworks such as credentialism, human capital theory and capabilities approach may support educators to re-conceptualise the representation of a students' educational capital and their capability to successfully undertake life after high school.

Furthermore, information contained in this research may stimulate alternative thinking and debate towards future decisions and policy formation, and prompt stakeholders to re-evaluate the purpose of educational outcomes. Educational authorities across Australia may consider evaluating whether contemporary curriculum, assessment and certification approaches foster student agency or whether the structures in place "may even diminish or restrict them" (Walker, 2005, p.107). Furthermore, through this analysis of the capabilities fostered through the attainment of a Year 12 qualification the findings may suggest: how might educational authorities better evidence and represent the qualities each young person has developed through schooling?

2 Chapter 2: Literature

2.1 Introduction

Some way into the 21st Century, education communities in Australia and a number of other Organisation for Economic Cooperation and Development (OECD) countries find themselves at an interesting crossroads. Many systems are reviewing educational approaches to ensure they are enhancing the capacity of students to develop deep discipline proficiency as well as possessing the necessary capabilities to apply and transfer these skills to succeed in a rapidly changing and globally connected world (OECD, 2018). An underpinning assumption of this research is that prospective employers and the business industry are often expecting that students will graduate with the technical skills and entrepreneurial nous to lead industries into a productive future (ACCI & BCA, 2002). However, the broader community continues to debate the perceived drop in student moral and academic standards (Wade, 2016; Riddle, 2016; Wilson, Dalton, & Baumann, 2015).

2.2 The ATAR and associated issues

The complexity associated with the purpose and value of secondary education manifests itself in the single classification represented by the Australian Tertiary Admissions Rank (ATAR). Perpetuated annually by the media, in the absence of an alternative compelling narrative, the ATAR has entrenched itself as a proxy for students' educational capital and predictor of future success. Although Marks' (1997) research identified the ATAR as the best predictor of success for very high and low ranked students, many researchers since then have identified difficulties in correlating the ATAR with success at tertiary level. Some claim its use has limited the equity of access for a diverse range of students (Blyth, 2014), is not a predictor of course completion (Knipe, 2013), and is not an accurate predictor of Grad Point Average (GPA)

(Wright, 2015). As the recent Mitchell report also suggests the ATAR "says little about the full range of accomplishments and broader capabilities a student has cultivated across years of schooling" (Pilcher & Torii, 2018, p.9). Overall, Wright (2015) confirms, "the singular use of ATAR scores as an entry requirement [for university] is not viable" (p. 12). Echoing this view is O'Connell et al (2019) who strongly assert, "as each year passes, the ATAR becomes less fit for purpose" (p. 7).

A significant amount of attention is given to a student's ATAR. The ATAR has become so entrenched that schools, students and parents are measuring educational success using this metric. Significantly, less than 50% of students who complete a senior secondary certificate go on to higher education, 31% go directly into tertiary studies after leaving school, with a further 15% within the first 10 years (Norton & Cakitaki, 2016). The Grattan Institute (2018) reports that only 41% of 19 year olds are enrolled in higher education (Norton & Cherastidtham, p. 22). Similarly, the Longitudinal Surveys of Australian Youth (Lumsden & Stanwick, 2012) reported that only 45% of the 2008 cohort planned to go directly to university. This raises the questions of the other 50-60%; for what purpose are schools and education systems preparing students and are they considering the right balance of focus and attention on the breadth of students' post-secondary school pathways? Peak industry bodies have consistently advocated for assurance that school leavers are adequately prepared with the basic discipline skills *and* vocational experience to support them to transition into and succeed in the workforce (Australian Chamber of Commerce and Industry, 2017; Business Council of Australia, 2017; Commonwealth of Australia, 2013; Education Services Australia, 2014). However, fit-for-purpose ways of aligning and representing the qualities of secondary school completers going on to employment, apprenticeships and vocational education are missing. An increasing number of researchers argue that the ATAR does not predict university attainment for most students (Blyth, 2014; Knipe, 2013; Wright, 2015; Torii, 2018). It is also the case that the ATAR does not serve the more than 50% of students who do not intend going to university. Not surprisingly, there is a distinct silence in the literature and the media in relation to the TAFE Selection Score. This is an overlooked area in research. This research is not aiming to explore an alternative to the ATAR for university entrance. It seeks to explore what an

alternative might be for all high school graduates, including the majority who intend going on to employment, apprenticeships and vocational education for whom there is no current recognition that claims to represent their skills, knowledge and capacities developed throughout schooling.

2.3 Year 12 Completion

Successful completion of a senior secondary certificate may be considered a valuable achievement by the whole community and a celebratory culmination of 13 years of education. The parchment that students receive represents this significant achievement. It might also signify to the community that the individual possesses the ability to successfully transition into the next phase of life. However, the prestige placed upon a ranking for university means that many students who do not achieve a 'high' ATAR might perceive their educational endeavour as a failure that may translate into disappointment and a lack of confidence (James et al, 2009). O'Connell et al (2019) take the implications of undue focus on the ATAR further when they caution,

> The ATAR compels young people to compete for a ranked position. The 30 percent of young people who rely on ATAR to enter tertiary education from school might focus their final two years of schooling on this score to the exclusion of developing broader capabilities for the future (p. 7).

If the aim of secondary education is to adequately prepare students for life, employment and further education (Australian Qualifications Framework, 2013), then, at best, the ATAR addresses only one aspect of these purposes.

As a senior secondary authority, the SACE Board of South Australia claims to issue "a locally and internationally respected SACE that gives all students capabilities to move successfully into further learning and work as confident and responsible citizens" (SACE Board of South Australia, 2016, p. 1). Recent reports published by the Business Council of Australia (2017), the Mitchell Institute (Torii, 2018) and the OECD (2018) call on stronger collaboration and alignment between education and industry. Hence, in a rapidly changing world it is critical to evaluate whether the 'knowledge, skills and capabilities' the SACE aims to foster are aligned with the demands and expectations of key stakeholders, including business and industry, in

addition to understanding how such knowledge, skills and capabilities could be better represented. This is a key challenge identified by the Education Council's (2019a) review which acknowledges that the varied representations of high school qualifications "raises a question around not only the skills young people obtain, but also what senior secondary certificates tell employers or providers of further education and training about what a student has learnt, knows and can do" (p. 7).

2.4 Summary

There has been much research conducted around tertiary entrance and school leavers´ employability skills. However, there is a gap in educational research that looks to connect the needs of employers and industry with global competencies and with educational institutions that have the ability to respond to the findings and make direct policy changes. The World Economic Forum's (2016) report identifies the need for education systems around the world to be responsive in order to prepare a young student going into the workforce. The report succinctly articulates the issue:

> Rethinking education systems: Most existing education systems at all levels provide highly siloed training and continue a number of 20th century practices that are hindering progress on today's talent and labour market issues…Businesses should work closely with governments, education providers and others to imagine what a true 21st Century curriculum might look like (p. 8).

With this backdrop, the challenge of this research is to investigate what can be reasonably inferred about students who achieve the high school certificate and how it is perceived and used by different stakeholders. Are current educations systems providing a valuable foundation of skills and capabilities for students' chosen pathways beyond school or, as the World Economic Forum suggests, are educational policies and practices actually 'hindering progress' and limiting students' chances of successful transition into the workforce?

3 Chapter 3: Research Design

3.1 Introduction

As many education systems globally sharpen their focus on the development of students' 21st Century skills and capabilities for the future (OECD, 2018; Commonwealth of Australia, 2018; Care, Anderson, & Kim, 2016; Care & Luo, 2016) they will grapple with the complexity of how these may be fostered, evidenced, measured and represented. This is a challenge educators have faced for some time, and one which Biesta (2010) captures very succinctly by asking "are [we] indeed measuring what we value, or whether we are just measuring what we can easily measure and thus end up valuing what we [can] measure" (p.2). In concert, employers and industry bodies have been lobbying to ensure that high-school leavers possess the necessary skills and attributes to successfully transition into employment. By asking the research question, I intend to investigate the capabilities that employers and industry groups identify is needed in secondary school graduates and analyse how closely these capabilities align with the General Capabilities of the Australian Curriculum and other '21st Century' transversal or soft skills. This information will then allow critical analysis of current policy documents to determine the extent to which the current SACE curriculum and assessment model facilitates the development of these capabilities in students and consider ways of reconceptualising the representation of a students' educational capital and their capability to successfully undertake post-secondary school employment.

This research was conducted through interviews with industry and employer representatives, combined with a document analysis of selected reports, case studies and policy documents. Other research related to Vocational Education and Training (VET) and the Australian Tertiary Admissions Rank (ATAR) are closely related to the research topic, and although the

relationship and influence they have on the research will be discussed, this work is well documented and will not be a primary focus.

3.2 My Position as a Researcher

In approaching the research, I am very conscious of my role and professional position at the SACE Board of South Australia and cognisant of not being 'distanced' from the research, as researcher. If I hope to understand the perspectives and realities of the participants, I must be aware of and declare my own subjectivity, my values and beliefs and how these may impact on the research. My research is directly related to my work and hence I am "thoroughly immersed in the social situation" (Blaikie, 2007, p.11) and acknowledge my 'insider' role to "use my personal experiences as a basis for understanding what is going on" (p.11). Although I will take a research insider role, I do not intend to adopt the role of 'expert'. In this search for new insights and perspectives, I am committed to ensuring the findings are generated from the research by taking on a 'learner' role. Through this approach I will try to "set aside existing social scientific knowledge and help the research participants reveal how they conceptualise and understand that part of their social world of interest to [me]" (p.11).

I see myself as a social-constructivist, understanding "that realities are local, specific and constructed…and depend on the individuals or groups holding them" *(*Punch & Oancea, 2014). This draws me to a qualitative research method to explore the perspectives of significant stakeholders, including a focus on the expertise of participants from peak bodies who have an academic and practical experience related to my research question. In developing a constructivist perspective I appreciate that knowledge and research information "occurs against the background of shared interpretations, practices and language; they occur within our historical, cultural and gendered ways of being" (Blaikie, 2007 p.23).

This context reinforces the justification for a qualitative approach in that the research will be "unfolding and emerging" (Punch & Oancea, 2014, p30) and consider the related policy implications. Values are a significant variable in research and the researcher's values play a role in considering and prioritising which educational phenomena have been chosen to investigate. The focus of this research is not on the foundations of the findings, but rather to

the consequences of the findings, hence “the choice of problem to be investigated is made in terms of the significance and consequences of the findings rather than the firmness of the foundations” (Keeves, 1997, p. 6). In the analysis and interpretation of my findings, I have been conscious of my ontology (Blaikie, 2007) as I undertake predominantly constructivist research. However, I am reassured by Crotty’s distinction that the decision to employ a qualitative approach occurs at the level of methods, “it does not occur at the level of [ontology], epistemology or theoretical perspective” (Crotty, 1998, p. 14). I have tried not to be drawn into the ‘quantitative vs qualitative divide’. I acknowledge my status as an emerging researcher, the evolving nature of my research approach, the frame within which it sits, and how at this stage I am striving for coherence and depth of thought rather than “strict loyalty and allegiance to one paradigm” (Punch & Oancea, 2014, p. 19). In this approach, I hope to make a significant contribution to the research by adding value to what we know and understand about the skills and attributes students exit the system with, but also to influence and provoke “change in the real world” (Keeves, 1997, p. 7).

3.3 Research Design

Keeves (1997) argues that the methods employed in educational enquiry should be “influenced by the nature of the problems being considered” (p. 6) and hence I have elected to follow Punch & Oancea’s ‘question-driven approach’ by beginning with the question/s that needs answering and “choosing a method for answering them” (2014, p.19). Consequently, I have employed a qualitative, constructivist approach to this research and see the methodology not just about the logic used to gather and develop new knowledge, but “the philosophical and theoretical ideas and assumptions about what constitutes social reality and how knowledge of it can be produced” (Blaikie, 2007, 5). Qualitative research is “theory generation” (Punch & Oancea, 2014, p.25) and I aim to “…strive to see things from the perspective of the participants” (Crotty, 1998, p.7). I have therefore adopted a qualitative method using semi-structured interviews and document analysis.

Data Collection Process – Semi-Structured Interviews

It is common in qualitative research to use non-probability sampling and identify participants based on "people that can best help us understand our central phenomena" (Creswell, 2012, p.205). Hence, in order to gain extensive insight into the research question I employed what Creswell (2012) defines as a purposeful sampling method. Liamputtong (2010) describes it as purposive, which "refers to the deliberate selection of specific individuals…because of the crucial information they provide" (p.20). The benefits in purposeful sampling will be in the strategic identification of participants and researching "information-rich cases for study in-depth" (Patton, 2002, p. 230). It is important to bear in mind though, that participants who volunteered may have been motivated to do so, to communicate already existing views about education and the preparedness (or not) of young people for work. I discuss this aspect further in Chapter 4 with the findings.

Participants in this study were national and local industry leaders and employers. Recruitment was in two parts; part one aimed to source participants who are national industry leaders (CEOs or senior management) from key Australian industry bodies. These participants were expected to have broad and varied understanding of the skills and qualities employers and industry groups are seeking in secondary school graduates. It was anticipated that this group would provide a national, high-level, strategic perspective. Part two sought research participants who were current employers via the industry associations. Employer participants were expected to have a local and specific understanding of the skills and qualities employers are seeking in secondary school graduates. It was anticipated that this group would provide a more practical and sharper perspective. The interview sample size was six participants (four industry leaders and two employers) and supported the research to be manageable and achievable, given the scope and size of the dissertation. I also understand that the "overall ability of a researcher to provide an in-depth picture diminishes with the addition of each new individual … [and that] the larger number of cases can become unwieldy and result in superficial perspectives" (Creswell, 2012, p.209). Given the small number of participants, I have not highlighted, in individual comments, whether the participant was an industry leader or employer because the comments may tend to identify the person. The ethics approval was

based on attempting to maintain confidentiality. I have summarised, broadly, a small number of key differences between the approaches of each group. I have used pseudonyms when attributing comments made.

I explore the participants' perspective and "capture, in the participants' own words, their thoughts, perceptions, feelings and experiences" (Taylor, 2005, p.39). As the researcher, I am acutely aware of the vested interest the target participants have toward the research question. Business industry leaders and employer groups have been lobbying through their publications for greater alignment between education policy and employability skills (ACCI, 2017; ACC & I&BCA, 2002; BCA, 2017; Education Services Australia, 2014). In their recent publication *Future-Proof: Protecting Australians through Education and Skills*, the Business Council of Australia (2017) goes so far as to provide comment on the history and purpose of education. The report also includes strategic recommendations for the secondary and tertiary education sectors.

I have employed a semi-structured interview process in my data collection process. A semi-structured interview allows me to elicit information from prepared questions (Appendix 4), but at the same time allow participants to elaborate on their responses (Liamputtong, 2010, p.47). I understand that confidentiality and anonymity in research occurs through anonymity of the research participants. Many of the interviewees are in leadership positions and one-on-one interviews were "ideal for interviewing participants who are not hesitant to speak, who are articulate, and who can share ideas comfortably" (Creswell, 2012, p.218). I have obtained consent from the interviewees to participate in the study by ensuring they received a research information sheet, a letter of introduction and an informed consent form. I also made clear the purpose of the research, how I intend to use the results from the interviews, and provided them within an opportunity to review their interview transcripts prior to thematic analysis commencing (Creswell, 2012, p.218).

I attempted to create a comfortable and non-judgmental environment for the interviews by talking as little as possible and being agile in using open-ended and closed questions as required to allow for "unexpected turns or digressions that follow the informants' interests or

knowledge" (Johnson 2002, p.111). The choice to use semi-structured interviews also supported the flexibility to adjust the questioning technique, thus by active listening and avoiding a 'fixed wording' format I was able to respond to the participants appropriately (Liamputtong , 2010, p.49) while still allowing participants to "voice their experiences unconstrained by any perspectives of the researcher or past research findings" (Creswell, 2012, p.218).

Analysis of Data

Participants´ interviews were audio recorded to support the coding of interviewee responses to identify emerging themes and key findings. A professional transcription service was employed to complete an 'intelligent' verbatim transcription of the data. They were required to sign and agree to strict confidentiality. I employed a coding process to identify key themes to support the development of emerging concepts and theories. I commended this process through open coding in which all of the utterances of the interviewee were highlighted and some summary notes made about them. The second phase, axial coding, sought to classify and cluster the sets of codes that I used in the first stage of the process. This led to the identification of a variety of themes that emerged from the interviews. In the third phase of the process, selective coding, considered all of the codes identified in the second phase and chooses those that seemed to be the most relevant and valid.

Document Analysis

As discussed throughout this dissertation, there have been numerous Industry and Government reports and policies that address issues specific to the research. I undertook a critical document analysis as "these sources provide valuable information in helping researchers understand central phenomena in qualitative studies" (Creswell, 2012, p.223). The SACE Board and the peak industry groups in Australia such as the Business Council of Australia, the Australian Chamber of Commerce and Industry, and the Australian Industry Group have all written and/or contributed to public documents related to the research question. Although I have been conscious of the motives behind their publications, an analysis of these

does provide “the advantage of being in the language and words of the participants, who have usually given thoughtful attention to them” (p.223).

3.4 Ethics and limitations

The ethics application was submitted to the Flinders University Social and Behavioural Research Ethics Committee (SBREC, Project 8111) and was approved in August 2018 (Appendix 1). In designing the research, I considered the beneficence of treatment of participants while providing them with autonomy in the process through well-informed, voluntary participation and the right to withdraw at any time (Creswell, 2012, p. 222). I outlined clearly in the letter of introduction (Appendix 2) the purpose and intended aims of the research and how the data and findings would be used. This letter also offered anonymity to the participants and guaranteed their identity will be protected. The introductory letter also clearly identified my professional role in the process and acknowledged the potential conflict of interest regarding my place of employment.

During the interviews, I did not anticipate any potential physical or emotional risks to participants; however, I was conscious that participants might feel a sense of discomfort or inadequacy regarding their depth of knowledge and understanding as it relates to educational theory or policy. Participants were free to withdraw from the research at any time during the interview process. Interviewees were identified by pseudonyms and all written information collected during the interview did not contain identifiable information about participants. Once full transcription occurred all audio files from the interviews were deleted. Every effort has been/will be made to ensure that participants are not identifiable in any reports or documents that may eventuate from this research.

There are identified limitations to the research that may impact the findings and recommendations. The research design discussed above identifies and acknowledges my potential conflict of interest and bias in this research. This limitation has been mitigated through an acknowledgement and awareness of the ‘insider’ status of the researcher position and a conscious intention to participate as an independent researcher rather than an

educational expert. It is also the case that the Letter of Introduction makes it transparent to the participants, my work role and possible conflict of interest.

The limitations are also recognised in discussion about document analysis, in particular pointing out that institutions have particular purposes and organisational foci underpinning the publications that will be included as data in this project. There are also potential limitations arising from the size of the interview participants as the participants recruitment process proved challenging.

Sourcing industry leaders was relatively easy as the majority of major industry bodies and organisations were eager to contribute to a discussion related to an area of major policy focus. Although I was able to secure the participation of two industry chief executives, other agencies elected to delegate the participation to senior management personnel responsible education policy. It was much more difficult to source employers. The recruitment process through industry associations resulted in only two employers accepting the invitation to participate in the research. It is acknowledged that the nature of the data generated from these participants repeated certain viewpoints and omitted others, and hence their transcripts were read critically for strong themes and silences, and accompanied by this relevant acknowledgement of limitation.

4 Chapter 4: Findings

4.1 Introduction

Peak industry groups, education authorities, government bodies and key stakeholders have made significant contributions to the issue of school leavers' preparedness for employment. This research aims to extend the debate by investigating the value of the secondary school certificate through the exploration of industry leaders and employer perspectives on the quality and representation of graduating students' skills and capabilities.

In this chapter, I explore the value the Year 12 certificate plays in the recruitment process for employment and the extent to which, employers say that high school graduates are adequately prepared for the world of work. I analyse the level of knowledge and understanding participants possess in relation to the requirements of the Year 12 certificate and discusses their experiences and perceptions of the senior secondary education system. Finally, I draw out the emerging qualities and skills industry leaders and employees perceive are critical for a young school leaver to support their successful transition in the workforce and explores recommendations from participants for curriculum authorities to consider.

4.2 The Value of the High School Certificate

It was clear from the interviews that employers and industry leaders thought that having a Year 12 qualification positions students in a better situation to secure and succeed in employment than not having a Year 12 qualification. However, whether an employer is more likely to hire a potential employee is dependent on a range of factors. From the interviews conducted, it seemed that possession of the Year 12 certificate is not a significant one of these factors. Participants acknowledged that there was a level of trust in the education system that assured graduating students would leave the secondary education system with a basic level of skills

and maturity. However, the actual parchment provided little value for employers as they rarely interrogated the substance of the certificate and in many cases did not even ask to see it. It appears to have little value as a discriminator in the recruitment process. Analysis of interviews suggests that employers are more interested in students' broader capabilities and personal qualities that they cannot currently ascertain from the Year 12 certificate itself.

The sections below explore a number of themes from the interviews that are in regard to (1) the value of Year 12 certificate, (2) knowledge and understanding of the Year 12 certificate; (3) school leavers not being adequately prepared for work; (4) significant changes in expectations for work; (5) highly sought-after skills; (6) employers and industry leaders' recommendations.

There are sub-headings for each listed below:

(1) Value of the Year 12 certificate
- has some trust value as a minimum requirement
- does not provide value in recruitment of employees

(2) Knowledge and understanding of the Year 12 certificate
- employers and industry leaders have limited understanding of Year 12
- perception that Year 12 places unnecessary pressure on students
- personal experiences and bias related to Year 12

(3) School leavers not adequately prepared for work
- Year 12 graduates do not have job-ready skills
- school leavers with different attitudes toward employment
- education system not qualified to prepare students for work

(4) Significant changes in expectations for work
- rapidly changing nature of work
- level of maturity expected is greater

(5) Highly sought-after skills by employers
- minimum standard of literacy and numeracy
- emerging capabilities and dispositions required

(6) Employers and industry leaders' recommendations
- improved information required
- improved career counselling and vocational experience

Each of these identified themes is discussed below.

Year 12 completion has some value as a minimum requirement

Both industry leaders and employers who were interviewed agreed that Year 12 graduation is a minimum requirement for employment and most employers would preference an applicant with a Year 12 certificate than without one. Participants highlighted that:

> the database really shows that having a Year 12 qualification puts you in a better situation than not having a Year 12 qualification (Jess)
>
> there is no doubt that the completion of Year 12 has become very important (Tracey)
>
> you don't touch anyone unless they've completed a Year 12 qualification (Alan)
>
> most resumes I get have completed Year 12. It seems to be the done thing these days (Jane).

Interestingly, participants did not specifically refer to Year 12 graduate employees as being better equipped with the skills for work than non-graduate employees are. Those interviewed did not observe a distinguishing difference between the capabilities of graduates and non-graduates, but appear to have the perception that those that complete Year 12 are better qualified to take on the challenges of employment. Hence the attainment of the Year 12 certificate offers 'exchange' value as it provides a level of quality assurance to the employment industry; "at the very least it guarantees some level of skills, …increases the likelihood of a higher level of maturity" (Alan). There was the expectation amongst participants, that as a minimum, the Year 12 certificate should provide students with the "qualifications that enable them to make their next step in life" (Martha). This is because participants articulated a level of expectation in the education system to develop in young people a basic level of knowledge and skill to enter the workforce.

> And certainly, absolutely a trust in the system and some sort of sense that the system will ensure that at the very least young people will come out with a basic set of capacities … So at the very least, there is a level of faith that a Year 12 qualification will give them at least a decent starting point (Alan).

It was evident that there was certain value in "Year 12, as being an absolute benchmark for what you at least need as your foundational layer before you go into the labour market" (Jess). Research participants had little interest or regard for the substance of the certificate, but benefitted from knowing students had attained it.

The Year 12 certificate does not provide value in the recruitment of employees

While participants acknowledged that as an achievement and a rite of passage the completion of Year 12 was a significant milestone, they made clear the value it provides industry;

> that sense of accomplishment, the parchment document, is exceptionally important to the student and the parents, [however] it's really not important to the employer (Tracey).

This view was reinforced by participants who claimed that the record of achievement did not play a major factor in recruitment and employers rarely interrogated the document. One employee admitted that viewing the parchment

> would not bother me in the slightest. That is not an impact to my standpoint… No I haven't [asked to see one], no (David).

When verifying the attainment of Year 12, another participant expressed that

> I wouldn't say the majority, [ask to see a certificate]. Now I suspect most [employers] would say 'oh yeah that's good. We'll take that as written' (Alan).

When questioned as to whether they asked to see a student's certificate during the recruitment process, another participant confirmed,

> not really, I don't ask; but I have seen some on their resume – basically I'll see it and then I'm looking at the other information they've sent me. It's not going to affect [my decision making processes] (Jane).

Participants confirmed that for their members the Year 12 certificate was not usually the main source of information in the recruitment process. Although completion of Year 12 was highly valued

> the actual certificate itself, in my experience doesn't rate much attention… the parchment itself is only one relatively small part of that total picture (Tracey).

One participant suggested the certificate had little exchange value in subsequent years after it is obtained;

> so if they're getting [students] straight out of school, maybe employees would ask to see a certificate. If they've graduated from university or a VET qualification, unlikely (Jess).

Although participants acknowledged that in the recruitment process "the focus isn't what's on a piece of paper" (Jess) it did serve the purpose of discriminating between applicants, as one

participant put it, “I’ve got to weed you out somehow so if you haven’t got that basic qualification I’m not going to be interested in talking to you” (Alan).

Acknowledging that the Year 12 parchment provided little value for employers during the recruitment process, participants were asked what they do value and take note of. Those interviewed were significantly consistent; “as an employer we take as much notice of what the person says” (Tracey). It was clear that “it would be the personal traits that would override my decision, not the certificate” (Alan). This was confirmed by another interviewee who acknowledged “I look for more of a personality…presentation of themselves basically is the number one thing I look for” (Jane). The preferred personality traits or ‘qualities’ of participants who were interviewed are explored in more detail in section 4.6, but essentially their view was that “many in the industry would always go for the upfront confidence [of the applicant] above the certificate” (Alan).

4.3 Knowledge and understanding of the high school certificate

Employers and industry leaders possess limited understanding of Year 12

It was clear from the participants in this research that the content of the Year 12 certificate provides little value for employers and further to this, they did not seem to know or care to know how the certificate is awarded. The declared limited value in the Year 12 certificate may have some correlation with the level and depth of participants’ understanding of the certificate. Participants representing both peak industry bodies and employers had a lack of knowledge and understanding in relation to the composition of the high school certificate or the requirements for its achievement. One employee admitted that

> to be brutally honest, I don’t understand a great deal as to exactly where the kids are and what criteria they are meeting to complete the SACE certificate (David).

When asked about what they knew of the Year 12 certificate, one participant confessed, “not an awful lot” (Martha). This sentiment was echoed by another participant who acknowledged, “the vast majority of us wouldn’t have a clue what’s in the certificate” (Alan). One participant based her understanding on the experience of her children;

> I left halfway through year 11 so I didn't actually finish my certificates…I think it can be made up in different ways. I've had three children that have all completed Year 12 (Jane).

There was a distinct silence amongst all interviewee responses concerning the make-up of the Year 12 certificate. It was clear that all participants had minimal understanding of the composition of the qualification, however it was not because of difficulty in accessing the information; it appears that it is simply of little interest to them. Respondents did not claim poor website navigation, ambiguity and/or inconsistency across states or complex policy documents as barriers to finding out how the Year 12 certificate is awarded. From the participants' perspective, it seems that employers do not care to know what students had to do to get their certificate; they just want to know that they got it.

Considering this lack of knowledge in relation to the high school certificate, participants were asked a follow-up question to determine the breadth of industry leader and employer perceptions of the high school certificate. One participant declared, "I'm assuming there's a level of detail for all of the subjects and level of competency" (Alan). This idea was extended by another participant; "what I imagine they're doing is learning specific subjects, then, taking exams in those subjects and doing course work in those subjects and then, getting a composite assessment of those and receiving a score for them" (Martha). However, one interviewee was very certain about the certificate; "I know what it [Y12 certificate] means. It's not about a perception or anything" (Jess). This suggested that this industry leader understood the make-up of the certificate as being very definite and specific, with little room for perception or subjectivity. Although she did have firm opinions about the value of this phase of education when she declared it was:

> two long years in senior schooling that have been very difficult, that have been exam focussed and that many of them will actually be more about learning how to do exams than actually coming out with a great deal of necessarily content knowledge or thinking framework (Jess).

Although participants who were interviewed acknowledged a lack of understanding regarding the certificate, they were forthcoming with their firm views that Year 12 was more about preparing for exams than preparing for life after school.

The perception that Year 12 places unnecessary pressures on students

A clear theme in the responses was that while participants had limited knowledge and understanding of the Year 12 certificate, they also had strong opinions on its quality and value. It was the view of one industry leader that the

> year 11-12 system is an abomination on kids, that's my personal view, and I don't think it really prepares them for anything other than exams, and I don't think it's a good test or a good finalisation of 13 years of schooling (Jess).

This perception of an excessive focus on examinations was echoed by another industry leader,

> there's a lot of focus on teaching students in a subject-based way, primarily aligned to the sorts of exams that they're going to be doing to try and maximise their chance of success in that way (Martha).

Considering this lack of knowledge and understanding of the high school certificate and deep-seated views on what its achievement encompasses, it is not surprising that both employers and industry leaders interviewed saw little value in the high school certificate, particularly in relation to the types of skills and capabilities it develops in preparation for the workforce.

Participants personal bias and experience of the Year 12 certificate

The views and perspectives of participants in this research may be better understood when we examine the personal bias and experience that supported the formation of their opinion. We have already seen in these findings that employers and industry leaders placed little value in the high school certificate, despite the acknowledgement that they had limited understanding of how it was awarded. The majority of participants expressed a genuine personal and professional investment in the association between education and employment; "I'm very interested in how young people leaving school are prepared for the next step they're going to take" (Martha). Surprisingly, despite "an extensive public policy background in educational reform" (Jess), it was clear that, as identified earlier, industry leaders and employers had very limited knowledge and understanding of how the Year 12 certificate was achieved and awarded. There was also no reference to, or an awareness of that different states in Australia have markedly different completion requirements; "a lot of them have got their year 10 certificate, don't they?" (Jess).

What emerged from the interviews was the suggestion that specific knowledge of education policy and process was not critical to determining whether education was sufficiently preparing students for post school pathways and that “the employer will only know by their experience, so in other words … the proof will be in the pudding” (Tracey). It was evident that industry associations were strong advocates for employer expectations of school leaver work readiness and less interested in playing in the pedagogical space. One industry leader affirmed,

> we have strong policy interests across all of the education and training sectors, and the interest for us is about the outcomes of school… we don’t take interest across the board in schools policy, pedagogical areas are not areas of our expertise (Tracey).

From a personal perspective, participants’ own experiences also appeared to play a significant role in their opinion of education and the high school certificate, “I left halfway through year 11 so I didn't actually finish my Year 12 certificate” (Jane). Another participant was very clear on the impact his final years had, “year twelve didn’t really mould me, prepare me in, I would say, almost any way to the real world” (David). Furthermore, the participants’ experience in earlier employment were also a strong influence, “if you had a job you did everything you could to hang onto it and you did the right thing understanding that your employer was your pathway to your future” (David). For others, it was a long journey of reflection and realisation that there are many pathways to success, “I never went past finishing Year 12… even then I didn’t have a clear focus or a plan” (Alan). Despite this, they managed to navigate their way through challenges, eventually coming to the realisation that they needed more education to improve their work conditions and salary, “I recognised that if I stayed in a trade … I’d always be on an average to below-average wage, a fact of life” (Alan). This background contributes to the interpretation of employers’ and industry leaders’ perspectives on the value of the high school certificate and whether current school leavers are adequately prepared to successfully transition into post-school employment.

4.4 School leavers not adequately prepared for Work

Year 12 graduates do not possess the job-ready skills required for employment

In the previous section, the participants viewed education as too focused on gaining content knowledge and teaching approaches that maximised students’ chances to get into university.

In the world after school, participants identified that most people are required to work collaboratively and have the right attitude to succeed; however, they suggested that education and schools are not supporting students to develop those skills. According to participants there are basic foundations that support students to be adequately prepared to enter the labour market and “and there are lots of kids who are graduating from school who don’t have those foundations” (Jess).

The perspective that current school graduates are not adequately prepared for post school employment pathways was confirmed by another participant; “absolutely, yes, absolutely not prepared” (David). Their view was that education focusses too much on trying to level out the playing field and pushing students towards academic success; when not all students are academically focused and denied the vocational experience. David felt education was:

> definitely being focused more so for the general consensus of having everyone on the same bar than having different branches, because not everyone is an academic and I can tell you mate that I never was (David).

According to the participants, limited vocational exposure or access to work experience restricts graduating students’ preparation for employment as “it leads to a lack of job readiness or a much weaker ability to work in workplaces” (Tracey).

Further than just job readiness, some participants who were interviewed felt that students do not appear to have an awareness of what the world outside of school is like. Apart from limited employability skills, many even lack “understanding of what [their] basic life skills will be once [they] leave school, it’s the most critical thing that’s essentially a shortfall with these kids coming through” (David). When reflecting on the quality of school leavers’ ability to transition into employment with the right skills, one participant recalled “If I look back through all my staff, there have only been one or two that have actually got that” (Jane). The perspective was that “most of them don’t step up, they don’t have that – I don't know if it’s maturity or the skills” (Jane). This viewpoint was reinforced when a participant lamented employees’ inability to undertake basic daily activities, “we have had kids that cannot even sweep a floor” (David). What comes through strongly in the interviews is the fact that presence and attitude play a significant factor in assessing graduating students’ employability skills and work readiness.

School leavers have different attitudes and expectations toward employment than industry and employers

Participants in the research highlighted that many industries are faced with a shortage of skilled staff, however "some members would go further and say a shortage of appropriately skilled staff with the right attitude" (Alan). School leavers' attitudes and expectations of employment were key themes that emerged from the research. There was a view that most school leavers treat employment as solely a means of income and show little interest or investment in the business itself, "I find some of them will come in and it's just a job; they come in, they get paid" (Jane). Their views were that many employees are transitional and they require significant amount of investment for a short time-frame, however they step in and out of a business without a consideration for, or being aware of, the broader impact and implications of their actions. As one participant put it;

> but just that whole awareness of what they actually mean to a business, especially a small business, and what the ramifications could be if something went wrong (Jane).

When it comes to attitude and an awareness of students' contribution another participant was seeking an employee "to be a civilised person and basically highlight the values of our business" (David).

More than just attitude, there was a sense from participants that the current generation of high school graduates have an inflated sense of entitlement; "they believe that they deserve more than they are entitled to when they are entering generally the workforce" (David). Their consistent view was that new employees seem to be oblivious to the fact that they are entering a new phase of their life and have to work their way up through the stages of the corporate ladder. One participant declared there "seems to be a very, very large misconception from the kids,…but there is a big transition from year twelve, stepping up high to dropping down to the bottom of the food chain" (David). The research participants suggested that graduating students expect to transition seamlessly from school into the workforce and demand respect and recognition:

> There's an expectation amongst young people, created largely by social media and TV and reality shows that you walk into a kitchen and become a head chef straight away (Alan).

Participants also argued that there was complexity and challenge when attempting to support and align school leavers' attitudes and perceptions with the reality of the workforce. One participant felt that "we can't speak our mind and let the individuals know where their shortfalls are because we may hurt their feelings" (David). Their view was that in the current social, political and industrial climate, it is very difficult to give employees constructive, critical feedback. The perceived over sanitisation of the feedback makes it ineffective and does not help the new employee improve and sometimes even risks lives; "rather than actually being able to address the situation … somebody can get hurt and it is a serious matter" (David). These views raise interesting questions that stem back to the purpose of education and the role the education system is expected to play in making students work-ready. The literature cited in this research highlights the long-standing debate about who is responsible for developing students' employability skills; however, it was evident that the debate has moved beyond work skills and is now about dispositions and non-cognitive capabilities.

The education system is not qualified to upskill students to participate in the workforce, but to be prepared for it

Participants consistently discussed a long list of emerging values, behaviours and skills that industry expects students to have to be work ready (discussed in more detail in the section 4.6). However, what emerged was participants' declaration of the limited responsibility education plays in preparing students for the world of work. As one industry leader put it:

> we actually do see there being a role for the school system in people being work ready but it's not necessarily about teaching them specific technical skills that they'll need to go into the workforce, it's more about making them aware of those work values and behaviours (Jess).

As identified earlier in this paper, the majority of industry publications acknowledge the significance of partnership, between education and industry, in supporting student transition into employment. One industry leader's suggestion was that although education may be criticised for students' employability skills, the industry sector could be doing more in this partnership. His perspective was that:

> the education system has done a great job over the decades of trying to work much more closely with industry…but to the [employers] that scream and say 'why can't you get decent staff anymore', we say 'well hang on, have you built a relationship with your local education facility?' (Alan).

Interestingly, there was some contrasting views on whether education should play a role in student's work readiness and employability skills. To this end, there was a perspective that the education system could not ensure students graduated Year 12 with the skills and dispositions required to be successful in the workforce because teachers have limited lived experience of it. Therefore,

> from an employer perspective teachers actually have no idea what the workforce is like because they have a very different pathway that doesn't expose them to the vast majority of the labour market (Jess).

One specific example was the increasing necessity for employees to have the necessary capability to collaborate and work with and across teams. One participant identified that,

> schools are not helping students to develop and learn as much as they could working in a collaborative and project-based way, which is basically the way that everybody in industry works (Martha).

Other participants also observed this gap in collective effort and contribution toward a shared goal, "everyone sees themselves as an individual rather than being able to… they are very reluctant to, get on board as a team environment" (David). However, there was some firm participant views regarding the limited value of collaboration skills developed in the classroom being transferrable to the workforce. One industry leader was clear that;

> all of this stuff about group work that's done in schools or in post-secondary education as an indicator of team work, employers don't take it seriously because it's not a real life setting and it doesn't actually reflect how someone would behave in a workplace (Jess).

These findings highlight a distinct mismatch between what education authorities aim to certify and what industry is looking for. It is clear that group work is not perceived by employers as comparable to team work – it is not equivalent to industry collaboration; participant perceptions was that it is not authentic or aligned with the real world of work. These contrasting perspectives and insights into the impact education can have on a high-school graduate's work readiness encapsulates the increasing complexity of this issue and how the debate regarding employability skills continues to evolved.

4.5 Significant change in expectations of school leavers compared to a generation ago

The shared responsibility for best-preparing students for the world of work seems to have evolved and become increasingly complex over the past 30-40 years; “are there higher expectations of school graduates now? I would say yes” (Jess). This industry leader’s perspective is that “the labour market 40 years ago was much easier” (Jess) and participants in the research concurred sighting a range of reasons relating to perceptions of maturity and the changing nature of work.

One argument is that education has made students ill-equipped to overcome the challenges and expectations of employment; “there’s a level of maturity, 30 or 40 years ago that is not expected in kids in schools in this age” (Jess). An employer who felt that society has lowered its expectations of our young people echoed this view:

> I really don’t know whether society’s expectations were a little bit harder on us, or we saw them as being harder. You had to prove to be part of the workforce, you weren’t just accepted or given a free pass and we certainly were accountable for our actions a whole lot more than what the kids ever are these days (David).

Those who participated in the research felt that society was demanding more of young people with “more of a push [from school-aged students] to get a job earlier these days” (Jane). There was a view that students tended to be very vocal about their rights and demands and often gave up on work too easily. In contrast, a generation ago new employees may have struggled, but “behind the scenes it was shut your mouth and grit your teeth and get on with the job” (David). This view may have even permeated industry perceptions as the norm rather than the exception. As one industry leader claimed, “I don’t think there’s an expectation that the current generation in schools or who have graduated from school in the last 10 years have the maturity to go into full time work” (Jess).

However, another participant provided an interesting perspective on employers’ changing expectations of students. His view was that some people in the industry have an expectation that students should be able to step straight into work without the industry or employer investing in their growth and development, “they want that level of expertise, that level of competence, that level of attitude already” (Alan). He sighted specific insights such as the

changing role of apprentices and reiterated that “an apprenticeship was traditionally an education process” (Alan) and employers “didn’t start charging [the apprentice] out until the third year” (Alan). However, he claims that the custom and practice is very different in today’s workforce where industries and employers often have far greater expectations of apprentices; “the first day you are there, within the week, once you have learnt a few basic things, you’re doing things that they’re charging for” (Alan).

Whether the issue of school leavers’ maturity is “an issue for the industry, and not the education system” (Alan), there was agreement from participants about the emerging skills demanded of employees being reflected in the changing nature of industry. As discussed in the literature earlier, industry experts acknowledge that the workforce is evolving globally at a rapid pace. As a direct result of this, industry and employers are expecting, and in some cases preferencing, employees with a different skill set to those of a generation ago. The views of the research participants supported these perspectives and acknowledged “that jobs are going to change and a lot of automation and AI will take away some of the sort of routine type tasks” (Martha) that may have traditionally been expected to be carried out by novice employees. The ability to work within and across teams also appeared to be an increasing demand; “I think people would have always been expected to be collaborative and work in teams, but there’s definitely more of an emphasis on it now” (Jess). There was a view that generations ago the large majority of employees were working in the ‘back-of-house’ and had limited contact with the public, “in a factory, you never knew what a customer looked like, all you had to do was interact with your co-workers” (Alan). However, it was the view that with the decline in the low-cognitive and routine tasks, all employees will be increasingly confronted with dealing directly with customers, and this is a marked difference to previous generations of workers. Interestingly, at least one participant made the explicit connection with the impact these emerging skills may have on education. Martha acknowledged that although a “baseline of knowledge is extremely important,” she went on to suggest that “a lot of the skills that people have developed in learning facts and gaining knowledge or being given information, are going to be less relevant” (Martha). This then poses the question of what exactly the ‘relevant’ skills

of today and the future are, and the next section will identify and explore the emerging skills that the research participants believed would best prepare students for the modern workforce.

4.6 Highly sought after skills by industry leaders and employers

Despite acknowledging that the Year 12 qualification was a minimum expectation of young people moving into the workforce, the participants identified that the parchment itself provided little value for employers in the recruitment process, and participants concurred in their view that students were not adequately prepared with the necessary skills to succeed in post-school employment. Considering the changing nature of work, there were clear and consistent themes in regard to the skills and dispositions that industry leaders and employers identified as highly sort after and necessary for successful transition into the workforce.

Minimum standards of literacy and numeracy

There was unanimous agreement amongst the participants that the core to a student's successful entry into employment is functional literacy and numeracy. For all participants in this research there was an expectation that our education system should be ensuring students graduate with "the good education of maths, well spoken English, and written skills" (Jane). Participants expected that, as a minimum, education develops in students "a basic capacity to read and write and do maths" (Alan) and therefore students "should have basic foundations, they should have competency in literacy and numeracy" (Jess). However, David took this expectation a little further than 'basic' when he expressed "an assumption that [students] are obviously being educated to a respectably high standard in reading and writing" (David). Participants identified and discussed this emphasis on the skills of literacy and numeracy because of their perception of graduating students' deficiency in this area as "there are lots of kids who are graduating from school who don't have those foundations" (Jess).

Both the employers and industry leaders interviewed lamented students' limitations in literacy and numeracy, "a good proportion of kids are leaving school without functional literacy and numeracy, I mean the data bears that out" (Jess). This research identified that industry associations are seeking to support consistent employer concerns over the poor literacy and numeracy skills of their employees, particularly students' ability to apply their skills functionally

in the workplace. One employer suggested over-reliance on technology might be a factor when he maintained,

> I can't tell you how many kids I see struggle with the basics of mathematics because they have relied on technology to give them those answers… kids are relying on auto spell rather than learning to write properly (David).

It was clear that members across industries identified poor literacy and numeracy as a significant issue; "business groups are very aware that this is one of the key issues employers raise, that is, their dissatisfaction with the level of literacy and numeracy" (Tracey). Further to this, some participants expressed the necessity for strong policy action and reform in this area to ensure improved outcomes in student literacy and numeracy skills.

Despite the earlier declaration that industry was not interested in commenting on education policy and pedagogical practice, Tracey identified one industry leader who they were aware was publically calling "for a national inquiry into literacy and numeracy"[1]. It was clear that those in the industry were aware of the tension and division that calls for policy reform would have amongst the education community when she declared, "we had a proposal that people didn't like very much" (Jess). This comment related to an assumption that not all states in Australia have minimum standards set for literacy and numeracy and a suggestion that only states that had policies related to standardised literacy and numeracy tests could claim minimum standards. One industry leader was clear that "there should be a summative test for literacy and numeracy that every learner takes before they exit schooling" and "that that summative test should be from year 7, 10 and 12" (Jess). This view was echoed by another industry leader who declared, "we have strong policy that all states and territories should adopt minimum requirements for literacy and numeracy" (Tracey), and went further to say "and it's not fair or not true to say that all states have minimum requirements" (Tracey). They qualified this claim by saying:

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[1] Business Council of Australia Chief Executive Jennifer Westacott in a speech to the National Press Club 30/10/18, (as reported in the Weekend Australian, retrieved from https://www.theaustralian.com.au/nation/politics/you-can-do-better-big-business-tells-morrison/news-story/995ba18f348639a7e30f35e4e62c337f)

> We have had one more state commit to it [literacy test]; I think Victoria is the most recent state to commit to it. New South Wales has sort of an online version; but WA was the first state to commit to it, not long after we adopted our policy of pushing for minimum requirements (Tracey).

Tracey acknowledged that Australia did have a literacy and numeracy benchmark that was consistent nationally in the National Assessment Program – Literacy and Numeracy (NAPLAN), but expressed her dissatisfaction with this, claiming; "it's not just about the NAPLAN national standards because those standards are pretty low, 90 per cent of students meet those standards" (Tracey). It was her view that the current minimum requirements, benchmarked in Australia in NAPLAN, were not sufficient as employers were still reporting students' deficiency in the basic skills required for work and suggested school leavers should be benchmarked against an international standard that she perceived as higher. The international standards Tracey was referring to were the Programme for International Student Assessment (PISA), conducted by the Organisation for Economic Co-operation and Development (OECD). PISA

> is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students who are nearing the end of their compulsory education (OECD, 2019).

This policy suggestion to benchmark students against an international standard was because of the perceived higher standards, and also the perceived alignment with workplace readiness and transferability of skills into employment. In direct contrast to the NAPLAN results Tracey highlighted, "but yet when the PISA results are issued, the international equivalent standards, results show there's a lot more people that are not meeting the minimum requirements required in workplaces" (Tracey). There was the view that the PISA test differed from the NAPLAN in that they were actually assessing different constructs. Tracey claimed that the PISA tests had "different standards than NAPLAN… it's how [students] can apply those literacy and numeracy skills to deal with everyday problems and everyday issues" (Tracey).

It was clear from the interviews that this policy suggestion for minimum standards in literacy and numeracy was more about Education's intent and commitment to ensuring students are adequately prepared for post school pathways, rather than an actual statement or representation on a student's certificate. That is, employers will not have direct awareness or

knowledge of changes even if policy changes were made, they will experience it in the improved skills and abilities of employees; “the proof will be in the pudding” (Tracey). Hence, a policy statement is not significant enough, industry and employees will need to see results; “ultimately if the PISA results starts to show an improved relative trend, that will be very good news to hear but the individual employer is only worried about the person in front of them” (Tracey). A new perspective that has emerged is the juxtaposition of participants’ focus on standardised testing to assess students’ literacy and numeracy skills and employers’ reliance on real-world, contextual judgment. In addition to literacy and numeracy, the next section analyses specifically what participants in this research were most interested in when it came to the qualities of the student ‘in front of them’.

Emerging qualities, capabilities and dispositions required of school leavers

In addition to compulsory literacy and numeracy standards, participants in this research identified a range of emerging qualities and characteristics that they believed were critical to a graduating students’ successful transition into the workforce. From the outset, they were clear that the purpose of 13 years of education that culminates in the Year 12 qualification is not to provide deep discipline knowledge, “we don’t expect anyone to come out school with a depth of knowledge. That’s not really what school is for” (Jess). Interestingly, what they identified as the main purpose of education was “actually about creating the whole person…it is actually about creating good citizens” (Jess). Although there was a consistent theme that highlighted the concept that “an employer looks holistically at the package of the job seeker before them” (Tracey), there were some specific emerging competencies that participants identified students graduating school will need to possess.

Participants discussed a long list of values (accountability, honesty, respect), behaviours (adaptability, authenticity, flexibility, entrepreneurial thinking, self-awareness and resilience) and skills (divergent thinking, critical analysis, data analysis, digital technology literacy, problem solving) that they identified as significant. However, according to participants interviewed, contemporary students will, more than previous generations, require the ability to transfer concepts studied in school and apply them in everyday life and work situations; to take

initiative, solve problems, to understand how advances in technology work and what to do when things go wrong. Put succinctly, “the skills that people are going to need are about analysis, synthesis, creativity and problem solving” (Martha). Jess declared, “we would expect [students] to have an understanding of thinking frameworks that would allow them to engage with problem solving and critical thinking”. Similar views were expressed by Tracey, explaining that students will,

> have to understand enough so that they can problem solve if things go down or don’t work in workplaces, what can they do? It’s sort of practically solving problems and dealing with issues and showing initiative.

As industries try to reimagine what products and service they need to provide in the new markets, they need staff that are creative, agile and be able to respond to the changing needs of customers. Martha describes the situation where

> all industries are going to face quite a lot of disruption due to automation and AI, … we have to reimagine what work looks like, and that requires people to think differently, think about the future, and be creative and be confident to have different ideas.

Consistent amongst participants was the expectation that to be competitive in the workforce students will need a broad set of competencies that will allow them to generate creative solutions to complex problems in new and unfamiliar contexts. These unfamiliar contexts also extend to beyond Australian borders, “we would expect them to have an understanding of where Australia fits within the world, so a global context” (Jess) and hence “things like cultural awareness are really important” (Martha). Although industry leaders provided a broad and strategic perspective on the emerging needs of their members, there were rather practical, more specific expectations from an employer perspective.

Participants who were interviewed identified that they are required to conduct process that will support them to hire potential employees that will support their business to grow and thrive. As discussed earlier, despite the Year 12 certificate being accepted by many as a minimum requirement, it provided little value in the recruitment process. In this research, participants who were interviewed identified very specific qualities that they valued. These traits may be expected of a Year 12 graduate but not explicit in the curriculum or obvious on a Year 12 parchment. According to the participants, a potential employee’s personal presentation has

more of an impact and value than a transcript or record of achievement. One employer articulated that they were looking for

> that person that will step forward and not have a parent behind them - pushing them. The person who really wants that position. How will they speak, their mannerism, and whether they're a bubbly person? (Jane)

A key character trait for Jane then was confidence, initiative and interpersonal skills; students "need to have that personality out front. [They] need to be able to approach people and pick up that conversation and if they can't do that, then it's not going to work" (Jane). This view that the qualities employers actually value highly are confidence and the ability to interact with people was echoed by Alan who expressed, "overwhelmingly they're looking for people with confidence and who enjoy working with people" (Alan). This personal presence and how an employee conducts themselves was consistently identified as more valuable than a list of qualities listed on a certificate: "you've got to see how a young person is – has the ability to sell themselves" (Tracey).

In fact apart from industry specific skills, the majority of employability skills identified by participants were common across industries – and these were primarily the skills required to interact with the customer and to work effectively with their colleagues. One participant was clear that "most of my members look for personality, interaction and affability" (Alan). Participants also identified the ability to be proactive and settle client issues as critical;

> I'm looking for someone that will take that initiative to go - 'all right, I'm going to do this because it's quiet', or, if there's an issue to be resolved with the customer, to take that initiative (Jane).

Similarly, David said he was looking for a prospective employee who was "honest and reliable and can put their mind to anything". When articulating why he valued these traits he explained how critical reputation and customer experience was to business, particularly when it came to ensuring repeat business; "we are very, very focused on making sure that our reputation stays in tact across the board" (David). This notion of business nous and entrepreneurial thinking was reiterated by Jane who expected employees to have some basic understanding of the workings of a business; "just that whole awareness of what it actually means to a business,

especially a small business, and what the ramifications could be if something went wrong" (Jane). Unfortunately, employers' experiences with high-school graduates rarely met their expectations.

Participants in this research felt that young employees were self-centred, and did not possess the collaborative skills required to succeed in a team environment. When reflecting on her previous employees Jane recalled, "If I look back through all my staff, there have only been one or two that have actually got that". When participants are looking for humility and collaboration toward a shared goal, they found that

> there [was] definitely a stronger level of arrogance between the kids that I see these days. They feel a lot more deserving rather than wanting to put the effort in for reward (David).

Regardless of the size of the company or the industry, according to the participants, employers are looking for the same quality - working as part of a team for the benefit of the business and being accountable for your actions. However, according to David "everyone sees themselves as an individual …they are very reluctant to get on board as a team environment. They are always worried about their own personal achievements". Participants declared they were willing to invest and support young employees; from "we do an induction" (Jane) to putting "effort and energy in just to bring [a new employee] out of his shell… [so that] he has come forward in leaps and bounds" (David). Despite this they still found themselves having "turned over an awful lot [of employees]" (David) as they felt young employees lacked the persistence, resilience and perseverance to take on any and all challenges; "three months in she walked away saying I am not prepared to commit to this for the next four years" (David). Although more specific to their small business, the personal qualities and dispositions identified by the employees were surprisingly similar to those highlighted by industry leaders in the previous section.

4.7 Industry leaders and employers' recommendations to curriculum authorities

Improvements to the information provided on students' record of achievements and/or parchment

There was a consistent interest from research participants for greater communication and collaboration between education and industry, with one participant calling for "a much stronger dialogue between industry or employers and schools" (Martha). The benefits of education and industry working more closely together were identified as improved preparation for school leavers entering the workforce and targeted representation of the qualities and dispositions students have developed during their education.

Currently there is a perception among industry that education policy and practice narrows student achievements to a tertiary admission rank and encourages students to "maximise their chance of success in that way, primarily to enable them to go to university and that's where the focus lies" (Martha). These views were reflected in the literature when Torii (2018) declared that:

> the demands that education systems place on schools – in terms of the national curriculum, NAPLAN results and Australian Tertiary Admissions ATARs – are considered to be at odds with investing the time and resources in building partnerships with industry. (p.19)

To those who participated in the research this focus was not useful as students were not encouraged to make their own choices. One participant felt that "some subjects are a waste of time and provide no benefit to students, yet they are forced to select them" (David). Jane concurred when she conveyed that if students were able to consider their chosen pathways they needed "flexibility to be able to gain that certificate in various different ways rather than the traditional 'must do the English exam' and 'do the top maths'" (Jane). This perception that most students were required to undertake specific subjects rendered students unappealing to industry "purely because they have just been churned through the system" (David). Therefore, the parchment students are awarded in their final year is very limiting for industry; "for us it's not a matter of what they should have from Year 12 it's a matter of what they should have from all their years of schooling" (Jess).

When participants discussed their selection and recruitment process, they claimed they looked holistically at the potential employee, particularly things they have done outside of school; their leadership and community involvement were highlighted as critical skills. Therefore, research participants suggested the parchment would be more useful if it represented not only the depth of student learning, but also encompassed a sense of the person as a whole. These view strongly reflect the sentiments made in the Education Council's (2019b) discussion paper as it declared a "student's workplace experience and community engagement may help provide a much better indication of their drive, resilience and developmental potential" (p. 8). Jane clarified that she "look[s] at what they've done at school, particularly if they've been a captain or a prefect or they've done debating or they've spoken at assemblies". It was clear from the interviews that participants were very interested in students' character and appreciated anything that could provide

> an insight as to perhaps what they did at school, were they involved with the extra-curricular activities, put their hand up to try to be a bit of a leader or were they the quiet achiever that always moved forward? (David).

Participants also identified similar concepts by offering that a parchment should encapsulate "things that they've done above and beyond in terms of their own commitment to furthering themselves in a broader sense" (Tracey). Martha was very specific when she acknowledged that a record of achievement should reflect what a student has studied, but should also identify the skills they have gained through studying these subjects, "I think it should represent a statement of capabilities of that particular person" (Martha). These sentiments echo the proposal by O'Connell et al (2019) for the development of a National 'learner profile' that goes beyond the mere statement of grades or an ATAR, but would

> provide a broader and better integrated representation of success for all students, by recognising a range of verified achievements that can be related to diverse pathways, criteria and fields of activity (p. 17).

However, there was some debate about the validity and reliability of such information and doubt over whether the industry community would have confidence in the certification of a

student's capabilities; particularly as judged by teachers within schools due to their lack of workforce experience outside of schools.

One participant felt that a school principal could offer an honest and trustworthy account of a student's character;

> a reference they receive in Year 12 from their principal… what did they participate in in their school life? Were they in a leadership role, did they participate in any community activity, were they a valuable member of the school community, undertook work experience, and I think anything that obviously gives an independent validity (Tracey).

Although there seemed to be no question over the integrity of student grades, it was evident that research participants were seeking something more. David recommended that "if [students] get an A, B, C or D, regardless of their mark for Mathematics, they should have a secondary personality assessment" (David). Martha thought it might be too great a leap to consider grades irrelevant; she believes "it's still important to know the depth of learning that somebody has done in terms of subjects". However, she did concur with David when she recommended incorporating "something that gives a sense of the experiences that somebody's had…an assessment of those skills, or at least a listing of those skills somebody's developed; as like a capability profile" (Martha). Other research participants were sceptical about an approach to assessing student capabilities stating, "I don't think you can test someone for that…in terms of behaviours, for kids in school you have to be really careful about assessing that and putting that on [the certificate]" (Jess).

One of the research participants was dismissive of any intention to judging students' capabilities. Jess recognised teachers as experts at making judgments related to curriculum, but could not credit their assessment of capabilities, particularly those related to employability skills. She felt that

> there is a great deal of respect for educators but it is also respect for what they're actually expert at, which is curriculum and curriculum assessment - versus assessing the behaviours, the values and attributes of a young person …, it's not for a teacher to make an assessment about that individual's capabilities for work (Jess).

Jess acknowledged that students have different background experiences that may affect any subjective judgment educators make about students' 'citizenship'. She suggested that schools

should work to foster and develop good citizens, but not assess this development or document it. In her view;

> if you can't assess it then it's just tokenism and no, it shouldn't be on the certificate…I think it is the role of schools to contribute to the development of citizens and we need to be clear about what that means, like 'What are the values of citizenship?' But I don't think you can assess that (Jess).

As discussed earlier, the interviews identified some employers' and industry leaders' lack of knowledge and understanding of the Year 12 certificate. This view on assessment and the judgement making process also provides a unique perspective into the industry sector and the insight they have into the complexities of assessment.

In speaking with one participant, there was an assumption that if a personal trait or capability cannot be assessed with accuracy it is not worth documenting on a certificate. That is, the perceived easy to measure skills such as literacy and numeracy can be assessed and reported on; however, judgments of other complex constructs (student qualities or characteristics) would not be valid or have integrity. Jess' view was that "employers…would be sceptical" about the capabilities being assessed and was not interested in any other potential approaches to evidencing or warranting student dispositions; "badges and micro-credentials for behavioural type things, I don't know that they will have much currency" (Jess). As referenced earlier, Jess' perspectives was that "teachers actually have no idea what the workforce is like". Hence, employers would not value teacher judgments of these complex constructs, as they are not reflective of the workplace legitimacy. Jess declared that "while industry and employers have tremendous respect for teachers", they also acknowledged "teachers have a very unusual pathway in the labour market. They go to school, they go to university, they go back to a school" (Jess). This unique perspective highlights the complexity at the essence of the research question; whether the education system will be able to provide the information that industry are looking for and the bigger question of whether it should be expected to.

This opinion contrasted with another participant who had a more diplomatic way of expressing the complexity. Martha agreed, "most employers trust the judgment of the teachers in the education system; because those are the people that are spending the most time with people

in school". However, she was clear to identify the misalignment in what education was valuing and employers were seeking; "they just don't necessarily think they're measuring the right things now" (Martha). When juxtaposed, the contrasting perspectives of participants highlight the complexity of this research question. For instance, even "if teachers were assessing teamwork and the collaboration of students for a labour market *they don't understand*, it has very little validity" (Jess, emphasis added). These views then pose a challenge if education and industry are to work collaboratively to foster the skills and qualities for students' successful transition in to the workforce and to provide useful documentation of these qualities.

Need for improved career counselling and increased vocational experience

Participants in the research were consistent in their call for greater education and development of students' ability to consider their future pathway and greater exposure to the world of work during school. Suggested benefits were policies and practices that supported students at an earlier age to understand and consider their future pathways and how this may impact on their year 11 and Year 12 subject selection, particularly "how they learn about the choices that they make as they're going through school" (Martha). Employers and industry leaders who were interviewed felt that very few students had a strong grasp of their abilities, a limited understanding of their post-school pathway options and narrow aspirations about their future. Participants acknowledge that careers counselling was part of the education program, but felt it stopped short of supporting students in "trying to find the focal point for an individual child's ambition…. Ultimately, I think that should happen a whole lot sooner than what it does" (David). Another participant had higher expectations of the career planning process and felt it should

> actually teach kid's self-awareness, it's teaching them to deeply examine their strengths and their likes. That's the kind of stuff that needs to happen from an employer perspective but that doesn't need to be related to what's put on a piece of parchment (Jess).

Ultimately, there was a sense that teachers, parents and the broader community were restricting students' perception of success and awareness of what possibilities where open to them and potentially "forcing [students] down a path that is not going to suit [them] in the future" (David).

Earlier discussion, in this paper, highlighted the complexities and tensions related to students' participation in vocational education and training (VET) and how this contributed to the achievement of their high-school certificate. Participants in this research also identified the significance of students' access and involvement in authentic work environments as critical to their preparation for the workforce. However, as students stay at school longer, participants were concerned that they are less exposed to authentic work experience and subsequently lack practical vocational experience. As student participation in VET decreases[2], industry participants were increasingly sceptical about the quality of the vocational education. As one participant noted:

> a lot of schools have fallen into the habit of delivering VET, not as proper vocational training, high quality courses; but as vocational learning. What we'd call Mickey Mouse courses, job readiness, certificate I, or foundation certificate II. That doesn't impress employers when people are turning up with that type of qualification. (Tracey)

However, vocational experience is not only gained through VET, but through students' involvement in school organised work placement or part-time, casual employment. This research identified that vocational experience is highly valued by employees because often students who have worked, particularly at large-scale fast food chains, are attractive because they have developed a level of rigour and routine. These experiences also allow for the development of vocational numeracy, literacy and customer relations that build on the learning at school. One industry leader was confident that his members "look at their work since they were 15 and whether they worked at Hungry Jacks, or they worked at McDonalds, … and they lasted! More often than not [employers] are inclined to go for them, simply because it's a factory, but it imposes a discipline" (Alan). Participants acknowledged that they have a significant role to play in supporting students to increase their participation and exposure to the workforce, but were adamant it was "not just about looking for work placements; no, a different sort of relationship" (Martha). In Martha's experience and discussions with her colleagues,

[2] The ACARA National Report on Schooling in Australia Data Portal states that the number and proportion of 15-19 year olds participating in VET at AQF Certificate II or above has been declining Nationally since 2014 (2017).

there was a strong commitment to enhance and foster this relationship; “just about every single [CEO] was really committed to working more closely with schools” (Martha). This evidence then provides a promising opportunity to strengthen the communication and collaboration between education and industry to support students’ successful transition from Year 12 graduation in the world of work.

4.8 Summary

Increasingly, the secondary school certificate has become a minimum expectation of young employees by industry leaders and employers. However, from the sample of participants interviewed, it seems that they rarely interrogate, look at it or even ask to see the certificate. Surprisingly, despite the confidence and trust placed in what the education system produces, these employers and industry leaders declared a lack of knowledge and understanding of the make-up of the secondary school certificate and did not appear concerned about the certificate’s composition. What both these industry leaders and employers consistently agreed on was that school leavers are not adequately prepared for post-school employment and lacked the skills, attitude and capabilities required to succeed in the workforce. In fact, it is these personal qualities that employers and industry leaders valued most above academic achievement in traditional disciplines and recommended that a more holistic representation of students’ extra-curricular activities, leadership and community experiences would be helpful. However, there was some perspective from the industry leaders that if the certificate did try and evidence additional employability skills, employers would not trust it anyway as teachers are not qualified to make these judgements.

5 Chapter 5: Discussion

5.1 Purposes of Education

The purposes of education argument is an essential starting point in any work that seeks to reconceptualise the substance and representation of the secondary schooling credential and realign these purposes with rapidly evolving global trends. There is little doubt that for the majority of society, education has largely been about preparing young people for the world of work as a means of social mobility and for the greater personal and national economic prosperity. However, it is critical that we again revisit this question, as the Education Council (2019a) declare, "[i]mproving clarity around the purpose and desired outcomes of senior secondary schooling is essential" (p. 6). The opening lines of the preamble in the *Melbourne Declaration on Educational Goals for Young Australians* states "In the 21st Century Australia's capacity to provide a high quality of life for all will depend on the ability to compete in the global economy on knowledge and innovation" (MCEETYA, 2008, p.4). The Declaration goes on to acknowledge the significant connection between education and employment in which Australian state and federal governments agreed that young Australians should:

> …be on a pathway towards continued success in further education, training or employment, and acquire the skills to make informed learning and employment decisions throughout their lives
>
> …have the confidence and capability to pursue university or post-secondary vocational qualifications leading to rewarding and productive employment (p.9).

The Foundation for Young Australians acknowledges the historical and nostalgic correlation between education and employment. Their report (2018) confirmed that "for at least the past century, Australia's promise to our young people has been that education is their 'golden ticket' to a full-time job' (p.3). However, the report acknowledges that the transition for young people between full-time education and full-time work is increasingly uncertain and determines

'accelerating factors' to support the successful education-to-work transition (Foundation for Young Australians, 2018); these factors are discussed in greater detail in the following section.

Despite this common accepted purpose of education, there has been much debate amongst academics and education experts surrounding the broader societal purposes and benefits of education. The Universal Declaration of Human Rights, proclaimed by the United Nations General Assembly in Paris 1948 establishes in Article 26, Section 2 that "Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms." (United Nations, 1948, p.7). This is a clear articulation of the broader and more impactful purposes of education beyond the significant, yet narrow focus on economics and employment discussed by the participants in this research. As society has progressed and developed since 1948 researchers have been asking, "What is really useful knowledge?" (Johnson, 1981) in education, 'Whose knowledge is of most worth?' (Apple, 1993); and 'What are schools for?' (Young, 2009). The *Through Growth to Achievement* report (2018) (commonly known in Australia as Gonski 2.0 after the head of the review panel, David Gonski) fell short of tackling the purposes of education, but it did recommend a review of senior secondary education. Priority three recommended a

> review of the purpose, content and structure of senior secondary education to make sure it is contemporary, and adequately prepares students for post-school employment, training, higher education and to live and prosper in a rapidly changing world (Gonski, D., Arcus, T., Boston, K., Gould, V., Johnson, W.,…Roberts, M. 2018, p. xi).

The latter part of the above recommendation, "to live and prosper in a rapidly changing world", may be been interpreted narrowly again as purely economic prosperity, or, what the industry leader and employer participants in this research were alluding to when lamenting the limited personal and social skills of graduating students. Industry leaders discussed interest in education being about the development of the 'whole person' and employers were looking for evidence of students' broader extra-curricular and leadership development. However, the sharp focus of this research on the perspectives on industry and employers resulted in a distinct silence on the well-being and development of students as human. This is not unique, as Cumming and Mawdesley (2013) found:

> Australian national educational policy also gives the best interests of the child little direct attention …[and] at Australian state and territory level, reference to the best interests of the child is also underwhelming, mentioned rarely and in contexts that in general do not relate to overall quality of education provision (p. 293).

Reid (2018) discusses the increasing complexity of a rapidly changing world through the lens of three education purposes. Reid's identification of "work and the economy", "democracy" and "individual, social and cultural life" as "three arenas served by the purposes of education" (p.5) encapsulates the global shift to see education as the means to much more than economic prosperity. In this context, it is timely that we begin to look more broadly at the purposes of education and ensure that any policy and practice changes are more than acknowledgement and rhetoric, but are reflected and valued in the achievement and representation of the high school credential. The OECD (2018) report declares, "It is time to create new economic, social and institutional models that pursue better lives for all" (p.3). Striving towards a better life for all is discussed in more detail in sections 5.7and 5.8. However, as this research is focused on industry and employer perspectives on the senior secondary qualification we will continue to discuss the value education in high school provides in the transition to employment.

5.2 Successful transition from school to employment

Strongly reflecting the themes identified in the findings, Musset and Kurekova (2018) acknowledge, "young people have long faced challenges in entering the labour market" (p. 8). He also concurs that the transition from graduating high school into employment is becoming increasingly challenging for today's youth. "[A]cross the OECD…youth unemployment levels have been historically high over the last decade, exposing young people to the long-term scarring effects of young joblessness" (p. 8). In a recent inquiry into school to work transition, the Australian Chamber of Commerce and Industry (ACCI, 2017) made a series of recommendations to the Federal Government. A number of recommendations in the report focused on improving work readiness of school graduates by asking the Federal Government to seek "commitments from the states and territories to work together with industry and the Australian Government to identify a mechanism to measure improvement in employability skills" (p.3). The ACCI's key findings reinforce societal expectations that the critical objective

and outcomes of a student's successful transition from school to work or further education are to "minimise the economic and societal costs of youth unemployment and negative social and health outcomes for the individual" (ACCI, 2017, p. 6). However, as identified in the findings, industry leaders and employers that participated in this research lamented that education was not providing a successful platform for this transition.

The definition of 'successful transition' has been defined by industry leaders to be one where the graduating student has "enrolled in full time study or is employed full time in work in the following year" (ACCI, 2017, p.6). However, Deloitte Access Economics (2012) takes this definition further in its analysis of the Youth Transitions Evidence Base by defining a 'good' transition to be where the school leaver has been fully engaged in full-time work or full-time study for "three or four of the four annual surveys since leaving school" (p.2). This concept of a successful transition is amplified when considering the magnitude and complexity of changes in the business and industry sector as they relate to youth employment. The 1998 Dusseldorp Skills Forum report captured the essence of this complexity when it synthesised the 'profound' changes throughout the decades. It described an era in the 1970s when most school leavers were aged 15 or 16 and were able to "very quickly get a job" (ACCI, 2017, p.8) to a contemporary situation where the school leaving age in Australia has risen to 17 (Department of Foreign Affairs and Trade, 2016, p.9). Unskilled employment opportunities continue to decrease and there is a "rise in expectation of employers who need employees to be highly productive as soon as possible in order to compete domestically and globally" (ACCI, 2017, p.8). This is a direct reflection of the comments made by participants who identified the increasing challenges placed on contemporary school leavers, specifically in relation to employers charging for an apprentice's services in first few weeks on the job.

One of the clear themes identified in the findings was the call for stronger communication and collaboration between education and industry. Gonski et al, (2018) identified that "[s]chool-industry collaborations improve education and employment outcomes" (p. 42). Hence, if we are to support and enhance students' successful transition from high school to employment then this partnership between education and industry is critical. Earlier, research participant

Martha established that the chief executives that she had worked with all declared their commitment to work with education. Similarly, Torii (2018) found that school-industry partnerships provide “rich real world learning opportunities that spark students’ curiosity, and open students to a range of new and emerging professions…and support the development of capabilities critical to the future of work” (p. iv). Despite strong intentions and commitments from both education and industry, there continues to be a mismatch between the purposes and expectations of each group.

5.3 Significance of student exposure to vocational experience

A significant issue related to student’s successful transition to employment and developing the necessary work-ready skills is exposure and participation in vocational work experiences. A Mitchell Institute report (Torii, 2018) highlighted the anticipation that the current generation of school leavers would transition through multiple and varied careers. Their findings recommended, “opportunities to gain exposure to and understanding of a broad range of occupations and industries while in education is critical for supporting successful transitions post-school” (p.8). However, as a result of perceived necessity, government and education policy focus has shifted to improving secondary school retention and completion, resulting in senior secondary school aged students being less and less exposed to work experience. As can be seen in figure 1 below, the youth employment participation rates have steadily decreased over the past 40 years, (ACCI, 2017, p.9). ACCI research claims that this lack of vocational experience has affected students’ successful transition from education to work. Participants in this research who also identified concerns over diminishing access and exposure to vocational experience for senior school students echoed these sentiments. However, participants also consistently identified Year 12 completion as the minimum requirement when looking to employ school leavers. The 2011 *Longitudinal Survey of Australian Youth* report “clearly illustrates that students who have achieved a senior secondary certificate of education (or equivalent) are substantially more likely to make a successful transition to further education, training and work than early school leavers” (Ryan, 2011, p. 13), and thus supply the demand. However, the ACCI are clear in stating that they are not

advocating that students leave school earlier than Year 12, but are calling on the education systems and the community to provide opportunities for "young people to understand and acquire the skills and attributes required in the workplace" (ACCI, 2017, p.9).

Image removed due to copyright restriction.

Figure 1: Youth employment participation rates 15-19yp 1978 to 2017 **Source:** ACCI, 2017,

Similar recommendations were identified by the Foundation for Young Australians (2018) who found that "the new work reality" (p.3) is that education alone is no longer enough to secure full-time work and that this assumption "is now at risk" (p.3). Their report revealed that the transition time from school to work has grown from 1 year in 1986 to 4.7 years in 2018. Hence, they called for changes in education policy that offered students opportunities to gain real world, vocational skills as a key way to shorten the transition from school to work (Foundation for Young Australians, 2018). This was not only the view of research participants, but of students themselves. This then highlights the complex dilemma facing education; to be able to meet the increasing demands of providing students with deep discipline knowledge while also fostering the enterprise qualities and dispositions industry are asking for.

5.4 Skills for the future

Conceptually, a useful model to consider the complexity of this dilemma is the OECD's recent *The Future of Education and Skills: OECD Education 2030 Framework* (2018). This emerging framework presents a picture of the "knowledge, skills, attitudes, values and competencies

required for the 2030 world" (p. 2). This global issue in education for the 21st Century continues to centre on the important skills, knowledge and attributes that future citizens require. The Melbourne Declaration on Educational Goals for Young Australians, specifically Goal 2, aspires for all Australian students to become "successful learners, confident and creative individuals, and citizens." (MCEETYA, 2008, p.8). We have discussed earlier the Melbourne Declaration's focus on employment, but it does continue by also describing a list of skills, attitudes, motivations and dispositions that are expected to contribute to the achievement of Goal 2. Some of these are; "to think deeply and logically…[be] creative, innovative and resourceful… have a sense of self-worth… relate well to others… act with moral and ethical integrity" (MCEETYA, 2008, pp8-9). The OECD's framework may be considered as an advanced iteration of the Melbourne Declaration and is able to articulate the global paradigm shift in education. The OECD Education 2030 paper, *The Future of Education and Skills,* asks, "what knowledge, skills, attitudes and values will today's students need to thrive and shape their world?" and "how can instructional systems develop these knowledge, skills, attitudes and values effectively?'" (2018, p.2).

The Australian Federal Government has funded research into the area for many years, since the Mayer Key Competencies were developed in 1992 to enable the incorporation of employment-related skills into education and training (Australian Education Council, 1992). The Key Competencies were superseded in 2002 by the *Employability Skills for the Future* report, which was a Commonwealth Government funded project that asked industry groups, the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA), to describe the skills required of school leavers to gain and progress in employment. In 2013 the Australian Federal Government also produced the *Core Skills for Work Developmental Framework (CSfW).* The framework describes a "set of non-technical skills, knowledge and understandings that underpin successful participation in work" (Commonwealth of Australia, 2013, p.1). These include three 'Skill Clusters', two of which focus on technical skills, with the third identifying the ability to utilise diverse perspectives, solve problems, create and innovate (Commonwealth of Australia, 2013, p.1). The framework was designed to be used by educators and trainers to "more clearly articulate the skills

[learners] possess and identify those that they would like to develop" (Commonwealth of Australia, 2013, p.4). Finally, following the recommendations of the Gonski (2018) review, the Australian Federal Government released *The Review of Senior Secondary Pathways into Work, Further Education and Training* led by the Education Council (2019b). After decades of unsuccessful attempts to align the transition between education and industry, the report claims, "[w]e now have a chance to re-imagine how the transition from school to employment might look" (p. 3). The discussion and background papers that contextualise the review are seeking submissions from all key stakeholders as they acknowledge "[e]ffective pathways also rely on a joint effort across schooling, vocational education and training (VET), higher education and business" (p. 3).

The common thread between the skills described and discussed in reports referenced above are that they are not designed as a set of standards, but "present the underpinning skills, knowledge and understandings in terms that make them describable, teachable and/or learnable, and able to be demonstrated" (Commonwealth of Australia, 2013, p.4). The *Mayer Key Competencies* identified a set of key competencies supported by descriptors such as:

> The capacity to apply problem-solving strategies in purposeful ways, both in situations where the problem and the desired solution are clearly evident, and in situations requiring critical thinking and a creative approach to achieve an outcome (Australian Education Council. Mayer Committee, 1992, pp.8-9).

The 'non-technical' or non-cognitive skills described in the various publications above are similar to the emerging qualities, capabilities and dispositions identified by industry participants in this research. In contrast, employer participants had higher expectations for students' values and attitudes, particularly as they related to the impact on small businesses. The Foundation for Young Australians (2018) encapsulates these emerging capabilities as 'Enterprise skills'. They define 'Enterprise skills' as the "transferable skills such as problem solving, communication, teamwork, and creativity" (Foundation for Young Australians, 2018, p.19) and believe these skills are a significant factor in accelerating transition into gaining full-time work. One of the key questions posed by the Education Council's review (2019b) is;

> What are the essential skills and knowledge with which young people should leave secondary school in order to enhance their lifetime career prospects whilst meeting Australia's future workforce needs? Whose job is it to make sure they acquire them? (p. 5)

The report acknowledges that this question has generated much debate, but requires a balance of foundational skills, workforce capabilities, work readiness, workplace behaviours and broader social capabilities.

Interestingly, employers and industry leaders who participated in this research concurred with the Education Council's (2019b) views and acknowledged that these emerging 21st Century capabilities were not specific to particular industries, but where critical skills required of all employees. These are the skills described by Torii (2018) as skills that are "fundamental to current and future jobs" (p.vi) but that there is also "a growing evidence base for the power of these capabilities in all occupations – and employers are increasingly seeking them in young people (Torii, 2018, p. vii). The need for students to develop an additional dimension of skills in addition to the academic and technical is a dominant paradigm acknowledged across the world. International Data Corporation (IDC) undertook comprehensive market intelligence by analysing 14.6 million job postings to identify the top skills required for the positions expected to have the highest growth and wages between now and 2020. Although the findings may be considered biased by the Microsoft sponsorship, the high-level findings are of interest. IDC found:

> a set of common, core skills focused on "soft" skills such as oral and written communication skills, attention to detail, and problem-solving ability…[and] a subset of soft skills focusing on communication, integration, and presentation skills, which are overwhelmingly desirable in high-growth, high-wage occupations (Anderson & Gantz, 2013, p. 1).

This local and global discourse highlights the increased recognition and understanding of the public value of students' development of 21st Century capabilities, not just for their successful transition into work, but also for their own personal development. Research conducted by the Brookings Institute maps how governments and education systems from over 100 countries are increasingly embedding soft skills into curriculum and policy to prepare students for the complex challenges of the 21st Century (Care et al, 2016). Hence, the views of industry leaders and employers in this research should not be considered in isolation. These view are reflective of an international awareness that education approaches have not responded to

rapid changes in global economies and this has resulted in a mismatch between the education young people are receiving and the skills and capabilities required in the future of work, and life.

When we look across the globe, countries like Singapore and Finland have often been lauded for the educational success their systems have produced. Their success has often been measured by their PISA rankings and something one of the research participants was calling Australia to aspire to. However, having topped the PISA tables, even Singapore are acknowledging their need for educational reform. This reform is driven by the acknowledgement that

> it is how [students] respond to real-life challenges that matters more than exam smartness. In a volatile, uncertain and fast-changing world, it is analytical and problem-solving capabilities, and the ability to infer conclusions that are vital (Sinnakaruppan, 2017)

In response, Sinnakaruppan, CEO of Singapore Education Academy, declared, “it is time for a radical and comprehensive review of the education system in Singapore,” (Sinnakaruppan, 2017).

Anneli Rautiainen, head of the innovation unit at the Finnish National Agency for Education, claims that "competencies needed in society and working life have changed over the past two decades, requiring skills that will remain relevant in an uncertain and volatile global environment" (Tay , 2017). Interestingly, Sinnakaruppan (2017) highlights that countries like Singapore and Finland often top PISA rankings, “yet companies from these countries barely feature in Forbes’ annual ranking of, say, the Top 25 most innovative companies in the world.” Zhao (2012) illustrates (figure 2 below) the inverse correlation between PISA results in mathematics and perceived entrepreneurial capability. The international trends illustrate that high academic achievement and technical proficiency are no longer the sole benchmark for the future of education and are no longer a guarantee of economic prosperity.

Image removed due to copyright restriction.

Figure 2: Ranking by PISA math score and perceived entrepreneurial capability. (Zhao, 2012)

This international perspective provides reinforcement for the views of participants in this research and their call for education reform to match employer expectations and adequately prepare students for post-education pathways. Let us now consider the implications of this research in regard to our case study qualification, the South Australian senior secondary certificate of education.

5.5 South Australian Certificate of Education (SACE)

The challenge is clear; how to incorporate these increasingly critical capabilities for all students into education credentials so that they may better represent the knowledge, skills and capabilities a student has developed throughout their schooling, and in ways that are useful and aligned to employee needs and global expectations. In this section, I aim to sharpen the focus of this line of enquiry to the final school credential in South Australia. Thus far, I have outlined the important problem that simple reports of academic achievement at all levels of education present; a focus on assessment of easily measured outcomes, and as evidenced through the perception of research participants, often specifically related to examinations,

content, and understanding of that content. Hence, a discussion about a lack of reporting on, and more critically providing learning opportunities for broader qualities and capabilities embedded in the SACE is highly pertinent, particularly for students who do not achieve a high ATAR score or who have no intention of going on to higher education following their senior secondary studies.

The South Australian Certificate of Education (the SACE) is issued by the SACE Board of South Australia (the Board). The Board is an independent statutory authority of the South Australian Government, that on its website claims to deliver "a modern, internationally-recognised secondary school qualification designed to equip students with the skills, knowledge, and personal capabilities to successfully participate in our fast-paced global society" (SACE Board of South Australia, n.d.a). The objectives and requirements of the current SACE were influenced by the recommendations of the 2006 *Success for All* review. The review panel's term of reference was to "achieve a curriculum and assessment framework that will meet the diverse needs of all students and result in high and more socially equitable levels of retention, completion and pathways beyond school" (Crafter, Crook, & Reid, 2006, p.9). This resulted in the 'success for all' vision of the qualitative review that found:

> a particularly strong desire in the community for the SACE to be more relevant and connected to everyday life…that can contribute to developing in students the capabilities required to live, work and participate as active citizens in a changing, globalised world (Crafter, Crook, & Reid, 2006, p.9).

It is with this backdrop the SACE became one of the leading senior secondary credentials in which "capabilities, that is, the skills, knowledge and dispositions that enable people to act in and on the world, both personally and collectively" (Crafter, Crook, & Reid, 2006, p.9) were placed at the centre of the high school leaving certificate.

The SACE Board's website supports students to consider how the capabilities[3] are incorporated into their education in a section entitled 'Exploring your capabilities'. The web

[3] The 'new' SACE introduced following the 2006 review adopted a set of 5 capabilities (communication, citizenship, personal development, work and learning) which continue to be used in non-renewed curricula (SACE Board of South Australia, 2010). More recently renewed subjects have adopted the 7 General Capabilities (Literacy, numeracy, information and communication technology

content begins be reaffirming that development and assessment of discipline knowledge is a critical part of the SACE, but highlights the significance of learning beyond school where this learning will need to be applied in real world situations and students will be required to transfer their knowledge in different contexts. It is for this reason their website asserts, “That's why the SACE is designed to go beyond just testing your knowledge, to focus on developing your personal capabilities as well” (SACE Board of South Australia, n.d.b). Hence, the Board acknowledges that the development of the capabilities will serve students well in all facets of their life, including work; “your personal capabilities are what employers want, and look for in you, when you apply for a job with them” (SACE Board of South Australia, n.d.b). The SACE Board’s *Capabilities Policy* defines the capabilities as comprising “an integrated and interconnected set of knowledge, skills, and understandings that students develop and use in their learning through SACE subjects” (SACE Board of South Australia, 2015, p. 1). These capabilities are fostered and developed through Board accredited subjects to “ensure that all students, whatever their learning pathways, are able to develop and demonstrate the knowledge, skills, and understandings for success in the SACE and beyond” (p. 1)). In theory then, the claims the SACE Board articulates on its website and policy documents strongly align with the emerging literature, and the perspectives of the industry and employer participants in this research, concerning the necessary skills required of all young graduates to navigate the complexities of a rapidly changing world. However, when we reflect on the views of the research participants, there is an obvious mismatch between the policies and intent of the educational institutions and what the industry sector are experiencing in the school leavers they are employing.

Although the structure of some Year 12 certificates around Australia, such as the SACE, acknowledge development and understanding of the Australian Curriculum General Capabilities (through, for example, integration in subjects such as the Personal Learning Plan and the Research Project), and recognise vocational attainment through Vocational Education

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capability, creative and critical thinking, personal and social capability, ethical understanding, and intercultural understanding) of the Australian Curriculum as referred to in the SACE Board’s ‘Capabilities Policy’ (SACE Board of South Australia, 2015).

and Training (VET), the approaches are inconsistent across jurisdictions. It is no surprise then that all participants in this research acknowledged their limited understanding of the design and requirements of the Year 12 credential. Participants did not declare difficulty in accessing the necessary information, but it appears that a culture has developed where employers no longer care how the certificate is design or what students are required to undertake to complete it. This embodies the challenge at the heart of this research: what value does the Year 12 credential provide students themselves, employers and society in general? Furthermore, if there is inherent value in the credential how may educational authorities better represent and communicate this value?

5.6 Vocational Education and Training (VET)

Although the focus of this research is the value, quality and usefulness of the representation of senior secondary qualifications, the role played by VET cannot be ignored; this research will consider the implications VET has for senior secondary certification, but will not include a detailed analysis of VET itself. The early 1990's in Australia saw the publication of three seminal reports that redefined the ties between post-compulsory education and working life. The Finn (1991), Mayer (1992) and Carmichael (1995) reports emphasised the significance of vocational education and recognised its increasing alignment with general education and proposed a set of key competencies that young people needed, to be able to participate effectively in the emerging forms of work. An attempt to bring schools into a closer relationship with the demands of the workplace, Symes describes the influence of these reports as "witnessing a resurgence of human capital imperatives in educational policy." (1995, p.247). More than 20 years later, Symes' insightful interpretations are relevant once more; "the debate about the optimal relationship between work and education is a recurrent one, which seems to surface with cyclical regularity at times of educational crisis" (1995, p.248).

The success of VET policies implemented by federal and state education authorities and this focus to align VET with senior secondary qualifications is reflected in the data. For example, there has been a 38 per cent increase in the number of secondary students undertaking VET

between 2005 and 2012 (Education Services Australia 2014, p.2). In 2017, 42.3% of students who completed the SACE had also undertaken some VET, with 2015 students completing a Certificate III or above as well as their SACE (SACE, 2017, p. 16). Despite promising participation in VET, emerging findings suggest that the issue with VET being incorporated into senior secondary qualifications has been the division between VET curriculum and 'traditional' curriculum. Definitions have also compounded the issue; "the terms 'VET in Schools' and 'VETiS' are widely used, but contribute to the misconception that VET delivered to secondary students is different from all other VET" (Education Services Australia, 2014, p.5). Whether VET is delivered to school students through an external Registered Training Organisation (RTO) or the school is an accredited RTO itself, VET has not gained broad recognition as an integral element of students' curriculum choices, and many school structures and systems have failed to conceptualise VET as having a valuable and legitimate place in the timetable. Negative perceptions of VET have also permeated from the education and industry sector. Gonski et al (2018) acknowledged, "in many schools, however, alternative vocational subjects were considered to be less prestigious than an academic pathway (p.49). More damning are the views of industry leaders who participated in this research who claimed,

> schools have fallen into the habit of delivering VET, not as proper vocational training, high quality courses; but as vocational learning. What we'd call Mickey Mouse courses (Tracey).

The Education Council's 2014 report, *Preparing Secondary Students for Work,* acknowledges in its introduction that the global conditions that shaped the current delivery models of VET have changed dramatically and that there is a "sense of urgency that both school and VET systems need to respond strategically to the changes affecting students, schooling, employment and society" (p.1). Their premise is that it has always been the responsibility of schools to adequately prepare students for the demands of work, whether this be casual, temporary employment or longer-term career opportunities. The point they make is that education systems and schools need to be cognisant of the requirement for students to meet higher than ever demands by employers. With manufacturing and other entry-level job numbers falling, employers are wanting to employ "skilled and flexible workers who can navigate the world of work; interact with others; plan and organise; make decisions; identify

and solve problems; create and innovate; and work in a digital world" (Education Services Australia, 2014, p.2). Findings drawn from participant interviews echoed these sentiments that employers have high expectations of students to be both job-ready and have the capabilities required to succeed in an evolving economic landscape. Segue into next section.

5.7 Human Capital and Credentialism Theory

A 2012 Australian Productivity Commission report strengthened the perspective that the key purpose of education was to prepare students for work. The report was very clear in its intent when it declared:

> Australia's 'human capital' has become more important for its future prosperity…A well-performing schooling system, underpinned by an efficient and effective schools workforce is fundamental. Specifically, it is essential to foster the skills, innovativeness and adaptability needed to prosper in competitive global markets, and to encourage more people to enter and remain in the workforce (Commonwealth of Australia, 2012, p.39).

Despite the strength of the Productivity Commission's assertion, this dissertation aims to provide an opportunity to reconceptualise the representation of the high-school completion certificate to consider a value beyond merely developing human capital, but by also valuing and enhancing an individuals' personal and social capabilities. By investigating the extent to which human capital theory, Credentialism theory (Labaree, 1997, 2004) and Capability theory (Sen, 1985, 1999) might be applied to education, I aim to make recommendations that may better capture a student's educational capital and their readiness to successfully undertake post-secondary school pathways, whatever they may be. Following the analysis of the alignment between the qualities the industry sector and employers are seeking and the capabilities the SACE certificate aims to develop in graduates, I now move on to an analysis of the educational value of the secondary certificate and what it represents.

The connection between human capital theory and Credentialism theory (Labaree, 1997, 2004), considers the 'use' value and 'exchange' value of credentials to differentiate how well a credential prepares its recipients with the skills for a specific purpose (employment or educational) versus the ability to transfer the skills and qualities developed beyond the specific purpose. The current challenge is identified by the Education Council (2019a) when they ask "[w]hether the current presentation of senior secondary certificates outlining only a student's

grades provides an adequate picture of their broader skills and knowledge" (p. 7). Maier (2012) claims "that individuals seek credentials not to obtain the skills and knowledge that will assist future life roles, but for their exchange value" (p. 14). If this theory is considered as a framework alongside this research, we might consider whether the senior secondary certificate delivers on its use value or is merely a 'ticket' to be obtained in exchange for the next stage of life. O'Connell et al (2019) posit one view that there is

> increasing recognition, across the nation and across different jurisdictions, that the system of certification and assessment Australia uses for senior secondary education is not providing the value for young people that it might and should (p. 9)

Similarly, comparable research in the United States provides a stark caution;

> for too many graduates, the American high school diploma … often serves as little more than a certificate of attendance…The diploma has lost its value because what it takes to earn one is disconnected from what it takes for graduates to compete successfully beyond high school (Achieve Inc, 2004, p. 1).

An analysis of the connection between human capital theory and credentialism perspectives supports the deeper exploration of the research question to determine the evidence industry and employers are seeking to provide assurance of a student's capabilities to succeed in post-secondary employment and how this may be better represented. Participants in this research discussed their recruitment processes to determine the best applicant for the job. Although participants declared the requirement for the Year 12 qualification, they also acknowledged it provided only limited information on which to evaluate the applicants. Industry and employer participants in this research also made it clear that students were not adequately prepared for the world of work. Hence, achievement of the high school credential implies a graduate may be a more attractive employee (it has good *exchange* value), however, it does not set students up with the necessary skills to succeed in post-school employment (it has little *use* value). This finding is echoed by Maier who contends that "the average job's credential requirements have far outpaced the same job's technical (or use value) requirements" (2012, p. 14) and furthermore, a credential loses its value with time and "has little exchange value if most everyone has it" (p.19). Thus, the question of the 'exchange value' and 'use value' of the senior secondary certificate must be raised in light of this framework. All stakeholders invested in the educational outcomes for young people must consider ways that we may

reconceptualise the high school credential. Beyond its surface use as a ticket in exchange for tertiary entrance and employment selection, there is a responsibility to ensure it provides use value for university and/or employment and for the life they choose to live.

An understanding of the value of a senior secondary certificate concerning a students' life beyond work may be enhanced through an exploration of Amartya Sen's Capability Approach (CA) (1985). Nobel Prize winner, Sen, has been recognised internationally for his approach to combining economic theory with the discipline of philosophy and his CA is acknowledged as one of the significant alternatives to traditional economic frameworks. However, as will be discussed, Sen's research has poignant connections with the essence of this research.

5.8 Amartya Sen's Capability Approach; Healthy Economies or Healthy Humans?

In the preamble to Gonski et al (2018), the report describes "a world where education defines opportunity" (p. viii), however it can also be argued that opportunity for one demographic in a community often creates disadvantage or inequity for another. What can we say of those who are 'educated' but do not possess the capabilities to take advantage of that opportunity? Any consideration of jobs for the future must consider the possibility that there will not be sufficient employment opportunities for all young people. Therefore, it may be that schooling may need to consider how young people can also creatively live their lives to the full outside of secure employment. These capabilities then may be required to secure employment in a competitive market, make the successful transition into the workforce or live a meaningful life in economic uncertainty.

The OECD (2018) acknowledges the intricate and complex connection between the purpose of education, work and human development. The report articulates:

> In the 21st Century, that purpose has been increasingly defined in terms of well-being. But well-being involves more than access to material resources, such as income and wealth, jobs and earnings, and housing. It is also related to the quality of life, including health, civic engagement, social connections, education, security, life satisfaction and the environment. (p.3)

This perspective has strong connection with Amartya Sen's Capabilities Approach (CA) (1999). Through his work on global economic frameworks he argues that human development, personal or global, should be seen more broadly than economic growth and personal income, but viewed "as a process of expanding the real freedoms that people enjoy" (Sen, 1999, p. 3). Saito (2003) bridges the connection between Sen's work and educational policy by asking whether education enhances a students' freedom and how effectively does it develop student agency to make choices that advance their standing. Hence, with or without the completion of a Year 12 credential, what substantive freedoms does 13 years of schooling generate? Sen argues that the "substantive freedoms [are the] capabilities to choose a life one has reason to value" (1999, p.74).

The CA considers human development in more than just economic terms by extending "beyond the analysis of poverty and deprivation and often concerns itself with well-being generally" (Clark, 2005, p.3). In 1990, the United Nations Development Program published their Human Development Index (HDI) (Pressman and Summerfield, 2000) which was strongly influenced by Sen who was a consultant to the United Nations when developing the HDI. The HDI

> emphasises the development of human choices and returns to the centrality of people and it is reflected in measuring development not as the expansion of commodities and wealth but as the widening of human choices (UNDP, 1990, p. 1)

At its core Sen's Capability Approach (CA) examines human capacity by focussing on what people are able to do rather than how much wealth or resources they accumulate (1985), or as Saito (2003) frames it "he paid attention to what people were able to do, rather than to what people could buy with their income" (p. 19). Hence, the CA contends that global, and individual, development should focus on the growth in human capabilities rather than solely on economics and resources. Clark (2005) acknowledges Sen's argument that although economic growth is important, it may not be sufficient when considering the well-being of communities and individuals around the world "we must consider how well people are able to *function* (emphasis added) with the goods and services at their disposal" (p. 3).

How then can we move from the idea of human capital and education developing future citizens that have more to offer than a contribution to a nations' Gross Domestic Product. Sen identifies the connection between human capital theory and the CA as focussing on humanity and freedom; however, he clarifies that:

> the literature on human capital tends to concentrate on the agency of human beings in augmenting production possibilities. The perspective of human capability focuses, on the other hand, on the ability…to enhance the real choices they have (Sen, 1999, p. 293).

Sen (1999) argues that we arrive at very different conclusions if we think of growth and development simply in terms of income or employment rather than selected capability sets, or 'functionings' such as agency and freedom to choose and make decisions. Sen (1985) contends that people and communities differ in their capacity to convert resources into achievements and that providing an equal command over resources does not always mean giving equal opportunities. Sen acknowledges the significance of healthy economies, but argues a need to invest in 'healthy' humans. Wealth is added to an individual's economic value when there is an investment in their personal capabilities. In this way economies can reconceptualise how they measure and evaluate growth and achievement by "refocusing on people as ends in themselves (rather than treating them merely as means to economic activity), recognising human heterogeneity and diversity" (Clark, 2005, p. 5).

This then brings us to the connection and implications of looking at education growth and attainment through a CA framework. Saito (2003) explores the relationship between CA and education by first acknowledging Sen's contention that "education plays a role not only in accumulating human capital but also in broadening human capability" (p. 24). This theory and perspective then may challenge a "narrow income generation approach or…a focus on education and employability as the key, even the only goal that matters for policy makers". (Walker, 2005, p.104). If education is seen as providing significant advantages for young people, not only economic, but also personal and social, then the CA provides an excellent lens through which critical educational reform can be considered. Reform in which "it seems appropriate to argue that education which plays a role in expanding the child's capabilities should be a kind of education that makes people autonomous" (Saito, 2003, p. 28).

If we revisit the earlier discussion on the purposes of education in light of Sen's work, educators must question whether we are looking to develop in our young people human capital or human capability. Students' successful post-school employment pathways are vital for nations to thrive in global markets and it is critical that education and industry work in concert to ensure healthy economies and healthy humans. The conclusions and recommendation in the following chapter suggest how this alignment may be achieved.

6 Conclusion and Recommendations

6.1 Introduction

This paper has investigated the value of the secondary school certificate through the exploration of national industry leaders' and employers' perspectives on the value, quality and representation of graduating students' skills and capabilities. Participants were sourced from across Australia and their perspectives applied to the South Australian Certificate of Education as the case study qualification. It is assumed that the findings and recommendations are applicable, and will have implications for other national Senior Secondary Certificates of Education. The themes emerging from these views were discussed in light of the literature on the broader purposes of education beyond preparation for the work force. This led to an analysis of how economic and philosophical frameworks such as credentialism, human capital theory and capabilities approach may support educators to re-conceptualise the representation of a students' educational capital and their capability to successfully undertake life after high school, including employment, further or higher education.

6.2 Overview of the research and findings

This study examined the views of employers and industry representatives about how prepared high school graduates were to successfully transition into the workforce and the significance the Year 12 credential played in the recruitment process. The intention of the research was also to determine the extent to which the high school certificate provided useful evidence of a student's capabilities to succeed in post-secondary employment, and how student evidence could be better represented.

The synthesis below details a summary of the findings in relation to the five sub-questions of the research:

i. How is the current high school certificate perceived and used by industry leaders and employers?

Employers in this research articulated a perceived confidence in students' achievement of Year 12, but found very little value in the representation of the certificate itself. Employers in this research claimed that they preferenced the high school certificate as a minimum requirement for employees; however their practices contradicted this. No participants made distinctions between the qualities of employees who were graduates and those that were not. In fact, industry leaders and employers in this research openly declared that they had very limited knowledge or understanding of how the certificates were constructed or awarded. Further to this, all participants acknowledged that they rarely asked to sight the parchment for verification of completion or as a source of useful information that would help them discriminate in the recruitment process.

ii. To what extent are secondary school graduates adequately prepared for post school employment?

It was evident that industry leaders and employers in this research strongly believed that secondary school graduates are not adequately prepared for post school employment.

iii. What qualities are industry leaders and employers requiring in secondary school graduates?

The qualities industry leaders and employers in this research are seeking in secondary school graduates are the broader capabilities that go beyond technical knowledge and work skills. Industry leaders were expecting students to have developed the capability to solve complex problems, show proactivity and initiative and demonstrate a global perspective. Employers were more interested in intra and interpersonal skills, students' self-confidence, teamwork and an awareness of values and ethics.

iv. How do these qualities align with the General Capabilities of the Australian Curriculum and other '21st Century' transversal or soft skills that are the focus of a range of educational strategies and policies in different parts of the world?

Not surprisingly, the qualities required by participants in this research closely align with the General Capabilities of the Australian Curriculum, competencies identified by the OECD as critical components of future education and other '21st Century' transversal or soft skills that are the focus of a range of educational strategies and policies in different parts of the world .

v. To what extent will human capital theory, Credentialism theory (Labaree, 1997, 2004) and Capability Approach (Sen, 1985) help to reconceptualise the broader purposes of education to better represent a student's educational capital and their readiness to successfully undertake post-secondary school pathways?

Finally, human capital theory and credentialism theory provided useful theoretical frameworks to assess the low *use* value and limited *exchange* value of the secondary school certificate. The Capability Approach supported a reconceptualisation of the broader purposes of education to better represent a student's educational capital and their readiness to not only successfully undertake post-secondary school pathways in employment or higher education, but in life itself.

6.3 Implications

The focus question for this research was; to what extent does the high school certificate provide useful evidence of a student's capabilities to succeed in post-secondary employment, and how could student evidence be better represented? The literature identified that the majority of high school completers were not directly seeking a university pathway via the ATAR, and that there was little to acknowledge this cohort's success apart from the high school certificate. The ATAR is losing support amongst the education community; however, in the absence of a compelling alternative, it continues to be the single, narrow representation of educational achievement. Alongside this, industry leaders and employers that participated in this research acknowledged limited understanding of the Year 12 certificate and little interest in its composition; however, they are clear in their view that graduating students are not adequately prepared to successfully

transition to employment. The research then asks, what is the value of the 13 years of education that culminates in the awarding of the high-school credential? With no perceived *use* value and limited *exchange* value, it appears that the high-school certificate serves little more than a 'ticket' to the next stage in a student's life. However, if we consider broader purposes of education beyond solely economic, and prioritise a focus on the development of 21st Century skills and human capabilities, education policy makers may be able to promote the value of the credential and devise valid ways to represent students' educational achievements in ways that are beneficial to all stakeholders.

With an increasing sense of urgency, there is a need to clearly define the purpose/s of education and provide clarity on whether school graduates are expected to be career-ready or work-capable. As a society, we need to question whether the goal of 13 years of education is to develop human capital or human capability. It is clear that the 21st Century competencies and qualities that build human capability are the same skills industry leaders and employers are looking for in employees. It is critical then that all educational policy makers, leaders and practitioners begin to prioritise the development of capabilities as integral to the purpose of education, and thus develop healthy humans and healthy economies.

Unfortunately, the barriers to this succeeding in the past have been the tangible metrics and fine-grained data, such as the ATAR and other standardised testing, that claim to support government policy and provide formative data for teachers to make decisions about where their students are at, but do little else than narrow educational outcomes and purposes. It is timely for educators to shift their focus away from easy to measure metrics that may not assess what is intended or present an accurate reflection of student achievement. If this focus is broadened to incorporate the more challenging to evidence assessment of complex competencies, then we may begin to support teachers to foster the development of student capabilities in addition to deep discipline knowledge. This way, the representation of thirteen years of schooling may be something students, parents, employers and educators can find value in.

6.4 Conclusion

The focus of this research has been Australian industry leaders and employers' experiences and perspectives on the use value and exchange value of the secondary school certificate. The findings and recommendations support policy makers to rethink education systems, particularly in relation to the substance and representation of the credential that reflects thirteen years of educational achievement. However, when these findings are considered in light of the literature related to the evolution of the labour market and the broader purposes of education, educators and policy makers must support stakeholders to understand and appreciate the value that thirteen years of schooling has for students personally and for the wider community.

It is clear that the industry leaders and employers, in this research, did not find value in the representation of the current secondary school credential. This, in turn, was reflected in their perspectives and/or experiences of the poor qualities, skills and capabilities young employees demonstrated upon entering the workforce. With growing recognition and acceptance that current educational achievement is narrowly defined by student ATAR results, there is increasing urgency to provide an appropriate recognition for the majority of students not seeking an ATAR, which may also be useful for employers in the recruitment process. However, there remains a distinct misalignment between the understanding and expectations of educators and industry. Although employers declared a strong sense of trust in educators, this trust was only for what they perceived educators where expert at — discipline-based curriculum and assessment. This trust did not extend to broader capabilities and complex competencies. There is still some way to go in developing close relationships and collaborations between education and industry to ensure any newly developed student profile is valued universally.

6.5 Recommendations

Considering the findings in context of the literature in this field, the following six recommendations are made to address the research question: to what extent does the high school certificate provide useful evidence of a student's capabilities to succeed in post-secondary employment, and how could student evidence be better represented? I address them as recommendations.

Recommendation 1: Clearly articulate and assertively promote the composition and intended outcomes of the high school certificate

Although industry leaders and employers claimed they preferenced an employee with a Year 12 certificate, in their recruitment they made no differentiation in quality between students that did possess the certificate and those that did not. In fact, participants in this research had little knowledge or interest in its composition or valued the need to sight the parchment and verify its completion. As the certificate was not a discriminator in the recruitment process and provided little use to employers, it appears the secondary school certificate has little to no value for industry or employers. Curriculum and certification authorities are noticeably silent in the national narrative regarding the high school qualification. It is critical they play an active role articulating and promoting the value of the certificate and what industry and the broader community should be able to infer about those who achieve it. Amongst the tide of an ATAR-dominated landscape, senior secondary authorities must drive the narrative which tells students what they are worth, explains to the parents the value of what their children have achieved and provide confidence to the community that our future is in good hands.

Recommendation 2: Establish formal stakeholder committees governed by education authorities, industry leaders and local employers

There is a distinct misalignment, or even misunderstanding, between the expected role education has in preparing school leavers for successful transition into the workforce. Industry leaders and employers declared the trust and respect they have for educators and there was a strong sentiment for working collaboratively on supporting students' successful transition into employment. However, there was some inconsistency about what education was expected to develop in students. Although participants lamented the fact that students were not adequately prepared with the necessary employability skills, they also discussed the fact that these were not necessarily technical skills, but making students aware of the values and behaviours required in the workplace. Employers were more interested in great personalities, initiative, complex problem solving and the ability to work in a team. Of greatest interest was industry perceptions of educators' qualification to teach these highly regarded skills. As many teachers spend their entire lives in educational institutions, the participants' view was that they have limited exposure to the

world of industry and hence do not have the experience to teach these skills (group work in classrooms is nothing like teamwork in industry). Industry and education views on literacy and numeracy are similarly mismatched. Education authorities certify that graduating students are literate and numerate and employers are increasingly frustrated by students' inability to read and write. However, what is clear is students' inability to *transfer* their school assessed (or tested) literacy and numeracy skills into the workforce; the concepts are so far removed, that students are unable to demonstrate the application of their skills in this new context. To address potential misalignment and enhance relationships, education must invite ongoing channels for communication and collaboration with employers and industry through formal structures.

Recommendation 3: Provide all students with greater incentives to participate in vocational experiences

In light of recommendation 2, it is crucial that students are given greater opportunity to, and credit for, participation in vocational experiences. Despite the tensions surrounding VET, the increasing number of students undertaking VET qualifications is promising. However, it appears there is no substitute for being immersed and engaged in a workplace. This is not to recommend ad-hoc, poorly planned and executed work experience placements, but the valuing and recognition of part-time and casual employment as contributing to certification requirements.

Recommendation 4: Review senior secondary qualifications to ensure they align with, value and achieve the broader purposes of education

The current rate of global change is unprecedented, and to ensure education is preparing citizens to successfully navigate through this change, student development should focus on the growth in human capabilities rather than human capital. Although the OECD's *Future of Education and Skills* (2018) report discuss the benefits students contribute to the economy, there is also a prominent focus on wellbeing. Amartya Sen's Capability Approach rightly questions whether we are valuing healthy economies over healthy humans, and hence if curriculum, assessment and certification authorities are to clearly define the multiple purposes of their qualification, we must see a flow-on effect and clear line of sight through all their policies and practices.

Recommendation 5: Reconceptualise the substance and representation of the high school credential to allow students to capitalise on its use value and exchange value

Senior secondary qualifications, such as the South Australian Certificate of Education, make some worthy claims regarding the type of student their qualification aims to produce. However, if students are unable to transfer, and stakeholders do not appreciate, the knowledge and skills developed – the certificate has no *use* value. Compounding this problem is that the ATAR has overshadowed the completion of the senior secondary qualification, both in terms of prestige and as a factor in tertiary entrance selection. Therefore, the certificate also has limited *exchange* value as employers and tertiary institutions rarely interrogate it. The certificate has become nothing more than a 'ticket' to provide employers with confidence to some level of maturity and capacity and as a prerequisite to the eligibility for an ATAR calculation. If the parchment was able to illustrate students' depth in discipline knowledge and achievement, as well as their growth and development in the capabilities, we may have a useful document that supports advanced tertiary entrance procedures and provides employers with a profile illustrating the significant skills and qualities they are seeking. This may take the form of a "learner passport" (Education Council, 2019a, p.9) or a "learner profile" (O'Connell et al, 2019, p. 17) which captures the essential skills, knowledge and capabilities students have gained as they progress through subject-based learning, VET, work-place experience and other recognised learning.

Recommendation 6: Confirmation of the findings through a larger sample size

One of the limitations of this research is the small sample size. Although appropriate for qualitative research of this size, it is recommended that a survey or questionnaire be conducted with a larger sample to confirm the findings.

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Appendices

Appendix 1: Ethics Approval

From: Human Research Ethics <human.researchethics@flinders.edu.au>
Sent: Tuesday, 7 August 2018 4:18 PM
To: Mekawy, Hassan (SACE); Bev Rogers
Subject: 8111 SBREC Final approval notice (7 August 2018)

Dear Hassan,

The Chair of the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University considered your response to conditional approval out of session and your project has now been granted final ethics approval. This means that you now have approval to commence your research. Your ethics final approval notice can be found below.

FINAL APPROVAL NOTICE

Project No.:	**8111**
Project Title:	The value of the secondary school certificate: industry leaders and employer perspectives on the quality and representation of graduating students' skills and capabilities
Principal Researcher:	Mr Hassan Mekawy
Email:	hassan.mekawy@sa.gov.au
Approval Date:	7 August 2018
Ethics Approval Expiry Date:	**31 January 2020**

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided with the addition of the following comment(s):

Additional information required following commencement of research:

1. Permissions
   Please ensure that copies of the correspondence granting permission to conduct the research from the CEOs of organisations where staff will be approached/invited to participant in this research, where relevant, are submitted to the Committee *on receipt.* Please ensure that the SBREC project number is included in the subject line of any permission emails forwarded to the Committee. Please note that data collection should not commence until the researcher has received the relevant permissions (item D8 and Conditional approval response – number 4).

Kind regards
Wendy Green

On behalf of Andrea Mather

Appendix 2: Letter of Introduction

7 August 2018

LETTER OF INTRODUCTION
(for *'industry leaders and employers')*

Dear Sir/Madam/Name

This letter is to introduce Hassan Mekawy who is a Master of Education student in the School of Education, Psychology and Social Work at Flinders University. Mr Mekawy is undertaking this research as a student of Flinders University, however it should be noted that Mr Mekawy is currently employed by the SACE Board of South Australia as the Manager, Professional Learning and Networks. He will produce his student card, which carries a photograph, as proof of identity. He is undertaking research leading to the production of a dissertation and other publications on the subject of industry and employer perspectives on the value of the secondary school certificate. He would like to invite you to assist with this project by agreeing to be involved in an interview which covers certain aspects of this topic. No more than 1 hour on a single occasion would be required. Interviews will be conducted over the phone or, if you are in Adelaide, at a mutually convenient public location.

Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting dissertation, report or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions. Since he intends to make a recording of the interview, he will seek your consent, on the attached form, to record the interview, to use the recording or a transcription in preparing the dissertation, report or other publications, on condition that your name or identity is not revealed, and that the recording will not be made available to any other researchers. It may be necessary to make the recording available to secretarial assistants (or a transcription service) for transcription, in which case you may be assured that such persons will be asked to sign a confidentiality agreement which outlines the requirement that your name or identity not be revealed and that the confidentiality of the material is respected and maintained.

Any enquiries you may have concerning this project should be directed to me at the address given above or by telephone on 8201 3445 or e-mail bev.rogers@flinders.edu.au

Thank you for your attention and assistance.

Yours sincerely

Dr Bev Rogers
Lecturer/researcher Educational Leadership
Coordinator of MEd Coursework Project
College of Education, Psychology & Social Work

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number 8111). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au

Appendix 3: Information Sheet

INFORMATION SHEET

(for *'industry leaders and employers'*)

Title: 'The value of the secondary school certificate'

Researcher
Mr Hassan Mekawy
Candidate, Master of Education
Flinders University
Tel: 08 8201 3445

Supervisor
Dr Bev Rogers
College of Education, Psychology & Social Work
Flinders University
Tel: 08 8201 3445

Description of the study
This study is part of the project titled 'The value of the secondary school certificate'. This project will investigate industry leaders and employer perspectives on the quality and representation of graduating students' skills and capabilities. The research will be undertaken by Master of Education candidate, Mr Hassan Mekawy. Mr Mekawy is undertaking this research as a student of Flinders University, however it should be noted that Mr Mekawy is currently employed by the SACE Board of South Australia as the Manager, Professional Learning and Networks. This project is supported by Flinders University, College of Education, Psychology & Social Work.

Purpose of the study
This project aims to investigate the value, quality and usefulness of the representation of senior secondary education. It aims to find out the evidence industry leaders and employers want to provide assurance of a student's capabilities to succeed in post-secondary employment and how student evidence might be better represented

What will I be asked to do?
You are invited to attend a one-on-one interview with a researcher who will ask you a few questions regarding your views about the secondary school certificate and the qualities students leave school with. Participation is entirely voluntary. The interview will take about 60 minutes. The interview will be audio recorded using a digital voice recorder to help with reviewing the results. Once recorded, the interview will be transcribed (typed-up) and stored as a computer file, and will only be destroyed if the transcript is checked by the participant or at the conclusion of the research.

What benefit will I gain from being involved in this study?
The sharing of your experiences will support education organisations and policy makers to better understand the perspectives of industry and employers. A 2017 Australian Chamber of Commerce and Industry report indicates that 60% of high school graduates go on to some form of employment; your contribution will help analyse the extent to which secondary school students are developing the necessary skills and qualities to succeed in post-secondary employment and how student evidence of this could be better represented.

Will I be identifiable by being involved in this study?
We do not need your name and you will be anonymous. Any identifying information will be removed, and your comments will not be linked directly to you or to your organisation. All information and results obtained in this study will be stored in a secure way, with access restricted to relevant researchers.

Are there any risks or discomforts if I am involved?
The researcher anticipates few risks from your involvement in this study, however, given the nature of the project, some participants could experience personal discomfort as a part of the interview process. This research brings the potential discomfort of lost work time and the potential cost of travelling to and from the interview, if required.
If you have any concerns regarding anticipated or actual risks or discomforts, please raise them with the researcher.

How do I agree to participate?
Participation is voluntary. You may answer 'no comment' or refuse to answer any questions, and you are free to withdraw from the interview at any time without effect or consequences. A consent form accompanies this information sheet. If you agree to participate please read and sign the form and send it back to the researcher at meka0002@flinders.edu.au .

How will I receive feedback?
You will be given the opportunity to review your interview once the interview has been transcribed. On project completion, outcomes of the project will be sent to all participants via email.

Thank you for taking the time to read this information sheet, and we hope that you will accept our invitation to be involved.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number: 8111).
For more information regarding ethical approval of the project only, the Executive Officer of the Committee can be contacted by telephone on (08) 8201 3116, by fax on (08) 8201 2035, or by email to human.researchethics@flinders.edu.au

Appendix 4: Interview Questions

The value of the secondary school certificate: industry leaders and employer perspectives on the nature and representation of students' skills and qualities.

Interview Questions

INTRODUCTION (5 mins)

- Welcome, Thank you and Introduce session aims
- Review Participant Information Sheet & Consent Forms
- Interview guidelines and expectations

TRANSITION QUESTIONS (10mins)

- Tell me about your background and interest in this research
- What comes to mind, what do you assume, when you hear someone say that "I've completed my Year 12"?

FOCUS QUESTIONS (30mins)

- In your experience, to what extent are secondary school graduates adequately prepared for post school pathways?
- As an industry leader/employer, what do you assume (infer) the attainment of a Year 12 certificate represents ? (What should the student be capable of doing?)
- What do you see as the most significant skills or qualities that school leavers require to successfully transition into employment compared to a generation ago?
- Which of these skills and qualities apply specifically to your industry and which are 'universal'?
- What are the skills and qualities do you see as transferable between industries? How do you think others might respond to this question?
- Are employers/you more likely to hire a prospective employee with a secondary certificate compared to one who has not finished their Year 12? Why?
- What process do employers most commonly go through when recruiting new staff? How do you determine the difference (discriminate) between prospective employees?
- Describe your selection process for me, what steps to you go through to appoint a new employee? Which step do you value most and why?
- What could a prospective employee show you/employers that contains information that you care about (these qualities you have highlighted) and assurance they can succeed in employment? How would you like to see this represented? If it was on a piece of paper, what would it look like?
- What else could Y12 certification authorities do to help your decision making become better and more efficient?

SUMMARISING QUESTIONS (5 mins)

- Present main points back to participant, seek clarification & confirmation
- Is this an accurate summary of today's discussion?
- Are there any other things you feel we haven't discussed?
- Are there any other factors you would like to mention?

CONCLUDING QUESTIONS (5 mins)

- Is there anything I have missed?
- Is there anything else you would like to add or contribute?

CONCLUSION (5 mins)

- Thank participants, Reminder re: Confidentiality
- Review Participant Information Sheet re: follow up and contact details