

**SCHOOL TO WORK TRANSITION PROGRAMS FOR
STUDENTS WITH PHYSICAL DISABILITIES IN
INDONESIAN SPECIAL SCHOOLS**

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ABSTRACT

Transition from secondary school to adult life is a critical period in students' lives (Crockett & Hardman, 2010b; Trainor, Carter, Owens, & Sweden, 2008).

Transition programs delivered at school play an important role in supporting students with disabilities to achieve successful post school outcomes (Crockett & Hardman, 2010a), particularly in the case of transition to work whereby employment is acknowledged as the main target after graduating from secondary school (Getzel & DeFur, 1997). However, students with physical disabilities have received less attention in the research literature regarding employment related transition (Yanchak, Lease & Strausser, 2005).

Using the Taxonomy for Transition Programming (Kohler, 1996b), this study investigated the current practices in school to work transition programs for students with physical disabilities in four special schools in Indonesia. Furthermore, perspectives and expectations from external stakeholders in relation to the practices of school to work transition were explored.

This study adopted a case study design. It engaged 57 participants including principals, teachers, students, parents, schools supervisors, business leaders, staff from the provincial Department of Education, Youth and Sport, staff from the district Department of Social Affairs, staff from the district Department of Manpower and Transmigration, and staff from a Disability Organisation. Data were gathered through observation, individual and group semi structured interviews, and document analysis. Prior to analysis, data from these sources were transcribed and then coded into the Taxonomy categories and clusters using Nvivo 10 software (QSR International, 2012).

The findings indicate that school to work transition programs in Indonesian special school settings are limited to providing vocational skills. However, this selection of skills was predominantly chosen by the teachers. Limited funding for work experience activities were provided by the provincial government and students with physical disabilities were not included. One of the schools established an onsite business that provided work experience for all their students. Limited student and parent involvement in the school to work transition program planning and conduct was identified in most of the schools. However interagency collaboration was characterised by disorganised collaboration in which clear roles and responsibilities of each party were lacking. In regards to human resource development, issues such as poorly trained and unqualified teachers were indicated in most of the schools, and one school had a serious issue in leadership that led to ineffective resource allocation.

The findings were used to develop a best practice model based on the Taxonomy for delivering school to work transition programs for students with a physical disability in Indonesian special school settings that links internal and external factors.

The model developed a series of actions for schools, external stakeholders, and the national government to improve the implementation of school to work transition programs. Although the model places emphasis on collaboration between these different stakeholders concurrently, the proposed new Indonesian model also explains what these stakeholders can do individually. Limitations and opportunities for future research are also discussed.

DECLARATION

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed:

Nur Azizah

Date: 31 July 2015

DEDICATION

This thesis is dedicated to:

My late mother, Ugi Mintarsih (1955-2003) and

My late sister Iis (1990-1997),

You are both my inspiration to begin my journey in special education field.

May Allah SWT granted you His Jannah.

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LIST OF ABBREVIATIONS

ACARA	: Australian Curriculum, Assessment, and Reporting Authority
ACT	: The Australian Capital Territory
ADA	: American Disability Act
BNSP	: Badan Standar Nasional pendidikan (National Education Standards Organisation)
BRTPD	: Balai Rehabilitasi Terpadu Penyandang Disabilitas (Integrated Rehabilitation Center for people with disabilities)
CEC	: The Council of Exceptional Children
CRPD	: Convention on the Rights of Persons with Disabilities
DECS	: Department of Education and Child Services
EA	: Equality Act
EHCA	: The Education for All Handicapped Children Act
ESCAP	: Economic and Social Commission for Asia and the Pacific
HSC	: Higher School Certificate
ICF	: The International Classification of Functioning, Disability, and Health
IDEA	: Individuals with Disabilities Education Act
IEP	: Individual Education Plan
ITP	: Individual Transition Plan
ITT	: Initial Teacher Training
LCE	: Life Centered Education
MoEC	: Indonesian Ministry of Education and Culture
MoNE	: Indonesian Ministry of National Education
MoSA	: Indonesian Ministry of Social Affairs
NAGs	: National Administration Guidelines
NDIS	: National Disability Insurance Scheme
NGOs	: Non-Government Organisations
NPoA	: National Plan of Action
NSW	: New South Wales
OECD	: Organization for Economic Cooperation and Development
PCP	: Person Centre Planning
PNS	: Pegawai Negeri Sipil (Civil Servant)
PWD(s)	: Persons with Disabilities
RPP	: Rencana Pelaksanaan Pembelajaran (Lesson plan)
SEN	: Special Education Needs
SENCO	: Special Educational Needs Coordinators
SEND	: Special Education Needs and Disability
TAFE	: Technical and Further Education
UN	: United Nations
UNESCO	: The United Nations Educational, Scientific, and Cultural Organization
UU	: Undang-Undang (Law)
WHO	: World Health Organization

CHAPTER 1

INTRODUCTION

Introduction

This chapter provides an introduction and overview of the research focus of this thesis. This includes the background to the study, the purposes and objectives of the research, definitions of key terms, and the significance of the study. The research questions are also introduced. The chapter concludes with the organisational framework of the thesis.

Background to the study

Post school outcomes for students with disabilities have been a concern of researchers in special education (Kohler & Rusch, 1995). Over the years, there have been major developments regarding employment, further education and training for young adults with disabilities (Mitchell, 1999). However, post school outcomes for student with disabilities remain poor in comparison to those without disability (Beamish, Meadows, & Davies, 2012; Blackorby & Wagner, 1996; Cameto, Levine, & Wagner, 2004; Taylor, 1998, 2000). Furthermore, employment options for students with disabilities remain limited (Crockett & Hardman, 2010a; Forlin & Lian, 2008; Noonan, Morningstar, & Ericson, 2008; Winn & Hay, 2009). In Indonesia, the employment rate of people with disabilities is very low at about 26% (MoSA, 2011). Although the school is not the only party involved in assisting successful post school outcomes for students with disabilities (Winn & Hay, 2009), the literature indicates that transition practices delivered in schools are essential in preparing students with disabilities for life after school (Crockett & Hardman, 2010b). Research based transition practices in the Asia Pacific are yet to be

disseminated in the academic literature (Forlin & Lian, 2008), and this study is the first regarding school to work transition in Indonesian special school settings. Thus this research develops an understanding of, and adds knowledge to, the issues associated with best practice in transition education for students with disabilities in Indonesia.

There are various areas of concern taken into account when providing transition support for students with disabilities. These areas are related to employment, independent living, further education and training, domestic and home living, social and interpersonal skills, and leisure and recreation (Crockett & Hardman, 2010a; Flexer, 2001; Forlin & Lian, 2008; Noonan, et al., 2008). However, employment focused goals have become a core program focus in many secondary schools (Trainor, Carter, Owens, & Sweden, 2008). In addition, employment is also acknowledged as a student's main target after graduating from school (Getzel & DeFur, 1997) and is the focus of this research.

Most students with disabilities experience difficulties in making the transition to adult life (Agran, Test, & Martin, 1994; Crockett & Hardman, 2010a; Davies, 2014; Riches, 1996; Thoma, Baker, & Saddler, 2001; Trainor et al., 2008). There are various aspects that contribute to this complexity. Firstly, because of the nature of their disabilities, individuals with significant disabilities are highly likely to experience more difficulty in mastering skills (Sheppard-Jones, Garret, & Huff, 2007). Secondly, transition also means changes in support systems to those that are often disintegrated and not comprehensive (Crockett & Hardman, 2010a; Winn & Hay, 2009), and this also becomes a major stressor for families (Strnadova & Evans, 2013). Thirdly, both schools and students lack awareness of the availability of supportive facilities (Davies & Beamish, 2009; Sweden, Carter, & Molfenter, 2010).

Among disability areas experiencing challenges in transition are students with physical disabilities, particularly those with both a physical and intellectual disability (Yanchak, Lease, & Strauser, 2005). Yanchak et al. (2005) assert that physical disabilities receive less attention in research regarding employment related transition. This study addresses students with physical disabilities, who may also have intellectual disabilities, enrolled in secondary special schools in Indonesia.

According to Indonesian Government Regulation No 72 Year 1991 (Peraturan Pemerintah no 72, 1991), special education services, which are mainly based in special schools, aim to help students with physical disabilities and/or intellectual disability to:

- (a) develop their attitudes, knowledge and skills as individuals and members of the community in conducting a reciprocal relationship with their social environment, culture and natural surroundings.
- (b) develop their ability in the workforce.
- (c) develop their ability for further education.

School to work transition programs, are therefore related strongly to the purpose and practice of special education schooling. This study attempts to explore the implementation of school to work transition services in special schools in Indonesia.

In observing the current practices of school to work transition programs in Indonesian special school settings, the Taxonomy for Transition Programming (Kohler, 1996b) is used as the framework. The Taxonomy was developed in 1996 through four in-depth studies. Rather than perceiving transition as additional activities received by students with disabilities, the taxonomy established the notion that transition itself was the foundation for education (Konrad, et al., 2008). The

Taxonomy incorporated comprehensive issues in addressing effective and efficient transition programs.

The purposes of the study and research questions

The main purposes of the research presented in this thesis are to investigate the current practices of school to work transition programs for students with physical disabilities in Indonesian special schools contexts by using the Taxonomy for Transition Programming (Kohler, 1996b) as the framework. Also examined are the perspectives and expectations of external stakeholders in relation to the practices of transition from school to work. Ultimately, development of a model to deliver the school to work transition program systematically isacknowledge.

The three guiding research questions that are explored in the present thesis are as follows:

1. How do special schools implement school to work transition practices for students with a physical disability? What factors influence the implementation?
2. What barriers and supports affect implementation? How can these barriers be addressed? How can these supports be strengthened?
3. What are the perspectives and expectations of stakeholders (community business leaders, disability organisations, and government agencies) regarding school to work transition practice?

Key terms definitions

The following key terms will be used in this study

School to work transition program refers to the sets of activities delivered in special schools to students with physical disabilities that focus on facilitating the development of students' knowledge and skills for employment purposes.

Physical disability refers to a broad range of disabilities which for the purpose of the study only include orthopedic and neuromuscular.

Students with physical disability refers to students who have orthopedic and neuromuscular conditions. This will include students with cerebral palsy, students with orthopedically impairments, and students with spina bifida. Those students may also have intellectual disabilities and communication difficulties.

Significance of the study

This study is the first reported study regarding school to work transition programs in Indonesian special school settings. Thus, it provides a major contribution in regards to informing the literature of the current practices of school to work transition programs for students with physical disabilities in special schools in Indonesia. The research is also important because it provides a model framework to enhance school to work transition programs in Indonesian special schools. It offers direction and guidance to the schools, the external stakeholders, and the national government in delivering quality school to work transition programs. Importantly, the study is expected to provide a guide to assist in generating policy related to future sustainable school to work transition programs.

Thesis organisation

This thesis consists of nine chapters.

Chapter 1, the current chapter, provides the background to study. It explains the contextual framework for the study, followed by the purposes of the study and the research questions. This chapter also presents definitions of the key terms, and the significance of the study.

Chapter 2 reviews the relevant literature regarding disability and special education policy both internationally and in Indonesia. It examines the development of disability perspective and legislation in different countries such as the US, the UK, Australia, New Zealand, Asian Countries and Indonesia. Special education provision in these countries are also presented. This chapter also looks into special education teacher training in general.

Chapter 3 reviews transition education. It examines the importance of transition education and models for the development and delivery of transition programs. It discusses some examples of school to work transition programs in different countries. This chapter also discusses transition teacher preparation. Most importantly, this chapter presents the Taxonomy for Transition Programming (Kohler 1996b). This taxonomy is used as the main framework in observing current practices of school to work transition programs in the Indonesian special schools, and is also the framework for developing the improved proposed model in chapter 8.

In chapter 4, the research methodology and methods are described and justified. This chapter explains the underpinning qualitative approach used in the study. Research site and participant selection are also described. This chapter also presents data collection methods, data analysis, and the trustworthiness of the data. In addition, ethical considerations are also discussed.

Chapter 5 presents findings of the current practices of school to work transition programs in the four case study schools. It reports findings from principal, teacher, student, and parent perspectives. The findings are presented according to the five categories and their clusters in the Taxonomy for Transition Programming (Kohler, 1996b).

Chapter 6 presents findings of perspectives and expectations of external stakeholders, including staff from related government organisations (including schools supervisors), business leaders, and a disability organisation. The findings are arranged by categories and clusters in the Taxonomy for Transition Programming (Kohler, 1996b).

In chapter 7, a comprehensive discussion of the practices of school to work transition programs is based on findings in chapter 4 and chapter 5 and linked to existing research.

Chapter 8 provides a proposed model framework for enhancing school to work transition programs in Indonesian special school settings. It offers comprehensive actions for schools, external stakeholders, and the national government to undertake both individually and cooperatively.

Finally, chapter 9 highlights the implication of the research results, along with the limitations of the study and recommendations for future research.

The following chapter examines the literature related to the themes of the current research.

CHAPTER 2 DISABILITY AND SPECIAL EDUCATION

Introduction

This chapter provides a review of literature on disability and special education internationally, and in the Indonesian context specifically. Disability and special education perspectives in different countries are explored including issues of national approaches to disability and disability legislation; school disability legislation and curriculum for students with disabilities in mainstream and special education settings; and, special education teacher preparation.

Disability

What constitutes disability develops continuously in line with advances in the development of human rights issues in society, and as a result of self-advocacy by people with disabilities (Campbell & Oliver, 1996). The perception of disability constantly evolves and varies between countries. As a result, services and accommodations provided for people with disability differ from one cultural context to another (Palmer & Harley, 2012).

Defining disability can be challenging as there is no universally agreed upon definition (Palmer & Harley, 2012). According to the World Health Organization (WHO) (2011, p. 3) disability is “complex, dynamic, multidimensional, and contested”. Historically, the definition of disability has adopted a medical viewpoint (Cox-White & Boxall, 2009; Leonardi, Bickenbach, Ustun, & Kostanjsek, 2006; Palmer & Harley, 2012), where disability was seen as a functional limitation caused by problems and abnormalities of the body (Barnes & Mercer, 2003). Leonardi, et al. (2006, p. 1220) defined disability as “a state of decreased functioning associated with disease, disorder, injury, or other health conditions, which in the context of

one's environment is experienced as an impairment, activity limitation, or participation restriction". In this model, disability can be categorised, measured, and standardised. This includes quantifying the level of severity and degree of the impairment (Smart, 2009).

As the disability viewpoint in the medical model focuses on disabled body functions, intervention, according to this model, focuses on repairing and restoring body function (Cox-White & Boxall, 2009; Palmer & Harley, 2012). Such interventions include rehabilitation and institutional care, and social assistance programs such as special education, vocational training and social welfare (Palmer & Harley, 2012). The medical model of disability has been diagnosis driven rather than individual focused (Smart, 2009).

An alternate approach to the medical model is the social model which argues that disability is caused by society's lack of positive attitudes and accommodations (Barnes & Mercer, 2003). The social model argued that "we were not disabled by our impairments but by the disabling barriers we faced in society" (Oliver, 2013, p. 1024). This social model has become a centre point of the disability movement (Oliver, 2013; Shakespeare & Watson, 1997), as well as empowerment and social inclusion (Hughes & Paterson, 1997). Its influence on national and international conventions, declarations and legislations; global expansion of community-based rehabilitation and inclusive education programs; and disability studies and research is also evident (Gabel & Peters, 2004). In relation to special education, the social model criticised the field of special education for maintaining an understanding of disability bound to a medical model, especially in regards to student disability categories and level of functional difficulty (Reindal, 2008).

The WHO (2011) suggests that purely medical and social conditions should not be taken for granted as solely contributing factors to disability. The recent definition of disability adopted by the WHO is the International Classification of Functioning, Disability, and Health (ICF) Model which is also known as the bio-psycho-social model. It describes disability as the interaction between the individual and that individual's contextual factors which include environmental and personal factors (WHO, 2011). The concept of the ICF can be seen in Figure 1.

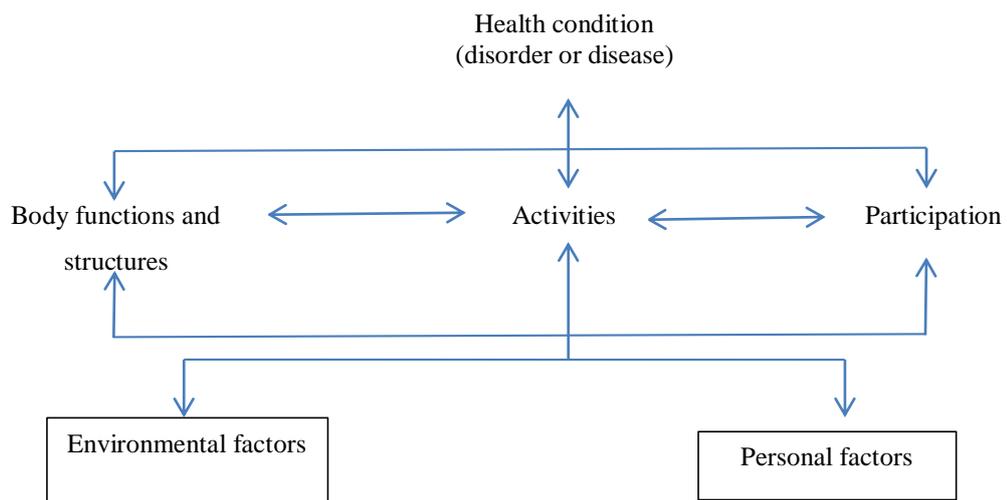


Figure 1 Representation of the International Classification of Functioning, Disability, and Health

(WHO, 2011, p. 5)

According to the ICF model, the problem of human functioning can be categorised within three connected areas: (a) impairments that are problems in body function or alterations in body structure; (b) activity limitations that are difficulties in executing activities; and (c) participation restrictions that are problems with involvement in any area of life (WHO, 2011). An overview of the ICF is shown in Table 1.

Table 1 An overview of ICF

	Part 1: Functioning and Disability		Part 2: Contextual Factors	
Component	Body functions and structure	Activities and participation	Environmental factors	Personal factors
Domains	Body function Body structures	Life areas (task, actions)	External influences on functioning and disability	Internal influences on functioning and disability
Constructs	Change in body function (psychological) Change in body structures (Anatomical)	Capacity executing task in standard environment Performance executing task in the current environment	Facilitating or hindering impact of features of the physical, social, and attitudinal world	Impact of attributes of the person
Positive aspects	Functional and structural integrity	Active participation	Facilitators	Not applicable
	Functioning			
Negative aspects	Impairment	Activity limitation Participation restriction	Barriers/hindrances	Not applicable
	Disability			

Adapted from WHO (2007, p. 10)

It is important to note that disability is not identified as a medical diagnosis or societal failure, but rather the interaction between personal and environmental factors. Thus, action on disability issues should focus not only on the impairment, but also on environmental barriers that hinder people with disabilities' participation in communities. The literature asserts that the framework of the ICF has increasingly influenced government, health care and rehabilitation entities worldwide (Bruyere, Looy, & Peterson, 2005).

Research on the application of the ICF to education and students with special needs is limited, compared with the medical and rehabilitation field (Aljunied & Frederickson, 2014). Even though Imrie (2004) claimed that the ICF neglected to identify some of the claims about the nature of impairment and disability, and which may limit educational capacity, the ICF model has the potential to focus on individual strengths and assets, and the functional needs and desires of persons with disabilities (Smart, 2009).

Legislation

Legislation plays an important role in supporting the participation of individuals with disabilities in all aspects of life including education, employment and community engagement. Disability anti-discrimination laws protect people with disabilities from forms of discrimination, focus on appropriate justice, and transform unfair social norms (Krieger, 2000). Many countries have enacted such laws to protect the civil rights of people with disabilities by giving them access to equal opportunities (Kim & Fox, 2011). The types of disability legislation, and other existing related disability policies, influence practices which lead to people with disabilities achieving independent living and high quality of life (Burn & Gordon,

2010). Disability legislation and other related policies such as services, programs, public facilities, transportation, housing and other necessities benefit individuals with disabilities by allowing greater access, participation and inclusion in society.

The establishment of disability legislation is not separable from the disability rights movement (Silverstein, 2000). Different international law and policy response to disability is enacted. Example of this are the Americans with Disabilities Act of 1990 (ADA) in the USA and later amended in 2008 as ADA Amendments Act (ADAAA, 2008) (Kim & Fox, 2011); the Disability Discrimination Act (DDA) of 1995 in the UK and it was later amended in 2005; The Disability Discrimination Act (DDA) of 1992 and The National Disability Insurance Scheme (NDIS) in Australia; and the Human Rights Act of 1993 and the New Zealand Bill of Rights Act of 1990 in New Zealand.

Disability in Indonesian Context

The term to refer people with disabilities in Indonesia has evolved, however the concept remains unchanged. The Ratification of Convention on the Rights of Persons with Disabilities Act No 19, 2011 (UU Pengesahan convention on the rights of persons with disabilities, 2011) demonstrates the importance the Indonesian government has placed on equal rights for individuals with disabilities. However, this has not yet been enacted into law. The concept of disability used in many Indonesian policy documents and legislation indicates a focus on the medical model. Table 2 provides details of the disability terminology used in Indonesia as developed by the thesis author.

Table 2 Development of disability terminology in Indonesia

Terminology in Indonesian	Meaning in English
Cacat	Impairment/lacking/invalid
Berkekurangan	(Person who) lacking (of something)
Tuna	Loss/without/lacking
Berkelainan	Abnormalities
Berkebutuhan khusus	(Person with) special needs
Disabilitas	(Person who has) disabilities

The most recent Indonesian terminology referring to people with disabilities is *penyandang disabilitas*, and is used in the legal document that ratified the UN CRPD in 2011 (UU Pengesahan convention on the rights of persons with disabilities, 2011). However, the new support model for people with disabilities in Indonesia has not yet been included in the Disability Act. The available legal framework is the Disability Act authorised in 1997. Currently, the new proposed Disability Act is being reviewed in the House of Representatives.

According to the Indonesian Disability Act No 4, Article 1 (UU Penyandang Cacat, 1997), a person with a disability is a person who has physical and/or mental deficiencies which can hinder or restrict that person from undertaking their activities properly. The Disability Act (1997) defined three groups of disabilities based on the following characteristics: (a) persons with physical disabilities (including sensory disabilities); (b) persons with mental disabilities; and (c) persons with physical and mental disabilities (UU Penyandang Cacat, 1997). It is clearly stated that the person's impairment is the main reason for lack of participation. There is no recognition of society's contribution as a disabling factor for persons with disability to participate fully in society.

Disability policies are incorporated in the National Plan of Action for people with disabilities (NPoA PWDs) 2004-2013 initiated by the Ministry of Social Affairs (MoSA, 2004).

However, achievement has not been satisfactory, with very minimal commitment from other sectors (Adioetomo, Mont, & Irwanto, 2014; Kusumastuti, Pradasari, & Ratnawati, 2014), hence people with disabilities still experience participation restrictions and stigma (Brakel et al., 2007).

Forms of rehabilitation available in Indonesia mainly focus on medical and social rehabilitation. Medical rehabilitation is available, but limited in terms of resources availability, particularly human resource. Medical rehabilitation is integrated with other health services in general hospitals in large cities and these services do not specifically address disability (Kusumastuti et al., 2014). Very often the “*Do it yourself approach*” is the only available option in most rural areas due to a lack of referral systems to medical institutions (Berman, 2011, p. 133).

Social rehabilitation is provided in institutional and non-institutional based rehabilitation centres and mainly delivered by Ministry of Social Affairs staff, although some NGOs in large cities also provide service delivery for social rehabilitation. The availability of, and access to, social rehabilitation is also limited with only two National rehabilitation centres across Indonesia and 19 technical centres available across the large provinces (Kusumastuti et al., 2014). Furthermore, such rehabilitation locations have limited capacities in terms of the number of people trained in the centre, and there are some exclusion criteria in providing rehabilitation services to people with disabilities. These exclusion criteria include people with paraplegia, epilepsy, colour blindness, persons in medical rehabilitation, those with infectious diseases, those with no hand coordination, wheelchair users, those who cannot stand for a long time and those who obtained only a junior secondary schooling certificate (Adioetomo et al., 2014).

Access to education for individuals with disabilities is also inadequate as there is a limited number of special schools, and inclusive education is not implemented widely across Indonesia. Low enrolment of people with disabilities in higher education and training is also evident. Higher education in Indonesia does not have written protocols to assist prospective and current student with disabilities (Rofah, 2010). Furthermore, the selection of prospective students in most higher education locations is discriminative, with clearly stated rules that persons with certain types of disability are forbidden to enrol (Muharam, 2014).

The next section will discuss school disability legislation and curriculum. Specifically it will review the legislation for special needs education and transition, and curriculum for special needs students, including those with a physical disability.

School disability legislation and curriculum

Education, as one of the basic human rights, has received much attention in research, particularly in improving access to quality services for all individuals (WHO, 2011). The right to access quality education for individuals with disabilities continues to be increasingly understood as a human rights issue, and should be a priority of all countries (WHO, 2011). Similar to the responsibility to all children, school assists children with disabilities to participate in employment and other areas of personal and social life (Crockett & Hardman, 2010b; WHO, 2011).

Internationally, there have been significant changes in terms of schooling for students with special educational needs. Special education no longer leads to placement in special schools. In recent times, students with disabilities have accessed a continuum of educational placement options; from separate schools to fully-inclusive settings with same-age peers (see Figure 2).

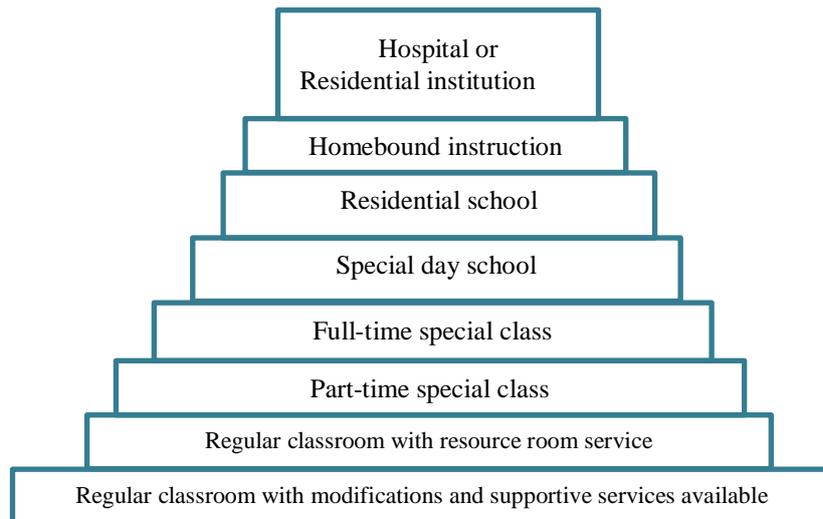


Figure 2 The continuum of alternative placement

Adapted from (Rozalski, Miller, & Stewart, 2011)

Researchers assert that special education should not be provided in separate settings as it can lead to marginalisation (McLaughlin et al. 2006; Westling & Fox, 2010). However, differentiating school placement based on disabilities has been significant in determining eligibility for different specialised services and programs (Florian et al., 2006). Florian et al., (2006) suggested that the use of disability categories benefit for the purpose of:

- (a) identification and intervention that is very critical for education assessment;
- (b) parental expectations to secure appropriate services for their children,
- (c) legal right including eligibility for certain types of services and legislative protection;
- (d) equity that includes fairness and resources allocation, placement, and services from professionals; and,
- (e) to develop accountability systems, such as ensuring that all children are accommodated and not discriminated against in universal access to primary education as it is mandated in “education for all” (UNESCO) .

Importance of legislation for students with disabilities

Legislation related to education is required to ensure the rights of students with disabilities in accessing appropriate special education and related services, to make sure that financial supports are available, to guarantee the effectiveness of provided special education and related services, and to protect the students and their parents' rights (Werts, Culatta, & Tompkins, 2007).

Internationally, legislation that governs education was first defined in the United Nations' Universal Declaration of Human Rights of 1948 (WHO, 2011). It was then further strengthened through other conventions such as the Convention on the Right of the Child in 1990, and the Convention on the Rights of People with Disabilities (CRPD) in 2006 (WHO, 2011). Specifically, the rights of students with disabilities to an education was justified in CRPD Article 24 that ensured the rights to access equal, indiscriminate, inclusive and lifelong education (UN, 2006). The introduction of normalisation in the early 1970s, the first World Conference on Education for All in Jomtein in 1990, followed by the Salamanca Statement in 1994, the establishment of the Dakar Framework For Action in 2000 were all initiated by UNESCO and have transformed inclusive educational opportunities for students with disabilities internationally.

The Jomtien World Conference brought countries together to make primary education available for all children, including those with disabilities. However the Jomtien targets were still not achieved by the end of the year 2000 (UNESCO, 2015). While the Salamanca Statement has been a significant landmark for inclusive education, as the guiding principle encouraged schools to find a successful way to accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions (UNESCO, 1994); the Dakar Framework for Action

reaffirmed the Jomtien vision regarding education for all (UNESCO, 2000).

Legislation specific to different countries will be discussed in the next section.

Legislation in special needs education and transition

The section below highlights the development of legislation in special education and transition education in countries such as the USA, the UK, Australia, New Zealand, Asian countries, and Indonesia.

The USA

Although the history of education for students with disabilities in the USA began in the 1930s, the year 1975 marked the revolution in special education services by mandating free public education for school age students with disabilities (between the ages of 6 and 21 years). This mandate was introduced through The Education for All Handicapped Children Act (EHCA), later changed in 2004 to the Individuals with Disabilities Education Act (IDEA). Legislation has subsequently extended services to infants, toddlers and preschoolers (Hardman, Drew, & Egan, 2014).

There are six principles in the IDEA that govern education for students with disabilities:

- (a) A zero reject model that prohibits schools from excluding a student with disability from free appropriate education.
- (b) Non-discriminatory evaluation that require school to clarify the student's disability and provide special education and related services to the student's needs.
- (c) Appropriate education that oblige schools to provide and implement an Individual Education Program (IEP) for each student.
- (d) Least restrictive environment that accommodate the students with disability to be with their mainstream peers to the maximum extent.

- (e) Procedural due process that ensures accountability of the services received by the students.
- (f) Parent-student participation that confirms school, parent and student collaboration in program planning and implementation
(Hardman et al., 2014; Kirk, Galagher, & Coleman, 2015; Turnbull, Turnbull, & Wehmeyer, 2007; Werts et al., 2007).

Transition, along with two other important changes in the quality of personnel and IEP standards, were the main features that highlighted differences between EHCA 1975 and IDEA 2004 (Hardman & Dawson, 2010; Kirk et al., 2015). It is mandated through IDEA 2004, that effective transition needs to be included in the Individual Education Plan (IEP) to promote successful post-school employment or education for students with disabilities (Individual With Disabilities Education Improvement Act of 2004).

IDEA 2004 also strengthened the legislation related to school to work transition services that have been supported by various pieces of legislation such as the Vocational Rehabilitation Act 1973, amended in 1998; The Americans with Disabilities Act 1990, amended in 2008; The Workforce Investment Act 1998; The Ticket to Work and Work Incentives Improvement Act 1999, amended in 2008; and, The School-Work Opportunities Act 1994 (Hardman & Dawson, 2010).

The UK

In the UK, while England and Wales share the same framework, Scotland and Northern Ireland have their own provisions (McLaughlin & Rouse, 2002). However, children with disabilities remained excluded from the provision until 1921 when England and Wales identified five categories of children with disabilities who would receive educational services in special schools or classes managed by local

health authorities. By 1970, through [Handicapped Children] Education Act, eleven categories of students with disabilities were established and education responsibility was transferred from local health authorities to education authorities (Florian & Pullin, 2002).

The reformation of special education policy in the UK, known as the Warnock Report published in 1978, proposed similar education concepts to those in the USA in that appropriate education should occur to the maximum extent in mainstream settings. The report also introduced the use of the term Special Education Need (SEN) instead of handicap (Florian & Pullin, 2002). The Warnock Report further became a foundation for the 1981 Education Act that required Local Education Authorities to make and maintain a statement of special education need, a legal document that specified additional resources required to facilitate a student's needs, and also eliminated the eleven categories of disability in the previous Act (Florian & Pullin, 2002). The Educational Act of 1996 further consolidated those changes (Silas, 2014). The Warnock Report also laid foundation for the Education Scotland Act of 1980, and the Education Order Act of 1984 in Northern Ireland (Smith, 2014).

The new framework for special education needs was based on the Code of Practice and part 3 of the Children and Families Act 2014 which replaced part 4 of the Education Act 1996 (Silas, 2014). Transition services in the UK are mandated under the Special Educational Needs and Disability (SEND) Code of Practice: 0-25 years (Special Educational Needs and Disability Code of Practice: 0-25 years, 2015). Transition goals dialogue should start early, ideally well before Year 9 (age 13-14 years) and it should focus on strengths and capabilities and the outcomes young adults with disabilities want to achieve. Hence transition education planning is

recommended to begin well before the actual transition programs in the final years of school.

School to work transition services were specifically addressed in the SEND Code of Practice: 0-25 years (2015) in Chapter 8, with emphasis on raising the career aspirations of their SEN students, to broaden their employment horizons, and to develop skills and experiences through work based learning such as apprenticeship, traineeship, and supported internship that enable them to have first-hand vocational experiences.

Australia and New Zealand

Australia

The history of special education in Australia can be drawn from the first Education Act passed in the state of Victoria in 1890, although the government did not taking responsibility for special education until the early 1900s (Safran, 1989). Australia's legal and political authority is divided between the Australian Government (Canberra) and the six states and two territory governments. Responsibility for education lies with both the federal and state/territory governments and this has been a source of friction over many years, as most education is the responsibility of states and territories, although funding comes from the Commonwealth government. More recently there has been stronger Australian Government engagement in education, and particularly special education, through the Australian Curriculum, the Disability Standards for Education and the funding of students with disabilities through identification of students with disability on a common nationally agreed basis. These are discussed below.

The most recent legal framework for disability in Australia is the DDA (1992). The DDA (1992) protects people with disabilities against discrimination

including education services. To ensure educational practice is in accordance with the provisions of the DDA, the Australia Government issued the Disability Standards for Education in 2005 (Conway, 2014b). The purposes of the Standards are:

- (a) to eliminate, as far as possible, discrimination against persons on the ground of disability in the area of education and training; and
- (b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law in the area of education and training as the rest of the community; and
- (c) to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

(Australian Government, 2005, p. 6)

The Standards specify requirements in five areas: enrolment; participation; curriculum development, accreditation, and delivery; student support services; and, harassment and victimisation.

However, unlike the USA where there is firm legislation regarding transition services, Australia does not have specific legislation regarding transition (Beamish et al., 2012; Strnadova & Cumming, 2014; Winn & Hay, 2009). Although there is increased awareness of the critical nature of the transition years in Australia (Riches, 1996), the complexity of transition services for students with disabilities still remain unresolved (Winn & Hay, 2009).

In most Australian states and territories, transition services are provided to senior secondary students with disabilities. Students have an opportunity to participate in transition programs that include employability skills, training and vocational education course in various areas, as well as being offered support for job placement (DECS, 2011; Riches, 1996). The NSW Transition pilot projects provided systematic and occupationally oriented vocational training to 1500 final year student with disabilities to be placed in over 382 TAFE course between 1989-1992 and 550 students received job coaching between 1990-1992 (Riches, 1996). It

was reported that these provisions increased school retention rates, improved student and parent satisfaction, improved participation in post-secondary education and training, and contributed to better employment outcomes for many students, particularly those with mild and moderate intellectual disabilities (Riches, 1996).

New Zealand

New Zealand has one education system for the entire country. Although the history of policy in New Zealand for special education began with the Education Act 1877 (Department of Internal Affairs, 2015), recent reform of special education policy and practice in New Zealand occurred initially through the 1989 Education Act, the Pivot Report in 1988, and the Tomorrow's School document in 1988. Three major stages followed (Mitchell, 2001). The first wave occurred from 1989 to mid-1995 starting with the establishment of The Education Act (1989) section 8 that stated "people who have special needs (whether because of disability or otherwise) have the same rights to enrol and receive education at State schools as people who do not" (Mitchell, 2001, p. 321). The second wave commenced in late 1995 and continued until mid-2000, culminating in the introduction of Special Education 2000. This included the principle of the same rights and freedoms of people with disabilities to be educated the same way as their counterparts who did not experience disabilities. It also placed emphasis on meeting these students' individual learning and developmental needs in an inclusive environment. The third wave occurred from mid-2000s onwards refining the previous policies and examining transition from school (Mitchell, 2001).

In regards to transition services, students with disabilities in New Zealand should start receiving transition programs when the students are 14 years of age (NZ Ministry of Education, 2011). This is in line with the New Zealand Disability

Strategy 2001 (NZ Ministry of Health, 2001) and the Administrative Guidelines for Education – National Administration Guidelines (NAGs), specifically NAG 1 point f, which states:

“provide career education and guidance for all students in year 7 and above, with a particular emphasis on specific career guidelines for those who have been identified by the school as being at risk of leaving school unprepared for the transition to the workplace or further education/training” (NZ Ministry of Education, 2013 p. 2).

Asia

Special education legislation and policies differ between Asian countries. While some countries such as China, Japan, Korea, Brunei, Cambodia, Indonesia, and Thailand have specific legislation that addresses education for children with disabilities, other countries do not. Further details on specific legislation from each country can be seen in Appendix A. On the other hand, countries such as Singapore, do not have legislation relating to special education or equal opportunities for people with disabilities within regular school environments (ESCAP, 2012; Konza & Tan, 2006). Furthermore, children with severe disabilities are exempt from compulsory education in Singapore (Konza & Tan, 2006).

In terms of transition services from school, legislation in Asian countries varies. While students with disabilities in Hong Kong and Taiwan are privileged to have transition service regulation (Forlin & Lian, 2008; Meng-Chi & Chadsey, 2006), students in other Asian countries are not protected by transition related legislation. Furthermore, in some countries, like Hong Kong, all students attend primary and secondary schools while in many Asian countries students complete only varying amounts of primary or basic education.

Students with disabilities in Hong Kong receive 24 months additional educational programming with an emphasis on career-oriented study and experience

based learning (Forlin & Lian, 2008). Transition programs in Taiwan are regulated with the 1998 Regulation Rules of the Special Education Act which applies to students from kindergarten to 12th grade (Meng-Chi & Chadsey, 2006). However, most teachers in Taiwan believe that the meaning of transition is in reference to agencies or job placement (Chen, 2002), and focusing on vocational education only (Chou, Yeh, & Chan, 2003).

In contrast, there are no specific regulations mandating transition services for students with disabilities in Indonesia. There are also no clauses either in the Disability Act (UU Penyandang Cacat," 1997) or the National Education System Act (UU Sistem Pendidikan Nasional, 2003) that require transition services and programs to be included in students' educational planning. The only requirement to prepare students with disabilities with specific vocational skills for particular jobs is that a ratio of 40% focus on academic skills and 60% focus on vocational skills should be maintained in the secondary special school curriculum (BNSP, 2006). This is similar to neighboring countries such as Malaysia (Abdullah, Mey, Eng, Othman, & Omar, 2013), Cambodia (Nhean, 2010), The Philippines (Olores, 2010), Thailand (Samart, 2010), Laos PDR (Shithath, 2010), and Brunei Darussalam (Wong, 2010).

Special education curriculum

It can be argued that accessing the general curriculum is important for students with disabilities, even for those who experience severe physical and multiple disabilities. Literature suggests that opportunities to engage in the regular curriculum can improve and expand the quality of their education (Best, Heller, & Bigge, 2010; Westling & Fox, 2010). Furthermore, curriculum content in special education should be able to provide opportunities for students with disabilities to

maximize their potential so they can experience a similar quality of life and level of self-determination as those who do not have disabilities (Westling & Fox, 2010).

While it has been proposed by many researchers and writers in the field of education that students with special needs should access the same general curriculum as their peers without disabilities, some researchers have raised concerns related to the utility of mainstream curricula in enhancing the quality of life for students with disabilities, especially older students (McDonnell, 2010a). It is argued that the curriculum for older students must recognise functional, practical, and age appropriate skills that allow students to be as financially independent as possible, and to take greater control over their lives (Crockett & Hardman, 2010b; Westling & Fox, 2010). Another key area of the curriculum in secondary education for students with disabilities is vocational education, and life skills curricula (Baer, Flexer, & Simmons, 2013).

A model to gain access to the general curriculum in mainstream settings, developed by Wehmeyer, Lattin, and Agran (2001), can be seen in Figure 3. This model proposed a decision making process in order to determine the most appropriate individual curriculum access for each student with a disability. There are two sources that inform the decision, namely the local general curriculum and the student's unique learning needs (see top boxes in Figure 3). Assistive technology, curriculum adaptation, curriculum augmentation, and curriculum alteration are each considered depending on the needs of the individual as shown in the vertical boxes in Figure 3.

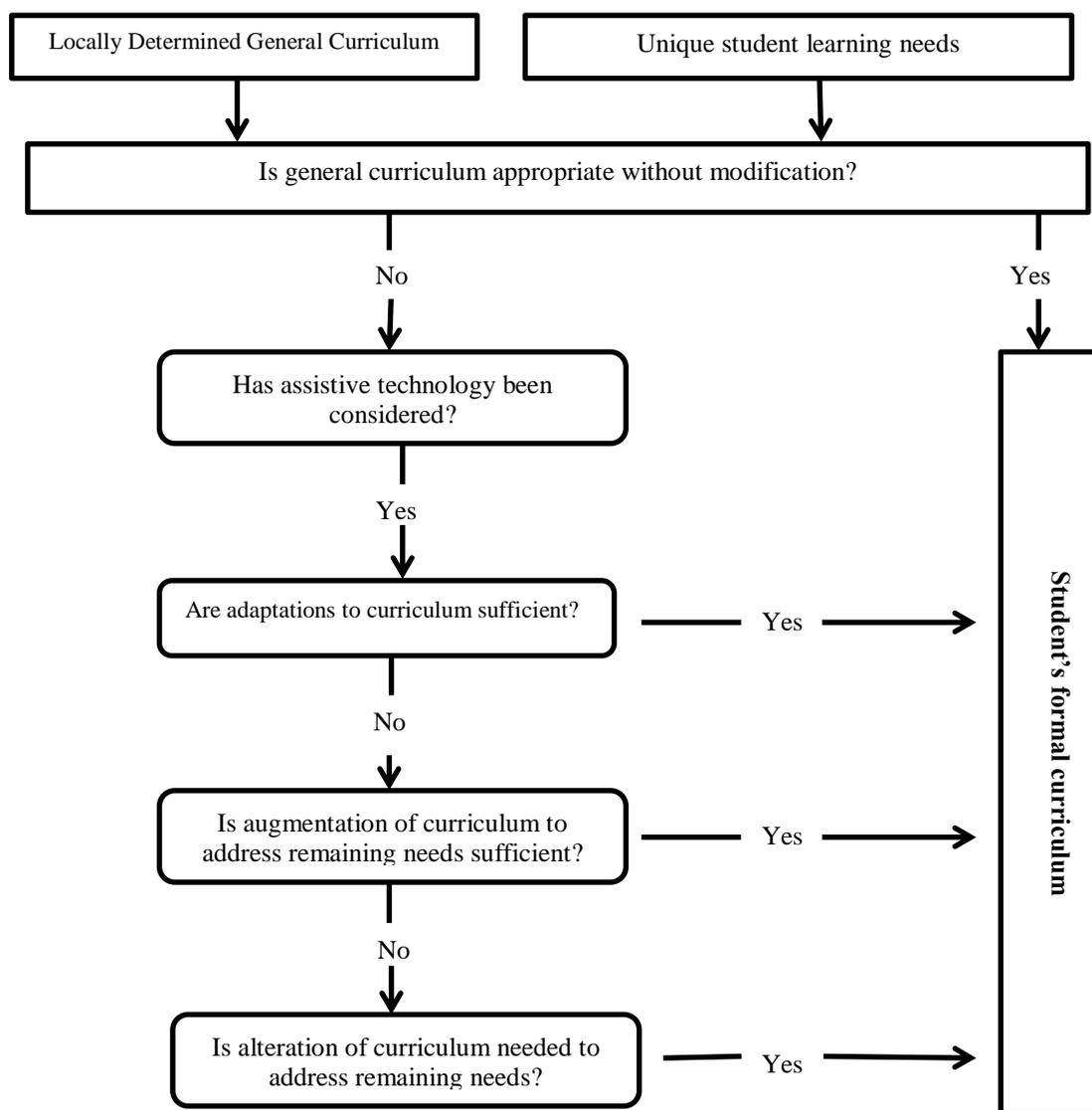


Figure 3 A model to gain access to the general curriculum

Adapted from (Wehmeyer et al., 2001, p. 341

In regards to curriculum decision making in secondary school, (Bouck, 2013) outlined a decision making process focused on curriculum directions (Figure 4). For Bouck, who placed emphasis on individualised needs and interests, the important question to be asked was about the student's future goals. The answer to this question would lead to curriculum decision making and whether it would focus on a functional curriculum, an academic curriculum, or a combination.

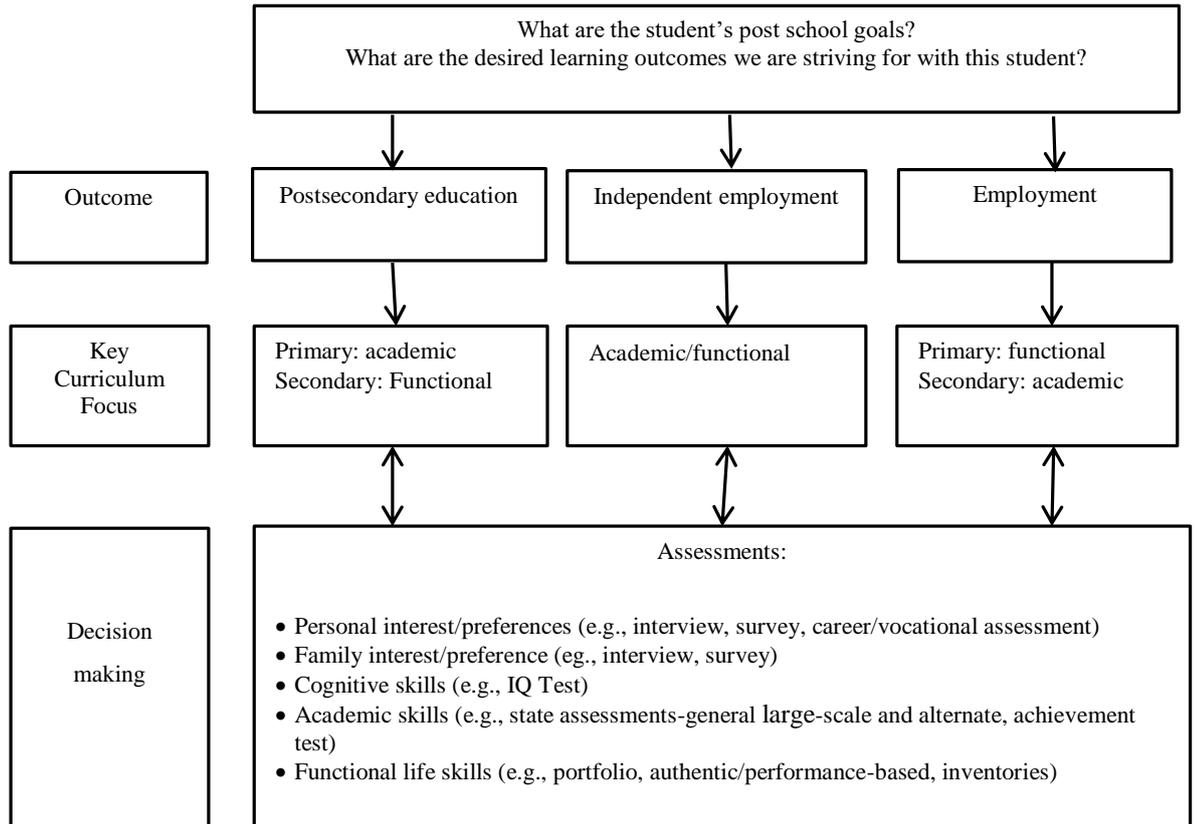


Figure 4 Guidelines for secondary curriculum decision making

Adapted from (Bouck, 2013, p. 228)

In a model developed by Bigge, Stump, Spagna, and Silverman (1999) (see Table 3), four curriculum options are proposed that can be accessed by students with a physical disability (or indeed any disability):

- (a) accessing the general curriculum without accommodation or modification;
- (b) accessing the general curriculum with accommodations;
- (c) accessing the general curriculum with modifications; and
- (d) accessing essential knowledge and skill domains for personal self-reliance via an alternate curriculum (Bigge et al., 1999).

Table 3 Curriculum options for students with physical and multiple disabilities

Option 1: General curriculum without accommodations or modifications
Core academic subject
Electives
Basic skills
Option 2: General curriculum with accommodations
Accommodations that alter modes and methods of curriculum presentation
Accommodations that support student response to curriculum
Accommodations for student participation in assessment
Option 3: General curriculum with modifications
Adjusted cognitive demand or conceptual difficulty
Prerequisite content selected from lower grade level
Alternate academic curriculum provided for needed basic life skills use
Option 4: Essential knowledge and skills domain for personal self-reliance
Functional living skills
Physical task performance
Fundamental and assisted communication
Individualized preparation for transition

Adapted from Bigge et al. (1999)

Prior to discussing the four options, it is important to consider what an accommodation is. The Australian Curriculum, Assessment and Reporting Authority (ACARA) defines accommodations as:

“a measure or action taken to assist a student with disability to participate in education and training on the same basis as other students. An adjustment is reasonable if it achieves the purpose while taking into account the student’s learning needs and balancing the interest of all parties affected, including those of the student with disability, the school, and other students” (Conway, 2014c, p. 142).

In the Australian context, there are four levels of adjustment to support students with disabilities:

- (a) No adjustment needed at this time, if students with disabilities do not required specialised education adjustment;

- (b) Supplementary adjustments, if students with disabilities required specific time adjustments to compliment the strategies and resources that are already available;
- (c) Substantial adjustments, if students with disabilities are experiencing significant barriers to their engagement, learning, participation and achievement;
- (d) Extensive adjustments, if students with disabilities require highly individualised, comprehensive and ongoing adjustments.

(Conway, 2014c)

In the Bigge et al. (1999) model (see Table 3), Option 1 is about access to general curriculum without accommodations and modifications. The general curriculum in the US includes core academic subjects/courses, electives and basic skills. While core academic subjects consist of specific numbers of units in key subject areas, electives are subjects that students may choose according to their interests. Basic skills include skills in reading, writing, speaking, and listening; computer skills, interpersonal skills and problem solving skills. Basic skills are applied across all subjects and are designated as important outcomes for all school graduates. Example of key subject areas in the USA are Mathematics, Science, English and Social Science (Best et al., 2010). A similar set of key subject areas also known as Key Learning Areas in Australia are English, Mathematics, Science, History, Geography, Physical and Health Sciences and Creative Arts, together with elective subjects (ACARA, 2015). Australia also has an equivalent set of seven Cross Curriculum Competencies similar to the USA's Basic Skills list.

Key subject areas in secondary schools in Indonesia include Religious Education, Civic Education, Mathematics, Indonesian language, English, Science,

Social Science, Physical and Health Education, Art and Culture, and local content that differs between schools, depending on provincial locality (Sunardi, 2010).

Students with disabilities in special schools in Indonesia can access this first option if they do not experience intellectual disabilities either as the primary disability, or as a dual disability with another disability, such as cerebral palsy.

Option 2 in the Bigge et al. (1999) model is access to the general curriculum with accommodations. Accommodation can be divided into three categories: accommodations that alter modes and methods of curriculum presentation; accommodations that support student responses to curriculum; and, accommodations for student participation in assessment. Examples of accommodations to support student responses are in the use of technologies such as software that allows students to write and complete activities by using computers instead of using pen and paper (Best et al., 2010). Examples of accommodations for a student's participation in assessment could include reading the direction and test items aloud, allowing the student to dictate answers, giving more time, and providing adaptive furniture (Salend, 2008). This option is implemented most frequently in accommodations for students with disabilities (but not intellectual disabilities), both for those who are educated in special schools, and inclusive school settings, in Indonesia.

Option 3 is access to the general curriculum with modifications that include adjusted cognitive demands and levels of conceptual difficulty, prerequisite content selected from lower grade levels, and alternate academic curriculum provided for basic life skills use.

Option 4 is a curriculum that accommodates essential knowledge and skills domains for personal self-reliance. This curriculum has four domains: functional living skills; physical task performance; fundamental and assisted communication;

and, individualised preparation for transition. Included in the functional living skills are domestic, community, leisure and vocational domains (Bouck, 2013; Wehman, Targett, & Richardson, 2012) . Physical task performance places emphasis on improving physical skills through focused coordination and strength training exercises, or to be taught to compensate through the use of accommodation (Best et al., 2010). The last two accommodation options (options 3 and 4) are the most likely used options in special schools that educate students with disabilities who have intellectual disability as a primary, dual or multiple disability.

Individualised transition preparation aims to prepare students for post school life and future roles in society (Best et al., 2010). There are critical areas of curriculum that need to be considered in preparing the students' future lives, and are related particularly to gaining functional living skills, or life skills. These critical curriculum areas specifically include career education and work, community living and participation, personal health and safety, self-determination, travel and mobility, and home living (Wehman et al., 2012). These provide alternate models to the option 4 curriculum discussed above.

The life skill curriculum approach is not unique in special education and countries such as the United States and Australia, particularly in the state of New South Wales (NSW), have developed this model especially for students who have intellectual disabilities. Access to the Life Skills subjects is open to those who can't access the mainstream curriculum, regardless of disability type. In the United States, the Council of Exceptional Children (CEC) developed Life Centered Education (LCE) that identified three significant domains in adult living:

- (a) daily living skills that teach students skills related to managing personal finance, household management, personal needs, family responsibility, food preparation, citizenship responsibility and leisure activities.
- (b) self-determination and interpersonal skills that assist students to develop self-awareness, self-confidence, socially responsible behavior, good interpersonal skills, independence, decision-making, and good communication skills.
- (c) employment skills that teach appropriate work habits, how to seek and maintain employment, physical/manual skills, and specific job competencies.

(CEC, 2015)

The Life Skills subjects implemented in NSW Australia are embedded in Key Learning Areas such as English, Mathematics, Science, and History, not in the vocational curriculum. The Life Skills outcomes and content in each syllabus can provide a more relevant, accessible and meaningful curriculum option for students with disabilities (Board of Studies NSW, 2007), while still providing the opportunity to gain the Higher School Certificate (HSC) which is the graduating award for all Year 12 students in that state. Before deciding whether the students should follow life skills outcomes and content, educators need to consider carefully the students' interests, strengths, goals and learning needs collaboratively with other stakeholders such as parents, students, learning support personnel, and community service providers as appropriate (Board of Studies NSW, 2007).

When it has been decided that a student should access the Life Skills outcomes and content in one or more subjects, school planning to support the student in the learning process should address: the selection of appropriate personnel; the

selection of Life Skills outcomes and content; the most appropriate contexts; the time allocation; the resources required; teaching strategies; curriculum adjustments; the Life Skills outcomes and content; monitoring strategies; and ongoing collaborative planning for successful transition (Board of Studies NSW, 2007). Examples of life skills outcomes and content can be found in Appendix B.

Appropriately addressed career development and vocational education is another important issue to be considered in the special education curriculum (Repetto & Andrews, 2012). The interconnecting relationships between career education, vocational education, and academic content in the school are displayed in Figure 5.



Figure 5 The interconnecting relationships between career education, vocational education, and academic content

Adapted from (Repetto & Andrews, 2012, p. 157)

Career education can be defined as the total of learning experiences that will “help individuals acquire and utilize the knowledge, skills, and attitudes necessary for each to make work a meaningful, productive, and satisfying part of his or her way of living” (Hoyt, 1975, p. 10). Literature suggests that the concept of career education is a life long issue and therefore it should be introduced as early as possible throughout the education span (Nobutaka & Kazufumi, 2012; Repetto & Andrews, 2012; Wehman et al., 2012). The stages of career education can be seen in Table 4.

Table 4 Stages of career education

	Career Awareness	Career Exploration	Career preparation	Job Placement
Elementary	Learning about career roles and tasks through fieldtrips, in-class simulation of a store, office, laboratory			
Junior High		Comparing the tasks of various careers to their own skills and likes through job shadowing, work sample, service learning, and other hands-on job exploration		
Senior high			Choosing initial career path through work-study program, on-the-job training, vocational program, or supported employment	
At graduation				Job placement

Adapted from Best et al. (2010); Repetto and Andrews (2012); Wehman et al. (2012)

Vocational education is more specific than career education. It is more focused on specific jobs and the essential competencies for employment purposes (Repetto & Andrews, 2012). This means vocational education in secondary school should aim to prepare student for work placement in the community (McDonnell, 2010a; Westling & Fox, 2010). Several principles of successful vocational programs have been identified (Sower & Powers, 1991). These are:

- (a) identification and job training that match with local community market;
- (b) training for essential work-related skills;
- (c) use of systematic instruction;

- (d) identification of adaptive strategies to improve student independence;
- (e) re-conceptualized staff roles and organisational structure;
- (f) family involvement in vocational preparation;
- (g) facilitated paid employment experiences; and
- (h) interagency collaboration.

(Sower & Powers, 1991)

Vocational education offered in secondary special schools should focus on teaching work related skills that can contribute to job success and assist students with disabilities to develop skills, obtain employment, enhance productivity in any job, and the ability to work cooperatively with others (McDonnell, 2010b).

Physical disability and the school curriculum

Adolescence is a significant period of growth and development crucial for success in adulthood (Davies, 2014; Scanlon, Saxon, Cowell, Kenny, & Perez-Gualdrón, 2008). During this period, several fundamental developmental experiences that equip the individual for future success are recognised including: greater responsibility for self-direction such as in independent living and employment (Scanlon et al., 2008; Wehmeyer & Webb, 2012); greater autonomy (Zimmer-Gembeck & Collins, 2006); development of self-identity (Pasupathi & McLean, 2010); enhanced social life around peers and a shift away from the family (Brown & Klute, 2006; Davies, 2014); and, greater control over healthcare and monetary issues (Wehmeyer & Webb, 2012).

However, most adolescent youth with disabilities encounter problematic developmental experiences due to their disability and their reduced capacity to integrate in all activities with ease, and these challenges may be greater for adolescents with complex physical disabilities (Irving, 2013). Adolescents with

disabilities confront many barriers in attaining autonomy and independence (Stewart, 2009). Moreover, the unique characteristics of motor and communication skills of individuals with physical disabilities minimises social interaction (Best, 1999). Therefore, students with physical and multiple disabilities frequently have needs that are intense, complex and highly individualised (Best et al., 2010).

Physical disability refers to “a severe orthopedic impairment that adversely affects a child’s educational performance. The term includes impairments caused by a congenital anomaly, impairments caused by disease (e.g., poliomyelitis, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures)” (IDEA, 2004 Sec 300.8). In the literature the terms multiple disabilities and severe disabilities are often used interchangeably to also refer to some types of physical disability such as cerebral palsy (Turnbull et al., 2007), Cerebral Palsy is the most frequently occurring example of a physical disability (Best et al., 2010) and among the research study participants. Individuals with a physical disability require “special service, training, equipment, material, or facilities” in order to assist their optimum learning experiences (Hallahan, Kauffman, & Pullen, 2012, p. 399).

In general, educational participation by youth with disabilities is lower than for those without disability. A study conducted through the World Health Survey showed that disability respondents experienced a lower rate of school enrolment and completion compared to their non-disabled counterparts (WHO, 2011). This gap is greater in developing countries. In Indonesia, the gap between youth with disabilities, and those without disabilities, enrolled in school is significant; 76% of youth without disability (age 12-17 years old) attend school compared to only 18% of their peers with disabilities (Filmer, 2008).

Considering the main problem of physical disability is related to body condition, research in the previous decades was dominated by medical and therapy interventions to correct body functions. A stronger research emphasis on education for adolescents in secondary school came after the US Department of Education initiated the Work Study Program in 1960 (Halpern, 1992). However, transition related outcomes programs in secondary schools have not achieved desired results (Wehmeyer & Webb, 2012). The study conducted by Chadsey-Rusch, Rusch, and O'Reilly (1991) demonstrated that the transition program outcomes were unsatisfactory in that “youths with disabilities face a very uncertain future that holds little promise of improving as they age” (p. 26). Issues such as accessibility (Janus, 2009) and environmental barriers (Irving, 2013; Stewart, Law, Rosenbaum, & Willms, 2002) still remain the major problems for adolescents with a physical disability.

Summary

In this chapter, perspectives and legislation on disability, as broad issues, have been introduced. It has described historical perspectives of disability and compared disability perspectives and challenges in different countries such as the USA, the UK, Australia, New Zealand, Asia, and in Indonesia in particular.

The importance of disability legislation in education has been identified together with a framework for delivering special education by providing alternate approaches in determining appropriate curriculum. The options of accommodations in the mainstream curriculum, and the core curriculum in secondary special schooling have also been described. Furthermore, physical disability as the type of disability closely observed in the current study has also been reviewed.

The following chapter will discuss transition education.

CHAPTER 3

TRANSITION EDUCATION

Introduction

This chapter provides a review of literature on transition education. Issues such as the importance of transition education, model development in transition education, and transition program teacher preparation are also discussed. Importantly, this chapter provides discussion on the Taxonomy for Transition Programming (Kohler, 1996b), and the framework for the application of the Taxonomy in Indonesia.

Transition education

The delivery of transition education cannot be separated from the development of policy and practice in relation to disability services and education in general. The issues across programs and services are related in regards to improving the quality of life for people with disabilities such as normalization, independent living, and self-determination (Bassett & Kochhar-Bryant, 2012; Sitlington, Neubert, & Clark, 2010). Transition can be defined as “life changes, adjustment, and cumulative experience that occur in the lives of young adults as they move from school environments to independent living and work environments” (Wehman, 2006, p. 4). IDEA (2004) defined transition service as a coordinated set of activities for a student with a disability that:

- (a) is designed to be within a result –oriented process, that is focused on improving the academic and functional achievement of the student with a disability to facilitate the student movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment) continuing and adult education, adult services, independent living, or community participation
- (b) is based on the individual child’s needs, taking account the child’s strengths, preferences, and interests; and

- (c) includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation. (IDEA 2004, section 34)

Derived from this definition, there are three key elements to be fulfilled in delivering transition programs: (a) careful assessment to identify student needs, strengths, preferences, and interests; (b) careful planning and implementation that should accommodate post-school outcomes; and, (c) interagency collaboration (Wehmeyer & Webb, 2012).

This section will highlight issues related to the importance of transition education and services, the development of a model for delivering transition programs, examples of transition programs, and the existing school to work transition model in Indonesia.

The importance of transition education and services in secondary school

Students with disabilities encounter several transition phases during their lifespans. This includes transition between home to multiple education settings such as moving from home into early intervention center, and then progressing into early childhood education, primary school, secondary school and further education and training; transition from school to community such as to employment and independent living; and transition from segregated setting into more inclusive setting. Each of these transition stages has their own challenges. However, research demonstrates that the transition from secondary school to adult life is the most critical (Agran, et al., 1994; Davies, 2014, Hardman & Dawson, 2010; Riches, 1996; Thoma, et al., 2001; Trainor, et al., 2008,) both from parents' and students' perspectives (Powers, Geenen, & Powers, 2009).

Literature suggests that post-school outcomes for students with disabilities remains in a poor state compared to their peers without disabilities (Beamish et al., 2012; Blackorby & Wagner, 1996; Cameto et al., 2004; Taylor, 1998, 2000). Not only does the employment rate of people with disabilities remain low (Abdullah et al., 2013; Australian Bureau of Statistics, 2012; Blackorby & Wagner, 1996; MoSA, 2011; UK Office for Disability Issues, 2011; US Department of Labor, 2014), their engagement in other areas of life is also limited (see Table 4 and Table 5 in Chapter 2).

Over the years, as a result of these outcomes, researchers, families, and educators have advocated for improvements in program provisions for delivering quality special education (Kohler, DeStefano, Wemuth, Grayson, & McGinty, 1994; Kohler & Field, 2003; Riches, 1996). The concern to improve post school outcomes for students with disabilities has resulted in countries such as the USA, the UK, and New Zealand authorising legislation that requires transition services to be embedded in the student's education planning; typically the IEP (IDEA, 2004; Special Educational Needs and Disability Code of Practice: 0-25 years, 2015; NZ Ministry of Education, 2011). The interest in improving post school outcomes has resulted in the publication of empirical and theoretical studies on a best practice transition model (Kohler et al., 1994). The development of this model is discussed later in this chapter.

Although the literature provides a clear statement that transition programs should accommodate all aspects of life such as independent living, community participation, further education and training, and employment (Bassett & Kochhar-Bryant, 2012; Chadsey-Rusch et al., 1991; Halpern, 1992; Wehmeyer & Webb, 2012), preparing students with disabilities for work endeavors is a major issue that

needs to be addressed in transition programming in secondary school (Best et al., 2010; Crockett & Hardman, 2010a, 2010b). This is based on evidence of the advantages associated with being employed which include promoting overall quality of life, greater independence, self-determination, and political strength (Benz, Lindstrom, & Yovanoff, 2000). Therefore, improving employment outcomes for student with disabilities is critical in “building upon their social capital for effective community functioning” (Brewer, Karpur, Erickson, Unger, & Malzer, 2011, p. 3).

The importance of successful transition services has become a main goal of outcomes-based education (Sabbatino & Macrine, 2007). A study conducted by Knapp, Perkins, Beecham, Dhanasiri, and Rustin (2008) showed that the economic cost of unsuccessful transition programs is considerable. It not only affects students with disabilities personally, in that they cannot achieve effective employment status, but it also means missed opportunities to contribute to the economy, dependency on welfare benefits, and increased health costs and services. Furthermore, 60-90% of parent respondents wanted their children to gain employment after they graduated from secondary school (Blacher, Kraemer, & Howell, 2010). Transition program planning that emphasises employment outcomes improves student engagement in work experience (Brewer et al., 2011). The most frequently reported transition programs involved vocational training, coursework or career exploration, and competitive employment (Alverson, Naranjo, Yamamoto, & Unruh, 2010), career interest assessments, tours of college or technical schools, job shadowing programs, interviewing or resume writing practice, and speakers brought in from local businesses (Carter et al., 2009).

People with disabilities should not have their job preferences restricted (Wehman & McLaughlin, 1980). However areas such as: business, technology and

communication; marketing and distribution; trade and industry; childcare and education; food service and hospitality; and, agriculture and renewable resources, have dominated vocational training for students with disabilities (Carter, Trainor, Cakiroglu, Sweden, & Owens, 2010). Although Crockett and Hardman (2010b) suggest that transition programs for students should be focused on developing competitive employment skills, practice in schools is still focused on more restrictive environments such as working in sheltered workshops, undertaking non-paid jobs and producing unvalued items (Agran et al., 1994; Forlin & Lian, 2008; Wehman & McLaughlin, 1980).

It can be argued that two crucial issues that need to be addressed in order to achieve marketable skills are changes in job placement and changes in vocational training, with the emphasis of giving students with disabilities appropriate work experience in the community (Agran et al., 1994), and providing appropriate career awareness and employment preparation programs (Crockett & Hardman, 2010b). The school to work transition program should be formulated as early as possible similar to career development theory. The example of timelines for transition program planning are shown in Appendix C.

History of developing transition models

The following section describes transition programs developed since the 1960s. In 1960, a *work study program* was developed in the USA which used a collaborative model between a high school and rehabilitation centre, and provided employment experience for students with disabilities (Flexer, McMahan, & Baer, 2001). The program was extended into a career education model and accommodated different levels of schooling practices (Flexer et al., 2001). The new model not only facilitated services for students with disabilities in secondary school but also

facilitated services for students without disabilities from elementary school. The key features of both models were collaboration and work experience.

In 1984, the *Will Model*, that assisted students with disabilities specifically to gain employment, was developed by the Office of Special Education and Rehabilitative Center in the USA (Agran, et al., 1994; Flexer et al., 2001; Hardman & Dawson, 2010). The model introduced transition services based on the level of support needed by the student. There were three different levels of transition support:

1. Transition without special service.
2. Transition with time limited service.
3. Transition with ongoing service.

Differing from the Will Model that focused on transition to employment, *the Halpern Model* was developed by adding residential living and social and interpersonal relationships as areas that needed focus in transition support (Flexer et al., 2001; Hardman & Dawson, 2010). The levels of support indicated in the Will Model were incorporated and operated in the Halpern Model using broader areas of transition services (Agran et al., 1994). Both models highlighted the importance of student focused planning through developing suitable IEPs or ITPs in relation to transition programming.

In 1985, Wehman developed the *Work Preparation Model* (Agran et al., 1994; Flexer et al., 2001). The key features established in the model were: (a) interagency collaboration; (b) family involvement; (c) detailed planning strategies and services; (d) usage of functional curriculum; and, (d) demonstration of a wide range of vocational outcomes and long term follow-up. Following that, in 1986, the *Severe-needs Model* introduced by Brown (Agran et al., 1994) accommodated students with severe disabilities to gain meaningful work experience in community

settings. Unlike the Work Preparation Model, the Severe-needs Model put emphasis on community-based training that was characterised by: (a) a limitation in percentage of students in the work force that did not exceed one percent of the total work force; (b) co-worker support; and, (c) increased time allocation as students get older.

Another best practice model in transition was the *Student-directed Transition Model* that put a greater focus on systematic instruction that enabled students with disabilities to play a significant role in decision making (Agran et al., 1994). They asserted that teaching self-management strategies was the key element of the model.

The Taxonomy for Transition Programming model was developed in 1996 (Kohler, 1996b). Rather than perceiving transition as additional activities received by students with disabilities, the taxonomy established the notion that transition itself was the foundation for education (Flexer et al., 2001; Hardman & Dawson, 2010; Kohler, 1996b). Unlike the other transition models described above, the Taxonomy for Transition Programming model incorporated more comprehensive issues in addressing effective and efficient transition programming. The Taxonomy for Transition Programming model is acknowledged in the literature as best practice in transition programming (Konrad et al., 2008). It includes the following five categories:

1. Student-focused planning
2. Student development
3. Interagency and interdisciplinary collaboration
4. Family involvement
5. Program structure.

This model is discussed in detail later in this chapter as it forms the model against which practice in Indonesian schools is assessed. Many transition programs

have been implemented in accordance with the key categories of the model described above. Examples of these transition programs are discussed below.

Examples of school to work transition programs

Many transition projects implemented internationally have successfully placed students with disabilities into the work force. The *Continental Project* (Peterson, Ellsworth, & Penny, 2003) was a collaborative project between various organisations in Flagstaff Arizona that assisted more than 20 students with moderate to severe disabilities per year transition into the workforce. The project adopted integrated approaches where work skills, social competence and life skills were incorporated into integrated activities. Participants rotated through several paid assignments including food and beverage preparation, handling reservations, laundry and repairing linen.

Meadows (2009) described several schemes implemented in Australia. Projects such as the *South Australian Business Service Partnership* gave opportunities to students with disabilities to receive intensive pre-employment theory and some practical skills while at school in a work experience situation through partnerships between schools and businesses. The *Tasmanian Gate Project* emphasised the preparation of students prior to work placement. The *Western Adelaide Vocational Enterprise Lighthouse Project* supported students in a combined certificate in retail operation and employment skills with a significant component of structured workplace learning. Other school to work transition programs included *New South Wales Transition Initiatives*, the *South Coast Transition Model*, *Start Right Project* (South Australia), the *Western Australian Transition support program*, *New South Wales Workout Project*, and *Queensland New Apprentices Partnership* which placed emphasis on a work experience component (Meadows, 2009).

The *Youth Transition Project (YTP)* (Benz, Lindstrom, Unruh, & Waintrup, 2004) operated collaboratively between various agencies in Oregon. The success of the program has been acknowledged in several studies conducted by staff of the University of Oregon and the U.S Department of Education. The project provided transition programming beginning during the last two years of high school and, as needed, the service could be extended to two years after students leave school. The program included: (a) transition planning that focused on post school goals and self-determination; (b) instruction in academic, vocational, independent living, and personal-social content areas; and, (c) paid job training.

Similar to the YTP, the *Community-Based Work Transition program* (CWBTP) (Sheppard-Jones et al., 2007) provided support and opportunities for students with significant disabilities to gain employment before they exited school. The program involved collaborative work between a vocational rehabilitation agency and schools in a Midwestern state of the USA.

The Start on Success program (Sabbatino & Macrine, 2007), established in 1995 was designed to provide early training and paid-work experience for students with physical, mental and sensory disabilities. It was a partnership model between a high school and a nearby university. Although there was no report on participants' progress after leaving the program, the participants had shown improvement in many areas of employability skills.

Having discussed some examples from different settings, existing transition programs in Indonesia are discussed in the next section.

Existing transition programs in Indonesia

As mentioned earlier, legislation regarding transition programs is not available in Indonesia. The only provision regarding preparing students with disabilities for future life is the arrangement of the special education curriculum, which places emphasis on vocational skills by having a minimum of 60% of the secondary special school curriculum allocated to vocational skills (BNSP, 2006). Very little is known about the extent of transition programs implemented in secondary special schools. Most students with disabilities in Indonesia are not prepared appropriately for competitive employment. Therefore, it is not surprising that without proper transition programs, these students will remain unemployed after leaving school. As a consequence, the low rate of employment for individuals with disabilities will continue (MoSA, 2011). The current study aims to fill the gap in the literature and, at the same time, provide actions that need to be undertaken by different level of stakeholders to improve school to work transition programs. Based on ecological model of Bronfenbrenners (1977), this stakeholders are engaged strongly both in policies and practices in school to work transition program. . Although the study restricted to only four special schools in a province in Indonesia, the suggested actions would enable development of school to work transition policy and practice in wider contexts as it includes recommendations for National government.

In order to improve the employment rate of people with disabilities in Indonesia, government organisations (such as the Ministry of Social Affairs and the Ministry of Manpower and Transmigration) and Non-Government Organisations, need to provide vocational training for people with disabilities in schools, rehabilitation centres and in open employment. The Ministry of Social Affairs, as a

government organisation that holds a key responsibility in disability issues at the National level, provides vocational training in (a) institutions based in *Panti* and *Balai Besar Rehabilitasi* and (b) non-institutions based in *Loka Bina Karya*. This vocational training is limited and not specifically targeted at students with disabilities. While *Panti* and *Balai Besar Rehabilitasi* provide vocational rehabilitation for individuals with disabilities, *Loka Bina Karya* provides social and vocational rehabilitation for high risk individuals (such as sexual workers, beggars, and homeless people). There are 204 *Loka Bina Karya*, 19 *panti*, and 2 *Balai Besar Rehabilitasi* in Indonesia (Irwanto, Kasim, Lusli, & Siradj, 2010).

In Bantul municipality, where the current research study was conducted, there is 1 *Loka Bina Karya* that provides vocational training for up to 3 months for 15 individuals aged 17-40 years old (Johan, 2005), and 1 *Balai Rehabilitasi*, known as BRTPD Pundong, that provides vocational training for up to 8 months for 100 individuals with disabilities aged 17-45 years old each year (Dinas Sosial Prov DIY, 2011). BRTPD Pundong was established in 2009 after an earthquake hit Bantul which left more than 7000 people with acquired disabilities (Mulyadi, 2011). Even though students with disabilities can apply for vocational training in BRTPD Pundong, the priority is to provide vocational training for the earthquake victims. As a consequence, students with disabilities continue to be isolated from access to further vocational training. Furthermore, the continuity of vocational training in BRTPD Pundong is compromised due to insufficient funds and the dispute between National and Local Governments in regards to the status of BRTPD (Mulyadi, 2011). Although it is not a significant contributor, this initiative has assisted a small number of students with disabilities to gain employment skills. It is very clear that this current scheme is lacking interagency collaboration and operates separately. More

importantly, the transition program does not reflect significant components of transition programming as previously discussed in the models of best practice transition.

Teacher education preparation for transition program teachers

Special education teachers are still assigned as a main leader in delivering transition service for students with disabilities (Blanchett, 2001; Knott & Asselin, 1999). Thus, competent teachers are a key to successful transition (Anderson et al., 2003; DeFur & Taymans, 1995). Teacher preparation for transition services, and the graduate teachers' impressions of preparation sufficiency, play a vital role in the success of transition services (Wolfe, Boone, & Blanchett, 1998). However, research demonstrates that teachers in secondary education feel unprepared to deliver effective transition services (Alnahdi, 2014; Morningstar, Kim, & Clark, 2008). A study conducted by Blanchett (2001) examined teachers' satisfaction with the transition related skills training that they received in higher education prior to working with students with disabilities. The results showed that only 9% of teachers indicated that they felt highly prepared, 39% were somewhat prepared, 24% were somewhat unprepared, and 21% were highly unprepared (Blanchett, 2001).

It can be argued that few higher education providers offer pre-service training programs that place emphasis on secondary special education and transition programming (Alnahdi, 2014; Anderson et al., 2003; Johnson, 2012). Consequently, many teachers begin teaching without specific knowledge and skills related to delivering a transition program (Johnson, 2012). Nevertheless, teachers' knowledge of transition service and their interest are significant factors for successful transition (Wandry et al., 2008).

As transition services are mandated in IDEA (2004), special educators are bound to meet the IDEA (2004) requirements, therefore they have to equip themselves with appropriate transition delivery related skills. Accordingly, higher education institutions that provide special education teacher programs in the USA have an obligation to provide courses to meet the IDEA (2004) requirements. In addition, transition service competencies are required under the Special Education Standards for Professional Practice where Section 8.5. states “*Engage in appropriate planning for the transition sequences of individuals with exceptionalities*” (CEC, 2011). Unfortunately, findings from a national survey of special education personnel preparation programs in the United States discovered that less than 50% of the teacher training programs in higher education addressed transition standards (Anderson et al., 2003). In addition, only 45% of programs surveyed offered a stand-alone transition course, while 70% of the instructors reported infusing transition content into other courses (Anderson et al., 2003). However, transition infused into existing courses does not allow for adequate emphasis or coverage of important transition content (Severson, Hoover, & Wheeler, 1994) as this method of delivery allocated less time to meet transition standard competencies (Anderson et al., 2003). Yet, transition courses in higher education led to greater perceptions, and greater confidence, of the abilities of the participants to implement effective transition practices (Wandry et al., 2008).

Few universities in Australia offer transition specific subjects (the term *subjects* is used as a common term rather than the differing terms in each university) as part of a post graduate special education program. From an internet search by the author, only two universities (University of New South Wales and Flinders University) offers a core stand-alone subject on transition, whereas some

universities, such as Deakin University, Griffith University, the University of Sydney, and the University of Western Sydney, accommodate some transition components, such as the IEP and collaboration and consultation subjects. Hence, it is understandable that teachers do not feel equipped with suitable knowledge and skills related to transition programs and programming.

The Taxonomy for Transition Programming

The Taxonomy for Transition Programming (Kohler, 1996b) is an applied framework of secondary education practices to develop post-school outcomes for youths with disabilities. It was developed through four in-depth studies (Kohler, 1996c). The first study reviewed 49 documents related to transition services (Kohler, 1993) where it revealed that vocational training, parent involvement, interagency collaboration and service delivery were cited in more than 50% of the reviewed documents; and social skills training, paid work experience, and individual transition planning were supported in approximately one third of the examined documents (Kohler, 1993).

The second study investigated 15 evaluation studies focused on exemplary programs and practices pertaining to transition (Kohler et al., 1994). The study identified practices include vocational assessment, supported employment services, employability and social skills training, parent involvement, interdisciplinary transition teams, transition-focused IEPs, community-based and community-referenced instruction and curricula, least restrictive and integrated settings, and interagency coordination and service delivery (Kohler et al., 1994).

The third study explored final reports of 42 employment focused transition programs funded by the Office of Special Education and Rehabilitative Service (OSERS) (Rusch, Kohler, & Hughes, 1992) where findings suggested that the

projects provided work skills training, developed programs or materials and evaluated their effectiveness, disseminated information, and conducted public relations activities and training (Rusch et al., 1992). The projects also achieved specific outcomes in employment of individuals, establishment of training programs and services, and development of cooperative delivery systems (Rusch et al., 1992).

The fourth study was a concept mapping (Kohler, 1996c). The study involved three phases that: (a) generated the identification of effective transition practices that promote quality post school outcomes, (b) structured five sets of transition practice statements to develop estimates of conceptual similarity and relatedness and, (c) evaluated the conceptual model (Kohler, 1996c).

The best practices were classified into five main categories with clusters in each of the categories. Table 5 shows the categories and clusters in The Taxonomy for Transition Programming. A detailed explanation of each category and cluster follows.

Table 5 The Taxonomy for Transition Programming

Categories	Clusters
Student focused planning	IEP development Student participation Planning strategies
Student development	Life skills instruction Employment skills instruction Career and vocational curricula Structured work experience Assessment Support service
Interagency collaboration	Collaborative service delivery Collaborative framework
Family involvement	Family involvement Family training Family empowerment
Program structure	Program philosophy Program policy Strategic planning Program evaluation Resource allocation Human resource development

(Kohler, 1996b, p. 3)

Student Focused Planning

Student focused planning includes the Individual Educational Program (IEP) development, student participation, and planning strategies (Kohler, 1996b; Kohler & Field, 2003). The aim of student focused planning is to adopt proactive student planning which is designed to assist effective school to work transition (Kohler & Chapman, 1999). Whenever possible, the student's visions, goals and interests are taken into account (Conway, 2014a; Crockett & Hardman, 2010; Forlin & Lian, 2008; Kohler, 1996b; Kohler & Chapman, 1999; Kohler & Field, 2003; Thoma et al., 2001).

Individual Education Program

As discussed earlier, adolescents with disabilities encounter many difficulties as they enter adulthood, therefore there is a need for a blueprint to assist the young adult with disabilities prepare for future life (Wehman & Targett, 2012). This blueprint needs to be transformed measurably into an Individual Education Program (IEP) (IDEA, 2004; Wehman & Targett, 2012). The IDEA 2004 places the IEP at its core and is the major indication of the relevancy of the child's educational program and measures its progress, achievement, and effectiveness (Bateman, 2011). The IEP is defined as a written statement for each child that includes: (a) the current level of child's performance; (b) measurable annual goals; (c) required special education and related services and supplementary aids and services; (d) the degree to which the child can and cannot participate in the general classroom; (e) appropriate accommodations; (f) duration of the IEP; (g) transition services; and, (h) measuring tools towards annual goals and report for the parent (IDEA, 2004 section 614).

Transition service and goals are mandated to be included in the IEP when the child is aged no older than 16 years of age (IDEA, 2004). This transition plan is better known as the Individual Transition Plan (ITP) (Austin & Wittig, 2013; Cummings, Maddux, & Casey, 2000). The goal of the ITP is to identify the student's and their family's preferred and expected postsecondary outcomes (Austin & Wittig, 2013). In IDEA (2004), transition goals are mandated to be included in the IEP. This should include:

- (a) Appropriate measurable postsecondary goals based upon age appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills.
- (b) The transition services (including courses of study) needed to assist the child in reaching those goal (IDEA, 2004)

Austin and Wittig (2013, p. 113) proposed a number of vital areas that need to be addressed in a transition IEP (see Table 6).

Table 6 Vital areas covered in transition IEP

Vital areas covered in transition IEP	
Employment opportunities	Friendship and socialization needs
Postsecondary education opportunities	Transportation needs
Living opportunities	Health and medical needs
Financial and income needs	Legal and advocacy needs

Austin and Wittig (2013, p. 113)

Although there is evidence of an increase in the frequency of IEP meetings that address IDEA transition requirements (Landmark & Zhang, 2012), this is not a predictor of quality transition planning (Finn & Kohler, 2009). Students with disabilities that have well planned IEPs are more likely to succeed in attaining further education and entering employment (Doren, Flannery, Lombardi, & Kato, 2013; Kohler & Field, 2003). However, research shows that many schools have difficulty fulfilling the requirements of the IDEA (2004) (Finn & Kohler, 2009; Kohler & Field, 2003; Landmark & Zhang, 2012).

A study conducted by Landmark and Zhang (2012) found that only 44.5% of IEPs from 212 samples reviewed, had measurable postsecondary goals. Furthermore, 37 out of 39 reports of the states and entities monitored by The Office of Special Education Programs between 1993 and 2000 were cited for noncompliance in some aspect of the IDEA transition requirements (Kohler & Field, 2003). Studies have found evidence in transition IEPs of a lack of many critical of the critical elements would reflect best practice (Beattie, Grigal, Test, & Wood, 1997), including, non-measurable and unclear goals, only addressing a few post-school outcomes, not allowing for short-term evaluation, and lacking collaboration with community agents (Beattie et al., 1997; Landmark & Zhang, 2012).

Effectiveness of transition planning is measured not only by well-documented planning but also the implementation of the planning (Davies, 2014).

In regards to persons involved in the IEP planning, the IDEA (2004) explains that different stakeholders should be consulted, however, preserving a minimum number of personnel and identifying accurate roles of each person is essential to maintaining productivity in the planning process (Austin & Wittig, 2013). IEPs should not only be able to maximise students' strengths, but at the same time, should address weaknesses (Davies, 2014).

An accurate IEP and ITP plays an important role in directing the student's future, and therefore should be constructed appropriately. Failure to do so may result in a lack of direction and vision (Wigham et al., 2008). Transition planning must supply the IEP team with identification of what the student aspires to and expects along with a mutually generated plan on how to achieve those aspirations and expectations (Austin & Wittig, 2013).

Student Participation

The IDEA 2004 emphasised that students with disabilities should be involved actively in planning their transition from school to work and directing their own careers, however few IEPs show documentation promoting student involvement in the transition planning endeavor (Getzel & DeFur, 1997). Student participation in transition planning has been acknowledged as a significant element in transition planning and program development (Hendrick & Wehman, 2009; Kohler, 1993; Landmark, Ju, & Zhang, 2010) and characterises a core aspect of secondary special education practice (Kohler & Field, 2003; Rusch, Hughes, Agran, Martin, & Johnson, 2009). Students' abilities in communicating their preferences are varied depending on the severity of their disabilities, yet students with significant

disabilities may demonstrate their ability in choice making by doing so differently (Cannella, O'Reilly, & Lancioni, 2005; Lattimore, Parsons, & Reid, 2003).

Special education teachers have a long history of not involving students actively in their IEP meetings (Martin, Zhang, & Test, 2012). Quite often, educators and parents take over decision-making when students with disabilities fail to do so (Getzel & DeFur, 1997). In a study conducted by Martin, Marshall, and Sale (2004) results indicated that special education teachers talked 51% of the meeting time, family members 15%, general educators and administrators 9%, support staff 6%, and students 3% of the time. Students with significant disabilities were less likely to attend their IEP meeting compared to those with other disabilities (Getzel & DeFur, 1997). While older students with disabilities attended more than their younger counterparts in IEP meetings, they were more actively involved by taking a leadership role compared to the younger students (Wagner, Newman, Cameto, Javitz, & Valdes, 2012).

Student participation in the IEP process can be divided into four phases: planning, drafting the plan, meeting to revise the plan, and implementing the plan (Konrad & Test, 2004). Studies conducted by Cross, Cooke, Wood, & Test (1999), Keyes and Owens-Johnson (2003), Woods, Sylvester, and Martin (2010) verified that students with disabilities can be taught to be involved actively in the IEP meeting. Furthermore, student participation in the IEP could be improved through intervention. A study conducted by Griffin (2011) documented a positive effect of 17 interventions to support student participation in the IEP, and a study by Allen, Smith, Test, Flowers, and Wood (2001) concluded that a self-directed IEP increased student participation in that IEP.

Part of a self-directed IEP is Person-Centered Planning (PCP) and is often adopted to assist with student participation in the development of the IEP. This approach enables the students to actively choose their preferences, take initiative, accept responsibility and reflect on their progress (Kohler, 1993; Orentlicher, 2011). PCP assists student with disabilities to have greater control of their future. It is driven by the individual and their families, and it places emphasis on student abilities and availability of supports (Austin & Wittig, 2013). Included in PCP tools (Baer & Flexer, 2013; Keyes & Owens-Johnson, 2003) are tools such as:

- (a) Personal future planning (Mount, 2000);
- (b) MAPS/ McGill Action Planning System (Vandercook, York, & Forest, 1989);
- (c) COACH (Giangreco, Cloninger, & Iverson, 1993);
- (d) Life style planning (O'Brien, 1987); and,
- (e) ELP/Essential Lifestyle Planning (Smull, Sanderson, & Harrison, 1996).

Although the most common tools used in person centered planning are MAPS and ELP (Keyes & Owens-Johnson, 2003), each tool places orientation on the future; emphasises the individual's strengths; explores the individual's aspirations and expectations; and, encourages creativity in planning and implementation (Stalker & Campbell, 1998). An example of a probe using the MAPS and ELP is show in Table 7.

Table 7 Probes in PCP that satisfy IEP/ITP requirements

Probes used in MAPS	Probes used in ELP	IEP/ITP procedural requirement
1. What is the person’s history? What are his/her gifts and talents? Dreams and nightmares?	1. What is this person’s image in the community? What are his/her preferences for now and the future?	1. What are the present levels of performance? The evidence of a disability?
2. What are his/her/our goals? How can we avoid nightmares and realize dream?	2. What are his/her non-negotiables? Highly desired goals?	2. What are the goals and objectives that reflect an effort to minimize the disability?
3. How can we maximize the dream to create an ideal day? An ideal setting? What evidence exists of his/her gifts, talents, and dream in the plan?	3. What will his/her legacy be? What are the plans of support and implementation? Who will be involved and how?	3. What are the needs for supplementary supports and services? Are the needs for transition included? Where is the least restrictive setting?

Adapted from Keyes & Owens-Johnson (2003, p. 147)

Planning Strategies

Student interest should be taken into account when planning a transition program. The words “strengths, preferences and interests” in the IDEA 2004 made clear that the transition program should be student centred, and should focus on what the student can do, not what the student cannot do (Austin & Wittig, 2013).

Student directed transition is an integral part of self-determination, and promoting self-determination of youth with disabilities has become best practice in secondary school transition services. Self-determination is recognised as the most important factor in transition outcomes (Austin & Wittig, 2013; Crockett & Hardman, 2010a; Hardman & Dawson, 2010; Wehmeyer, 2001; Wehmeyer, Palmer, Shogren, William-Diehm, & Soukup, 2010). Studies have demonstrated that proficient self-determination links to greater student involvement in the transition service (Baer & Flexer, 2013; Lee et al., 2012; Wehmeyer, 2001; Wehmeyer, Agran,

& Hughes, 1998). However, self-determination skills vary among type of disabilities, gender and age (Carter, Lane, Pierson, & Glaeser, 2006; Carter, Trainor, Owens, et al., 2009).

Self-determination is defined as “the control of one’s own fate or course of action without compulsion” (Baer & Flexer, 2013, p. 13). Component elements of self-determination behaviour are shown in Table 8.

Table 8 Component elements of self-determination

Component elements of self-determination behavior
Choice-making skills
Decision-making skills
Problem solving skills
Goal-setting and attainment skills
Independence, risk taking, and safety skills
Self-instruction skills
Self-advocacy and leadership skills
Internal locus of control
Positive attributions of efficacy and outcome expectancy
Self-awareness
Self-knowledge

(Wehmeyer & Shogren, 2013, p. 44)

Teaching and practising self-determination skills are not part of the educational culture in Indonesia. Educational practice in Indonesia has been long dominated by a teacher centred approach (Azra, 2002; Bjork, 2013; Buchori, 2001; Darmaningtyas & Gusmian, 2004). Similarly, a study conducted by Strnadova and Cumming (2014) suggested that self-determination is also the least practice applied in secondary school in NSW.

Student Development

The category of student development in The Taxonomy for Transition Programming Model includes life skills instruction, career and vocational curricula, structured work experiences, assessment and support services (Kohler, 1996b;

Kohler & Chapman, 1999). Effective student development practices should facilitate the student in acquiring, applying and evaluating their skills (Kohler & Field, 2003).

Life Skill Instruction

While life skills are defined as “those skills or tasks that can contribute to the successful independent functioning of an individual in adulthood” (Cronin, 1996, p. 54), a life skills instruction approach refers to “a commitment to providing a set of goals, objectives, and instructional activities designed to teach concepts and skills needed to function successfully in life” (Clark, Field, Patton, Brolin, & Sitlington, 1994, p. 126).

A review of the literature suggests that life skills areas, including community participation and satisfactory personal and social relationships, are not addressed adequately in transition services (Benz & Halpern, 1993; Blalock & Patton, 1996; Halpern, Doren, & Benz, 1993; Johnson, Stodden, Emanuel, Luecking, & Mack, 2002; Kardos & White, 2005; Sitlington, 1996). The Halpern early transition model placed social and interpersonal skills as one of the foci in transition support (Flexer et al., 2001; Hardman & Dawson, 2010). However, many youth with disabilities continue to experience difficulties in this area (Carter & Hughes, 2013). The degree to which students can use their social and communication skills can influence their meaningful participation in all areas of life (Carter et al., 2013; Carter & Hughes, 2013; Patton, Cronin, & Jairrels, 1997). In regards to employment issues, interpersonal and intrapersonal skills affect: quality and productivity in the workplace (Levin, 2012); finding and maintaining employment (Carter, Trainor, Ditchman, Sweden, & Owens, 2011); and, navigating the workplace’s cultures and established relationships between co-workers (Eisenman & Celestin, 2012). Findings from a study conducted by the National Secondary Transition Technical Assistance

Center (NSTTAC) on evidence based practice indicated about 20 practices that could be used for teaching life skills (see Table 9).

Table 9 NSTTAC evidence based practice related to life skills

NSTTAC evidence based practice related to life skills

- Teaching functional skills
 - Teaching banking skills
 - Teaching cooking and food preparation skills
 - Teaching grocery and shopping skills
 - Teaching home maintenance skills
 - Teaching leisure skills
 - Teaching personal health skills
 - Teaching purchasing using the “one-more-than” strategy
 - Teaching restaurant purchasing skills
 - Teaching safety skills
 - Teaching self-care skills
 - Teaching life skills using community-based instruction
 - Teaching life skills using computer-assisted instruction
 - Teaching self-management for life skills
 - Teaching self-determination skills
 - Teaching self-advocacy skills
 - Teaching functional reading skills
 - Teaching functional math skills
 - Social skills training
-

Adapted from (Test, Richter, & Walker, 2012, p. 122)

Employment Skills Instruction

The category of employment skills instruction includes work related behaviour and skills, job seeking skills, and occupation-specific vocational skills (Kohler, 1996b). These skills are identified as being essential components for successful transition (Kohler & Chapman, 1999). Despite the fact that most students with disabilities are able to learn vocational skills (Beirne-Smith, Ittenbach, & Patton, 2002; Spooner, Bowder, & Richter, 2011; Wehman, Hill, Wood, & Parent, 1987), many students with disabilities do not have access to appropriate programs related to career development and employment preparation (Best et al., 2010; Crockett & Hardman, 2010a; Guy, Sitlington, Larsen, & Frank, 2008). Furthermore, vocational skills that special schools emphasise are often limited to basic skills that are unmarketable (Agran et al., 1994; Forlin & Lian, 2008; Wehman & McLaughlin,

1980). On the other hand, employment skills instruction cannot be viewed only as teaching vocational skills, but also work related behaviour and skills, and job seeking skills (Kohler, 1996b; Kohler & Chapman, 1999). In relation to work related behaviour and skills, appropriate work attitudes and behaviours such as self-discipline, punctuality and attendance, ability to set goals and taking responsibility, and listening skills, are among the top required skills identified by employers for successful employment (Fischer, 2013).

Safety instruction skills are also largely ignored when teaching employment skills (Agran, Swaner, & Snow, 1998). Many students with disability do not receive systematic safety skills instruction (Agran, Krupp, Spooner, & Zakas, 2012). In a study conducted by Agran et al. (1998) in 800 vocational rehabilitation facilities, approximately 36% of survey respondents experienced a work injury, and only 32% of respondents were provided with ongoing safety skills training. Regardless of the type of job and whether a responsible adult attended work with that individual with disabilities to provide support, it is important for people with disabilities to respond appropriately in emergency situations to avoid serious consequences (Agran et al., 2012; Agran et al., 1998).

Career and Vocational Curricula

As raised in an earlier section, career and vocational education is an essential curriculum component in secondary special schools (Crockett & Hardman, 2010b; Repetto & Andrews, 2012) and is also a major issue that needs to be addressed in secondary schools (Best et al., 2010; Crockett & Hardman, 2010a). Despite the finding that many schools have reduced the amount of vocational curriculum time, and replaced it with high stakes testing subject time (Baer et al., 2003; Guy et al., 2008), literature suggests that vocational education is one of the

most regularly reported transition programs in secondary school (Alverson et al., 2010).

Career and Vocational education is a pathway to acquire specific skills that are needed in local workplace communities (Lucas, Spencer, & Claxton, 2012), however, it should not be limited to providing only vocational skills, as vocational skills are only a small part of career and vocational curricula (Repetto & Andrews, 2012). Secondary schools should be able to integrate career and vocational curricula programs to facilitate development of self-discovery as a skill that is important for career development (Sitlington et al., 2010)

Structured Work Experience

Despite the importance of work experience in secondary schools in relation to post-school employment regardless of the type and severity of disability (Benz et al., 2000; Karpur, Clark, Caproni, & Sterner, 2005; Luecking & Luecking, 2015; Rowjewski, 2002), literature suggests that work experience for students with severe disabilities is very limited (Burbidge, Minnes, Buell, & Ouellette-Kuntz, 2008; Carter et al., 2010; Davies & Beamish, 2009; Kraemer & Blacher, 2001). Furthermore, a study conducted by Landmark and Zhang (2012) on secondary students in seven counties in Texas, showed that only 40.1 % of students were reported to have engaged in paid or unpaid work experience. In addition, students with disabilities educated in special schools experienced a low percentage of work experience (59%) compare to student with disabilities educated in state high and non-government schools (82%) and special education units (86%) (Davies & Beamish, 2009). The study also revealed that only 15% of students with disabilities educated in special school engaged in paid work experience (Davies & Beamish, 2009). Yet, individuals who have paid work experience are more successful in terms

of finding employment after leaving school (Getzel & DeFur, 1997). In addition, work experience programs are perceived as positive learning experiences by school professionals and students (Mitchell, 1999). Through work experience, students with disability may develop autonomy, explore their vocational identities, develop career direction, and gain an understanding of workplace knowledge, skills, and values (Vondracek & Porfeli, 2008). Job placement is also among the recommended practices in transition programs (Getzel & DeFur, 1997).

Assessment

Assessment serves different purposes ranging from placement, grading, determining mastery on skills and concepts, and recommendations for future courses and interventions (Dorn, 2010; Neubert, 2012). In the transition process, assessment plays an important role as mandated in the IDEA (2004). Without a valid and reliable assessment, the IEP will fail to set measurable goals, evaluate the student's progress and hence determine which educational and related services are needed (Kirby v Cabell County Board of Education, 2006, p 9). Transition assessment defines the quality of transition planning and service (Morningstar & Liss, 2008) and serves as a foundation in transition services (Neubert & Leconte, 2013). The key principle for transition assessment is age appropriateness and ongoing formative assessment (Neubert, 2012; Neubert & Leconte, 2013). The Division on Career Development and Transition (DCDT) of the Council for Exceptional Children stated that age appropriate transition assessment can be defined as:

“an ongoing process of collecting information on the youth's needs, strengths, preferences, and interests as they relate to measurable postsecondary goals and the annual goals that will help facilitate attainment of postsecondary goals. This process includes a careful match between the characteristics of the youth and the requirements of secondary environments and postsecondary environments along with recommendations for accommodations, services, supports, and technology to ensure the match. Youth and their families are taught how to use the results of transition

assessment to drive the transition requirements in the IEP process, develop the SOP document, and advocate for needed or desired supports to succeed in meeting postsecondary goals”
(Sitlington, Neubert, & Leconte, 1997, pp. 70-71)

One of the keys to a successful school to work transition program is a comprehensive vocational assessment that incorporates multidisciplinary links between school and community agencies (Levinson & Palmer, 2005). Specifically, vocational assessment plays an important role in promoting career development and identification of needs in the area of employment related skills (Neubert, 2003, 2012; Sitlington et al., 1997).

Although direct observation is the most popular assessment tool, (Agran & Morgan, 1991), it is recommended that schools should employ a variety of methods of assessment, and not rely on any single method, as this may generate inappropriate career needs descriptions and impede the effectiveness of a potential career intervention (Niles & Harris-Bowlsbey, 2013). Transition assessment should also be well documented as it is important evidence for developing transition goals and informing IEP planning (Neubert & Leconte, 2013). Keeping students’ work samples is an example of ongoing (formative) assessment, however the school should ensure that they not only keep the samples, but should also use them as interest inventories to inform decision making for further actions (Neubert, 2003). To assess broad future prospects for employment, transition assessment should also place emphasis on assessing students’ current and potential future environments (Flexer, Luft, & Queen, 2013; Sitlington, Neubert, Begun, Lombard, & Leconte, 2007).

Support Service

While research shows that families are often confused with the arrangements made for post-school support, due to the complexity and different services that are involved (Sitlington et al., 2010), those services and supports should

be identified in planning in order to attain short and long term transition goals (Getzel & DeFur, 1997). The complexity of support services has been recognised as an inhibiting factor in transition services (Certo et al., 2003; Morningstar, Kleinhammer-Tramill, & Lattin, 1999).

Support services in relation to the use of assistive and adaptive technology have been used widely in developed countries (Burgstahler, 2003; Scherer, Elias, & Weider, 2010). This includes technology that assists the student directly such as word/speech recognition devices, and technology that is used in delivering transition programs. Research shows that digital simulation software is an effective tool to improve employment skills attainment (Zionch, 2011) and can be used to develop self-determination (Wehmeyer, Palmer, Williams-Diehm, Shogren, & Davies, 2011).

Interagency Collaboration

The interagency and interdisciplinary collaboration category of The Taxonomy for Transition Programming focuses on facilitating participation by different stakeholders such as business, labour unions, community service agencies, government organisations and other community resources (Kohler & Chapman, 1999).

Collaborative Service Delivery

High quality transition services are characterised by good information sharing between the school and related agencies (Kohler, 1996a, 1996b; Noonan & Morningstar, 2012). However, quality information sharing continues to be a challenge in interagency collaboration (Johnson et al., 2002), and literature shows that regular communication between special educators and other transition personnel is almost not-existent (Schmalzried & Harvey, 2014). Despite the importance of interagency collaboration for post school outcomes, no experimental research or

evidence-base currently exists to guide professionals in best practices in this area (Mazzoti, Rowe, Cameto, Test, & Morningstar, 2013). However, an example of interagency collaboration in a school to work transition service, and which could be implemented in school, is community-based work experience which has been shown to be cost-efficient and students who took part kept their jobs longer than a comparison group (Cimera, 2010).

Collaborative Framework

Although it is believed that systematic collaboration is a critical element in ensuring effective transition (Conway, 2014a; Mpofu & Wilson, 2004; Spooner, Bowder, & Uphold, 2011), research shows that interagency collaboration has emerged as a vital area in need of improvement for schools (Noonan et al., 2008; Xu, Dempsey, & Foreman, 2014). Some of the issues that have emerged in collaboration frameworks include a lack of guidelines on who is responsible for what (Agron, Cain, & Cavin, 2002; Oertle & Trach, 2007; Repetto, Webb, Garvan, & Washington, 2002), and a lack of well-defined expectations on what the school and related agencies want to achieve in relation to student outcomes (Trach, 2012). Improving collaboration frameworks also means improving other transition components such as human resource development, resource allocation, and student and family involvement (Noonan et al., 2008).

Family Involvement

Family involvement includes practices associated with parent and family participation in planning and delivering education and transition services, as well as practices that facilitate such involvement (Kohler & Chapman, 1999). Key elements of the family involvement category include family training and empowerment (Kohler, 1996b).

Family Involvement

Although the role of the family in facilitating transition can be either limiting or enriching (Mpofu & Wilson, 2004), parental involvement during the transition phase is essential (Conway, 2014a; Spooner et al., 2011). Family involvement plays an important role in transition planning as it provides valuable social, psychological, and material support. The roles of parents and families are even greater in supporting transition of students to community life (Crockett & Hardman, 2010a), including providing children with family values and culture (Powers et al., 2009), and self-determination (Morningstar et al., 2010). In addition, families can also be involved in building positive work habits, can promote future vocational choices and preferences, and family networking can also generate job opportunities (Mpofu & Wilson, 2004). The following teacher statement from a study conducted by Trainor et al. (2008) captured the importance of family networking "...parents who were able to network with business people and others in the community provide their children with valuable connections that could lead to employment" (p. 148).

In relation to family involvement in the development of the IEP, although there is an increase in parents attending IEP meetings in secondary schools (Cameto et al., 2004), particularly parents with older children (Wagner et al., 2012), many parents do not feel they are fully included or appreciated in IEP or transition meetings (Luft, 2013b). Yet, the quality of relationships between parents and teachers is a major factor for effective family involvement in a transition program (DeFur, Todd-Allen, & Getzel, 2001; Landmark, Zhang, & Montoya, 2007).

Family Empowerment

Effective family involvement can only occur if the school gives appropriate opportunities for parents to be involved from the very beginning of the transition process (Luft, 2013b). This includes providing pre-IEP planning activities, providing choices among supports that are available, identifying family needs, and providing the family with all appropriate information (Kohler, 1996b, 1996d; Kohler & Chapman, 1999). One example of this is involving parents in a person-centered approach where, together with their child, they also play an important role in decision making (Orentlicher, 2011).

Family Training

A family needs essential knowledge and supports to be involved effectively in the transition process and program (Luft, 2013b; McDonnell & Nelson, 2009; Wandry & Pleet, 2012). This includes training on transition related planning processes, promoting their children's self-determination, providing and seeking advocacy and legal issues, seeking and providing natural supports, identifying related agencies and services and support networks, and recognising and fulfilling their own empowerment (Kohler, 1996b).

Program Structure

The Taxonomy for Transition Programming promotes a structured program as to how transition services are facilitated (Spooner et al., 2011). This category involves a number of cluster activities: program philosophy, program policy, strategic planning, program evaluation, resource allocation and human resource management (Kohler, 1996b; Kohler & Chapman, 1999; Kohler & Field, 2003).

Program Philosophy

Program philosophy refers to a program mission, paradigm, values, and beliefs (Kohler & Field, 2003). A reliable transition program must have a strong philosophy and policy. It should consist of clear expectations in regards to four important aspects: an aim that states what will be achieved; methods and approaches that show how outcomes will be achieved; the person(s) who is responsible for the program; and, materials used in the program.

A strong transition program philosophy would be reflected in well-defined aims that state the program outcomes clearly. Students' strengths and weaknesses and their preferences should be taken into account when outlining the program aims (Conway, 2014a; Crockett & Hardman, 2010b; Forlin & Lian, 2008; Kohler, 1996b; Kohler & Chapman, 1999; Kohler & Field, 2003; Thoma et al., 2001). In regards to methods and approaches, they should be able to assist the students to acquire, apply, and evaluate their skills in different environments (Kohler & Field, 2003).

Program Evaluation

Program evaluation is a crucial component to measure the success of a transition program. This includes data-based management systems, the use of program evaluation for program improvement, ongoing program evaluation, specific evaluation of student outcomes, student and family roles in the program evaluation, needs assessment of secondary level and post-school services, and annual evaluation of interdisciplinary policies and procedures (Kohler, 1996b). Furthermore, related stakeholders should also be involved actively when undertaking program evaluation (Baer & Flexer, 2013). However, literature suggests that the implementation of program evaluation is limited. A study conducted by Beamish et al. (2012) concluded that there was a gap between teacher beliefs and actual implementation of program evaluation, both in ongoing evaluation and at twelve months post-school

(summative) evaluation. Similar to this, Test, Eddy, Neale, and Wood (2004) found that most of the schools in their study placed emphasis only on collecting data regarding student performance skills, and did not gather post-school outcomes data. In a study conducted by Strnadova and Cumming (2014) suggested that only one from 38 secondary schools performed follow up post-school evaluation to their graduates.

Strategic Planning

Another aspect of program structure is strategic planning. While rarely discussed in the literature review of transition programming (Kohler & Chapman, 1999; Kohler & Field, 2003), together with program evaluation, they are crucial in predicting successful transition (Hardman & Dawson, 2010; Kohler & Field, 2003). Strategic planning includes a focus on local issues and services at the community, regional, and state levels (Kohler, 1996b). To ensure the students with disabilities transitioned successfully, systematic strategic planning needed to be clearly established prior to the transition periods (Forlin, 2013). There are few studies that have focused on strategic planning; Beamish et al. (2012) identified low level implementation and a high level of uncertainty in strategic planning.

Program Policy

Program policy is linked to the philosophy underlying the transition program (Kohler & Chapman, 1999). Comprehensive policy activities in transition programs should include clear and structured transition programs, both in the education system and related adult agencies, that reflect schools' and related stakeholders' consistent support (Kohler, 1996b). However, as mentioned in the earlier section regarding policy and legislation, many countries still experience a lack of supporting policy regarding transition programming (Abdullah et al., 2013; Beamish et al., 2012;

Nhean, 2010; Olores, 2010; Samart, 2010; Shithath, 2010; Wong, 2010). The lack of policy in transition is concerning, however it is also disturbing that even with the existence of a transition policy (such as in Hong Kong), expectations of implementation of quality transition programs remain low (Poon-McBrayer, 2013). Furthermore, policies that often change and modify affect the level of stress experienced by the family of students with disabilities (Strnadova & Evans, 2013).

Human Resource Development

In relation to human resources management, a clear statement on persons responsible for specific activities and how responsibilities need to be shared between all persons involved in the program, and should be communicated clearly (Kohler & Chapman, 1999). Although many studies have demonstrated that transition services should coordinate collaboratively between agencies, special education teachers are still assigned as the main coordinator in delivering transition services (Knott & Asselin, 1999). Thus, competent teachers are a key to successful transition (Anderson et al., 2003; DeFur & Taymans, 1995). Although secondary special educators are challenged to play complex roles in transitioning students with disabilities, identifying competent teachers is more difficult (Morgan, Callow-Heusser, Horrock, Hoffmann, & Kupferman, 2014).

Research shows that teachers in secondary education feel unprepared to deliver effective transition services (Alnahdi, 2014; Forlin, 2013; Morningstar et al., 2008). Furthermore, inadequate teacher training or education also contributed to these circumstances (Anderson et al., 2003; Benitez, Morningstar, & Frey, 2009). On the contrary, teacher preparation, and teacher impressions of the sufficiency of that preparation, play a vital role in the success of a transition service (Wolfe et al., 1998). There is a strong relationship between the level of teacher preparation, and the

frequency of providing transition services. Teachers who feel more prepared to deliver transition services provide such services more frequently (Benitez et al., 2009).

There are two types of transition personnel in the USA: the secondary special education teacher, and the transition education service coordinators (Morningstar & Clark, 2003), however, most schools rely on secondary educators, and few rely on transition personnel (Morningstar & Clark, 2003). There is a specific body of knowledge and skills that a transition specialist needs to learn and demonstrate to be effective. This includes: knowledge of the principles and basic concept of transition education services; knowledge of the models of transition education and services; skills in using strategies in developing, organising, and implementing transition education and services; knowledge and use of collaboration competencies; and, knowledge and skills to address systemic problems in transition service delivery (Morningstar & Clark, 2003).

Resource Allocation

The resource allocation cluster includes sufficiency and efficiency in the use of resources, sharing resources, and the role of different stakeholders in resource allocation (Kohler, 1996b). Lists of used and available sources, including financial sources, should be made transparent (Kohler & Chapman, 1999). Although resource allocation plays an important role in transition programs, research that focuses solely on resource allocation is very limited. Although a review conducted by Kohler and Chapman (1999) indicated that from 20 studies of transition programs, none addressed whether sufficient or insufficient resources were allocated to transition programs, a study conducted by Davies and Beamish (2009) suggested that lack of funding in regard to post school options is limited. However, sharing resources

between educational institutions and related agencies in providing transition programs are encouraged by legislation such as the Rehabilitation Act and IDEA (Noonan & Morningstar, 2012). Furthermore, they claim that sharing resources plays an essential part in interagency collaboration. Examples of sharing resources between agencies include sharing costs for summer employment, staff costs, and transition fairs (Noonan & Morningstar, 2012).

Framework for the application of the model in Indonesia

This section explains the framework for the application of a Model for Transition Programs in Indonesia. It is proposed that there are four elements that can be used to promote successful outcomes in employment. The core element is transition education, particularly the school to work transition program, and the use of an effective model. Transition programming should accommodate essential components, such as those described in the Taxonomy for Transition Programming (Kohler, 1996b). The other three elements are: a) schools, b) external stakeholders such as district or provincial government and organisations that are directly involved in special education, disability, and employment; and, c) national government. Although transition education is commonly arranged and provided in the school setting, the three elements cannot be separated in providing the necessary supports for transition programs. The four elements and their relationships are illustrated in Figure 6.

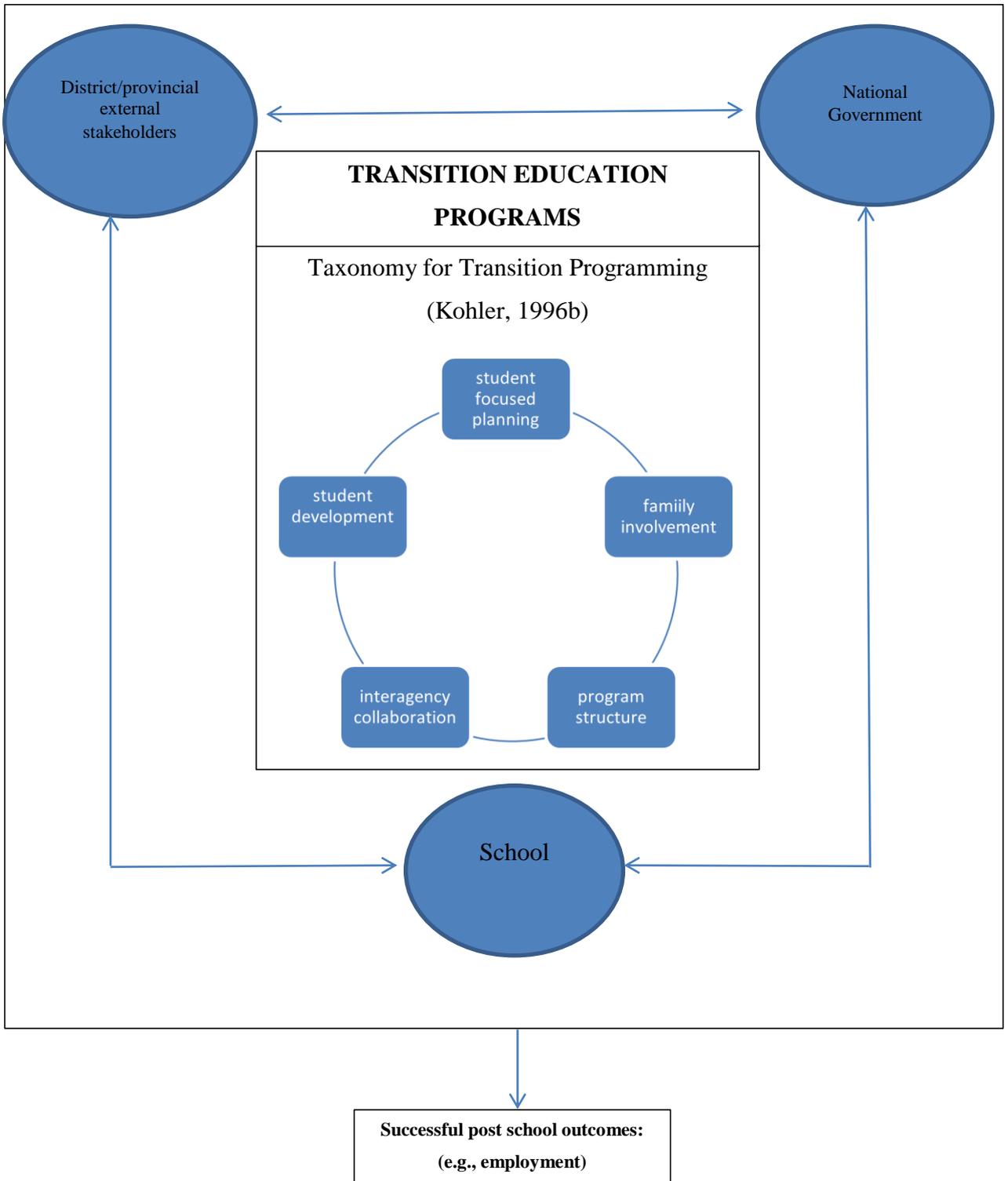


Figure 6 Framework for the application of a model in Indonesia

Element 1: Transition education: school to work transition

Transition education plays an important role in providing suitable skills for successful student post-school achievements. Although specified in the government document (Peraturan Pemerintah no 72, 1991) that the aim of schooling in special schools is to achieve post-school outcomes such as independent community living, further education and training, and employment; transition education in special education in Indonesia is still at the emerging stage. School to work transition programs do not accommodate transition education comprehensively as schools tend to focus exclusively on vocational skills education. As there is a lack of people with disabilities involved in employment (MoSA, 2011), schools should employ a school to work transition program model that can achieve improved employment outcomes (Kohler & Chapman, 1999). The Taxonomy for Transition Programming (Kohler, 1996b) provides a best practice model which incorporates the crucial categories of student focused planning, student development, family involvement, interagency collaboration, and program structure. High quality school to work transition programs can only be accomplished if schools employ comprehensive transition programs that support well-established interagency collaboration (Conway, 2014a; Mpofu & Wilson, 2004; Spooner et al., 2011).

Element 2: School

A positive, supportive school culture and competent school staff are vital in providing high quality school to work transition programs (Kohler & Field, 2003). Schools should provide clear guidance related to delivering school to work transition programs, and collaboratively involving all school components such as teachers and

school staff, students, and parents in planning, implementing, and evaluating the program (Baer & Flexer, 2013). Students and their families should be the central focus when planning the program, and schools should ensure that their teachers are competent in delivering all aspects of the program (Conway, 2014a; Crockett & Hardman, 2010b; Forlin & Lian, 2008; Kohler, 1996b; Kohler & Chapman, 1999; Kohler & Field, 2003; Thoma et al., 2001).

Element 3: External Stakeholders at district/provincial level

External stakeholders at the district/provincial level are government and non-government organisations directly involved in disability related services and employment, including the Provincial Department of Education, Youth and Sport, the District Department of Social Affairs, the District Department of Manpower and Transmigration, as well as disability organisations. It also includes community and business leaders. In addition, higher education institutions that provide special education teacher preparation programs should be considered as external stakeholders. These institutions play an important role in preparing competent teachers to deliver high quality school to work transition programs as well as in-service training for teachers alongside government and businesses (Beamish et al., 2012; Strnadova & Cumming, 2014; Winn & Hay, 2009). All stakeholders should be aware of the value of quality transition programs and this should be reflected in their support and commitment (Kohler & Field, 2003).

Element 4: National Government

Government at the national level supports transition programs through policy and funding. Transition education should be addressed both in broader disability policy, and specific policy contexts (Beamish et al., 2012; Strnadova & Cumming, 2014). Furthermore, this policy should place emphasis not only on the content (the “what”), but also on the groups of people who are involved in transition education, that is students, families, schools and related stakeholders (the “who”) and explain support that is available to access programs (the “how”).

Summary

This chapter has reviewed transition education and presented historical models employed in delivering transition programs. These models included the Will, and Halpern models as examples of existing practices. Most importantly, the chapter has also introduced and reviewed the Taxonomy for Transition Programming (Kohler, 1996b) that is used as the main theoretical framework throughout this study. This Taxonomy consists of five categories, and a series of clusters within each category, that interrelate to form a best practice model that was derived from research, and which has been applied extensively in real settings.

Challenges in school to work transition program for students with physical disabilities are greater from those who do not experienced physical disabilities as barriers for successful transition are not only emerged from individual factor such as physical limitations but also environmental aspect such as lack of accessibility. Many individual with physical disabilities identified a poor fit between them and the adult world (Stewart et al, 2002). Therefore, school to work transition program that could

address both personal and environmental issues is essential to build the bridge so they can be prepared for the life afterschool. In relation to the importance of transition education in building that bridge, this chapter has provided framework for the study specifically on how the implementation of school to work transition program for students with physical disabilities in the selected schools, support and barriers in implementing the program, and perspectives and expectations from different stakeholders in relation to school to work transition program.

This chapter has also explored transition program teacher preparation issues. The chapter concludes with a framework for the application of the proposed model in Indonesia. This framework consists of the inter-relation between four elements that support transition education in Indonesia. The core element is the use of the Taxonomy for Transition Programming in Transition Education within special schools. The other elements are the inter-collaboration of: the school; external stakeholders at the district and provincial levels; and, the national government. The following chapter discusses the research methodology and methods employed in this study, including the research design, data collection methods, research sites, participants, and data analysis.

CHAPTER 4

RESEARCH METHODOLOGY

Introduction

The methodological framework employed in the research is outlined in this chapter. It includes the study design followed by data collection procedures. Following that, discussions on the data analysis, and accuracy and trustworthiness are also presented.

Study Design

As the purpose of the research was to explore the current practices in school to work transition programs for students with a physical disability from the collective views of different stakeholders, the epistemology underpinning this research is constructivism. In constructivist methodology, there is an assumption that there are multiple views of reality from the perspectives of the research participants, and these are pivotal in creating knowledge (Gay, Mills, & Airasian, 2011).

In accordance with constructivist methodology, this research used a qualitative approach. The approach enabled the researcher to understand and examine the issues contextually (Ary, Jacobs, Sorensen, & Razavieh, 2011; Merriam, 1998; Patton, 2002). In order to gain a deep understanding of the processes and meanings involved in the study, this research utilized a case study design (Merriam, 1998; Punch, 2014; Stake, 2005, 2008). A case study design was selected as the research was concerned with the process of discovery and placed strong emphasis on contexts (Merriam, 1998; Punch, 2014; Yin, 2014). This included the specific school to work transition programs, the schools, the teachers, the students, the families and their communities. Furthermore, a

case study approach was appropriate when the researcher has little control over the events (Yin, 2014).

The case study design in this research could be classified as a multiple case study (Johnson & Christensen, 2014; Merriam, 1998) or a collective case study (Stakes, 2008) approach. A multiple case study design was chosen because it can lead to better understanding (Stakes, 2008) and can present the multiple perspectives that represent the complexity of the context (Creswell, 2012).

This research would be the first examining transition programs in an Indonesian special education setting. Four special schools located in the Bantul District, Yogyakarta Indonesia were purposefully selected to explore transition programs.

The framework that was used to investigate the transition program is the Taxonomy for Transition Programming introduced by Kohler (1996b). The Taxonomy can be seen in Figure 7.

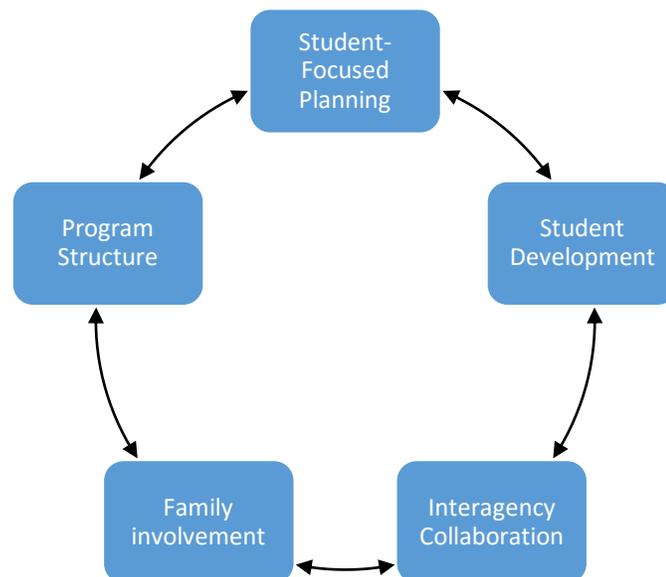


Figure 7 The Taxonomy for Transition Programming

Adapted from: Kohler (1996b)

As discussed in the literature review, the Taxonomy has five inter-related categories, which are:

- (a) Student-focused planning that includes the clusters of IEP development, student participation, and planning strategies.
- (b) Student development that includes the clusters of life skills instruction, career and vocational curricula, structured work experience, assessment, and support service.
- (c) Interagency collaboration that includes the clusters of collaborative framework and collaborative service delivery.
- (d) Family involvement that includes the clusters of family training, family involvement and family empowerment.
- (e) Program structure that includes the clusters of program philosophy, program policy, strategic planning, program evaluation, resource allocation, and human resource development.

Research Questions

In order to address the purposes of the research, three research questions were established. The specific questions as outlined in Chapter 1 are:

1. How do special schools implement school to work transition practices for students with a physical disability? What factors influence the implementation?
2. What barriers and supports affect implementation? How can these barriers be addressed? How can these supports be strengthened?

3. What are the perspectives and expectations of stakeholders (community business leaders, disability organisations, and government agencies) regarding school to work transition practice?

Data Collection

This section discusses the selection of participants, data collection methods, and data analysis procedures. Data collection was determined based on the Taxonomy for Transition Program framework. Data were collected and comparisons made between, and among, the schools, and the perspectives and expectations of different stakeholders. These data were examined to develop an understanding of the actual model of transition programs in the case study schools.

The first part of the research examined the implementation of school to work transition programs in each of the four special schools. These were examined using the five categories in the Taxonomy (Kohler, 1996b). Informants in this part included principals, teachers, parents, and students. These data are reported in Chapter 5, which is divided into three case studies: case study 1 reports data from Special School A; case study 2 reports data from Special Schools B and C; and, case study 3 reports data from Special School D. Data from Special Schools B and C were combined due to the similarity between these schools in terms of the size and structure of the schools and findings.

The second part of the research focused on supports and barriers experienced by the schools in implementing their school to work transition programs. Strategies to strengthen the supports and ways to overcome the barriers were also investigated.

The third part of the investigation concerned perspectives and expectation about the school to work transition programs by non-school personnel, who worked in related services and organisations. These included staff from the Provincial Department of Education, Youth and Sport; disability coordinators in the District Department of Social Affairs and the District Department of Manpower and Transmigration, community business leaders; and the head of a disability association. These data are reported in Chapter 6.

In response to the third purpose of the study, a proposed model for the implementation of enhanced school to work transition programs in Indonesian special schools setting was developed based on findings and the research literature, and is presented in Chapter 8. The Model utilised the Taxonomy for Transition Programming (Kohler, 1996b) used throughout the current study and applied in an ecological systems perspectives theory framework over the Taxonomy to address the levels of influence on transition programs in Indonesia (Bronfenbrenner, 1977). Bronfenbrenners' social system theory (Bronfenbrenner, 1977, 1979, 1986) is a useful concept in that it considers an ecological perspective of complex interactions between the individual and the context, in this thesis the layers of influence on the students' transition to work program. Leading out from the individual through engagement with the Taxonomy within the schools, to engagement with the local district/provincial layer, to the national government layer, provides a framework in which to consider the influences on the transition to work programs in the school. The layers are not set, or separated, but serve only as reminder that school transition programs do not operate in isolation. It also provides the

opportunity to see the influence (or not) of external factors on the operation of a school's transition to work program.

Methods of Site and Participant Selection

Purposive sampling was employed in determining sites and participants (Creswell, 2012; Gall, Borg, & Gall, 2005; Patton, 2002). Purposeful sampling refers to selection of research sites and participants selected intentionally by the researcher “to learn or understand the central phenomenon” (Creswell, 2012, p. 206). As this study was conducted to gain an understanding of the practices of school to work transition for students with physical disabilities in Indonesian special schools, it is important to purposely target special schools that provide education for students with physical disability, and related external stakeholders directly involved with special education.

Within purposeful sampling, four groups of research participants were identified: (a) school staff that included principals and teachers; (b) students, (c) parents and (d) external stakeholders.

All external stakeholder organisations were situated at the district level, with the exception of the Department of Education, Youth and Sport, which was located at the provincial level. Although there was a Department of Education presence at the district level, it only administered and supervised regular primary and secondary schools. Administration and supervision of special schools in Indonesia is managed at the provincial level.

By conducting research in one district, discrepancies related to irrelevant factors have been reduced, as within the districts, services are arranged and implemented by a

common set of rules and legislation. A summary of the participants is shown in Table 10.

Table 10 Summary of research participants

Participants	N	
Principals	4 (M: 3	F: 1)
Teachers	24 (M: 18	F: 6)
Students	10 (M: 0	F: 10)
Parents	9 (M: 2	F: 7)
School supervisors	3 (M: 3	F: 0)
Staff from Provincial Department of Education, Youth and Sport	1 (M)	
Staff from District Department of Social Affairs	1 (M)	
Staff from District Department of Manpower and Transmigration	1 (M)	
Community business leaders	3 (M: 2	F: 1)
Staff from a disability organization	1 (M)	
Total participants		57

Note: M= Male F=Female

Preliminary Contact

Preliminary contact was made with all special schools located in Bantul District. In 2011, there were 17 Special schools located in Bantul District (Department of Education, Youth and Sport Yogyakarta, 2011). The researcher communicated with each school to find out whether there were students with a physical disability enrolled in their school. From 17 special schools, four schools were found to fit within the criteria. In terms of external stakeholders, preliminary contact was made with the relevant government departments and organisations, disability services and business leaders to ensure that the researcher interviewed the appropriate person. Letters of introduction were given to relevant stakeholders (schools and external stakeholders) targeted in the study. Appendix D shows an example of the letter of introduction to the schools.

Issues in accessing the population and relevant data

While the number of people involved in a qualitative study is not a key issue because qualitative data relies more on meaning rather than generalisation from a large sample (Mason, 2010), conducting a study of a low incidence disability type has potential challenges.

The first challenge was to find schools that educated students with physical disability and that fitted with the criteria of the study. The population of students with a physical disability in Bantul District comprises about 11% of the total disability population (Jurusan PLB FIP UNY, 2011) and not every special school has students with a physical disability. Only five out of 17 special schools located in Bantul District educated students with physical disability. From the five special schools, four schools educate students with a physical disability who matched the criteria of the study.

The number of students with a physical disability in each school also created a problem. With such a limited number of students, it was not possible to balance the number of students with a physical disability and gender in each school. One school had more students than the other schools, and all the participants were female. Even though, all the student participants were female, the questions addressed in the interviews however were not specific to gender. It could be argued that, responses may be different in regards to student and parents responses if there were male participants. Table 11 shows the number of students involved in the research.

Table 11 Number of student participants

Name of the school	Number of student participants
Special school A	6
Special school B	1
Special school C	1
Special school D	2

The second challenge was related to involving the students with a physical disability in the research. Many of the research participants had cerebral palsy that also affected their communication and (in some cases) intellectual functioning. Developing questions in the interview that were easily understood, and understanding participants' responses during the interview, were challenges. Although some of the students were placed in a class according to their intellectual functioning, written information about their cognitive and communication skills were not available from the schools. The researcher had opportunities to observe their skills and abilities during the observation periods. The degree of the disability affecting their motor and communication skills is shown in Table 12.

Table 12 Characteristics of the student participants

No	Name of Students	Gender	Category	Program	Description
1	Student 1 SS A	F	CP	D1	<ul style="list-style-type: none">• Supported by wheelchair.• Spasticity affected both hands and legs severely with the right hand the most affected.• Speech was not comprehensible.• During the focus group, communication with her depended mostly on her friend to translate her speech.
2	Student 2 SS A	F	Paralysis	D1	<ul style="list-style-type: none">• Supported by wheelchair.• Could use her hands, but both are weak.• A talk active person.
3	Student 3 SS A	F	CP	D	<ul style="list-style-type: none">• Cerebral palsy affected only the left part of her body.• Walked independently without using an assisting device.• Her speech was comprehensible.
4	Student 4 SS A	F	CP	D	<ul style="list-style-type: none">• Cerebral palsy affected only the right part of her body.• Walked independently without using any assisting device.• Her mouth control was poor, and saliva dripped from her mouth.• Her speech was understandable.
5	Student 5 SS A	F	Paralysis	D	<ul style="list-style-type: none">• Supported by a wheelchair.• Her speech was comprehensible.• Although she was placed in class D (that is a special class that accommodated student with a physical disability without intellectual disability), according to her teacher, her intellectual functioning was diminished.
6	Student 6 SS A	F	CP	D	<ul style="list-style-type: none">• Cerebral palsy affected the right part of her body.• Walked independently without using any assisting devices.• Her speech was comprehensible, however she had little control over her mouth, with saliva dripping sometimes.

No	Name of Students	Gender	Category	Program	Description
7	Student 1 SS B	F	CP	D1	<ul style="list-style-type: none"> • Her spasticity affected both sides of her body mildly. • She had a movement and could not control her right hand (reflex). • Her speech was comprehensible.
8	Student 1 SS C	F	CP	D	<ul style="list-style-type: none"> • Cerebral palsy affected the left side of the body mildly. • Her speech was comprehensible. • Walked independently without using any assisting device.
9	Student 1 SS D	F	CP	D1	<ul style="list-style-type: none"> • Cerebral palsy affected the right side of her body moderately. • Although she can walk independently without using any devices, her right arm was severely affected. • Her speech was comprehensible.
10	Student 2 SS D	F	CP	D1	<ul style="list-style-type: none"> • Cerebral palsy affected the right side of her body mildly. • She could use both hands. • Walked independently without an assisting device. • Her hearing was limited and she could not speak. Therefore she spent most time in a class with hearing impaired peers.

Note: D class for students with physical disabilities without intellectual disabilities

D1 class for student with disabilities with intellectual disabilities

Specific differences in intellectual functioning were not taken into account in this research, as this research focused on transition programs within the vocational curriculum. Only in the academic curriculum, is there a difference in the level of content taught.

The third challenge related to the students' fears and anxiety. One of the student participants initially did not allow her mother to be interviewed. While her mother gave consent to be interviewed at the school, this particular student frequently left her class to ensure that her mother stayed at school during school hours. When this student saw her mother talking to the researcher, the student became angry and would not allow her mother to be interviewed, the student was afraid that the interview would be discussing the student herself. The researcher approached the student to explain (over a series of meetings) that the parent interview was about the school program, not about her. This resolved the issue, and the parent was interviewed.

Ethical Consideration

Ethics approval was obtained from the Social and Behavioural Research Ethics Committee (SBREC) Flinders University with project number 5475 (Appendix E). Individuals were given the research information letter (Appendix F). As the research involved students with physical disabilities, who may also have intellectual disabilities, consent was given by their parents. Students also received accessible research information (Appendix G). In order to ensure confidentiality, anonymity is maintained throughout the research through coding of all respondents' comments.

Methods of Data Collection

Data were collected through several techniques including observations, focus groups interviews, individual interviews and document analysis. Following are details of each technique.

Observation

Direct observation has long been used for the conduct of social research, and has been adopted broadly by psychologists and educational researchers (Punch, 2014). Observation can be defined as a process of data collection by watching and looking at the participants. Creswell (2012, p. 213) maintains that observation is “a process of gathering open-ended, firsthand information by observing people and places at a research site”. Observation is a significant method of gathering data about people because “people do not always do what they say they do” (Johnson & Christensen, 2014, p. 236).

Although observation was not the main data collection method used in the research, it did play a significant role in the research. Observation was taken as firsthand information, and to familiarise the researcher with the research sites and participants, and vice versa. Through observation undertaken at the beginning of the study, student participants were also able to familiarise themselves with the presence of the researcher. As a result they showed trust and confidence during the focus group interviews.

Observation focused on how the students were supported through teacher instruction in activities including work habits, social skills and self-determination during the vocational classes. After consulting vocational teachers at each school, observation schedules were developed according to vocational classes timetables. Observation schedules in SS A was organized two days a week which is Monday

and Wednesday and once a week in SS B, SS C and SS D which is Tuesday, Thursday, and Saturday respectively. Observation occurred during vocational classes about 2x45 minutes. There were five visits for observation purposes in every school. To facilitate the observation, an observation guide was prepared (AppendixH). Field notes were created following each observation. A total of 20 field notes were generated from the four special schools.

Interview

The frequency of using of interview techniques in qualitative study, is about the same as observation techniques (Creswell, 2012), and is one of the main tools of qualitative inquiry (Punch, 2014). The interview is a process of developing understanding between the researcher and the participants that places emphasis on gaining information (Gay et al., 2011), and was the main data collection method in this research. The interview methods used were in two formats: individual interviews, and group interviews. In this study six focus groups were established. In each school, there were three focus groups: a group of teachers, a group of students and a group of parents.

Focus group discussion with teachers

There are four focus group discussion (FGD) within the teacher participants that are FGD of teacher SS A, teacher SS B, teacher SS C, and teacher SS D. Each FGD consist of six teachers whom three of them are class teachers and three are vocational teachers. The selection and organisation of the date and venue for the FGD was arranged during observations. To ensure the comfort of teacher participants and effectiveness of the FGD, it was decided that the FGD took place in the school after school has finished. The FGD took placed in a classroom in SS A and SS D, in the teacher room in SS B, and in the guest room in SS C. Before starting the FGD,

the researcher arranged the chair in O shape so the participants could see each other. The researcher also performed the role as moderator. A set of questions guide for FGD was prepared (Appendix I). The questions were adapted from the Taxonomy Transition Program (Kohler, 1966b; Kohler & Chapman, 1999). These questions were intended to guide the FGD. Questions were varying based on participant responses to preceding questions.

Once the participants were settled, the researcher explained the overview of the FGD and highlighted by the fact that the FGD is not to agree on something but to bring different of perspectives on the issues of school to work transition for students with physical disabilities. Before discussing the key questions, participants were invited to introduce themselves. In the end of FGD, participants were given opportunity to say something that is important and have not been covered in the questions. The researcher then expressed appreciation for participant participation. The FGD were audiotaped and lasted for 60-90 minutes. The researcher generated verbatim transcriptions from the FGD and then imported to Nvivo 10 for data analysis.

Focus group discussion with parent

There was only one FGD in parent participants that is FGD of parent of SS A. This is mainly due to small number of parent participants in another school. The parent FGD in SS A consist of five parents (M=2 F=3). FGD for parent SS A is arranged during the school hours while they were waiting for their children and located in the school. The school facilitated one spare classroom for FGD. A set of interview guide (Appendix I) was prepared. The questions were adapted from the Taxonomy Transition Program in the section of family involvement categories (Kohler, 1966b; Kohler & Chapman, 1999). These questions were intended to guide

the FGD. Questions were varying based on participant responses to preceding questions. Similar to Teachers' FGD, the researcher arranged the seating in O shape to maximize interaction between participant and researcher. The researcher also play role as a moderator.

Before the discussion of the key issues, participants were asked to introduce themselves and were advised to express their opinion honestly. Different to teacher FGD where all the teachers can express their opinion in voluntary manner, some of parent participants needed to be encouraged to speak. In the end of FGD, parents were thanked to participate in the study. The FGD were lasted in approximately one hour. It is also audiotaped and transcribed then imported to NVIVO 10 for data analysis.

Focus group discussion with students

There was only one FGD within student participants that FGD of student participants in SS A. This was also because of limited number of student participant in another school. The number of student participants involved in the FGD was six students whom all of them are female. The arrangement of FGD was organized during observation where the students decided to have FGD after school hour in their classroom.

Before starting the FGD, researcher organised the seating arrangement to O shape and moved some chairs to give room for the students who use wheelchairs. A set of questions that was adapted from the Taxonomy Transition Program: Student Focused Planning and Student Development categories (Kohler, 1966b; Kohler & Chapman, 1999) were prepared (Appendix I). Similar to Parent' FGD, researcher who play her roles as a moderator, also needed to encourage the student to express their opinion regarding the issues. Due to limitation of communication that resulted

from their disabilities, one of the participants could not speak clearly. The researcher sought assistance from parents and their peers to facilitate interactions in the student focus group and also used written communication. The focus groups lasted approximately for 30 and were audio-taped and transcribed, then imported to NVIVO 10 for data analysis.

Individual Interview

Separate individual interviews were conducted with school principals, school supervisors and other external stakeholders. 16 individual interviews conducted in total that includes four interviews with school principals; four interviews with parents, three interviews with school supervisors; one interview with staff from Provincial Department of Education, Youth, and Sport, one interview with staff from District Department of Social affairs; one interview with staff from District Department of Manpower and Transmigration; three interviews with community business leaders; and one interview with staff from a disability organisation.

A set of questions guide for individual interview was prepared (Appendix I). The questions were adapted from the Taxonomy Transition Program (Kohler, 1966b; Kohler & Chapman, 1999). These questions were intended to only guide the interview. Before interviewing the participants, the researcher made appointment by phone and by person to arrange time and location of the interviews. Most of the individual interview was conducted in the participants' office with the exception of parent participants. Parent participants interviews were conducted either in the school while they waiting for their children and at participant house. Each interview lasted in approximately one hour. It was audio taped and transcribed then imported to NVIVO 10 for data analysis.

Document analysis

Document analysis provides a valuable source of information that can be analysed in order to understand a phenomenon (Creswell, 2012). The documents accessed in the research were: the school's curriculum, and students' records. The researcher did not utilize other document as informal conversation before conducting individual interviews with the external stakeholders indicated that there is no school to work transition related document available in their departments.

Data Analysis Procedure

Data from 20 field notes, 6 focus group discussions, 16 individual interview, 4 school documents, and 10 students report were successfully represent rich and rigorous data. d. All data then imported to Nvivo 10 (QSR International Pty Ltd, 2012). The use of Nvivo 10 Software as data analysis tool is numerous as it can handle large amount of data and uncover connections in ways that are not possible when doing manually (QSR International Pty Ltd, 2012). Before performing analysis, the researcher was still demanded to review the data for numerous time to decide which data were coded, name of themes, and names of codes.

Data were analysis according to Patton (2002) where it involved initial stages, inductive analysis, and deductive analysis.

Initial stages

At the initial stage of data analysis, data collected from individual interviews and focus groups were transcribed. Field notes from observations were organised and all related documents were copied. Included in the initial stages was also consolidating raw data into more manageable data. Because the researcher did data

collection and transcribing independently, the researcher arrived at this stage with sufficient comprehension of the data. Data from individual interview and focus group discussion served as the main data as it consist more comprehensive data, whereas documents and field notes derived from observations were used as a supplementary data.

Inductive analysis

The next stage in the research was to explore the data and develop appropriate codes (Creswell, 2012) to determine patterns, themes and content analysis (Patton, 2002). This procedure referred to what Patton (2002) termed as inductive analysis. In addition to manual coding generated by the researcher, Nvivo 10 software (QSR International Pty Ltd, 2012) for qualitative data analysis was employed. In this stage, data were rearranged and coded according to theme that is developed by the researcher. A range of theme was generated including barriers: transportation, further training, discrimination, teacher competencies, assessment, student-teacher ratio, curriculum, etc. Within codes created in NVIVO 10, the researcher could easily identify the source and references related to the codes.

Figure 8 display themes that appear frequently in the transcript. These includes *barriers to transition program* (33 references, 7 sources), *parent participation in the program* (32 references, 11 sources), *human resources development* (30 references,7 sources), *vocational skills*, (24 references, 13 sources), *interagency collaboration* (23 references, 7 sources), *work experience* (21 references, 9 sources), *vocational and academic curriculum* (17 references, 10 sources), *student center* (13 references, 8 sources), *parent empowerment* (11 references, 6 sources), *student participation* (11 references,7 sources), and *resources allocation* (11

references, 4 sources).

Name	Sources	References	Created On	Created By	Modified On	Modified By
barriers to transition program	7	33	15/05/2013 9:31 PM	NUR	16/05/2013 9:14 PM	NUR
parent participation in school program	11	32	15/05/2013 6:02 PM	NUR	16/05/2013 9:12 PM	NUR
human resources development	7	30	15/05/2013 9:31 PM	NUR	16/05/2013 9:14 PM	NUR
vocational skills	13	24	15/05/2013 6:49 PM	NUR	16/05/2013 9:18 PM	NUR
interagency collaboration	7	23	15/05/2013 9:28 PM	NUR	16/05/2013 8:51 PM	NUR
work experience	9	21	15/05/2013 8:44 PM	NUR	16/05/2013 9:10 PM	NUR
vocational and academic curriculum	10	17	15/05/2013 8:20 PM	NUR	16/05/2013 9:18 PM	NUR
student centered	8	13	15/05/2013 8:19 PM	NUR	16/05/2013 9:16 PM	NUR
parent empowerment	6	11	15/05/2013 6:56 PM	NUR	16/05/2013 9:12 PM	NUR
student participation in program planning	7	11	15/05/2013 9:26 PM	NUR	16/05/2013 8:58 PM	NUR
resource allocation	4	11	16/05/2013 2:02 AM	NUR	16/05/2013 9:17 PM	NUR
parent' expectation	6	10	15/05/2013 6:47 PM	NUR	16/05/2013 11:00 AM	NUR
barriers to parents involvement	7	10	15/05/2013 6:51 PM	NUR	16/05/2013 9:12 PM	NUR
assessment	8	10	15/05/2013 9:27 PM	NUR	16/05/2013 9:20 PM	NUR
student development	6	10	15/05/2013 9:36 PM	NUR	16/05/2013 9:16 PM	NUR
post school outcomes	7	10	16/05/2013 1:40 AM	NUR	16/05/2013 9:20 PM	NUR
access to information	6	9	15/05/2013 5:55 PM	NUR	16/05/2013 12:05 PM	NUR
further training in vocational	7	8	15/05/2013 5:53 PM	NUR	16/05/2013 11:56 AM	NUR
teaching employability skills	6	8	15/05/2013 9:40 PM	NUR	16/05/2013 9:22 PM	NUR
program planning, implementation and evaluation	5	7	15/05/2013 9:25 PM	NUR	16/05/2013 9:19 PM	NUR
program development	5	7	16/05/2013 2:46 AM	NUR	16/05/2013 9:17 PM	NUR
parent' perception on teacher competencies	3	6	15/05/2013 6:35 PM	NUR	15/05/2013 9:06 PM	NUR
children involved in parents business	3	5	15/05/2013 6:42 PM	NUR	16/05/2013 8:53 PM	NUR
students' interest	3	5	15/05/2013 7:39 PM	NUR	16/05/2013 9:04 PM	NUR
Parent perception on their children independency	3	4	15/05/2013 6:00 PM	NUR	15/05/2013 8:28 PM	NUR

Figure 8 Nvivo 10 display most coding theme in inductive analysis

Deductive analysis

The final step of data analysis involved deductive analysis (Patton, 2002). Based on the researchers' coding schemes, data were re-arranged in Nvivo 10 (QSR International Pty Ltd, 2012). It were then analysed according to an existing framework, that is The Taxonomy for Transition Programming (Kohler, 1996b). A range of theme that was generated in inductive analysis stage then corresponded into the Taxonomy for Transition Program categories. For example: barriers to transportation fits to family involvement category; discrimination fits to program structure category; student participation fits to student-focused planning (more detail of example can be seen in the Table 13).

Table 13 Example of coding validation of the Taxonomy for Transition Programming

Transcript (Initial stages)	Actual coding (Inductive analysis)	Category in The Taxonomy (Deductive analysis)
I had difficulty in transportation because I only have one motorcycle and my husband often uses it for work.	Barriers: Transportation	Family involvement
Sometimes the teacher discriminates against the students. The students from high economics backgrounds receive high attention. But the students from low economic backgrounds have only modest attention.	Discrimination	Program structure
I think she cannot think about that. But if there are offers from NGOs to do some training, I will send her. It is not meant that I want to push her away, but all I want is to equip her with various skills.	Further training	Program structure
In my opinion they are capable only of mastering the content; they are not capable of delivering the content to special needs students. Even though they have attended a course for two semesters known as special education certification, it is not enough to equip those teachers with the appropriate teaching skills.	Teacher competencies	Program structure
We do not involve students in all those activities. It is difficult for them to participate in those activities, they do not have initiative.	Student participation	Student focused planning
Unfortunately, we do not assess and document it systematically. It is based only on teacher observation.	Assessment	Student Development
We also have a teacher crisis at the moment. According to the ideal teacher-student ratio, we need 116 teachers but we have only 104 teachers and 8 teachers will be retiring this year.	Student- teacher ratio	Human resource development
Based on my observation, special education services still put less emphasise on future life. There's still an emphasis on academics. Yet, academic matter for student who has intellectual disability is not really you know, advanced. In my opinion, we give less emphasis to life skills, skills for life and future life.	Vocational and academic curriculum	Student development
We pay the students based on what they achieve, for example in sewing class, they can cut 80 or 100 pieces, and then the school will pay for it.	Paid work experience	Student Development
We invite an expert in bitternut making to teach us about bitternut production	Collaboration with business	Inter-agency collaboration

As the research was a collective case study, the data analysis involved two different processes: a case theme analysis; and a cross-case theme analysis (Creswell, 2013). A case theme analysis took place within the case study schools where each case school was analysed separately according to the steps explained

above. A cross-case theme analysis looked across case study schools where data are compared among the schools.

Accuracy and Trustworthiness

In order to enhance the accuracy and trustworthiness of the study, the researcher employed several techniques. First of all, triangulation was used. Triangulation refers to “the process of corroborating evidence from different individuals (e.g., a principal and a student), type of data (e.g., observational field notes and interviews), or methods of data collection (e.g., documents and interviews) in descriptions and themes in qualitative research” based on (Creswell, 2012, p. 259). In this study, the process involved a variety of data collection methods such as observation, interviews and documentary evidence gained from individuals in different groups such as school staff, students, parents, others stakeholders and written documents.

Secondly, the accuracy and trustworthiness of the study was maintained through member checking by taking the points of finding back to the participants and discussing the validity of the findings (Creswell, 2012). Thirdly, the accuracy and trustworthiness was preserved by external audit. In this case, the researcher took the findings to the research supervisors. Six samples of transcripts were coded independently by the researcher and each of the research supervisors. The coding generated by the researcher and research supervisors was then calculated using Nvivo 10 (QSR International Pty Ltd, 2012) to determine the Kappa Coefficient. The range of the kappa coefficient has three values which are shown in Table 14.

Table 14 Interpretation of Kappa coefficient

Kappa Value	Interpretation
Below 0.40	Poor agreement
0.40 – 0.75	Fair to good agreement
Over 0.75	Excellent agreement

(QSR International Pty Ltd, 2012)

The average of Kappa coefficient obtained from all six samples was 0.83 and interpreted as “excellent agreement” (QSR International Pty Ltd, 2012). The average kappa value for each sample transcript is shown in Table 15.

Table 15 Kappa value of each transcript sample

No	Sample of transcript	Kappa value	Interpretation
1	Sample 1	0.91	Excellent agreement
2	Sample 2	0.74	Fair to good agreement
3	Sample 3	0.80	Excellent agreement
4	Sample 4	0.91	Excellent agreement
5	Sample 5	0.73	Fair to good agreement
6	Sample 6	0.86	Excellent agreement
	Average	0.83	Excellent agreement

The coding of the two samples that were in the “fair to good” agreement category were reviewed and refined. The sample of coding refinement is shown in Table 16 where A, B, and C represent the researcher and each of the research supervisors.

Table 16 Example of coding validation to the Taxonomy for Transition Programming

1	We have supplementary food program every Wednesday and Friday. We have snack on Wednesday and meal on Friday. Some of students only come to the school every Wednesday and Friday just to receive the food. That is what attracts them to attend school.				
	Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)
	Resource allocation	Barriers to family involvement	Resource allocation	Resource allocation	Use of the resource for supplementary food program
2	In average, I could only take my daughter three or four times in a week to school. The teachers questioned the frequency yet I did not have to pay for the tuition fees. But because of transportation and time difficulties I had to move her to [name of special school].				
	Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)
	Barriers to family involvement	Barriers to collaborative framework	Barriers to family involvement	Barriers to family involvement	Parent Difficulties
3	If parents had concern about anything related to children and school, they only talked to other parents, not directly to the teacher because they were afraid it might affected the way the teacher educated their children.				
	Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)
	Barrier to family involvement	Resource allocation	Barriers in collaborative service delivery	Barrier to family involvement	Parent Fear
4	Before moving her to [name of a special school], I kept her at home for months doing nothing except watching TV. I thought that she would not develop any skills if I kept her at home, so I took her to [Name of a special school], so she can have friends and develop social skills. I also took her to [Name of a center] but she was not age appropriate. So I decided to educate her in [Name of a special school], even though most of the students in [Name of a special school] have intellectual disability and there is no physiotherapy program for students with physical disability. School A had a physiotherapy program for students with a physical disability and there is financial aid for the students from low economics background.				
	Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)
	Life skills instruction	Included within the rest of the transcript barriers to collaboration	Included within the rest of the transcript as student participation and support service	Student Participation	Student Participation in education

5	<p>I want her to be included in activities, social, employment, you know. It is too bad that a child like my daughter is excluded by society. At Independence Day celebration when there are the festivities and competitions, every child in this area participated. I know that my daughter also wanted to join, but the committees are so ignorant. They do not include her. I keep asking why are they doing that to her. If I am not mistaken, there are three people with disability in this area. But only my daughter goes to school. I was took her to regular kindergarten. However, she got a lot of bullying. People called her crippled, call her insane, limp. She was not understood, but deep inside my heart I was crying. It hurt my feeling badly. It was a risk that I had to take for disable child. Deep inside my heart I could not take this. Our society cannot accept and do not care about disabled people. They just cannot accept them. It is a big homework for the government. I really want that our societies open their eyes for people with disability. They have a right to education, employment and living in society. They have the rights. One day if I had fund, I will initiate business for my daughter and her peers.</p>			
Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)
Included within the rest of the transcript as barriers to student participation	Life skills instruction	Barriers discrimination	Barriers to Student Participation	Student Discrimination to participation in activities
6	<p>When I sent my daughter to special school, I put high expectation that she would develop her skills rapidly. May be not in academic but in vocational skills, so she can compete with her normal peers.</p>			
Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)
Life skills instruction	Included within the rest of the transcript as program philosophy	-	Program philosophy	Intended post school outcomes
7	<p>I spoke to the principal about my concern related to vocational skills, that I want my daughter to be able to have you know specific skill for her future. I also often stay at school and observe everything she does so I know the education program implementation there. In the previous school, very often the school finished at 10 am. But in this school, they encourage the students to do dhuhur pray (noon; about 12-1 pm) before going home. I think that is a good habit.</p>			
Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)
Included within the rest of the transcript as family involvement	Life skills instruction	Included within the rest of the transcript as family involvement	Life skills instruction	Religious activity
8	<p>I am thinking that the children should be equipped with a variety of specific skills not only one or two, but as many as they can. Put less emphasis on academic because it is their weaknesses.</p>			
Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)

	Career and vocational curriculum; Employment skills instruction ; Program philosophy; Planning strategies	Student participation; Employment skills instruction; Program philosophy; Planning strategies	Career and vocational curriculum; Program philosophy	Career and vocational curriculum; Employment skills instruction ;	Specific skills Less academic skills
9	It is not necessarily that a public school is better than a private school. Even when they were performing music and arts, the students from private school performed better than the students from public school.				
	Coding A	Coding B	Coding C	Agreed Coding	Keyword (Reason)
	-	Importance of family empowerment	Support service	Support service	Identification and development of student support

Summary

This chapter has presented the research methodology and the specific methods employed in this study. The study employed a multiple case studies design and used several methods of collecting data including observation, interview, and document analysis. This chapter has also clarified the procedures for site and participant selection, data analysis, accuracy and trustworthiness, and ethical considerations. The following chapter will present findings from the schools.

CHAPTER 5

FINDINGS FROM SCHOOLS DATA

Introduction

This chapter presents findings that resulted from the semi structured individual interviews with the school principal, group interviews with teachers, parents and students; observations on how students' employability skills were facilitated in the vocational classes; and examination of relevant documents for each of the four schools in the study.

To ensure anonymity and confidentiality in this study, all extracts from the data have been identified by code. The schools' names have been given pseudonyms such as Special School A (SS A), Special School B (SS B) and so on. The participants were also assigned the same identifier as the school for example principal SS A, teachers SS A, parents SS A and students SS A; principal SS B, teachers SS B, parents SS B, students SS B and so on. In the case of more than one participant in the same group, Arabic numbers were assigned to those participants, for example teacher 1 SS A, teacher 1 SS B, parent 1 SS A, student 1 SS A and so on.

There are three sections presented in this chapter. Section one presents case study one from Special School A. Section two presents case studies from Special School B and C. Section three presents a case study from Special School D. Special School B and C are presented in one section as they were similar in terms of the school size and similarities in findings.

The results are presented in order of the research questions

1. How do special schools implement school to work transition practices for students with a physical disability?
2. a. What barriers affect the implementation?
b. What supports affect the implementation?

In each case study, the presentation of the result is constructed based on the clusters in each category of the Taxonomy for Transition Programming (Kohler, 1996b). Due to interrelatedness of the categories and clusters in the Taxonomy, some of the findings may be fit into multiple clusters.

Case study one: Special School A

Special school A was a government special school where students with disability were educated according to the type of disability. Occupying 29.562 m sq. of land area with 11.590 m sq. of building, the school has five blocks that were called ‘departments’ based on their educational focus. Department A was for students with visual impairment, B for hearing impairment, C for intellectual disability, D for physical disability, and there was also an Autism department. Every department has its own teachers and coordinators who were responsible to the principal. Programs in each department were coordinated within the department and reported to the principal. However, administration and funding were centralised at the school level.

The participants in the school included the school principal, six teachers, five parents, and six students. Data gathered from the school were comprised of observations, interviews and documents.

Q1. How do special schools implement school to work transition practices for students with a physical disability?

Taxonomy category: Student Focused Planning

IEP Development

Students were a main focus in school curriculum development. One of the main principles in school curriculum development identified that it should focus on students' potential, needs and interests (school curriculum document).

The individual education plan (IEP) was not used widely in special schools in Indonesia. For teaching and learning purposes, teachers distinguish diverse student abilities by setting different goal and outcomes for each student within the same learning activity (Teaching plan document). The decision on which student was doing what activity and the goals setting in the teaching plan, were mostly based on unsystematic and undocumented teachers' assessment. Furthermore, student and parent involvement in formulating these activities and goals were very limited. The details of assessment and the student and parent participation will be discussed in other relevant components of the Taxonomy later in this section.

Student achievements in each subject were reported to their parents through a report at the end of semester; however it was limited to general comments (rapport book).

Student Participation

Even though the principal of SS A wanted "*students not only pursue their interest but also those availability as well as opportunities in their home environment*" (Principal SS A), strong evidence of limited student participation in program planning, implementation and evaluation were identified when the principal said, "*We do not involve students in all those activities. It is difficult for them to participate in those activities; they do not have initiative....the students in special*

schools are not similar to those in the regular schools. They do not have initiative to say or to do something. In general they do not have the capacities to give any suggestions on what they want to do in the school” (Principal SS A).

The teacher participants described that even though *“at the beginning of school year, the students can choose vocational classes according to their interest from the provided classes” (Teacher 2 SS A), student participation in program planning was collectively decided among the students “It is up to them to choose, but usually they will discuss with their classmates and choose the same class and, computer class is their favorites I think” (Teacher 1 SS A).*

Student participation in the program’s implementation was also limited. The teachers provided an example from the agriculture class where one said *“however, not many students (are) interested in agriculture. Only a few students watered the plants. The others just sat down and watched” (Teacher 5 SS A).*

When they were asked in the interview about the teachers’ efforts to make the student participate more in the program, teachers said *“The teacher only sit down with them and watch too (laughing). We cannot force the students, ; they get, they get sensitive if we raise our voices, and as the result, they will not come to the school the following day” (Teacher 1 SS A).*

Another example of limited student participation was from the cooking class where the teacher said *“I actually think that the cooking class in not effectively run because of the nature of the students who have difficulties fine motor and hand movement difficulties...we do more theory rather than practice” (Teacher 3 SS A).*

From the students’ point of view, the limitation of student participation in program planning was verified. They participated *“Only if the teacher asks us to but it is very rare” (Student 4 SS A).* Another student comment was *“Only in Mr.S class*

are we allowed to choice to do anything we want. As soon as we come to Mr S' class, he will ask what are we want to do today” (Student 2 SS A)

The parents also made negative comments about student participation in program planning *“never..never..they never get involved in that kind activities” (Parent 5 SS A).*

Planning Strategies

Despite not engaging students in program planning, the principal said that *“the school disseminates the program and curriculum to all parent and of course students are welcome to attend too” (Principal SS A).*

In terms of post school outcomes, three of the six student participants identified themselves as having an employment goal after they graduate, one of them was unsure, one of them wanted to stay at home helping her mother with the household chores, and one of them was interested in taking further training in either computer, embroidery, sewing or beading.

Table 17 Student' post school goal

Student	Post school goal
Student 1	Get a job
Student 2	Further training
Student 3	Unsure
Student 4	Involved in family business
Student 5	Get a job and further training
Student 6	Stay at home

When the students were asked about the importance of getting into employment, they agreed that it was very important. The reasons for getting into employment were: income; happiness both for themselves and the parents; and independence.

One student commented that employment was important *“so I can have income, help my parent and make my parent happy” (Student 2 SS A).* Another student said the importance of getting into employment was *“to ease the parent’s*

burden, to earn money not only for me but also for my parent” (Student 4 SS A). The importance of getting into employment for another student was “to help my parent, make them and myself happy, to be able fulfill needs, not depend on others, not wait for others to give charity” (Student 3 SS A). Another student maintained that “In my opinion having a job is very important so I can have income and be able to fulfill my needs, and can make my parent happy. I think my parent would feel happy if I had a job” (Student 1 SS A).

From the parent participant point of view, they expected that their children would engage in employment after graduating. They agreed that post school outcomes related to employment was a serious problem, especially after the parent(s) passed away. However, if their children could not enter competitive employment, they would open a small business or involve them in the family business.

The parent participants described that *“Life after school is a big problem for us. What will they do after graduating from the school? If there is a solution, we will be happy to be part of it” (Parent 1 SS A). Furthermore, the parent participants explained that “we have an expectation that they will have jobs, but where should they go for training? We know from the news that companies should employ individuals with disability. There should be no discrimination, but the reality is they are discriminated, companies keep rejecting them and look for normal people” (Parent 2 SS A).*

In addition to this, a parent participant stated that *“I very much expect she will be independent, have a job; I am really worried what will happen if I passed away” (Parent 5 SS A). Similarly, a parent participant stated that “It crossed my mind, I began to think, she will be graduated soon, I begin to think what kind of work is suitable for her. I do not know her interest, maybe she needs further training”*

(Parent 3 SS A). In the same way a parent participant said that *“my husband spoke to me a while ago that we should start to prepare a little grocery stall for her so she can manage the stall after finishing her school”* (Parent 4 SS A). When they were asked whether they communicated with the school about their plans and concerns they explained that *“[Not] here; [school] is so passive”* (Parent 5 SS A).

Only two students said they had parents who spoke to them about post school activities. A student participant claimed that *“my parent ask frequently ‘What will you do after graduating? You have to work on your interest and skills so you can get a job!’”* (Student 2 SS A).

The computer has become a focus of student interest, in either a future job, or in vocational skills class preference at school, and was recognised by the teachers and the students themselves. One student stated that *“I want to continue my study, maybe taking a computer course, or taking a course in embroidery, sewing or making beads. But I want to have a job in the computer area”* (Student 2 SS A).

Another student maintained that *“I want to get a job and want to attend a training course. I am not sure what kind of job that I want, but as long as I have money from it, it does not matter. But If I can choose, maybe I am interested in working in the computer area...and I would like to use a blog to help my mum’s business”* (Student 5 SS A).

When they asked about what efforts they had undertaken to achieve their aspirations, some students had begun to prepare themselves, and some had not. One of the students said *“because I want to be a priest, I start to read the bible very often. The school also provides a religion subject once in a week”* (Student 1 SS A). Another student gave the comment *“I often help my mum with her business”*

(Student 4 SS A). Other students pointed out *“I do not know, Nothing to be prepared for I guess”* (Student 2 SS A), *“I have not prepared anything yet”* (Student 3 SS A).

The school accommodates the students’ interests through vocational skills. The students agreed that computer and arts were two among their favourite vocational skills. Examples of student comments on this were *“[school accommodate] some of our interests, which are computer and art class”* (Student 2 SS A), *“Everybody likes the computer class”* (Student 4 SS A).

The teacher participants also strongly agreed that *“I think, the computer class is their favourites. It is up to them to choose, but usually they discuss it with their classmates and choose the same class”* (Teacher 1 SS A). *“...But everybody likes the computer class very much. They like to stay in the computer class even though the class was over and they have to do other school subject. We have changed a lot of keyboards and mouses because they often breaks”* (Teacher 3 SS A).

The principal of SS A acknowledged that student interest was taken into account when developing the school program *“When the students move to junior high level, their interests are recognised and developed”*, however, *“they tend to follow their friends”* (Principal SS A).

Acknowledgement of student interest was identified by teacher participants by giving as an example Student 1 SS A, who had different interests to her classmates. *“[Student 1 SS A] does not want to go to Mr. S’s class. She is interested in music particularly playing the organ. Even though the teacher thinks she has no talent in it, only making a noisy sound, we are doing it anyway* (Teacher 3 SS A).

The teachers intended to maintain student interest consistently during their school period, however students often change their minds and chose other vocational skills once they moved to higher grades. A teacher participant maintained that *“actually we allow the students to choose vocational skills since grade four in the primary school except computers and farming that are offered in junior high school. We would like to keep the students in their chosen vocational skills class from the beginning until they finish school, but they often change their mind”* (Teacher 1 SS A).

Self-determination was facilitated inconsistently. One teacher participant gave an example *“like the other day in science class, she knew that the answer is A but she ticked C. When I told her she ticked the wrong option, she said: ‘aaah, that is alright’. If I asked her what she wants to do, the answer is always “it is up to you”, nothing else. She cannot choose anything, she can only accept”* (Teacher 1 SS A). Another teacher reported that *“because they also have difficulties in controlling their hands, [In art class] they often pick up any color or paste, anything they can reach. I direct them to expressionism, taking a lot of example from their real life...what they feel and see. It turns out that I realised that they are not inferior, they are capable of doing something and it makes me happy and proud”* (Teacher 5 SS A).

Taxonomy Category: Student Development

Assessment

There was strong evidence that assessment use was limited in the school and this was reflected in the interviews and documents. While Principal SS A maintained that *“We do have an assessment process at the beginning of school years; it is mostly psychological testing and it is only conducted at the beginning of primary school and Junior high school, and limited to IQ tests for placement purposes”*. No evidence

existed in the school curriculum on how student interests were taken into account in the program.

The importance of vocational assessment was identified by the teachers and student participants. The teacher participants maintained that *“there should be vocational skills assessment. Basically what we are doing now is we have a list of vocational skills that has been used in the schools for many, many years. Students are asked which one is matches interest without any assessment”* (Teacher 4 SS A). Furthermore he gave examples of the cooking and agriculture classes where the teachers recognised that classes were run ineffectively even though those skills were chosen by the students. Student participants were also agreed that vocational assessment was essential. They nodded *“[yes], there should be a vocational assessment”* (Student 1 SS A).

Career and Vocational Curricula

The school curriculum referred to the national curriculum called school-based curriculum (*Kurikulum Tingkat Satuan Pendidikan/KTSP*). Principal SS A maintained that *“yes, we are using KTSP which, in my opinion it is just a continuity from KBK (Kurikulum Berbasis Kompetensi/Competence-based Curriculum)”*. A teacher participant claimed that *“In terms of the curriculum structures, we follow the government regulation. We use school-based curriculum”* (Teacher 1 SS A). When arranging the school curriculum, Principal SS A noted that *“we also involved the school supervisors from the Department of Education, Youth, and Sport”*.

Even though the school claimed to follow the government regulation No 22 Year 2006 on The Content Standards, to have a ratio of 70% of vocational skills and 30% of academic skills in the curriculum, the implementation was not completely consistent. While the teacher participants claimed that *“We may be only*

implementing the ratio of 60% vocational skills and 40% academic skills at this moment” (Teacher 3 SS A), the vocational skills only comprised 25% - 30% of the total ratio in the actual curriculum the school had structured. From the total of 40 units, vocational skills only accounted for 10-12 units (School curriculum document).

The National examination requirement also played a significant role in the implementation of the curriculum structure in the school. Special school students in their final year were required to undertake the National Test in three areas of Mathematics, Indonesian Language and English. The National Test was taken seriously by the school, as it was often seen to reflect school success. Principal SS A affirmed that *“Although there is a clear regulation that vocational education should be the main emphasis in the curriculum at the secondary level, however the government still demands a National Test for those students. Eventually, the school must adapt to this and change the curriculum. Where there should be 2 units for Mathematics or Languages, because we do not want our student to fail in the exams we add more units to Mathematics and Languages and reduce units for vocational education”* (Principal SS A).

The school curriculum identified different groups of student ability according to intellectual functioning. For students with a physical disability, those who also had an intellectual disability (D1) were distinguished from those without intellectual disability (D). The difference took place in curriculum structures where students with a physical disability who also had an intellectual disability received a higher ratio of vocational programs compared to their non-intellectual disabled counterparts (School curriculum document). A teacher participant maintained that *“students in D group have their academic curriculum ratio higher than their*

counterparts. Although they do not have intellectual disabilities they also have additional learning needs. So the academic curriculum is not the same as for the regular students” (Teacher 3 SS A).

While Principal SS A claimed that “Yes, even though in my opinion students who are in the categories of D1 (moderate to severe physical disabilities) and C1 (moderate to severe intellectual disability) may be have limited options in terms of [work options], the school has a vocational program that provides vocational skills”, the student participants identified the need to improve vocational education by “increasing the time allocation for vocational education and work placement, (as many alumni are unable to find a job” (Student 3 SS A) and “I also think that the school should also give career education, like an introduction to a lot of jobs” (Student 4 SS A).

Life Skills Instruction

Life skills instruction was specifically accommodated in the curriculum structure through 2 units of specific programs such as self-help and self-development (School curriculum document). However, parents thought that what constitutes learning at school was when their children learnt how to write, read and complete other academic subjects. Even when the subject was vocational skills, or if the teacher of vocational skills subject was away, the parent would ask the teacher to teach academic skills rather than vocational skills. The teacher participants stated that “parent would ask why it isn’t any academic lesson for today? Even though the students have vocational skills class, they think it is not a lesson” (Teacher 1 SS A). Furthermore, a teacher participant maintained “Friday is a clean-up and sports day.

Many of students do not go to school on Friday. Only few students come” (Teacher 3 SS A).

Employment Skills Instruction

Employment skills instruction was facilitated in the school through a variety of vocational skills. Principal SS A stated that *“the school has a vocational program that gives vocational skills. We provide many packages of vocational skills including cookery, sewing skills, cat fish farming, and paving production”*. Consistent with comments by the principal, the teacher participants also maintained that *“We have vocational skills such as computer, farming, art, cooking, fish farming”* (Teachers SS A).

From the list of available vocational classes, only certain vocational skills ran effectively, such as the art and computer classes. The principal of SS A stated that *“at the moment, the vocational skills that are available in the school do not really run exactly to the plan, because most of the students are not interested in some specific kind of vocational skills. The vocational skills that are successfully run are Mr. S’s Art class and Mr. U’s Computer class. In fact, all of the students with a physical disability like doing computer skills”* (Principal SS A). Furthermore when student participants were asked about the popular vocational class, they responded *“computer and Mr. S’s [Art] class”* (Student 4 SS A).

The teacher participants stated that *“because my students also have motoric problems, cooking seems to be more difficult to teach”* (Teacher 3 SS A). Moreover, the teacher participants claimed that *“surprisingly, the students also are not really interested in activities that develop their skills for independent lives. We hope that through the vocational skills like cooking, farming, etc, it will give them appropriate independent living skills”* (Teacher 1 SS A), *“but they more interested in computers,*

Facebooking, browsing on the internet, and playing games. They think that the other vocational skills are less cool than computer skill” (Teacher 2 SS A). *“They are more interested in doing things that are easy and classy; they just sit down in front of computer, not doing something complex with their hands; [they enjoy to be]in an air conditioned room rather than having to go outdoors and make themselves wet and dirty”* (Teacher 3 SS A).

When the student participants were asked the reason for this, they commented that *“I like computer because we can write stories, do blogging, and Facebooking. We also can know something new* (Student 5 SS A), *“new knowledge, not similar to agriculture, because I feel that agriculture is not challenging, I already know about it”* (Student 2 SS A). Furthermore another student claimed that *“I like playing on the internet and Facebook, so I can communicate with someone else”* (Student 1 SS A). Another student maintained that *“[at] Mr. S class, we are taught different kind of making beads and art work [such as] painting, drawing, and using clay”* (Student 4 SS A).

The teacher and student participants recognised that vocational skills trained in the school place emphasis more on theory than practice. A teacher participant maintained *“We do more theory than practice”* (Teacher 3 SS A). Furthermore during the researcher’s observation session, one of the teacher participants informed her that not much practice took place in the agriculture class. Most of them were just theory about how rich Indonesia is as an agriculture country, explaining the advance in agriculture practices, and showing the students agricultural practices in other countries (Field notes 3 SS A).

Consistent with this, a student participant explained that *“We still do a lot of theory in the cooking class. I think the school should add more time for practice”*

(Student 2 SS A). Similarly, other student participants stated, “[should emphasise] *more on practice, not only theory*” (Student 4 SS A). Moreover, the student participants also acknowledged the need to improve the choice of available vocational skills provided by the school. *“I think the school should increase the time allocation and to have more vocational skills”* (Student 2 SS A). *“[Give] more options in vocational skills and conduct work experience”* (Student 5 SS A).

The parent participants identified minimum programs related to employment skills instruction. One of the parent argued *“the school only focused on academics, there is very limited employment skills program education time in the school”* (Parent 5 SS A). In addition a parent participant acknowledged that *“I’ve been here for 13 years and the school program is pretty much the same. The student that I know such as A and S, who are graduating this year, were very confused about their life after school. Since I have been here, I do not think the school provides appropriate employment skills training”* (Parent 1 SS A).

Structured Work Experience

Apprenticeships were available but limited in the school and did not apply to students with a physical disability. These were funded by the Department of Education, Youth and Sport at the provincial level. As Principal SS A explained *“we do have an apprenticeship program. It is a program from the Department of Education, Youth and Sport. Unfortunately we only take one student in the program each year. There are 16 special schools in Bantul District, however the quota for the program is only 12 students for the whole of the special schools in Bantul, our big school is assigned to send only one student”* (Principal SS A). However, *“Apart from the program that is funded by the Department of Education, Youth and Sport, we cannot afford to send students to business sites as the school does not have enough*

funds” (Principal SS A). Furthermore, he explained that “the idea of an apprenticeship is to improve students’ employability skills, so we send the most skillful student. The final aim of this program is that the company will employ this student, so the student is able to produce something” (Principal SS A).

In deciding which student progresses to the apprenticeship program, Principal SS A explained *“we send the most skillful student from the highest grade in the school. We do not send the student who is just learning to do something, because we do not want to create a problem in the workplace. We do hope that the student who is engaged in the program will make it to the employment stage. If the company cannot take him as an employee, I expect that through this apprenticeship program he will be able to make his own career, producing furniture for example” (Principal SS A).*

Compared to other type of disabilities, students with a physical disability were seen as being unsuitable to participate in the apprenticeship program. A teacher participant described that *“the school has an apprenticeship program but it is limited to hearing impairment students. It is difficult for students with a physical disability to be involved in the apprenticeship program, because they have limitations in their physical and motor movement. They have difficulties in creating and making things. We have not seen their potential to be involved in the program” (Teacher 5 SS A).* Moreover, the Principal SS A suggested that *“...we are not confident with the students’ ability too. Business does not want someone who is incapable, they do not want someone that only do bang, bang, bang, and break their tools” (Principal SS A).*

The student participants were aware of the discrimination. One student participant commented *“Yea, there is work experience, but it is only for students with*

hearing impairment, not for us” (Student 2 SS A). Another student asserted “Yea and he gets paid. We are discriminated against” (Student 5 SS A). The student participant also identified the importance of work experience for them as “so we know what it's like to work and develop interests and skills” (Student 2 SS A).

Another work experience program carried out in the school involved incidental paid work for school maintenance. The principal described that *“at one time, the school had a project to pave the school and, because we do have paving production classes, we involved the students in making the concrete. The school paid the students according to their production. Some student got one metre and some student with advanced skills got two metres per day. We can see that they are highly motivated if payment is involved. We consider this activity as paid work experience too” (Principal SS A), however the paving production class was for student with intellectual disability (School Curriculum document).*

Support Service

Access to support services as identified by participants was limited. Although students with a physical disability had access to physiotherapy, this was only when they were in kindergarten and primary school levels. As explained by a teacher participant, *“the school provides physiotherapy, and growth and development stimulation from the doctors. Every student receives different support services depending on their condition. The school provides four hours physiotherapy per week in kindergarten and primary school and it is free of charge” (Teacher 1 SS A).* The teacher participant believed that more support services regarding employment matters should be available for students with a physical disability enrolled in higher levels of schooling. Another teacher participant maintained that *“we think actually the students at the secondary level need more support services related to gaining*

skills for employment purposes, however, the school has not provided them yet”
(Teacher 4 SS A).

Another support service identified by the teacher participants was related to accessibility. The teacher participants maintained that *“it is actually difficult to teach agriculture to the students with cerebral palsy, mainly because of access to the fields”* (Teacher 4 SS A). Cooking classes also shared the same problem as agriculture classes where *“the cooking centre is not design for students with a physical disability who use a wheelchair, as there are no ramps, and the stove is not accessible”* (Teacher 3 SS A). In addition, a teacher participant stated that *“we also think that because of the nature of the students, they need adapted tools, such as a cooking set, but we do not have them”* (Teacher 1 SS A).

Post-school support program needs were also acknowledged. One teacher participant maintained *“we also think that secondary school level cannot give students appropriate skills to enter employment, so there should be a one or two year program that helps transition the student to employment”* (Teacher 1 SS A).

Both student and parent participants recognised the importance of access to information regarding employment. One student participant stated that *“honestly, I do not know what kinds of jobs are available out there for people like us”* (Student 5 SS A). In the same way, a parent participant argued that *“we know that our children need support in terms of training, work and employment matters, but we do not know where we should go to find that information”* (Parent 3 SS A). Moreover they sustained that *“actually, we put high expectation on the school to share that information, but they do not”* (Parent 5 SS A).

Taxonomy Category: Interagency Collaboration

Collaborative Service Delivery

The school has collaboration with various organisations such as businesses, universities and the hospital. The collaboration with business organisations was limited to students' apprenticeships; the collaboration with the two universities and hospital were limited to psychological testing and rehabilitation services.

In the apprenticeship program, the school provides financial support to the business organisation for the materials and the student's salary during the apprenticeship. The business organisation provides tutoring support for the students to produce goods. Principal SS A explained that *"The program is up to [name of a business], but the school provides funds, both for the materials and the student's salary"*. In terms of collaboration with university and hospital, Principal SS A maintained that *"we do have collaboration with some universities and hospitals in Yogyakarta. For psychological tests we collaborate with UAD [Ahmad Dahlan University] and UGM [Gadjah Mada University] and for rehabilitation, we collaborate with UGM and Dr. Sardjito hospital"* (Principal SS A).

The teacher participants pointed out that the Department of Social Affairs at the district level also gave aid to some of the students personally, not involving the school. A teacher participant stated that *"the school does not have collaboration with the Department of Social Affairs but we know some students who received aid from the department"* (Teacher 3 SS A). Furthermore, UGM also supported the school in agriculture classes by providing seeds: *"UGM assist the school by providing seeds, mushroom, bok choy, kangkung, spinach, papaya, and also catfish"* (Teacher 2 SS A).

Collaborative Framework

While a teacher participant maintained that *“the school does not have any formal collaboration with any other organisation at the moment”* (Teacher 1 SS A), the principal argued that the school had formal collaboration with [Name of a company]. The collaboration focus was on student apprenticeships. Principal SS A asserted that *“we made an MoU with [Name of a company] to take our student as an apprentice but like I said earlier the apprenticeship program is limited to only one student”* (Principal SS A). Furthermore he explained that *“we decided to send a student to [Name of a company] because they have a variety of productions and one of our student’s skills fitted within the industry”* (Principal SS A).

Taxonomy Category: Family Involvement

Family Involvement

There was strong evidence that parent involvement in the program was limited. This limitation was confirmed by school staff and parent comments. While Principal SS A maintained that *“not all parents are involved, only those who have a position on the school committee”* (Principal SS A). He further explained that *“one or two parents on the school committee are involved in the program planning and evaluating... Parents who are involved in the school committee can make any program suggestions, and usually they do. Some of them are active”* (Principal SS A). The parent participant argued that *“the school very rarely involves the parent in [the program planning], there is no [bond] between the school and the parent”* (Parent 1 SS A).

Consistent with the principal’s statement, a teacher participant also acknowledged the limitation of parent involvement in the school. The teacher participant explained that *“we do not involve the parents, they usually are idealist,*

but they are just talking heads, only giving suggestions, but when we ask for support, they became not as determined anymore” (Teacher 1 SS A).

Parents’ low education levels and low expectations for their children were seen as significant contributing factors to low family involvement. Principal SS A stated that *“many parents are ignorant when it comes to their children’s education. Only a few of them have high expectations. In this school, many parents have a low education level. Parents who have young aged children expect the school to act as a day care. Parents with older children, or children that are have already graduated are encouraging their children to stay at school. Because of the low education level, parents also have low involvement in the school program. They have low expectations of what their children can achieve, and as a consequence, the teachers do not give full efforts in teaching the students” (Principal SS A).*

Other contributing factors to low family involvement were ignorance and discrimination. The school provided a meeting schedule for the family to discuss their child’s progress twice a year, at the end of the semester; however the principal maintained that *“many parents are ignorant. They do not even bother to take the school report document. They discriminate against their child [compared to] their normal sibling. They do not even bother to take the certificate if their children graduated from the school. Sometime their actions made the teachers annoyed” (Principal SS A).*

Although, as explained in the planning strategies section, the parents expected to see their children live independently; the teacher participants pointed out that *“we think not many parents explicitly said that they want their children to enter employment. Most of the parents do not demand it. The parents who know their children’s’ abilities don’t really demand employment outcomes. Because they know*

their child's condition are limited, only like that, they are disabled, so they do not put high expectations on their child" (Teacher 1 SS A). Another teacher participant claimed that *"the parents in this school feel more pride if their children learn more about academic rather than vocational skills, even though their children have limitations in learning academic matters"* (Teacher 2 SS A).

A teacher gave an example of the parents' negative perception of the cooking class and other vocational skills classes. The teacher participant asserted that *"some of the parents also cynically said that 'o...you will be able to open a catering business when you graduate, excellent'.."* (Teacher 4 SS A). Another teacher participant argued that *"They [Parent] also are being picky on what vocational skills their children should take. Computer is the most popular; we do not have to persuade them to take computer class. They love it. 'What are your children doing right now? Oh computer', they will tell other people with such a pride, even when their children cannot hold the mouse correctly"* (Teacher 5 SS A).

Despite the lack of the parent involvement, both teachers and parents actually had similar aspirations in establishing parent involvement in the school. A teacher participant stated that *"we want the parents involved in the program"* (Teacher 1 SS A), the parents also commented that *"we would love to be involved"* (Parent 1 SS A).

Family Training

While the teachers encouraged the parents to assist their children at home, there was no evidence on how the school facilitated this consistently. Family training on parenting tips was held occasionally at school. The parent-teacher meeting at the end of semester was limited to giving the student progress report. A teacher participant argued that *"when we meet the parents at the end of semester to give their*

student's progress report, we also encourage the parents to involve their children in home activities, because I think they never involve their children in home activities. But just limit engagement to encouragement" (Teacher 1 SS A). Moreover, Principal SS A maintained that *"we invited parent to the school for a workshop on parenting with a school psychologist"* (Principal SS A).

Family Empowerment

There was strong evidence that family empowerment was not part of the school culture. As described in the previous section, the family was excluded from program planning decisions. Principal SS A sustained that *"the dissemination of the school program and curriculum to all the parent is just to inform the parents what is going to be learned at school during a one year school period"* (Principal SS A), it didn't suggest the need for engagement.

Taxonomy Category: Program Structure

Program Philosophy

Students with a physical disability, both with and without intellectual disability, had access to vocational education. As described in the previous section, the school provided a variety of vocational skills to accommodate the students' interests and to meet the government regulation on special school curriculum standards (School curriculum document). Principal SS A asserted that *"the government outlined the program and curriculum; the school just has to make adjustments according to needs"* (Principal SS A). Similarly, a teacher participant pointed out that *"in terms of the curriculum structures, we follow the government regulations. We use school-based curriculum"* (Teacher 1 SS A).

Vocational education provided in the school for students with a physical disability was limited to vocational skills classes, and, as explained in the career and vocational curricula section, it was insufficient in terms of time, facilities and skills. Principal SS A argued that *“The school has a vocational program by providing vocational skills classes”* (Principal SS A). A teacher participant maintained that *“in my opinion the program is not enough to equip the students for independent employment. We have to be honest that the vocational education that we give in this school is far from being sufficient in terms of time, facilities and skills. It only covers an introduction to vocational skills”* (Teacher 4 SS A).

Vocational education provided in the school was not appropriate for employment purposes. A parent participant claimed that *“it is just a common set of vocational skills, not really work skills”* (Parent 1 SS A). Similarly a student participant also commented that *“[it is] only a vocational class, just doing ordinary practices”* (Student 6 SS A).

Although there was a discussion at the school level to build a “sheltered workshop”, it was decided that a sheltered workshop was not appropriate to be developed in the school as the school was afraid of identity confusion between school and business. The principal argued that *“a long time ago, the former principal had thought and planned to run a sheltered workshop, but it never happened, because we are afraid that if we were doing it then it is more likely not a school anymore, and we do not want a school that looks like a business or company”* (Principal SS A).

Program Evaluation

In general, the school program was evaluated once a year as the basis to determine the next program. As explained in the previous section, the program evaluation lacked student and parent involvement. Principal SS A asserted that *“when determining the new program, we evaluate the previous program, so if we need something to add or change, the parent in the school committee can make suggestions”* (Principal SS A).

Strategic Planning

At the school level of strategic planning, students who had graduated from the school and have not gained involvement in employment, were welcome to participate in vocational class again at the school for a maximum of two years period. The Principal of SS A maintained that *“in general, the graduates from special schools, not only in this special school, but throughout Yogyakarta region, are welcome to stay at the school and participate in vocational classes if they do not have a job yet and are interested in doing so. We are more than happy to have them in the vocational class”* (Principal SS A).

He further explained that *“we still can give them a service but of course we are not including them in any school report. They do not have to pay, but if they want to make something for themselves, then we encourage them to bring their own material”* (Principal SS A). Similarly, a teacher participant also stated that *“the children who have graduated from the school and who are not yet in employment still can come to school and attend vocational classes”* (Teacher 1 SS A).

At the community level of strategic planning, the teacher participants identified the need for further training and apprenticeships as the school failed to

accommodate the students in the school to work transition program. The need to have a showroom to display student's work was identified by a teacher participant within the school level strategic planning. A teacher participant maintained that *"we also think that the secondary level cannot really give the students appropriate skills to enter employment, so there should be a one or two year program to transition the student to employment"* (Teacher 1 SS A).

Another teacher participant claimed that *"We cannot depend on only vocational education delivered in the school. For those in regular vocational schools they also are advantaged with further training and the apprenticeship program. If we want our students in special schools to gain appropriate work skills then we should do things in the same way as regular vocational schools. However, a special school does not have that kind of facility; we do not have the same access as a regular vocational school"* (Teacher 4 SS A). Another teacher participant argued that *"having a showroom that is open to the public to display students' work is essential"* (Teacher 3 SS A).

The student participants identified the need to improve quality vocational education within school level strategic planning. A student participant claimed that *"[Give] more vocational skills options and conduct work experience"* (Student 5 SS A). Another student participant acknowledged the need to *"increase the time allocation for vocational education and work placement, as many alumni are unable to find a job"* (Student 3 SS A).

Program Policy

Although the school provided vocational education, the teacher participants claimed that employment was not the main focus. A teacher participant argued that *"employment is not really our goal. We just want them to live independently after*

graduating. What we mean by independent is they can take care of themselves in their daily living skills, not depend on other people to help in doing their daily activities. That is the final aim. The vocational skills that are given in the school are just additional goals. If after graduating, they can work and earn money, it is better” (Teacher 1 SS A).

Even though employment was not as clearly mentioned directly in the school curriculum document as student outcomes were, it was stated that the school goal was to provide quality education in generating individuals’ independence according to their best potentials in order to become active community member (School curriculum document).

Despite their claim about the final student outcomes, the teacher participants acknowledged that they were challenged to equip the student with appropriate skills for employment purposes. A teacher participant stated that *“I expect that in the future the school can really seriously and intentionally educate the children. The school can equip the students with at least one vocational skill that can make them live financially independently whether they work on their own or become an employee”* (Teacher 3 SS A).

Human Resource Development

Despite the low student-teacher ratio as noted by the Principal SS A when he noted *“we also have a teacher crisis at the moment. According to the ideal teacher-student ratio, we need 116 teachers but currently we only have 104 teachers and eight teachers will be retiring this year”* (Principal SS A). A teacher participant claimed that *“in terms of teachers, we think we have enough human resources”* (Teacher 3 SS A).

Both principal and teacher participants expressed their concern about the quality of the teachers. While Principal SS A maintained that *“they are not capable of teaching special needs students... even though they have attended a course for two semesters known as special education certification, it is not enough to equip those teachers with the appropriate teaching skills. The teachers who have roles in the department such as Ms. E and Ms. H are not enthusiastic and have low commitment in teaching those students, includes Ms. A too”*. The teacher participants expressed difficulties in teaching students with a disability emerged because they didn’t have background in special education. A teacher participant claimed that *“Previously I was a teacher in a regular secondary school. I experience difficulties in teaching in a special school because I do not have the competence and experience related to this. Sometimes it stresses me out”* (Teacher 1 SS A). Another teacher pointed out that *“to be honest, I do not know anything about students with disabilities... I believe that I have not found any teaching methods that really fit with the students. What should I teach the students who experience difficulties in grasping and controlling their hands? I teach art where a lot of activities are making things and using hands”* (Teacher 5 SS A).

Leadership was an important issue seen by both the principal and teacher participants. While the principal argued that it was difficult to manage the teachers, the teacher participants believed that it was because of weak leadership. Principal SS A maintained that *“[the teachers] are not really taking seriously my plan to improve the vocational skills by allowing others students to attend vocational class across the departments. But as the principal I cannot do anything. Yes, I have expectations, but when teachers do not meet my expectation, I cannot do anything; there is no sanction; there is no power. I realised that if I talk about this matter with the*

teachers it would only be adding more to the list of enemies. What is the meaning of power [of being a principal]? What is the meaning of rules? It is nothing but an accessory” (Principal SS A). A teacher participant argued that “we have problems with the school management. It is not transparent. The job is not really clear, who is doing what, the principal has weak power” (Teacher 5 SS A).

Furthermore, the principal argued that *“I set a target that at the end of the school year periods, each vocational class should be able to display the works they have done in the vocational class in that year. But it never happened. If I ask the teachers they always blame the students. The students cannot do it, nothing good to display, bla bla bla. It only gives me a headache and problems. So now I do not really care anymore, I am only spending the time until the contract is finished, I will be retired next year anyway” (Principal SS A).*

While the principal stated that the teachers had a low commitment to teaching, the teacher participants claimed that there was less focus on teaching because of too much administrative work. While Principal SS A asserted that *“the teachers, like I said earlier, just like to go with the flow, they do not take it seriously, they do not have high expectations of the students, no target” (Principal SS A).* A teacher participant affirmed that *“the school should employ instructors specifically for vocational skills. It is very difficult for teachers to focus on teaching proper vocational skills because the teachers have to do many administrative tasks, we have to do this, and we have to do that. We not only focus on the teaching and learning process, but also administrative work” (Teacher 4 SS A).*

Even though there were various training courses offered by the Department of Education, Youth and Sport and other organisations to improve the quality of teachers’ competencies, the teacher participants believed that the training

opportunities were not distributed equally among teachers across the school. While the principal argued that *“we do have a lot of training for them that involves the Department of Education, Youth and Sport or other government and non-government organisations...It is based on the qualification and the subject that is taught. For example, if there is training in Art, we will send the art teachers with a qualification in art. But if we do not have teacher with a qualification in it, for example in food production, then we will send a teacher who is teaching cookery”* (Principal SS A). A teacher participant claimed that *“there is training for the teachers to develop competencies in vocational skills such as cooking, art, beauty salon, etc. However, because this school is a big school, the individual opportunities to attend training are smaller compared to a small school. There is a long queue because there are so many teachers in this school”* (Teacher 3 SS A).

Resource Allocation

The school received financial support from the government through the Department of Education, Youth and Sport. However the teacher participants claimed that the funding management was not transparent. While Principal SS A maintained that *“we have funding from the government”*; the teachers argued that *“we do not know how much money we have, what sort of funding or grant we have. It is not transparent. It would be good if we know what funds we have so we are able to make reasonable programs”* (Teacher 3 SS A).

Besides regular funds, the school also received block grants and projects. Principal SS A explained that *“we also have block grants or projects from the government”* (Principal SS A). The funds were spent on improving school facilities and teacher competencies. Principal SS A confirmed that *“some of the funds were used for improving facilities and improving teachers’ competencies includes*

training, seminars and workshops. Sometimes we invite experts to the schools”

(Principal SS A). Furthermore, he claimed that sometimes the school cannot spend the grant properly.

While Principal SS A argued that *“we have a variety of grants. We asked the teachers to propose a program, to propose a target for example in the Batik class: what do we have in Batik class?; what we do not have?; then make a financial plan, then propose it to the school, but they never do it, and eventually we cannot spend all the funds. Even if we can spend it, it is improper”* (Principal SS A). The teachers claimed that the procedure to claim the funding was inefficient. One teacher participant argued that *“there is also a problem related to claiming the funding, for example for the cooking class. We make a proposal to the school for ‘nagasari’ (traditional cake made from rice flour and banana), but the school gave us something else. We proposed for nagasari ingredients, but it turns out to be a brownies ingredients. We proposed at the beginning of the semester, but sometimes it takes weeks for the school to comply with our needs”* (Teacher 3 SS A).

The nature of the school as a big complex resulted in another set of issues in managing the resources. Because of the separation of the building and coordinators, it was suggested that the school departments were not only physically separated but also practically. Principal SS A explained that *“we are not really sharing; every department is doing the teaching and learning in their own block. So, even though it is under one school, in practice it just five different schools. Every department has its own facilities”*. Consistent with the principal, the teacher participants also asserted that *“sharing does not exist in this school. Competition does exist. Our setting mode is the most powerful will win. The ideal is to be sharing but it is not happened here”* (Teacher 3 SS A). Another teacher participant maintained that *“I think this is the*

disadvantage of being a big school; it is difficult to manage big school. And because we are teaching in blocks, block D is here, block C is there, block A over there. We are not connected to each other; we are lacking a sense of belonging. We only care about our own department. We also see that another department is more advanced in term of vocational skills. There is more variety and more facilities. We think that our department has been marginalised” (Teacher 4 SS A).

Even though the government provided financial support to the school, it was insufficient. Principal SS A stated that *“apart from the program funded by the Department of Educatio, Youth, and Sport, we cannot afford to send more students to business sites as the school does not have enough funds” (Principal SS A).*

Moreover, he asserted that *“another problem is in regard to facilities. Because the students select the same vocational class as their peers, the class become full and there are more students than tools; therefore, the teaching is not really effective because when the students have to do something the other students only watch, they are not really doing something” (Principal SS A).* Similarly, teacher participants also affirmed that *“special schools do not have that kind of facility; we do not have the same access as the regular vocational school” (Teacher 4 SS A).* Table 18 summarises the participant responses across the five categories of the Taxonomy.

Table 18 Summary of responses across the Taxonomy by participant and data collection methods in Special School A

Taxonomy Category	Taxonomy Cluster	Participants				Data collection methods		
		Principals	Teachers	Parents	Student	Observation	Interview	Document
Student Focused Planning	IEP development							v
	Student participation Planning strategies	v	v	v	v	v	v	
Student Development	Assessment	v	v		v		v	v
	Career and Vocational curricula	v	v		v		v	v
	Employment skills instruction	v	v	v	v	v	v	v
	Life skills instruction	v	v			v	v	
	Structured work experience	v	v		v		v	
	Support service	v	v	v	v	v	v	
Interagency Collaboration	Collaborative service delivery	v	v				v	
	Collaborative framework	v	v				v	
Family Involvement	Family involvement	v	v	v			v	
	Family training	v	v				v	
	Family empowerment	v	v				v	
Program Structure	Program philosophy	v	v	v	v		v	v
	Program evaluation	v	v				v	v
	Strategic planning	v	v		v		v	v
	Program policy	v	v				v	v
	Human resource development	v	v			v	v	v
	Resource allocation	v	v				v	

Note: v = Response is identified

Q2a. What are the barriers to implementation ?

Q2b. What supports exist in implementation?

This section discusses barriers and support in the implementation of school to work transition program in special school A. The issues that emerged from the participants are presented in Table 19, based on the Taxonomy framework categories. Following Table 19, each of the categories is discussed.

Table 19 Barriers and supports in implementation of school to work transition program in Special School A

Taxonomy Category	Barriers	Supports
Student Focused Planning	<ul style="list-style-type: none"> • Limited student participation • No IEP 	
Student Development	<ul style="list-style-type: none"> • Limited use of vocational assessment • No employment support service • Low student motivation • Limited practice, focus only on theory 	List of vocational skills to choose
Interagency Collaboration	<ul style="list-style-type: none"> • A disorganised collaborative framework 	Some collaboration with a company and universities
Family Involvement	<ul style="list-style-type: none"> • Limited parent participation • Parent competencies: <ul style="list-style-type: none"> ○ Low parent education level ○ Low parent commitment ○ Low parent expectation ○ Low parent motivation 	<ul style="list-style-type: none"> • Twice a year meeting but only on academic progress • Parents waiting for their children at school • Parent willingness to be involved
Program Structure	<ul style="list-style-type: none"> • No explicit goal for employment • Weak leadership • Complicated bureaucracy • Unhealthy school climate • Teacher competencies: <ul style="list-style-type: none"> ○ Low teacher motivation ○ Low teacher commitment • The same quota for teacher training as for small schools • Resources (ramps, modified tools, accessibility, facilities, etc.) • Financial resources (apprenticeship and tutor) 	<ul style="list-style-type: none"> • Training from other organisation • Grant from government

Student Focused Planning

The barriers in the Student Focused Planning taxonomy category included limited student participation and lack of planning and implementation of an IEP.

As has been noted in the previous section, students had limited participation in any of program planning, implementation and evaluation. The acknowledgement of this limitation was recognised in the student, parents, teacher and principal perspectives. Furthermore, the teacher participants argued that the students chose the vocational skill area collectively among their peers.

As explained in the earlier section, an IEP was not widely used in special schools in Indonesia. Different learning goals were set up based on student abilities (lesson plan document).

Student Development

The barriers in the Student Development taxonomy category included: limited use of assessment; lacking employment support service; low student motivation; limited practice opportunities; and, an over-academic focused program in spite of national guidelines. On the other hand, supports included options in vocational skills, and access to vocational skills for students with a severe physical disability.

Although the school had a list of vocational skills for student to choose, no vocational assessments were conducted to identify the students' interests and capabilities for attending a suitable vocational class. Assessment used in school was limited only to a psychological test at the beginning of schooling. In terms of student options in vocational skills classes, the choice was based on student desire rather than by conducting a vocational assessment. Yet, teacher and student participants recognised that vocational assessment was important.

Another barrier in the program, recognised by the principal and the teacher participants was low student motivation that result in limited student participation in the program implementation.

Lack of practice in the program was another barrier to student development. The programs implemented in the school focused only on theory rather than practice. Examples of this were in the cooking class and agriculture class where the activities were limited to writing down recipes, and explaining agricultural practices in Indonesia and other countries.

Support services related to employment matters were also recognised as a barrier to student development. While the teacher participants acknowledged the importance of this support, no employment support services were provided to the students.

Interagency Collaboration

Supports in the area of Interagency Collaboration included the existence of collaboration with some universities, a hospital and a business in Yogyakarta. However, the barrier was that collaboration was conducted without standardised procedures and without measurable outcomes.

Family Involvement

Support for school to work transition programs through family involvement included twice a year meetings, most of parents waiting for their children at school site during the school hours, and parent willingness to be involved more generally. The barriers included limited parent participation and parent competencies such as low levels of education, low commitment, low motivation and low expectations.

As noted in an earlier section, the school held two parent meetings (one at the beginning and one at the end of school period), however these meetings were

limited to program information only. Parents were not involved actively in program planning, implementation or evaluation. Furthermore, the school staff stated that parent incompetency and low expectation in regards to their childrens' achievement also contributed to limited parent involvement.

Program Structure

Supports to the program in the Program Structure taxonomy category included training for staff, government grants, and extended vocational classes after graduation. Barriers to the program included no explicit employment outcomes, weak leadership, a complicated bureaucracy, a poor school culture, low teacher competences, and limited appropriate resources.

The school staff were provided with access to enhance their competencies by attending further training provided by both government and non-government agencies through short courses. However, due to the large number of the teachers in the school and limited training slots, teachers needed to wait for long periods to be included in the training.

In terms of financial issues, the school had a grant from the government however, it was very limited and the management of this matter was ineffective. This grant also included vocational programs for the graduates that were not involved in employment yet.

Although the school wanted the graduates to have independent living skills, the school staff admitted that the program was far from being sufficient in preparing the student to be an independent individual, not only in terms of program facilities and time allocation, but also in terms of the teachers' competencies, the teacher-student ratio, and skills which were taught to the students.

Weak leadership and poor culture also were characterised in the school climate. While the school characteristics that created a poor culture among the teachers included a poor sense of belonging and poor teamwork, the school leadership was also reported as ineffective.

The next section will present the findings from case study two which involves special Schools B and C.

Case Study two: Special School B and C

Special School B occupies a site of about 1725 sq. m2, whereas Special School C occupies a site of about 2000 m sq. m2. Both schools were private special schools where students with different types of disability were educated together in the same classroom. Table 20 lists participants in each school.

Table 20 Research participants in Special School B and C

Name of school	Participant	n	Gender	Name of school	Participant	n	Gender
Special School B	Principal	1	M	Special School C	Principal	1	M
	Teacher	6	M=1 F=5		Teacher	6	M=1F=5
	Parent	1	F		Parent	1	F
	Student	1	F		Student	1	F

Data gathered from the schools included interviews, observations and school documents.

Q1. How do special schools implement school to work transition practices for students with a physical disability?

Taxonomy Category: Student Focused Planning

IEP Development

Both schools recognised that students' potential, needs and interests was the main focus in curriculum development (school curriculum document SS B and school curriculum document SS C).

In both schools, teachers identified attention to student ability and interest by setting different goals and outcomes for students in the same class activities (Teaching plan SS B and Teaching plan SS C). Furthermore, students' achievement of those goals and outcomes generally were documented in the student report and reported to the parents at the end of semester (Rapport book student SS B and Rapport book student SS C).

Student Participation

While SS B involved their students in curriculum planning and deciding their own vocational skills choice, SS C did not involve the student in planning, and only allowed the student to choose skills from a provided list. While Principal SS C stated that *"no student was involved in curriculum planning"*, Principal SS B maintained that *"we involve the higher grade students in the [curriculum] workshop"*.

The different level of student participation displayed by both schools was also verified by the students. While *"It is always based on what the teacher wants to do. If the teacher wants to do A, then the student have to do the A too, and I have never been asked what my interest is"* (Student SS C), student SS B argued that *"I was presented with the choices; I can choose what I like"*.

Teacher participants also confirmed the difference in student participation in program planning. While the teacher participant in SS B claimed that *"Yes, they [the students] are pretty much active in choosing the vocational skills. They probably do the activities the teachers asked them to do, but later they [the student] can say if they like to do that or not and they can change it. We cannot force the student to like what we [the teacher] like, it is up to the student, we [the teacher] only facilitate them"* (Teacher 1 SS B). The teacher participant at SS C claimed that *"It is chosen*

by the teachers, we [the teachers] predict what the students can do. It is the teachers who make the decision on which vocational skills are appropriate, and which are easy for the students to follow” (Teacher 6 SS C).

Parent participants also highlighted the different level of their children’s participation in the school. While parent SS B stated that “...*I see she developed well compared to when she was in her previous school, she is involved in a variety of the school programs. She is participating in drum bands, making salted egg and cooking” (Parent SS B). In comparison, Parent SS C asserted that “the school does not really involve the child” (Parent SS C).*

Planning Strategies

Even though self-determination in SS C was not as advanced as SS B, which has implemented strategies at the beginning of the program planning, the principal stated that “...*some of the children do not show interest [in the designated class], they only want to cut [in the sewing skills class] for example, and eventually we do not include them in sewing class. Later on, they only participate in the vocational class that matches their interests” (Principal SS C).*

In terms of post school outcomes, Student SS B did not want to enter employment: “*I just want to stay at home, helping my mum take care of my siblings” (Student SS B); whereas Student SS C identified that she wanted to get involved in employment that is “easy and not involving two hands”. Furthermore she explained that probably she would pursue her interest to “work in the computer area as a typer, or make homemade snacks” (Student SS C).*

Regarding parent participants points of view, both Parent SS B and Parent SS C would support them if their children want to be involved in some form of employment. While Parent SS B maintained that “*I will be glad if she can have a*

skill and could find a job after graduating ... at least she should be able to have one skill. I put a big expectation on her. Not so she should be able to get a job, but to live independently and not burden other people". Parent SS C admitted that *"it is up to her if she wants to work, but I will support her to gain the skills that she wants. I am still observing her interest, if she wants to initiate a small business to make products, for example making banana chips , I will give her funds and moral support"* (Parent SS C).

Although, as explained above, that there were differences in the level of student participation in program planning, both schools have vocational skills classes to accommodate student interests. While Student SS B confirmed that *"I like all the classes that were provided"*, Student SS C contended that *"it is very rare that the teacher supports my interest, even though I know that the material is available. The teacher is always busy with her own desires"*.

Principal SS B accommodated student interest by involving students in program planning by asking the student *"what are your interests? Hopefully we will see and develop their talents afterwards. We asked what will you be when your graduate, especially when it comes to the vocational skills?"*. Furthermore he explained that *"We have a batik class, if the students are interested in doing batik or drawing patterns, they can go to batik class. Once, they [the students] asked for motor bike wash, so we make programs for them. Basically we have a bottom up approach. Every class teacher has their own tricks to 'interrogate' the student, even though some students discontinue taking a class in the middle of the school period, and change their preferences"* (Principal SS B). Those whose interests cannot be accommodated by the school are *"encouraged to take the most favorites class among the available vocational skills classes"* (Principal SS B). In addition, the teacher

participant claimed that *“vocational skills are given to students from grade 6. Hopefully, now they have moved to higher school levels, we [the teachers] can identify and develop their interests”* (Teacher 2 SS B)

SS C accommodated student interest by allowing the student to try all the listed vocational skills classes and later on they could follow only this chosen class. Principal SS C asserted that *“when they were in the lower grade, they often saw their seniors doing a vocational skills class, so when it is time for them to choose, they use their experience from their seniors. Sometimes the teachers also direct their choice, if they do not have any options, or if they do not show any interests”* (Principal SS C). Moreover, a teacher participant asserted that *“all the student should follow the listed vocational classes, even if they are not interested in them. Even if they only sit and are doing nothing, at least they see the other student do it”* (Teacher 3 SS C).

Taxonomy Category: Student Development Assessment

There was strong evidence that assessment was conducted only at the beginning of the school period. There was no evidence in the school curriculum of either school on how student assessments were taken into account in the implementation of the programs. While Principal SS B maintained that *“there is assessment at the beginning of the school period by observing the new student for placement purposes”*, Principal SS C confirmed that *“our assessment is using our own observation... We do not have formal assessment here... Currently, assessment is conducted at the beginning of the school year”*.

In terms of staff conducting assessment, SS B appointed a teacher to be responsible for the assessment process (Principal SS B). Furthermore he stated that *“when the student enrolls in this school, the specialist teacher will observe the*

student, so we can predict the placement and the program...so in the beginning the student will be in an observation class for three to six months, the decision on class and program depends on the teacher. So the observation places emphasis on which class and program is suitable for the student". Different to SS B, SS C did not have a specialist teacher. Principal SS C maintained that "the regular teacher would observe the child's abilities... Later on, if it is not appropriate, then we will move the student. [The procedure is] just like that, we do not have any specialist assessment staff".

As stated in an earlier section, there was no specific vocational assessment conducted in either school. SS B uses a portfolio to document the student's works in vocational skills classes, whereas SS C depends on teacher memory in observing the students. The teacher participants in SS B argued that *"we keep the students' works. For example in Batik class, we keep from the first product until the latest, our intended aim is to assess their work and if there is no progress, the student can do something else. However, we still consider the student choice, even though the result is not good enough. If the student wants to stay in the batik class, we allowed them to continue the class"* (Teacher 2 SS B). A teacher participant in SS C suggested that *"unfortunately, we do not have any specific assessment tools, we only observe the students while they are working. This student can only do this; this student can only do that, but not documenting it. It takes time and effort to do that. [Document is not important], the important thing is student success"* (Teacher 6 SS C).

Career and Vocational Curricula

In both schools, vocational education received a higher ratio of teaching time compared to academic content. This ratio was consistent with the parent

expectation to *“put less emphasis on academic because it is their weaknesses”*

(Parent SS B).

While Principal SS B maintained that *“the ratio is 60% vocational and 40% academic in which the academic matter is a supported component for the vocational skills”*, Principal SS C claimed that *“In junior and senior high school, vocational skills compromises 60% of the total percentage, I follow that regulation”*. But at the same time he stated that *“special education services still place less emphasis on future life. Emphasis is still on academics. Yet, academic content for a student who has an intellectual disability is not really advanced. In my opinion, we, school and teachers, still place less emphasis on life skills, skills for life and future life”*

(Principal SS C).

The teacher participants from both schools also confirmed the way in which the curriculum was structured. While *“vocational skills have become the focus in secondary schools”* (Teacher 5 SS B), teacher participant SS C maintained that *“the curriculum in special schools is focused on vocational skills, arts and sports”*

(Teacher 6 SS C).

Consistent with the ratio, the SS B and C school documents show that vocational skills accounted for 24 units from the total 37 unit curriculum structures (SS B and C curriculum document).

Life Skills Instruction

Life skills instruction was specifically accommodated in the curriculum through 2 units of specific self-development programs (SSs B and C School curriculum documents).

Interestingly, SS B takes account of local wisdom of *‘rewang’* in life skills instruction. *‘Rewang’* is a community gathering to help a neighbor who has a

celebration event (such as: wedding, religious matters, birth, death, cultural matters, etc). It is important to be involved in 'rewang' in Javanese culture as it is show belonging, respect, and cooperation. In order to be able to be included in the society, the students in SS B were taught to how taking part in these activities.

Principal SS B asserted that *“we teach the students how to make ‘samir’ [food lining from banana leaf] and ‘sudi’ [special food pouch made from banana leaf], so they can take part in ‘rewang’ and be included in the community”*.

Furthermore he maintained that *“for special religious event such as ‘Eid Al Fitr’, we also teach the students to make ‘ketupat’ [woven palm leaves pouch]”* (Principal SS B). Moreover, the school also *“encourages the students to do dhuhur [midday pray] before going home”* (Parent SS B). Parent participants also acknowledged that developing life skills was one of the purposes of schooling *“so she can be included in activities, the social community and employment”* (Parent SS B).

Employment Skills Instruction

Employment skills instruction was facilitated in school B through a variety of vocational skills classes, such as *“batik, flannel and motor bike wash, and coconut shell”* (Principal SS B). Furthermore he explained how the teacher supports vocational skills: *“the teacher makes a pattern for key ring made from coconut shell with the student cutting and sanding it”*. Vocational skills classes available in SS C were *“sewing, salted egg, bitternut cracker, flannel, nursery, fish farming and cat fish farming”* (Teacher 4 SS C).

From the available vocational classes, batik was the favorite class of a student from SS B: *“I like doing batik but not flannel, it is difficult to sew the flannel. Only boys are doing motor bike washing”* whereas student SS C claimed that *“I would like doing a computer class, but the teacher does not let me do it”*.

The teacher participants pointed out that every year, schools had different leading vocational classes depending on student abilities and school conditions. While a teacher participant from SS C asserted that *“we develop different vocational skills every year. We had carpentry and trade last year. However, we cannot continue that class because the students are not as strong as last year”* (Teacher 6 SS C), a teacher participant at SS B stated that *“we used to have a computer skills class, but because of the school renovation, we stopped it temporarily”* (Teacher 4 SS B). In addition Teacher 3 SS B suggested that *“earlier, we had a variety of vocational skill classes such sewing, embroidery, woven, nursery, and catfish farming. But it is seasonal”* (Teacher 5 SS B).

School limitations in teaching vocational skills were acknowledged by both SS B and SS C. While Principal SS B confirmed that *“I admit that vocational skills are limited here ... actually, we would like to give more vocational skills options. The more skills the student acquires, the wider the work options. However, the school has limited resources”*. Furthermore, he explained that *“in a special school, sometimes, there is wide gap between our expectation and the reality”* (Principal SS B).

Consistent with the principal, parent participants also pointed out the importance of gaining several vocational skills. While the SS B parent claimed that *“I think that the children should be equipped with a variety of specific skills, not only one or two, but as many as they can”* the SS C parent maintained that *“school should teach diverse vocational skills”* (Parent SS C).

Furthermore, the parent and student at SS B were satisfied with the program at the school. The parent saw that *“she [her child] developed well compared to when she was at her previous school, she is involved in the variety of the school program”*, and the student also confirmed *“yes, I like [vocational skills]”*. The parent and

student at SS C identified minimum programs related to employment skills instruction. The parent believed that *“the school shows little attention to this [employment skills], and only focuses on academic content”* (Parent SS C) whereas the student argued that *“not much...very rarely, maybe only once in a week I do computer; in cooking too, we cook noodles or fried vegetable pancake once in a week”* (Student SS B).

Both schools teach social and work skills as they arise in an activity, by learning on the spot. While an SS B teacher maintained that *“we teach social skills while we are teaching the vocational activities, so it depends on the occasion. For example in motorbike wash, when the student finishes washing the motorbike, we [the teacher] teach how to talk to the owner nicely, and if we [the teacher] sees that he [the student] forget to put the owner’s belonging on the motor bike, we [the teacher] told the student that he should check and put the owner’s belonging back on the motor bike before you tell the owner that it is ready”* (Teacher 4 SS B). Teachers at SS C asserted that *“we [the teachers] teach social and communication skills while we do the vocational class. We [the teacher] teach how to communicate with colleague and the boss, how to solve simple problem and safety issues (teacher 4 SS C), how to be on time for work and let the boss know if you [the student] are not able to come to work”* (Teacher 6 SS C).

Structured Work Experience

Apprenticeships were available but limited in both schools. Besides funded apprenticeships from the provincial level Department of Education, Youth and Sport, structured work experience was available at both schools through collaboration with business.

Regarding the apprenticeship funded by the government, both principals asserted it was insufficient in terms of the number of students sent to the program. Principal SS B suggested “*there are not enough quotas for the students*”. Principal SS C argued that “*there is an apprenticeship program funded by the government, but it is limited. Not every special school can participate in this program. The quota for Bantul District is only 12 students and we [Bantul District] have 16 special schools. It is not enough.*”

Another structured work experience program in both schools was arranged through business collaboration. While it was only available for students with hearing impairment in SS C, it was available for other types of disability in SS B, including for students with a physical disability.

Structured work experience was available in SS C in an underwear manufacturing business. The school has collaboration with a business that was personally known to the principal. The students who could be involved in the program were limited to those with hearing impairment, and they received lunch money from the school. Principal SS C explained that “*we do have cooperation with an underwear manufacturing business... However, the company does not give any salary or fees for any pieces that are completed...The school provide only a small amount of lunch money*”. In addition a teacher at SS C confirmed that “*we have been collaborating with the underwear manufacturing business for about one year. We [the teacher] take the material from the business sites, and then the students sew it at school. Next, the teacher returns the completed work back to the business*” (Teacher 6 SS B). The student at SS B also confirmed that “*a student with hearing impairment is working for underwear manufacturing business*”. This collaboration will be explained further in the later interagency collaboration section.

A structured work experience available at SS B was at the art and craft workshop for males. The art and craft workshop belongs to one of the teachers. Principal SS B maintained that *“we send male student to making statues at Mr. W’s craft workshop and send female students to the laundromat”*.

In deciding which students progressed to the apprenticeship program, both schools choose the most skillful student. While Principal SS C asserted: *“Because we have collaboration only with the sewing business, I choose the students who were best in sewing skills. I ranked them to find the best, hoping that she/he will be recruited”*. Principal SS B maintained that *“we send the student who has capabilities”*. There were several problems regarding the apprenticeship program identified by Principal SS B, including internal and external problems. Details of problems will be discussed in a later section of this case study.

In terms of apprenticeship guidelines, both schools did not have structured guidance. Principal SS B stated that *“we do not have any guidance, we just bring the student to the business. It is up to the business what are going to teach the student, and what sort of work the student will perform. The teacher will visit the student once a week or fortnightly. We ask the business owner about the student’s performance during his/her apprenticeship. If according to the business owner the student’s performance is good, then nothing to worry about. If there are negatives then the teacher will talk to the student to improve the performance”*. In relation to apprenticeships in SS C, Principal SS C pointed out that *“because of the transportation problems, instead of sending the student to the business site, the principal invited the business owner to come and teach the students at school. The business owner used to come every Saturday to teach the students and the teachers. But now the students are expert and they can sew independently”*.

Another structured work experience was arranged through collaboration with other government organisations. The detail of this collaboration will be discussed in interagency collaboration section.

Support Service

Participants identified that access to support services was limited. While it was confirmed by the parents that *“there is no physiotherapy program for students with a physical disability”* (Parent SS B), the teacher participant confirmed that *“we do not have physiotherapy, I encourage the student to use both hands even though I know that she has spasticity on her left side”* (Teacher 6 SS C). Furthermore, the SS C student also asserted that *“no special program to accommodate my spastic hand”*. (Parent SS B).

Lack of access to facilities and resources was also noted. A teacher participant at SS C maintained that *“I found that it is difficult to teach vocational skills without modified tools. Student with a physical disability need modified tools, but we do not have them. A student may be interested in doing the sewing class but it is difficult for her because her left side is spastic. We find it difficult to accommodate her. Perforce, she just needs to work hard to move and stretch her arm and leg as far as she can”* (Teacher 5 SS C).

In terms of access to information, both parents recognised that the schools shared information regarding further training for their children. Parent SS B noted *“I know about organisations that assist further training for people with disability. I know about [Name of a NGO] from the school. I know about [Name of a center] from my friend”*. Parent SS C indicated *“I know about the rehabilitation center in [name of location]. The school offered my daughter further training in [Name of a center] but then it was cancelled.”*

Taxonomy Category: Interagency Collaboration

Collaborative Service Delivery

Both schools had collaboration with various organisations such as business and government. While the collaboration with the business organisation was limited to students' apprenticeships, the collaboration with government organisations related to further training.

As stated in the previous section, both schools had collaborations with business organisations in the apprenticeship program through personal relationships. In SS C the business owner was approached personally by the principal, whereas the business owner who collaborated with SS B was a teacher at the school. However, Principal SS C was not satisfied with the collaboration with the business owner as he believed that it was not mutual collaboration: *“for this kind of program, the company gets more benefits than us”* (Principal SS C). The benefit for the school was not having to provide the material for sewing, because it was supplied by the business owner. Principal SS C indicated that *“we [the school] are advantaged by not buying any materials. We cannot buy material for underwear for a limited amount, should be these sizes, should be those sizes. Our advantage is that we teach the students without providing any materials, we only provide sewing machines. We are only making the product, we do not get any salary, it's a bit of troublesome”* (Principal SS C).

While SS C had *“collaboration with government organisations such as Department of Manpower and Transmigration and Department of Social Affairs”*, (Principal SS C), SS B did not *“have any collaboration with other government organisations”* (Principal SS B). However, both principals identified the importance of collaboration. Principal SS C emphasised *“shared responsibility between communities and government to provide a sheltered workshop for all student with*

disabilities”, whereas Principal SS B placed emphasis on mutual understanding between the business owner and the school because *“unfortunately, the business owner often forgets that this student is in training. They [business owner] force the student to be fast and good like an expert”* (Principal SS B).

Collaborative Framework

As discussed earlier, the collaboration framework implemented by both schools was informal; it was based on personal relations. In terms of collaboration with the business owner in SS C, the school provides lunch money and sewing machines; the business owner provides materials. Furthermore, the school invited *“her [business owner] to come to the school every Saturday to teach the students and the teachers. Once the students and teachers became expert, she came rarely”* (Teacher 4 SS C).

A collaborative framework in SS B was implemented in an unstructured way. A teacher participant asserted that *“it not really structured. One of the teachers has an art and crafts business. If he gets lots of order then he will ask the student to come and work at his place. Usually the student will ask permission from the class teachers which most of the time will be permitted”* (Teacher 3 SS B).

Taxonomy Category: Family Involvement

Family Involvement

There was clear evidence that family involvement in planning in both school programs was limited. While Principal SS B maintained that *“we [the school], at least, involve the school committee and parent representatives in the [program] workshop. Once, we invited all parents. However, due to parents’ low education levels, they were not actively involved in making suggestions and decisions. Their involvement is limited to confirming their agreement to the decisions the school has made”*. Principal SS C suggested that *“...we [the school] involved the parent in*

program making, however their involvement is limited to agreeing with the school”. Furthermore, he stated that *“they do not have knowledge of this matter [program]”* (Principal SS C). In addition, a teacher participant asserted that *“not every parent was involved in the planning, only those who were on the school committee”* (Teacher 1 SS C).

The parent participants also confirmed their limited involvement in program planning. Parent SS C stated *“I only received invitations for taking the annual student report and excursions but I never get any invitations to the program planning meeting”*. Parent SS B was involved only by *“often staying at school and observing my child’s activities at school so I know the education program implemented there”*.

Evidence suggested that parent participation in the program was also voluntary and personal. While a teacher participant at SS B claimed that *“a parent came and asked me to teach sewing to her child personally”* (Teacher 1 SS B), Principal SS C maintained that *“we have a parent who has an underwear manufacturing business and personally expressed her interest to participate in the sewing class to learn sewing of underwear”* (Principal SS C). Furthermore, the parent participant asserted that *“I spoke personally to the principal about my concern related to vocational skills, that I want my daughter to be able to have a specific skill for her future”* (Parent SS B).

Parent involvement in the program also related to influencing their children in making a decision on which vocational skill class their children should undertake. While Principal SS C asserted that *“some parents control their children; they do not let their children choose their own [vocational skills class]; force their children to choose computer class, [because it is] more modern... I see that the parents who have these beliefs have a higher education level, and work as civil servants and*

teachers. They might think that sewing skills will not be good for their children's futures" (Principal SS C).

Furthermore, a teacher participant pointed out that *"there was a parent who requested us to teach her child sewing skills, surprisingly the child can do it; something that the teacher did not predict that he could do" (Teacher 6 SS C).* In addition, another teacher participant claimed that *"there was another parent that also requested a sewing skills class for her child because she has a sewing business. We [the teacher] tried to teach the student, unfortunately the student did not have talents, he sewed like in racing, very fast no rhythm. It scared the teacher, so we told the parent that we could not teach him" (Teacher 5 SS C).*

However, Parent SS B stated that *"I used to think that sewing skills would be good for her. But then I realised that my daughter has limited capabilities. While sewing needs math and measurement, my daughter has an intellectual disability too. I cannot force her to do sewing. Now she has a course in leather production in [Name of a center]. Everyone does specific things in the production. It is ok for me, as long as she gains skills" (Parent SS B).*

The parent participant in SS C identified the importance of involving the parents once the students' interests were identified. He said that *"the teachers are supposed to observe, identify and govern their students. If the interests are identified then they should be communicated to the parents: encourage and address, encourage and address. We should share the responsibility. But it is not happening in this school" (Parent SS C).*

Family Training

Family training implementation varied in both schools. While SS B held “*training for the parents at least once a year*” (Principal SS B), SS C “*has never held a training program for the parents*” (Principal SS C). However, if there was vocational training for the students, parents who were interested in it were welcome to join in. Principal SS C claimed that “*many parents who pick and drop their children often see and become interested [to join]*. In addition, he asserted that “*actually, I think it is important to do so, so together with their children, they can develop [the business]*” (Principal SS C).

Family training in SS B was more structured compared to SS C. Besides organising once a year vocational training for the parents, they also had a choice to be involved in the particular vocational skills class with the children and were encouraged to bring their own materials. During researcher observations, two to four parents attended batik class (Field notes 1-5). Similarly, the principal of SS B explained that “*we encourage parents to be involved in the batik class. We expect they can also be involved in batik business with their children*”. Furthermore he maintained that “*once, we trained the parent to make ‘jamu’ [traditional drinks] for sale. The parents included their children in the business whether it was packing the drinks or grating the herbs*” (Principal SS B).

Family Empowerment

Evidence suggests that family empowerment varies in both schools. As described earlier, parents could join the training by approaching the school personally, however there was no family participation in program planning, implementation and evaluation organised by SS C for each parent. Differently, SS B organised family participation in the program implementation.

Taxonomy Category: Program Structure

Program Philosophy

Students with a physical disability in both schools had access to vocational education. As described in the previous section, the school provided a variety of vocational skills to accommodate the students' interests and to meet the government regulation on special school curriculum standards (School curriculum document).

The vocational education available to students with physical disability in both schools was insufficient in preparing those students for employment purposes. Principal SS C admitted that *“vocational skills are limited here... we [the school] give less emphasis to life skills, skills for life and future life”* (Principal SS C) whereas principal SS B maintained that *“vocational skills is the focus of the curriculum in the secondary level”*, however, he further stated that *“we [the school] are unable to provide an expertise certificate. We only confirm to the parent what their child's interest are, we only suggest that this particular student has interest in this or that skill”* (Principal SS B).

Program Evaluation

In general, both schools evaluated their program once a year, however, it lacked student and parent involvement. While there was a special team in SS B to review the program curriculum, SS C's review of the program was based on teacher assumptions of student capabilities. Principal SS B asserted that *“we [the school] have a team that arranges and reviews the program. The goal is to revise any inaccuracy and inappropriate part of the program”*. A teacher participant in SS C maintained that *“we develop different vocational skills every year based on the teacher assumptions of student abilities”* (Teacher 6 SS C).

Strategic Planning

At the school level of strategic planning, both schools implement the same

policy regarding an extended vocational program for graduates who were not involved in employment. These graduates were welcome to participate in a vocational class. This strategy applied to *“the graduate who graduated up to three years previously and it is implemented across special schools throughout Yogyakarta as it is the Department of Education, Youth and Sport Provincial Level regulation through (the) entrepreneurship program”* (Principal SS B). In both schools, this *“entrepreneurship program is integrated in vocational skills classes”* (Principal SS B and Teacher 6 SS C).

Regarding the delivery of vocational skills, both schools implemented a team teaching strategy. Teachers in both schools were class teachers who also acted as vocational teachers. In both schools, vocational skills classes were held simultaneously across all classes in the schools. Similarly to SS B that *“employ vocational skills in teams so the teachers can learn and help each other”* (Principal SS B), vocational skills classes in SS C were scheduled in the same way. Principal SS C maintained that *“we arrange the same schedule [for vocational classes], we allocate the same time in all classes. If this class has sewing class so is the other class so they [the teachers] can collaborate. In batik too, if this class has batik class so is the other class. Even though the other teachers only acts as an observant, only watching”* (Principal SS C).

At the regional level of strategic planning, both schools took advantage of further training courses offered by other government organisations. Both schools often send their students to pursue these vocational skills courses. However, while the training applied to all students in SS B, its application in SS C was limited. Principal SS B suggested that *“we let the students participate in short courses offered by government institutions”*. In the same way, the principal of SS C

maintained that *“if other institutions provide opportunities for future life skills, I let the students participate. For example, the Department of Manpower and Transmigration often opens registration for training. If the students passes the registration process, we will allowed them to participate due to the limitation of such programs at the school. [Name of a center] also often gives opportunities, looking for older students who can read and write. I also often asked teachers if they knew of any training for the students, and I will let the students participate, so they can gain skills for a better future life”* (Principal SS C).

At the community level of strategic planning, both schools recognised the importance of *“shared responsibility between communities and government in providing a sheltered workshop for the students”* (Principal SS C). Furthermore, he also placed emphasis on the importance of sustainability of the program. Taking example of aid given by one of government organisations that assisted the five best students with sewing machines, he asserted that *“it is important that the organisation does not end the program by only giving the sewing machine. But the organisation needs to assist these students to be independent with those machines; how to open business and find customers”* (Principal SS C). In addition, Principal SS B also identified the needs for assistance in product marketing as *“some of special schools produce a variety of goods, but we do not have reliable marketing”* (Principal SS B).

Program Policy

Both schools acknowledged that developing vocational skills and establishing collaboration with stakeholders were important in regards to work related transition programs (SS B School Document & SS C School Document). While it was stated in general that the school should develop vocational skills and collaboration with business (SS B School Document), the SS C school document

indicated specifically that the school should provide four types of vocational skills and held apprenticeships for their students in the relevant industry (SS C School Document). However, as noted earlier, the skills that were provided in the school were inadequate and the collaboration was limited.

Similarly, independent living was recognised by teacher participants in both schools, as expected students' outcomes. An SS B teacher participant maintained that *“we would like our student to be independent; for those who have only mild disabilities we expect that they would be able to join the work force”* (Teacher 4 SS B), whereas an SS C teacher participant also asserted that *“we expect that after graduation, the student could earn money from the skills gained at school”* (Teacher 3 SS B).

Human Resource Development

Human resource limitations were highlighted in the findings in the human resource development cluster in both schools B and C. Due to teacher shortage, both schools utilised only regular teachers who had a special education background to teach vocational skills. While Principal SS B asserted that *“the teachers are not really qualified to teach vocational classes because they are not expert in those particular skills. They are not expert, they are special education teachers who took up short training. It is supposed to be taught by experts but that is all we have”*. Principal SS C claimed that *“we still employ class teachers in junior high school and senior high school, not subject teachers, that's the problem too. Not every teacher has appropriate skills yet they have to teach vocational skills to the students. That is the problem and we haven't any solution because we experience a teacher shortage”*. Furthermore, Principal SS C explained that the teacher student ratio was also high in the school: *“According to the government regulation the ratio is one*

(teacher) for every five students. However, we have more than that. Actually the teachers also complain if they have too many students. ‘Sir, I object if I had eight students in the class’.

It was difficult for the school to employ new teachers who had specific vocational skills as the school did not have sufficient resources. Principal SS C argued that *“even though it is allowed to appointed vocational teachers, for private school like us, we do not appoint new teachers due to financial reasons”*. Moreover, the government cannot place a new teacher in private schools as *“the government only places the candidate of teacher civil servant/Pegawai Negeri Sipil [PNS] in the government school”* (Principal SS C).

Teacher participants in both schools also acknowledged the lack of expertise in teaching vocational skills. While a teacher participant in SS B claimed that *“we still lack resource and experts”* (Teacher 2 SS B). A teacher participant in SS C stated that having vocational skills coordinators accommodated class teacher who had less expertise in teaching vocational skills. One of the teacher participants argued that *“every class teacher should teach vocational skills too, however, we have vocational skills coordinators who assist the class teacher in teaching vocational skills. For example we have a coordinator for the sewing class, computer class, etc. The class teacher usually teaches beginning skills, for example introduction to sewing machine, how to move pedal and sewing exercise using paper. If the children move to the more advance level, then I hand her over to the coordinators”* (Teacher 6 SS C).

Lack of teacher competence in SS C was also identified by the parent and students. Parent SS C confirmed that *“in this school, the teachers only care about themselves, they are rushing home after teaching is finished. If not, they sit in the*

office and bla..bla..bla...(Imitate people talking). There are more female teachers than male. It is their habit that after sending the children to the classroom, the teachers will still be chatting in the office". The student also claimed that *"the teachers are busy with themselves, they are often still drinking and chatting in the office even when it is time to begin the class"* (Student SS C). On the other hand, Parent SS B believed that the teachers in SS B are competent as she observes her daughter was *"involved in variety of school programs"* and *"developed good skills"* (Parent SS B).

However, Principal SS B did not agree with the parent point of view. He confirmed that most of the teachers had low teaching commitment. Principal SS B claimed that *"motives are significant in teaching. Not all the teacher put their full dedication into teaching. Some of them reluctantly educate the student. They only teach just to pass their duty as a teacher. Yet, sincerity is the most important factor for succeeding in teaching and learning in special school."*

Teachers had access to training to improve their competences in vocational skills. However, it depended on the principal which teacher went for what courses. In order to reduce jealousy between teachers, the principal will *"make sure that every teacher has their turn"* (Principal SS B). Similarly, a teacher participant also maintained that *"the principal will determine which teacher goes to the training, who has more spare time and has not had their turn yet. We avoid unequal workload and opportunities (Teacher 6 SS B)"*. However, Principal SS C claimed that this policy was problematic if the teacher who was sent for the workshop has no interest and/or no previous background and experience. He argued that *"Once, one of our teacher had training on an automotive course at the National level for about a month. Because he had no background in automotive, he experienced difficulties in*

understanding the course. Therefore, he only attended the course to be dutiful, not really putting concern on achieving the outcomes. It did not really improved his competences”.

Training was provided by government and non-government organisations, however, it was insufficient in terms of resources and delivery. Principal SS C suggested that *“for a program involving many participants and for the purpose of vocational skills training, the material is limited. For example making a bird cage, only few people have a chance to build the bird cage in the course, the other participants only observed. That was not training; that was a demonstration. The government often did that. They held and carried out the training, but because of the financial limitation, it turned out to be an observation not full training”.*

Despite the purpose of training being to improve teacher competence in vocational skills, the training limited school participation to only one course and the course was at the beginner level. Principal SS C argued that *“not every school has the same access to the courses. The school had to choose only one course, they only have limited places. Our school could participate only in batik training.”*

Furthermore, because it was offered at beginner level, the teacher still needed assistance in teaching specific vocational skills to their students. The teacher participant in SS B claimed that *“even though I am appointed to be the coordinator and am trained to make batik, I am not confident to teach batik by myself. So I invite a student from ISI [Indonesia Art Institute] for assistance”* (Teacher 5 SS B). In addition, the training that was provided did not match student interest. Principal SS C claimed that *“too bad that our school cannot use the teacher’s skills on batik to be implemented in our school, as the students with intellectual disability have limitation in doing batik and the students with hearing impairment are not interested in it”.*

The teacher certification program that has been running since 2010 has not yet recognised teacher competence in transition programs and vocational skills.

Teacher certification only “*recognised teacher general ability in recognising the student with disabilities*” (Principal SS C).

Resource Allocation

Even though both of the schools were private schools, financial supports were derived from the government through the Department of Education, Youth and Sport. Both of the schools occupied local council land that had less space compared to the government school. Principal SS B maintained that “*one of our problem is we do not own our place, we borrow from the local council and also it is very small*”.

Despite the status of the school, the parent argued that “*it is not necessarily that the public school is better than the private school. Even when there was a performance of music and arts, the students from the private school performed better than the students from the public school*” (Parent SS B). However, Parent SS C claimed that the school does not use resources efficiently. He claimed that “*the school used to have all the tools, but they do not maintain them. I know that it used to have carpentry tools, electrical tools, and mechanical tools; they do not maintain them. It used to make wooden educational toys, produce batik; they lack of the human resources to utilise all those tools. I honestly speak about this. The school also has cooking appliances but [these are] left broken in the storeroom. They only used the stoves for Boy Scout activities now*” (Parent SS C). On the other hand, the principal believed that “*we are constrained by the equipment; we do not have modern machineries or effective infrastructure*” (Principal SS C).

In terms of paid work experience, due to funding limitations, the school had to use another program’s fund in order to cover the expenses. Principal SS C

suggested that *“the school only gives lunch money to the students but our financial resources also limited. The school only provides a small amount of lunch money. We also use the money from the supplement food program”*.

The principal believed that there should be a higher level of employment support for those students who cannot go into competitive employment. These resources included a sheltered workshop and special product marketing. He argued that *“we can teach students who have physical and intellectual disability to weave, but the quality will differ compared to the normal. In general, our society can see if the product is low or good quality. Our society would not choose the low over the good especially if the price is similar. If we sell at a cheap price, we do not have profit. So I think sheltered workshops and special marketing are important and this should not be done by school. I think the government has more power to do so”*

(Principal SS C). Table 21 summarizes the SS B and SS C participant responses within the taxonomy structure.

Table 21 Summary of response across the Taxonomy by participant and data collection methods in Special School B and C

Taxonomy Category	Taxonomy Cluster	Participants								Data collection methods						
		Principals		Teachers		Parents		Student		Observation		Interview		Document		
		SS B	SS C	SS B	SS C	SS B	SS C	SS B	SS C	SS B	SS C	SS B	SS C	SS B	SS C	
Student Focused Planning	IEP development														v	v
	Student participation	v	v	v	v	v	v	v	v	v	v	v	v	v		
	Planning strategies	v	v	v	v	v	v	v	v			v	v			
Student Development	Assessment	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	Career and Vocational curricula	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	Employment skills instruction	v	v	v	v	v	v	v	v	v			v	v	v	
	Life skills instruction	v	v	v	v	v					v		v	v		
	Structured work experience	v	v	v	v				v	v			v	v		
	Support service	v	v	v	v	v	v	v	v		v	v	v	v		
Interagency Collaboration	Collaborative service delivery	v	v	v	v	v							v	v		
	Collaborative framework	v	v	v	v	v							v	v		
Family Involvement	Family involvement	v	v	v	v	v	v						v	v		
	Family training	v	v	v	v								v	v		
	Family empowerment	v	v	v	v								v	v		
Program Structure	Program philosophy	v	v	v	v	v					v		v	v	v	v
	Program evaluation	v	v	v	v								v	v	v	v
	Strategic planning	v	v	v	v								v	v	v	v
	Program policy	v	v	v	v						v		v	v	v	v
	Human resource development	v	v	v	v						v		v	v	v	v
	Resource allocation	v	v	v	v	v	v	v					v	v		

Note: v = responses is identified

Q2a. What are the barriers to implementation?

Q2b. What supports exist in implementation?

This section discusses barriers and supports in the implementation of school to work transition programs in Special Schools B and C. The issues will be presented based on the Taxonomy framework, firstly summarized in Table 22 and then discussed in the following text.

Table 22 Barriers and supports to the implementation of school to work transition program in special school B and C

Taxonomy Category	Barriers		Supports	
	SS B	SS C	SS B	SS C
Student Focused Planning	<ul style="list-style-type: none"> Limited student participation No IEP 	<ul style="list-style-type: none"> Limited student participation No IEP 		
Student Development	<ul style="list-style-type: none"> Limited used of vocational assessment No Employment Support service 	<ul style="list-style-type: none"> Limited use of vocational assessment No Employment Support service Limited practice 	<ul style="list-style-type: none"> Used portfolio to document student’s work Choice of vocational skills Taking account of local wisdom 	<ul style="list-style-type: none"> Choice of vocational skills
Interagency Collaboration	<ul style="list-style-type: none"> Seasonal collaborative framework Absence of procedural guidance in collaboration 	<ul style="list-style-type: none"> Absence of procedural guidance in collaboration 	Collaboration with teacher who has a business	Collaboration with business

Taxonomy Category	Barriers		Supports	
	SS B	SS C	SS B	SS C
Family Involvement	<ul style="list-style-type: none"> Limited parent participation Low parent education level 	<ul style="list-style-type: none"> Limited parent participation Low parent education level 	<ul style="list-style-type: none"> Parent teacher meeting Parent willingness to be involved 	<ul style="list-style-type: none"> Parent teacher meeting Parent willingness to be involved
Program Structure	<ul style="list-style-type: none"> Teacher competencies: <ul style="list-style-type: none"> Low teacher motivation Low teacher commitment No skills competence in vocational skills Unavailability of Resources (ramps, modified tools, accessibility, facilities, etc.) Limited financial resources 	<ul style="list-style-type: none"> Teacher competencies: <ul style="list-style-type: none"> Low teacher motivation Low teacher commitment No skills competence in vocational skills Unavailability of Resources (ramps, modified tools, accessibility, facilities, etc.) Limited financial resources 	<ul style="list-style-type: none"> Goal for employment was acknowledged Training from other organisations Grant from government 	<ul style="list-style-type: none"> Goal for employment was acknowledged Training from other organisations Grant from government

Student Focused Planning

While there was no evidence that supports the implementation of student focused planning in either Special School B or C, they share the same barriers in the student focused planning category. The key barriers were limited student participation, and lacking of planning and implementation of IEP.

As noted in the SS A data, the IEP was not widely used in either school, and limited student participation (especially in program planning and evaluation) was evident.

Student Development

Supports recognised in the category of student development in SS B included the use of a portfolio in documenting the student's work, choice of vocational skills, and taking account of local wisdom such as 'rewang' in the transition program. Barriers acknowledged in the transition program in SS B included the limited used of assessment and unavailability of employment support services.

Different to SS B, which allocated sufficient amount of time allocation in practice in vocational skills classes, SS C placed little emphasis on this matter. In addition, choices of vocational skills were available only to students with hearing impairment. Students with other types of disability, including those who had physical disabilities, could only access limited choices.

Interagency Collaboration

Although both of the schools had collaboration with businesses, there was no guidance on how this collaboration was conducted. In terms of financial matters, the collaboration in SS C, and acknowledged by the principal, only advantaged the business.

Collaboration in SS B was seasonal and with a business owned by one of the teachers in the school. The students could be involved in paid work experience by seeking permission from the teacher.

Family Involvement

Support for school to work transition programs in the area of family involvement in both schools, included parent teacher meetings and parent willingness to be involved in the program. However, in SS C the meeting occurred mostly not for planning of the program, but for announcement of holiday and school excursion news.

Barriers to family involvement in the transition program in both schools included limited parent involvement and low parent education level. While according to the school staff, they did not give room for participation because the parent did not have sufficient capacities, the parent noted that parents were willing to be involved and to share responsibility to develop their children's' competencies.

Program Structure

Both schools shared the same supports and barriers regarding the program structure category. Both schools acknowledged that employment was one of the school outcomes. The teachers in both schools were provided equal access to enhance their competencies in vocational skills by attending further training provided by both government and non-government agencies. Both schools also depended solely on financial assistance from the government to manage the program.

In terms of the barriers, both schools had the same issues regarding the teacher competencies. Both schools did not employ specialist teachers in teaching vocational skills, and low teacher dedication was highlighted by research

participants. Unavailability of accessible resources was also recognised as a barrier in this category.

The next section presents the findings from case study three which involves Special School D.

Case study three: Special School D

Special School D occupied a site of about 2000 sq. m². The school was a private special school where students with different types of disabilities were educated together in the same classroom. Research participants in the Special School D are shown in Table 23.

Table 23 Research participants in Special School D

Name of the school	Participant	n	Gender
Special School D	Principal	1	F
	Teacher	6	F=6 M=0
	Parent	2	F=2 M=0
	Student	2	F=2 M=0

Data gathered from the schools included interviews, observations and examination of school documents.

Q1. How do special schools implement school to work transition practices for students with a physical disability?

Taxonomy Category: Student Focused Planning

IEP Development

The school recognised students' potentials, needs and interests in their curriculum development (School Curriculum Document SS D) and, as noted in the other case studies, the IEP was not widely used in special schools in Indonesia. Student capabilities were identified by setting different goals for each student in the lesson plan for each subject (Lesson plan document SS D).

Furthermore, the students' achievements of educational program goals and outcomes were documented generally in the report and reported to the parents at the end of semester (Rapport book SS D).

Student Participation

Student participation in the planning process was limited. Compared to other types of disability seen within the school, students with physical disabilities, whether they had, or didn't have, additional disabilities such as intellectual disability, were seen as incapable of communicating their ideas. Principal SS D maintained that *"Together with their parents, the students attend the meeting, however, it is limited just to attending; they do not give any suggestions or propositions. The school also cannot confirm whether they really understand the purpose of the meeting. It is really different to those who have hearing impairment where they can give their opinion. Students with physical disability and or students with intellectual disability, experience difficulties in communicating their interests"*.

Similarly, the teacher participant stated that *"we do not involve the students in developing the program and curriculum because we do not think that the students would have capabilities do those activities"*. In addition, the parent participant also stated that their children *"never get involved in the planning decisions"* (Parent 1 SS D). In the same way, the student participant also sustained that *"[the students] just do what the teacher ask them to do"* (Student 1 SS D).

Even though student participation in program planning was limited, students participated actively in the program's implementation. Further details about this participation will be addressed in *other relevant components of the Taxonomy* below.

Planning Strategies

In terms of post school outcomes, principal and teacher participants agreed that employment issues were taken into consideration when developing the school program. This included taking into account the school environment in determining vocational skills options. More detail on how this issue was taken into account will be explained in the subsequent program structure category of the taxonomy.

After graduation, both student participants would have liked to be involved in employment. While *“I want to help my mum managing the grocery stall”* (Student 1 SS D), Student 2 SS D maintained that *“I am interested to be involved in a sewing business”*. Even though one of the parent participants would have liked to send her daughter for *“further training”* (Parent 2 SS D). Both of the parents also confirmed that eventually they would have liked to have their daughters involved in work. One parent participant claimed that her daughter was a quick learner. She maintained that *“my daughter can do any kind of vocational skills... She often helps her grandparent making ‘tempe’...she helps the neighbour make bitternut crackers...I was very surprised myself, but she can do anything”* (Parent 1 SS D). Parent 2 SS D asserted that *“I wish she can join me in the grocery stall. I can teach her cashier work, how to make change. I think she can do it.”*

Getting into employment was important for both student and parent participants in order to earn money and engage in independent living. Similarly, the student participant pointed out *“so you can have your own money without asking parents”* (Student 2 SS D), and the parent participant emphasised that *“it is good for their future as I am getting old and will not be alive forever to take care of her”* (Parent 2 SS D).

The school accommodated student interests through a variety of vocational skills and “*takes consideration of student interest to fit them into the available vocational skills classes*” (Teacher 4 SS D). Furthermore, the students agreed that the school had addressed their interests; one of the students maintained that “*the teacher teaches me how to sew and I like it*” (Student 2 SS D). The other student suggested that “*yes, I like doing ‘batik’, I like making things from ‘batik’*” (Student 1 SS D).

Taxonomy Category: Student Development

Assessment

Even though the school did not utilise standardised assessment for vocational skills purposes, the school used information about each student; their home and school environments to choose particular vocational classes for that student. The principal maintained that “*we do not have specific assessment, but we try to see [the student] environment. If they come from agricultural areas, we put them in an agriculture class. Furthermore, [the school] environment is a centre of batik production so some of our students also doing batik class. For student with intellectual disability but physically strong we placed them in the bitternut cracker production class as Pandak also produce bitternut*” (Principal SS D).

Similarly, a teacher participant also suggested that “*there is no formal assessment; we only see their interest and abilities*” (Teacher 5 SS D). Furthermore, one of the teacher participants claimed that “*When you spend a lot time with the children you can tell what their interests are*” (Teacher 5 SS D).

Career and Vocational Curricula

The school curriculum identified different groups of disability according to students' intellectual performance. For those who did not have an intellectual disability, the curriculum placed greater emphasis on academic matters. Career and vocational curricula for those who did not have an intellectual disability accounted for 40% of the total ratio in the actual school curriculum. For those who had an intellectual disability, career and vocational curricula accounted for 60% of the total actual curriculum (SS D School Curriculum document). However, due to lack of facilities, Principal SS D argued that *"in practice, we probably implemented just 40% of the actual curriculum for vocational education"*. Conversely, a teacher participant suggested that *"the biggest percentage, about 80%, is vocational skills"* (Teacher 4 SS D).

The school used the National Curriculum as the School Based Curriculum (SS D School curriculum document). However, in implementing the curriculum, a teacher participant maintained that *"Even though we utilise the national curriculum, we also take childrens' abilities into account, so we are not using the national curriculum completely"* (Teacher 4 SS D)

The curriculum was set before the school period began and parents on the school committee were involved in the curriculum making. The curriculum implementation was flexible where *"the teachers can adjust the curriculum according to the students' capabilities. If it fit with the students, then the teachers continue using it; if it does not fit, then it is up to the teachers to make the adjustment. We cannot push it"* (Teacher 2 SS D).

Life Skills Instruction

Life skills instruction for students at the secondary school level was addressed specifically in the curriculum through a 2 unit self-development program. The program divided into two types: extra-curricular programs such as, citizenship activities, sport, clean-up day, and religious activities; and, structured programs such as batik and computer (SS D School Curriculum document).

Employment Skills Instruction

Employment skills instruction was facilitated in the school through a variety of vocational skills. Every vocational skill had a coordinator. While a teacher participant stated that *“we have salted egg class, bitternut crackers class, batik class, sewing class, and agriculture class”* (Teacher 1 SS D), Principal SS D pointed out that *“actually we have laundry too and a beauty class, but it is just a short term program”*.

Unlike students with hearing impairments who were encouraged to undertake all the vocational skills classes that were available before decided which one they want to choose, students with intellectual and or physical disabilities were directed into specific vocational skills classes. A teacher participant argued that *“We can generalise that students with hearing impairment are interested in doing something smooth like sewing and batik. Students with intellectual disability show interest in bitternut cracker, they are not able to do ‘batik’. Students with moderate intellectual disability are encouraged into pounding bitternut and also into agriculture. For students with a physical disability, we direct them to ‘batik jumputan’. They can make a table cloth, tea towel and handkerchief. We cannot put them in bitternut cracker class, because they have difficulties in pounding, the pounders is really heavy; we may put them also in salted egg”* (Teacher 5 SS D). Moreover, *“student*

with hearing impairments can do more vocational skills options as they do not have intellectual and physical constraints” (Teacher 4 SS D). Furthermore Principal SS D maintained that “students with intellectual disability experience difficulty in doing ‘batik tulis’ but enjoy doing ‘batik jumputan’ and so do students with a physical disability. They also enjoy the process of colouring the ‘batik’ and ‘nglorot’ [the finishing process where batik is washed by hot and cold water in sequence to remove the wax]”. Moreover, she suggested that “sometimes, students work collaboratively in the batik class. Students with hearing impairments draw the patterns and do ‘canting’, students with physical disability do the block part and students with intellectual disability do coloring and ‘nglorot’”(Principal SS D).

The student participants claimed that the school provided skills that were matched with their interest in “batik” (Student 1 SS D) and “sewing” (student 2 SS D). Furthermore, a parent participant also identified positive outcomes in terms of employment skills instruction facilitated in the school. While one of the parents suggested that “My daughter gains a lot of skills in terms of vocational skills, I do not know how she can do it but I believe it is taught in the school” (Parent 2 SS D), the other parent stated “the other day, she brought a task from school and it was batik. She spent almost all of her spare time to complete it and she seemed to enjoy it” (Parent 1 SS D).

In terms of work related social skills and safety issues, these were included when teaching vocational skills. While a teacher participant maintained that “the teachers will explained tools and materials used in the vocational skills and teach how to use them safely” (Teacher 6 SS D), Principal SS D pointed out that “we do not teach social skills separately, it is included when teaching vocational skills.”

Structured Work Experience

As well as the apprenticeship that was funded by the Department of Education, Youth and Sport, the school provided paid work experience for the students regardless of their disabilities. While apprenticeships were provided in the business sites, paid work experience was held in everyday vocational skills classes.

The students who were involved in the sewing class were paid for every fabric they cut and sewed. The school had financial support for making school uniforms. Instead of buying uniforms from a store, the school sewed their own uniforms and used the fund to pay the students. A teacher participant maintained that *“we make our own school outfits in school, the secondary level students sew the material. The teacher cut the materials and the students sew it. The students who participate in sewing the outfits will get paid. They will get 3000-4000 IDR each”* (Teacher 5 SS D).

The same strategy was also used in the batik class. Student products of batik were also sold in the annual exhibition and to school visitors. Students in the batik class also produced batik fabric for uniforms. Principal SS D pointed out that *“our batik is always favourite in the provincial annual special education exhibition. Batik coordinators will record the sales and pay the students who made the batik”*.

Paid work experience also applied in bitternut crackers production, with the students paid for making bitternut crackers. The students could take the bitternut home. Interestingly, the school allowed parents to be involved in this program to make extra money. The school paid more money if the parents prepared the materials at home. A teacher participant maintained that *“they will get 1000-2000 IDR for every kg bitternut that they can pound...they will receive much higher amount of*

money if they pound it at home at about 3000 IDR. It is because they should provide oil and wood to roast the bitternut before pounding” (Teacher 4 SS D).

Furthermore, one of the teacher participants explained that *“the school buys skinned bitternut. Before it is roasted, the student should peel the skin. It helps their motoric skills. The students become expert at it and most of them are happy to bring the work to their house. One of the students took 10 kg home and peeled them on his own. He did not let his family help him. He did it until midnight, and he experienced a seizure. He was too excited about getting paid” (Teacher 1 SS D).*

Occasional paid work experience also occurred in the hair cutting salon. The students were encouraged to get their hair cut at school by their peers. The students paid 1000 IDR for the haircut. A teacher participant stated that *“the students take turn in doing the haircuts. Instead of paying 4000-5000 IDR for a haircut in a regular salon, the students pay only 1000 IDR to their peers. In doing so, they not only sharpen their skills, but also, get paid” (Teacher 6 SS D).*

In terms of apprenticeship programs funded by the Department of Education, Youth and Sport, the school sent final year student to a business according to the student’s skills. However, Principal SS D asserted that *“unfortunately, the quota for funded apprenticeship is only one student each year”.*

Positive outcomes were recognised in paid work experience. While Principal SS D maintained that *“the students feel motivated and parent earn extra income”*, a teacher participant confirmed that paid work experience could make *“the students responsible and feel that ‘I have to complete the work as good as I can, so I can get paid’” (Teacher 4 SS D) and “feel rewarded” (Teacher 5 SS D).*

Support Service

Access to support services, as identified by the participants, was limited. While special programs such as self-help and mobility for students with physical disabilities were available at the primary school level, they were not available for students with physical disabilities at the secondary level (SS D School curriculum document).

Besides the heaviness of the pounder in the bitternut cracker skill class, access to the agriculture class was also limited due to lack of disability accessibility at the farm. A teacher participant noted that “.... *The Agriculture class is little bit difficult for them too, especially in terms of accessibility at the farm*” (Teacher 3 SS D).

Access to information regarding employment was not available to the students or parents. While the school did not have knowledge about what jobs were available for individuals with disability, the school knew some organisations that provided further training for students. Principal SS D sustained that “*the schools shares information with the students and parents about non-government organisations that provide further training, such as CiQal*” (Principal SS D).

Taxonomy Category: Interagency Collaboration

Collaborative Service Delivery

The school collaborated with various businesses and non-government organisations, while collaboration with government and non-government organisations included training both for the students and the teachers; collaboration with business also included training, trading and apprenticeships.

In the apprenticeship program, the school provided financial support to the business for paying the students’ wages and for materials. In terms of collaboration for further training, while school had collaboration with some government and non-

government organisations for conducting training for the teachers and the students, the school also collaborated with a business leader to train the parents. The teacher participant maintained that *“we also had haircut training provided by the Department of Education, Youth and Sport”* (Teacher 5 SS D); *“We also have collaboration with [Name of a center]”* (Teacher 1 SS D). Furthermore, the principal maintained that *“...we established collaboration with a nearby business to train the teachers, parents, and the students”*.

Collaborative Framework

The school had three collaboration formats with businesses. The first collaboration was the formal MOU with businesses that provided apprenticeships for the students. Principal SS D stated that *“we make an MOU, (in which the) school provides funds and negotiates the use of the funds with the business; how much for the salary, how much for the materials.”*

The second collaboration established was a non-formal collaboration with a trading person. This collaboration involved buying and selling bitternut crackers. Interestingly, the trading person was one of the teachers’ sons. A teacher participant noted that *“the school buys raw bitternut; the student processes it to bitternut crackers and we sell it to M[name], the son of [Teacher at the school]. He buys our product regularly and sell it not only in the local area, but also he can reach Cilacap and Ciamis”* (Teacher 4 SS D). Moreover, *“usually he will call if he needs the product”* (Teacher 6 SS D). In this category, the school also collaborates with [Name of a center] to train the students for more vocational skills. However it was not effectively run as there was a lack of student interest. One of the teacher participant maintained that *“the students were not interested in the course even though [Name of a center] gives fund to initiate the business”* (Teacher 3 SS D).

The third collaboration was occasional collaboration. Engaged in this collaboration were local industries such as a market merchant and batik craftsmen. These were seasonal trading activities including salted egg production and batik training. A teacher participant pointed out that *“there is high demand in salted egg too but because we do not have our own duck farm, we have difficulties in keeping egg supplies; it is only seasonal”* (Teacher 2 SS D). In addition, another teacher participant argued that *“There is high demand for the salted egg but unfortunately the return is also not really good”* (Teacher 6 SS D). In terms of collaboration with batik craftsmen, one of the teacher participants indicated that *“We have an offer for batik mass production, but we have some small difficulties in the production, because making batik is a long process, and we could not meet the demand”* (Teacher 5 SS D).

Taxonomy Category: Family Involvement

Family Involvement

There was evidence that parent involvement in the program varied. While parent involvement in the program planning was reported to be passive; parent involvement in the program implementation, especially in the bitternut crackers production was describe as active. A teacher participant claimed that *“parents’ involvement in the program planning is limited”* (Teacher 5 SS D). Furthermore, *“Once [the school and committee] completed [the program planning], then we inform the parents. Usually there is no complaint or objection, they agree”* (Teacher 1 SS D). Consistent with this, while a parent participant argued that *“I do not get involved in the planning, the school will inform the program but I’m not involved in the program making”* (Parent 1 SS D). Another parent participant emphasised that *“I cannot be involved in all school matters. As a single mother of three children I have*

to work from dawn to dusk, and it is not easy to skip from work. I pass on my responsibility for my daughter completely to the school. I also delegate all school related business of my other two children to my niece” (Parent 2 SS D).

The school provided access for family involvement in the program’s implementation, especially in the bitternut crackers production where *“together with their children, parents can bring raw bitternut and make bitternut crackers at home”* (Teacher 4 SS D). However, none of the parent participants in this study were involved. This was because, as stated above, one parent was busy with her work, and the other parent because *“her husband does not give permission for her to work”* (Parent 2 SS D).

Parent involvement in the school was seen as important by the school staff. Family involvement, from teacher and principal perspectives, was not limited to being a motivator but also an acquaintance. While a teacher participant argued that *“In my opinion, doing vocational skills is not only dependent on the children but also the parents...Parents play an important role in providing motivation to their children. They have to be a role model for their children. If they see their parents doing it, it will draw the children’s interest to do it too”* (Teacher 4 SS D). Principal SS D claimed that *“Parent involvement should be giving ideas and suggestions actively, not to agree to everything the school has planned. Parent should learn how the school educates their children”*. Furthermore one of the teacher participants suggested that *“we invite parents at the end of every semester when they receive feedback on their child’s progress. We always emphasise the importance of working together in developing their children’s skills. Everything that is given in the school we hope that parents will do some follow-up action at home”* (Teacher 1 SS D). In addition, teacher participants believed that the family could also teach their children

to be involved in family business if they had one. One of the teacher participants maintained that *“we are not worried if the parents have business, they can help their children to join them, even though they may only do something very specific”* (Teacher 6 SS D).

However, not every parent had the skills to assist as suggested by the school. Due to low family economic status and education levels, many parents displayed inadequate skills. While Principal SS D claimed that *“most of the families are in the category of low socio economic status; we have many orphan students, they come from low income families”*, one of the teacher participants pointed out that *“In a rural area, we are thankful that the parents send their disabled children to school. If we expect them to do this and that, we are afraid that they will refuse”* (Teacher 3 SS D). Moreover, *“we have a supplementary food program every Wednesday and Friday. We have snacks on Wednesday and a meal on Friday. Some of parents only send their children to the school every Wednesday and Friday just for the food. That is what attracts them to attend school”* (Teacher 5 SS D). In addition, a teacher participant noted that *“many parents are not responsive; they do not care if they lose the progress report; they will drop the children to school even if it is a school holiday and the school has sent the information earlier. Most of the parents do not care about their children; [they think] they’re only disabled children...[they do not care if] their children wearing dirty clothes, do not take a shower and do not brush teeth. It is true. They do not take school seriously”* (Teacher 2 SS D). Furthermore, most of the parents often discriminated between their disabled children and their siblings. A teacher participant suggested that *“the school gives money to the students for buying shoes, their parents give the new shoes to other children and their disabled children still wear faded and torn shoes. The same condition exists for*

school uniforms, bag and books too. The money is part of the scholarships program. We give the students five books, but she/he only bring one to school, the other four are used by her/his siblings. The parents think as it's only for the disabled children, it's better to use the stationary for other children. They do not put high expectation on their disabled children” (Teacher 5 SS D).

Family Training

The school provided occasional training related to parenting and vocational skills for the families. Principal SS D claimed that *“the school held training for parents especially in bitternut cracker production; we also give advice to parents on how to assist their children at home”*. Furthermore, a teacher participant suggested that *“The school carries out training. Not long ago, we conducted an entrepreneur training session. We had a workshop on bitternut cracker production. We invited an expert to teach us about bitternut production, how to choose good quality bitternuts, how to add various flavors to bitternut such as: sweet, chili, savory, prawn and strawberry. The training was held not only for teachers and students, but also for the parents”* (Teacher 4 SS D). In similar way, a parent participant noted that *“once, the school held training for bitternut crackers, the school also gives money so the parents can put the theory into practice”* (Parent 1 SS D). She also suggested that she was also appointed *“to be a parent representative for a parenting training program held by a disability organisation”* (Parent 1 SS D).

Family Empowerment

As mentioned above, family empowerment was implemented in the school in the form of vocational skills and parenting training. The school also included the parent who had specific skills to assist in the training. Principal SS D maintained that *“when there was bitternut crackers training, we involved the parent who was in the business too. She assisted the group of parents.”*

Family empowerment was seen as important from the parent perspective and the school's effort to facilitate this was essential. One of parent participants maintained that *"children spend most of the time with their parents compared to the teachers, Parents need to have advanced knowledge about what their children do at school so they can assist their children at home"* (Parent 1 SS D).

Taxonomy Category: Program Structure

Program Philosophy

As described in the previous section, the school provided a variety of vocational skills to accommodate the students' interests and to meet the government regulation on special school curriculum standards (School curriculum document). A teacher participant claimed that *"It [vocational education] is designed to prepare the students so they can live independently after they graduate, to be able to work based on their interest and potential and what they really desire. So indeed we are preparing them for life after graduation. We do not want our graduates back to zero after finishing their schooling"* (Teacher 4 SS D). Principal SS D supported this when she argued that *"we want our children to be independent, have vocational skills and be able to use their skills in their future life"*.

Even though the graduates had appropriate skills to be able to work in open employment, many of them stayed at the school. This was either because of their own choice or their parent's influence. Principal SS D maintained that *"we have graduated a student who is ready for employment but the kid does not want to go, so she still stays at the school. The community does not positively accept individuals with disability, and she feels more comfortable at school with her peers"*. Furthermore, she mentioned that *"parents often encourage their children to stay at school and encourage the school not to let the students graduate"* (Principal SS D).

In addition, many of graduates from years ago also returned to the school as they heard the school had paid vocational education. Some of the graduates are 30 years of age and had a family. Principal SS D argued that *“many former students came to school asking to join the vocational skills class again as they know the school has a paid vocational program. They are in their 30s and have families. We have not thought of any solution to this, but our priority is the current students”*.

In similar way, a teacher participant also maintained that *“our plan is that we would like to see our graduates in open employment, but it is up to the students. If they cannot find any job, we are happy to keep them at the school”* (Teacher 4 SS D).

Program Evaluation

In general, the school program was evaluated once a year to determine the success of the implementation and to prepare for the next program. Even though it lacked student and parent involvement, Principal SS D claimed that *“parents can make any suggestions for better programs, what is lacking and needs to be improved”*.

Strategic Planning

At the school level, they implemented vocational skills that were in accordance with the characteristic of the area where the school was established, including batik and bitternut crackers production. The government, through the Department of Education, Youth and Sport, also gave funds for the entrepreneurship program in which *“the school embedded the program into its existing vocational skills program”* (Principal SS D). The school asked vocational skills coordinators to organise payment for the students. Principal SS D maintained that *“the students give the finish products to coordinators, so they can document how much money the*

students earned; bitternut crackers with Mrs S, batik and sewing with Mrs I, salted egg with Mrs J”.

At the community level of strategic planning, as mentioned in the previous section, the school established cooperation with local businesses for training and apprenticeship, whereas at the regional level of strategic planning, the school also sent students for further training in government organisations.

Program Policy

Interestingly, the school acknowledged not only that the students needed to develop vocational skills in general, the school also aimed to improve the quality of teachers delivering it (SS D School document). A teacher participant claimed that *“When students come back to their society after graduating from school, they will be back to zero if we do not equip them with appropriate vocational skills...So indeed we are prepared them for life after graduation...So at the secondary level, teachers may only teach until 9 am, after that the students will participate in the vocational skill classes”* (Teacher 4 SS D). The principal argued that *“we also need to develop teacher competencies, we try that teaching is not only a routine, having good teaching skills is essential”* (Principal SS D).

Human Resource Development

Even though Principal SS D claimed that *“the school lacks qualified vocational skills teachers”*, a teacher participant argued that *“we have enough vocational teachers”* (Teacher 4 SS D). While Principal SS D argued that *“we only have one vocational skills teacher for batik and sewing..., class teacher are forced to teach the other vocational skills”*, a teacher claimed that *“there is no need for a specialist teacher to teach bitternut crackers, as anyone can easily learn to make bitternut crackers”*.

Teacher training was provided by school, government and non-government organisations to improve teacher competencies in vocational skills. While the school carried out training for bitternut cracker production, other vocational skills training was provided by government and non-government organisations. A teacher participant maintained that *“I was trained in batik for three months”* (Teacher 5 SS D). Furthermore, to improve her competencies in teaching sewing skills, she explained that *“I undertake further study in sewing skills in one of the universities”* (Teacher 5 SS D).

Even though teacher competence in teaching vocational skills were claimed by teachers to be appropriate, teacher participants argued that they were *“lacking knowledge about what jobs are available for the students in the community”* (Teacher 1 SS D), especially for student with intellectual and physical disability. One teacher participant noted that *“teachers are as confused as the parents. It is not a problem for students with hearing impairment, but it is a big problem for students with intellectual disability and students with a physical disability. We are thinking what to do for them. We do not stand silent; we feel the burden, what should we do with those students who have limited capabilities?”* (Teacher 2 SS D).

In terms of acknowledgement of teacher competences, there was no difference in teachers’ criterion competences between vocational teachers, class teachers, primary school teachers and secondary school teachers. A teacher participant argued that *“class teachers and vocational teachers have the same criteria of competences. Primary teachers and secondary teachers have the same criteria as well”* (Teacher 2 SS D). However, the concern of the principal and teacher participant focused more on the work ethic environments and unimproved teacher competencies after being certified. A teacher participant suggested that *“the*

work atmosphere is unpleasant, the job selection is based on who has time to do it rather than expertise. If one has expertise but does not want to use it, then we cannot force her/him to do the job. It all depends on teacher awareness” (Teacher 4 SS D).

Principal SS D asserted that *“there is no significant improvement after they have been certified, or between teachers who are uncertified and certified. They are the same”*. Furthermore, she maintained that *“They only think that teaching is just transferring knowledge from the book. This has to be changed. Most of the teachers have poor motivation in teaching vocational skills, always teaching the same thing”* (Principal SS D).

The levels of teacher competences varied according to the parent participant, whereas student participant did not give any further detail about teacher competence which was not unexpected. While a student participant noted that *“I like my teacher”* (Student 2 SS D), her parent maintained that *“during my daughter’s schooling period, the class teacher from last year was very good. He never left the student in their class alone; always teaching full time and my daughter was very motivated in her education.”* (Parent 1 SS D).

Resource Allocation

The school received financial support from the government through the Department of Education, Youth and Sport, although the principal believed that *“financial support is limited”* (Principal SS D).

The school occupied local council land and had limited space (SS D School Curriculum document). Similar to this, a teacher participant pointed out that *“as the number of the student increased, we have had to discontinue the carpentry class. We have limited space so we use the room as an autism classroom”* (Teacher 5 SS D).

Furthermore, Principal SS D confirmed that *“we have very limited space, and as you can see, we hold our vocational classes in the front yard”*.

In terms of adequacy of tools and material supplies, some of the vocational skills had adequate supplies, whereas some of them had insufficient supplies. One teacher participant asserted that *“we never have difficulties in bitternuts supply; Making salted egg is easy and does not needs advanced tools however it is difficult to buy high quality eggs”* (Teacher 3 SS D). Principal SS D supported this in that *“we have difficulties in maintaining egg supply and we also have a poor retailing system”*. In addition, some of the students and parents interested in making bitternut cracker at their home experienced difficulties in providing pounders as *“the school does not have enough high quality pounders”* (Principal SS D). Table 24 summarises the participant responses on the five categories of the Taxonomy.

Table 24 Summary of response across the Taxonomy by participant and data collection methods in Special School D

Taxonomy Category	Taxonomy Cluster	Participants				Data collection methods		
		Principals	Teachers	Parents	Student	Observation	Interview	Document
Student Focused Planning	IEP development							v
	Student participation Planning strategies	v	v	v	v	v	v	
Student Development	Assessment	v	v				v	v
	Career and Vocational curricula	v	v	v	v		v	v
	Employment skills instruction	v	v	v	v	v	v	v
	Life skills instruction	v	v			v	v	
	Structured work experience	v	v	v	v		v	
	Support service	v	v	v	v	v	v	
Interagency Collaboration	Collaborative service delivery	v	v				v	
	Collaborative framework	v	v				v	
Family Involvement	Family involvement	v	v	v			v	
	Family training	v	v				v	
	Family empowerment	v	v				v	
Program Structure	Program philosophy	v	v				v	v
	Program evaluation	v	v				v	v
	Strategic planning	v	v				v	v
	Program policy	v	v				v	v
	Human resource development	v	v	v	v	v	v	v
	Resource allocation	v	v				v	

Note: v=Responses is identified

Q2a. What are the barriers to implementation ?
Q2b. What supports exist in implementation?

This section discusses barriers and supports in the implementation of the school to work transition programs in Special School D. The issues are presented based on the five categories of the Taxonomy, firstly in Table 25, and then in text.

Table 25 Barriers and supports to implementation of school to work transition program in Special School D

Taxonomy category	Barriers	Supports
Student Focused Planning	<ul style="list-style-type: none"> • Limited student participation • Poor quality or non-existent IEP planning and implementation 	
Student Development	<ul style="list-style-type: none"> • Limited student assessment of vocational skills • Limited support services, especially in terms of accessibility 	<ul style="list-style-type: none"> • Paid work experience available for some of the student • Unpaid work experience available for all student
Interagency Collaboration		Various collaborations with business
Family Involvement	<ul style="list-style-type: none"> • Poor family involvement in planning • Limited involvement due to families' commitments 	Some parent involved in paid work experience
Program Structure	<ul style="list-style-type: none"> • Limited financial resources • Limited school space resulting in vocational classes being taught outside 	<ul style="list-style-type: none"> • Goal of employment by students was acknowledged • Taking account of the school environment in determining types of vocational skills that were taught • Training from other organisations • Grant from government • Specialist teachers for high level vocational skills

Student Focused Planning

The barriers in the Student Focused Planning Taxonomy category included limited student participation in program planning, and poor individualised educational planning.

As noted in the earlier section, an IEP is not widely used in special schools in Indonesia. Furthermore, students with a physical disability and/or intellectual disability are seen as incapable individual to be involved in the program planning.

Student Development

Support in the Student Development category included paid and unpaid work experience, whereas barriers in the program included limited use of assessment and poor availability of support services, especially in regards to accessibility.

Paid work experience was available to all students, including students with a physical disability. Students involved in vocational skills classes could access paid work experience. Vocational skills classes such as bitternut cracker production and sewing were among those that maintained regular paid work experience, whereas salted egg production and batik were among the seasonal vocational skills.

Students received a salary based on how much product they could produce. While students involved in bitternut cracker production and sewing were paid once they finished their job, students involved in the salted egg and batik production were paid once their products were sold.

Interagency Collaboration

The school had established collaborations with government and non-government organisations and businesses. The collaboration involved training and trading business activities.

Family Involvement

Although limited parent involvement in program planning was evident, the school provided access for family involvement in the paid work experience, especially in bitternut crackers production. However, none of the parent participants were involved due to other family commitments.

Program Structure

Although the school identified the limited financial support that was available only from the Department of Education, Youth and Sport, occasional grants were available from the government. Furthermore, training for the school community was available through collaboration with business, government and non-government organisations.

The school identified the importance of employment as a student post school outcome and in determining vocational skills options, and this was considered as a unique characteristic of the school environment. Batik and bitternut crackers were some of leading products from the Pandak area where the school was established. Specialist teachers were employed to teach high level vocational skills such as batik and sewing, whereas low level vocational skills such as bitternut cracker and salted egg production were delivered by regular class teachers. In addition, due to increase number of students and lack of space, the school had to close the carpentry skill vocational class.

Summary

The findings indicate that school to work transition programs in Indonesian special school settings are limited to providing vocational skills. However, this selection of skills was predominantly chosen by the teachers. Limited funding for work experience activities were provided by the provincial government and students with physical disabilities were not included. One of the schools established an onsite business that provided work experience for all their students. Limited student and parent involvement in the school to work transition program planning and conduct was identified in most of the schools, whereas interagency collaboration was characterised by disorganised collaboration in which clear roles and responsibilities of each party were lacking. In regards to human resource development, issues such as poorly trained and unqualified teachers were indicated in most of the schools; while one school had a serious issue in leadership that led to ineffective resource allocation. The summary of findings from each school can be seen in Table 26 below.

Table 26 Summary of findings in each special school

Taxonomy Category	Special School A	Special School B	Special School C	Special School D
Student focused planning	<ul style="list-style-type: none"> No specific goal for post school outcomes No student participation in vocational skills planning 	<ul style="list-style-type: none"> No specific goal for post school outcomes Some student participate in vocational skills planning 	<ul style="list-style-type: none"> No specific goal for post school outcomes No student participation in vocational skills planning 	<ul style="list-style-type: none"> No specific goal for post school outcomes No student participation in planning, but active student participation in program
Student Development	<ul style="list-style-type: none"> Limited use of vocational assessment Paid work experience not available for students with a physical disability 	<ul style="list-style-type: none"> Limited use of vocational assessment Limited paid work experience 	<ul style="list-style-type: none"> Limited use of vocational assessment Paid work experience only available for students with hearing impairment through underwear manufacturing business 	<ul style="list-style-type: none"> School assessed their environment to decide vocational skills options Paid work experience was available for most students
Interagency Collaboration	Collaboration available for psychology and health issues only	Collaboration with a teacher who has business to employ students when needed	Collaboration with underwear manufacturing business	<ul style="list-style-type: none"> Formal collaboration for apprenticeship program Non formal collaboration with business for selling bitternut cracker Occasional collaboration for seasonal produce

Taxonomy Category	Special School A	Special School B	Special School C	Special School D
Family Involvement	Limited family involvement	Some parents involved in vocational skills with their children	Limited family involvement	Active family involvement especially in bitternut crackers production
Program structure	<ul style="list-style-type: none"> • School divided into five different departments according to type of disabilities and each department has its own coordinator • Has vocational skills teacher • Weak leadership • Inservice teacher training was limited due to large number of teachers 	<ul style="list-style-type: none"> • Vocational skills taught by class teacher except for batik • Teacher training distributed fairly among teachers 	<ul style="list-style-type: none"> • Basic vocational skills taught by class teachers • Advanced vocational skills taught by vocational skills teachers • Teacher training distributed fairly among teachers 	<ul style="list-style-type: none"> • Vocational skills teacher available for batik and sewing • Other vocational skills taught by class teachers • Teacher training distributed fairly among teachers

The following chapter reports the findings from external stakeholders.

CHAPTER 6

FINDINGS FROM EXTERNAL STAKEHOLDERS DATA

Introduction

This chapter presents findings from semi structured individual interviews with stakeholders connected to education, disability and employment services. These included a special education coordinator from the Department of Education, Youth and Sport, three school supervisors, a coordinator from the Department of Social Affairs, a coordinator from the Department of Manpower and Transmigration, three community business leaders, and a coordinator in a disability organisation.

To ensure confidentiality in this study, the participants have been given codes as shown in Table 27 and their comments are coded as such in the chapter.

Table 27 List of participants and their pseudonyms

No	Participant	n	Pseudonyms
1	Special Education Coordinator, Department of Education, Youth and Sport	1	SE
3	School Supervisor	3	SSvp 1, SSvp 2, SSvp 3
2	Coordinator Department of Social Affairs	1	SA
3	Coordinator Department of Manpower and Transmigration	1	MP
4	Community business leader	3	CBL 1, CBL 2, CBL 3
5	Coordinator Disability Organisation	1	DO

The findings in this chapter address research question 3. This examines the perspectives and expectations of external stakeholders (e.g. community business leaders, disability organisations, and government agencies) regarding school to work transition practice. The findings are presented based on the five categories of the Taxonomy for Transition Programming, and their clusters.

Taxonomy Category: Student Focused Planning

IEP Development

Even though all external participants did not specifically identify the importance of IEP development in transition programs, some participants considered that *“student interest should become a focus in developing transition programs”* (SSvp 2). Furthermore, another participant argued that *“Student interests need to be appropriately facilitated in the program”* (SE).

Student Participation

External stakeholders expected active student participation in the transition program: *“students should be involved in program planning by asking about their interest”* (SE), *“they also need to be involved in work experience”* (SSvp 2). Furthermore, *“teachers are encouraged to plan programs that can involve all the students”* (SSvp 3).

Planning Strategies

Students should be placed at the centre of the planning process as *“a school should never generate a program that is based on what the teachers can do and cannot do. It should be in reference to student interest”* (SSvp 2). In the same way, another school supervisor also confirmed that *“the program should be relevant to the students’ interests and their environments”* (SSvp 3). Furthermore, a coordinator argued that *“it is wrong to force the student to do only what their teacher can do. The school should accelerate the student interest* (SE).

Taxonomy Category: Student Development

Assessment

The use of assessment in the transition program was encouraged by the external stakeholders. A coordinator maintained that *“assessment is useful to identify problems and student competences. Even though not all schools in this district have*

a psychologist who works in the school they are encouraged to undertake assessment of the student, not only for placement purposes, but also to identify the student's vocational interests" (SE). Furthermore, he claimed that "once the school finds out the student's interest, it should be well-developed within the vocational programs" (SE).

Business leaders also recognized the importance of assessment. One of business leaders suggested that *"teachers should assess their students carefully. If the student is interested only in one particular area then let that be it. Do not force the students to do many things that they are not interested in. Focus on only one but the training should make them skillful" (CBL 3).*

The use of assessment for program planning should not be limited to the student but also to their environments. One of the school supervisors argued that *"school should not only analyse the child's interest, but also the availability and suitability of her/his environment in developing a transition program (SSvp 2). In a similar way a business leader also highlighted that "it is important to assess what is available in the neighbourhood as it is useless to teach something and then later you find out that the skills are not marketable" (CBL 3).*

Career and Vocational Curricula

Career and vocational curricula should receive greater emphasis in the school curriculum. A coordinator stated that *"we divided the curriculum into academic and vocational skills. We encourage the school to use 70% of the school curriculum on vocational skills. In special schools, we do not demand our students to be a doctor, or engineer because we know that they have difficulties in their intellectual function. We encourage schools to place an emphasis on vocational skills, so they can be independent" (SE).*

In a similar way, a school supervisor also pointed out that *“schools should place greater distribution on vocational curriculum compared to academics”* (Sspv 2). Furthermore *“schools should place a greater percentage of time on vocational curriculum from junior high school, and even greater in secondary school”* (SSvp 1). In addition he further explained that *“in junior and secondary school, the school should only focus on vocational skills, and when it comes to maths or language it should be directed for vocational purposes”* (Ssvp 1). Another school supervisor argued that *“even though schools should emphasise a greater percentage on vocational curriculum as little as 60% from the total, it does not mean that principal and teacher know how to implement that percentage in practice”* (SSvp 3).

Business leaders also acknowledged the importance of making the school curriculum innovative. While a business leader maintained that *“schools need to create a curriculum that provides more benefit to their students rather than only knowledge”* (CBL 3), another business leader argued that *“making change from the regular curriculum is essential”* (CBL 1). Furthermore, as noted in the earlier section, vocational education should be aligned with market demand.

Entrepreneurship should be an essential part of the vocational curriculum, and this was acknowledged by the external participants. Business leaders argued that *“entrepreneurship should be introduced to the student as early as possible, and it should become a key in the vocational curriculum”* (CBL 3). Whereas a coordinator asserted that *“the central government has just started to introduce an entrepreneurship program in special schools this year”* (SE).

Life Skills Instruction

Transition programs should facilitate the student to become a self-determined individual. A business community leader maintained that “*schools should develop their students’ positive mentality so they have self-esteem and determination. Their students should also have the ability to self-promote. If they can display these personalities, businesses would not mind whether they have a disability or not*” (CBL 1). In the same way, one of coordinator asserted that “*schools should assist their students to be able to recognise what their job interests are and develop them*” (MP).

Employment Skills Instruction

Employment skills instruction was facilitated through the vocational skills class. While “*it is expected that graduates from a special school should have appropriate employment skills instruction*” (DO), a school supervisor claimed that “*most special schools do not have proper vocational skills teachers, and the option of skills is not derived from students’ interest. Most of the schools offer vocational skills that are based on their teachers’ interests*” (Ssvp 3).

Suitable employment skills instruction was importance to prepare the student for joining the work force. As an individual with disability “*does not want to depend on charity*” (DO), and “*wants to participate in a paid job*” (CBL 3), a coordinator insisted that “*individuals with disability should improve their skills*” (MP). In addition, a business leader insisted that “*schools should be able to teach advanced skills. They can divide vocational classes based on the skill levels*” (CBL 2). In a similar way, another business leader suggested that “*the students need to be taught the skills that match with business requirements*” (CBL 3). Furthermore “*business is not a charity. Their skills need to fit in appropriately*” (CBL 1).

Furthermore, she claimed that “*to be able to put their production in this agency, it*

should meet the standard quality, and as far as we are concerned, they have not met this standard. We would like to assist them, not because we feel pity for them, but because they can produce quality goods” (CBL 1).

Structured Work Experience

There were two structured work experience schemes for students with disabilities in special schools, namely apprenticeship and entrepreneurship programs. The apprenticeship program was organised collaboratively with the business site and was funded regionally, whereas entrepreneurship was managed inside the school site and was funded nationally. While a school supervisor maintained that *“the apprenticeship program should be available for all students with disability”* (Ssvp 1), a coordinator suggested that *“most students with different types of disabilities can access the apprenticeship program as long as they have the ability to work. However, students with a visual impairment are very rarely involved in the program as they are expected to continue their further education”* (SE). Moreover, *“the apprenticeship program is provided for the student, especially those who are in the final year, and the students who graduated no more than three years ago. We still accommodate alumni”* (SSvp 2). However *“recipients of the apprentice program are still limited in number”* (Sspv 3) so the school needs to *“choose the student carefully based on needs, student readiness and financial matters”* (Sspv 2).

The arrangement of the apprenticeship program was handed to the school. This included *“which student is sent for the program; where the apprenticeship is taking place; and the program monitoring; are up to the school and the vocational skills teacher. We do not arrange the program in such detail”* (SE). In addition a school supervisor maintained that *“the program should accommodate student*

potential, but detailed arrangement such as which business sites and what competencies they aim for the student to gain is up to the school” (SSvp 1).

The Department of Education, Youth and Sport also does not limit the apprenticeship program to sending students only to business sites. Vocational preparation also could be in a form of a tutoring program by inviting experts to school sites, and initiating business within the school. One school supervisor maintained that *“students who have sewing potential can take up an apprenticeship program at a clothing manufacturer, another student might undertake an apprenticeship program in the factory as a laborer, and another might be involved in a service station as a motorbike or car mechanic” (SSvp 2).* A coordinator suggested that *“school can also invite an expert as a tutor or use the fund to initiate business, for example to buy some fabric for batik, then the student makes batik and sells the product and uses the earned money to make new ones” (SE).*

The aim of the apprenticeship program was to develop student employment skills and initiate job placement. A coordinator claimed that *“we send students to businesses so they can improve their skills, be ready to work and become financially independent...we will not feel offended if the business would not take the student, the student can go back to school” (SE),* whereas a school supervisor maintained that *“we hope businesses can recruit the students” (Ssvp 2).* A business leader suggested that *“we know that the school wants us to recruit the students, but we do not yet comply with this simply because we do not have the power to recruit the students. We can only give suggestion to our members but it is not our decision. So after the apprenticeship program is completed we send the student back to school” (CBL 1).* Another business leader claimed that *“there are 6 students in total and I told the teacher if these students have graduated, 5 of them, whose economic status are low,*

are welcome to come and work here while the other one, because his dad is a police officer, I do not really worry about him” (CBL 3). In the same way, another business leader confirmed that “our organisation has not yet taken on the role of recruiting employees. We focus on improving product quality and management” (CBL 2).

There were inconsistent responses among participants regarding the length of time the apprenticeship program was managed. While a coordinator stated *“it is a 10 month program” (SE)*, a school supervisor said *“the students are sent to business sites for 6 months” (Ssvp 2)*, whereas business leaders said *“students spend 3 months with us” (CBL 1, CBL 3).*

The entrepreneurship program that was nationally funded was matched with an initiative apprenticeship program that was managed regionally and could fund more students to have work experience. A coordinator noted that *“the entrepreneurship is matched with our program; schools can use the entrepreneurship fund to provide more work experience for the students. The schools use the fund to initiate and sustain business” (SE).*

Structured work experience was also provided by other organisations such as the Department of Manpower and Transmigration and the Department of Social Affairs, however *“the length is not enough to equip the participant with appropriate skills” (MP)*, and *“sometimes the materials and funds are limited and cannot cover all the participants” (SA)*. In addition, a business leader believed that *“if the program is held continuously, it will improve student employment skills instruction, however, the time allocation is very limited” (CBL 1).*

Support Service

Access to support services was limited. This access includes support for individuals with disabilities, their families and school. In terms of accessible facilities, while *“we have a new building for vocational rehabilitation and it is very accessible, we have ramp and toilet; it is not sophisticated but at least we have the facilities”* (SA), a disability organisation coordinator maintained that *“accessibility is limited, and people who work in the Department of Social Affairs also seem to not understand the meaning of accessibility. Very often, they invite us to a meeting and it is always upstairs where the only access is by using the stairs. Once, my friend in a wheelchair fell over while people brought him up the stairs in his wheelchair. Luckily it was only bruises”* (DO). Furthermore a business leader pointed out that *“even if I had colleagues that needed a worker and I suggested some of my disabled friends for the job, they would say that we do not have accessible facilities for them; no toilet, no adaptive tools and the road to get to the workshop is bumpy and muddy”* (CBL 3).

Access to education was also limited. While inclusion existed in limited ways, segregation was the dominant practice implemented in schools. However, there were limited numbers of children with disabilities enrolled in special schools. The most significant contributing factors to that were the economy, special school availability and location, short school hours, and a negative perception about special schools. A coordinator maintained that *“we have a very limited number of individuals with disability educated at school. Most individuals with disability come from a low economic status home. While school tuition is free, parents have to spend money for other things such as transportation. Each municipality does not necessarily have a special school so they have to travel far from home”* (SA).

Furthermore he asserted that *“for them, if they send their children to school, who is*

going to stay with them at school? It is better to leave their children at home so they can go to work and earn some money. Not to mention that a negative perception about disability is forcing them to keep their children locked at home” (SA).

Limited access to education contributed to more difficult access to employment. A business leader maintained that *“most individuals with disability have low education levels, and therefore they have very limited skills. Because of that, they can only be employed in the lowest level of jobs. It is not easy for them to enter the work force. They are lacking education and experience” (CBL 3),* A coordinator noted that *“because they lack education; they can only be involved in informal work” (DO).*

The importance of support services to assist employment opportunities, such as creating awareness in the work force and mentoring program, were acknowledged by the external participants. A coordinator maintained that *“let alone an individual disability that has obvious limitations, people who are normal also still experience difficulties in looking for employment” (MP),* therefore *“we should start to build a bridge, business does know the capability of individuals with disability and how to support them in the work force, someone needs to educate businesses” (CBL 2).*

This support service was not yet available due to *“lack of human resources and funding” (SA),* and *“the head of district has not yet thought about this so it can be included in the policy...We are not focused. The organisation already manages too many issues, such as transmigration program, labour and business, family planning” (MP).*

Another important support service that was identified at the school level was related to marketing workshops. *“Unlike the secondary vocational school that provides a job fair for their students, most vocational skills in secondary special*

schools are based on the creative economy where the schools teach the student to produce goods. So supports in marketing and creating workshops are essential” (Ssvp 1).

Regarding mentoring, external participants acknowledged that it was useful to assist students with specific disabilities, especially those who have an intellectual disability as *“they are easily distracted and unable to make independent decisions”* (Ssvp 2), *“They do not have an appropriate level of intellectual functioning to keep themselves on the job and they lack initiative”* (SA), *“they easily forget the skills if they do not use them regularly”* (CBL 1), *“they are not confident”* (CBL 3), and *“teachers need to assist them to move to the next level of skills”* (MP).

Participants also agreed that mentoring and support service should be available not only for the individuals with disabilities, but also for the families so *“the family can be positively involved in the program”* (SA). Furthermore, according to a coordinator of a disability organisation, *“In this area lives a family that has three children, all of them having severe disabilities, they are not able to walk and talk.... But what supports are available for them? Nothing; only once in a life time charity. They need prolonged and constant support services”* (DA). Furthermore he stated that *“we have more cases that are similar to this one. For example one family in [location], has a child with cerebral palsy where his body is always shaking. It shakes all the time. His parents press him with a block of wood trying to stop him from shaking. They have received nothing from government. No support.”* (DA).

Taxonomy Category: Interagency Collaboration

Collaborative Service Delivery

Various collaborations between schools and other external stakeholders, and inter-external stakeholders were identified. Coordination between external stakeholders was limited to presenting programs in each department. A coordinator stated that *“we have an interagency meeting with government and non-government organisations. The Department of Social Affairs and Department of Manpower and Transmigration also are always in touch with us if they have programs for students with disabilities. If we have a program that relates to those departments we also invite them to a meeting. We also have good relations with non-government organisations. If I invite them to a meeting, they will always attend”* (SE). However, sharing data was not available, as a coordinator stated *“we do not have statistical data on how many students with disabilities are enrolled in special schools in [location] and how many graduate each year”* (SA). Furthermore, a school supervisor asserted that *“the Department of Education, Youth and Sport hold an interagency meeting once a year with other related departments to share each department’s programs and seek possibilities to provide collaborative services for students with disability”* (SSvp 2), however *“it is easy to talk but difficult to act”* (SSvp 1).

Collaboration between schools and external stakeholders, was limited to apprenticeships and vocational skills training, both for students and teachers. In regard to the apprenticeship program, the business organisation was responsible for the program and tutor, whereas the school gave funds to the business to use for student fees and materials. A school supervisor claimed that *“We facilitate the financial matters. We give all the money to the company, but we work out how much money for the student expenses, for transportation and incentives; how much money*

for the materials. The student feels like they earn money from the company but it is actually from us” (Sspv 1). A coordinator maintained that “businesses where the students undertake apprenticeships should take full responsibility for the program” (SE). Similar to this, a business leader maintained that “the program was offered in accordance with the availability of resources in our organisation and we modify it according to school needs and student characteristics. When the school came to us, the teacher explained what kind of student were involved, their characteristic and how to handle them. So we made a program based on that. We have two designers working with the student on a roster” (CBL 1). In addition another business leader stated that “the school sent their student here. Basically we focus on involving the student in a job routine around here. We pair the students with our employees” (CBL 3).

Both business and government organisations provided opportunities for improving student and teacher vocational skills through vocational training. While business leaders were invited to the school, government organisations such as the Department of Social Affairs and the Department of Manpower and Transmigration invited the students and teachers to undertake vocational training in their rehabilitation centre. Coordinator SA maintained that *“students with disabilities who meet the requirement are welcome to have training in [location]. Every year we need 120 people to be trained. There is always an opportunity for everyone. We are starting to have difficulties in recruiting people as the course required participants to stay in the dormitory for the duration of the course, about one year” (SA).* Furthermore he stated that *“[named] rehabilitation centre that is managed by the central government also provides vocational skills training, however to be able to enter [named centre] a candidate has to be able to pass the selection process. After*

completing the course, [named centre] will give a small amount of funds to initiate a business” (SA). In addition, the Department of Manpower and Transmigration also offered “limited vocational training for people with disabilities” (MP).

Schools often invite business leaders to deliver vocational training to their communities. A business leader pointed out that *“I came many times to the special school to give vocational training both for students and teachers” (CBL 2).*

Similarly, another business leader also stated that *“schools invite us for one or two session for entrepreneurship training, but there is no follow up. We actually see a potential for long term collaboration but the school does not seem interested” (CBL 1).*

Identification of the needs to improve collaboration between schools, government and non-government organisations, and business was evident. One business leader pointed out that *“relevant government organisations should facilitate interagency meetings with business and industry. For example, every state-owned enterprise has a partnership with a craft production centre and there are more than a thousand centres here in [location]. We need to have an integrated system that allow us to identify which centre needs specific skills and what the students are able to do. So everytime the centre needs new employees with specific skills, the department would direct it to that person or school. I also find out that some schools are already making products, so they also can supply semi-finished products to the company” (CBL 2).* In addition, another business leader explained that *“while schools often receive support from the central government including tools and equipment, some of our members are lacking in regards to equipment. We have some options that might work for both of us. If we can arrange our members to use that equipment and their graduates can work too, it might benefit everyone” (CBL 1).*

Collaborative Framework

Various collaborations between schools and external stakeholders, and between external stakeholders, were acknowledged. While *“there is a MOU between the school and business in apprenticeship program”* (Ssvp 1), *“collaborations with other government and non-government organisations are informal”* (SSpv 3). Furthermore he explained that *“it is limited to attending and giving opinions in meetings, not really making a program together”* (SSvp 3).

Private schools were more open to collaboration compared to government schools, as noted by a school supervisor: *“private schools are more flexible. Government schools worry too much about bureaucratic issues. Based on my experience when I was a principal at a private school, they have more flexibility to collaborate with others institutions, and do not have to worry in using resources and funds”* (Ssvp 2).

Even though formal collaboration between external stakeholders had not yet been established, a coordinator maintained that *“family, community and government need to work together in partnership and aim for the same goal”* (MP). Furthermore, the importance of improving the collaboration framework was identified by external stakeholders. As a school supervisor claimed, *“problems in special schools are very complex as we cater for individuals who are very unique and vulnerable. We need to try to accommodate these complexities by collaborating with relevant organisations. For example, some special schools have integrated with housing care so we have to collaborate with the Department of Social Affairs; most of the students are vulnerable to health conditions so we need to collaborate with healthcare; we need business to train our teachers and students in regards to vocational skills. Special schools cannot do it by themselves, we need to collaborate. We’re not really satisfied with what we have achieved, we hope we can improve our collaboration”* (SSvp 2).

Taxonomy Category: Family Involvement

Family Involvement

Participants acknowledged that family plays a significant role in transitioning their family member/student to the community. However, limited family involvement in the transition program was evident. While “*family involvement contributes 90% to children’s success*” (DO), a school supervisor emphasised that “*they are often forgotten*” (Sspv 3), and “*not included in program planning*” (Ssvp 2). Furthermore he stated that “*parent involvement is beneficial. As parent witness the progress of their children, they will appreciate more and the most important fact is that the parents can be both a natural support for their children and also be advocates in the community*” (Ssvp 2).

Family Training

Training for family was as important as training for the students, however as stated earlier, training for parents was very limited. A coordinator maintained that “*parents need to be guided and supported. There is evidence that some of the parent misuse the support given from the government. For example we have monthly financial support for individuals with severe disability. Some parents use the money for their other kids, to buy a bicycle, etc*” (SA).

Family Empowerment

The Department of Social Affairs had a mentoring program for families of children with disability where a mentor volunteer accompanied these parents for a specific time to assist the parent fostering the children, but their participation was limited due to the small number of mentor volunteers and financial constraints. While a coordinator claimed that “*we have chosen some of the parents to be involved in the empowering program*” (SA), another coordinator stated that “*we support the parents through mentoring program*” (DO).

Taxonomy Category: Program Structure

Program Philosophy

It was acknowledged that schools should provide an outcomes-based curriculum. A coordinator maintained that *“the school has to have a well set vision and mission statement. We expect that the school has outcomes-based goals, rather than just random teaching. Schools should fulfill the aim of special schooling which is to facilitate the students to reach their full potential and be able to live independently”* (SE). The term ‘independent’ subdivides into two categories: living skills independence; and, financial independence. *“The meaning of independent is the degree to which they can live according to their abilities and skills. The level of independence will depend on the type and severity of disabilities they have. For those who experience severe disability such as moderate to severe intellectual disability, cerebral palsy and who have multiple disabilities , the term independency means to be able to take care of themselves for daily living skills, but perhaps no employment goal”* (SE).

While a coordinator maintained that the type and severity of disability contributes to different settings of independence goals, business leaders claimed that special schools failed to provide work and employment supports for their students. A business leader argued that *“the school has to have a concept of how to prepare their students to be able to have work options after graduation”* (CBL 3). Furthermore, another business leader suggested that *“schools should be able to map their students’ potential and any possible networking out there. If their students cannot meet the requirements for working outside, the school should be thinking of having a workshop. However, our education system does not allow students to reach both pathways”* (CBL 1). In addition another business leader maintained that *“schools need to work on designing post school activities. I often come across students who*

stay at school after graduating because they think that they did not belong to the society and vice versa” (CBL 2).

Despite being implemented only recently and without legislation yet to overlay the issue, school supervisors argued that issues on work and employment have to become focused programs and be implemented in special schools. As a school supervisor emphasised *“conventionally, students with disabilities in special schools are educated to be independent in daily living skills, while employment issues were only initiated two or three years ago” (SSvp 3).* Similarly, another supervisor asserted that *“recently, we put emphasis on issues in work and employment in special schools; we acknowledge that employment should become the final aim of schooling and schools are encouraged to put these outcomes in their list” (Ssvp 1).* Furthermore, he stated that *“even though we do not have well established transition programs, the government has started to think about it by allowing the alumni to take part in the entrepreneurship program. There is no legal document yet, but it has started” (SSvp 1).* In addition, another supervisor asserted that *“we are now thinking about how to make the students more independent after finishing their education in the school, to be accepted in their society, and able to have jobs” (Ssvp 2).*

Program Evaluation

The coordinator from the disability organisation suggested poor program evaluation existed. He asserted that *“the government organisations always do the same program in the same way each year in providing training for people with disability, even though the program is not really effective, they keep doing it in the same way” (DO).*

Strategic Planning

School level strategic planning was very limited, even though apprenticeships and entrepreneurship programs were implemented to a limited extent. A coordinator maintained that *“it gives opportunities for the school to provide work experience for their student”* (SE). For students with disabilities who were unable to work outside, schools were encouraged to provide *“sheltered workshops”* (Ssvp 1) and *“production units”* (Ssvp 2).

At the community level strategic planning, through the apprenticeship program, schools were encouraged to *“assess what is available in the community”* (Ssvp 2), make *“connections with businesses that are located near the school”* (Ssvp 3), and *“have collaborations with other special schools”* (Ssvp 1). A business leader agreed that *“schools should work closely with business leaders to keep updated on marketable skills and products”* (CBL 1). One supervisor also asserted that community events could also be used to *“introduce products and skills that are available in special schools”* (Ssvp 1). Furthermore, schools also expected to *“work closely with disability organisations as their members often circulate job vacancies”* (SE).

At a regional level, strategic planning, there was an expectation that the regional House of Representatives would maintain their financial support for the apprenticeship program. A coordinator maintained that *“this year we were able to put 50 students in one province in an apprenticeship program. Hopefully it will be increased to 60 students next year. I hope people in the House of Representatives keep their support for this program”* (SE). In addition, another coordinator claimed that *“regional government should also provide a benefit scheme for the industries that are able to take people with disability on as their employees”* (MP).

Interagency meetings were also recognised as a regional strategic planning action where *“the Department of Education, Youth and Sport invites related stakeholders to a once a year meeting, however the main barrier is most stakeholders limit themselves to just attending, they do not actively participate in solving the problems”* (Ssvp 1).

Program Policy

Despite many government policies related to services for people with disabilities, it was acknowledged that the implementation of those policies was poor and limited. Moreover, even though *“there are clear roles and responsibilities between government organisations”* (MP), *“the Department of Social Affairs and Department of Manpower and Transmigration are not fully active and aware in providing support for people with disabilities”* (SSvp 1). The reason was mainly *“limited financial support and human resources”* (SA), and *“too many things that are handled in one Department”* (MP).

As mentioned in an earlier section, transition program policy in the Department of Education, Youth and Sport has been extended to entrepreneurship for the alumni. A school supervisor maintained that *“even though it is not written in a legal document, the Directorate announced that alumni who graduated up to two years before, are eligible to participate in the entrepreneurship program”* (Ssvp 1).

Human Resource Development

The main issues in human resource development were teacher quality, good leadership, and adequacy of human resources. Teacher quality played an important role in delivering a quality transition program. Identification of teacher quality in special schools showed teachers as having low competency, low motivation, and low dedication. A coordinator maintained that *“teaching students with disability is not*

the same as teaching regular students. In special schools, teachers should use more of this [heart]. Consciousness is number one” (SE).

While a school supervisor maintained that *“some of the special schools have professional vocational skills teachers; some of them have only regular classroom teachers”* (SSpv 1). Another school supervisor claimed that *“I proposed that teachers should obtain an appropriate certificate before teaching vocational skills, but most of our teachers’ background are special education, they do not hold professional vocational skills at all”* (Ssvp 2). In a similar way, another school supervisor also suggested that *“with more than 60% ratio on vocational skills education, there are no teachers in special schools who are genuinely competent to teach vocational skills, because they graduated from special education”* (Ssvp 3). In agreeance, a coordinator commented that *“we have the teacher [who is competent in one skill], but we do not have the students [who are interested in that skill], or vice versa; and that is commonly happening in our schools”* (SE).

Training and workshops in relation to vocational education are held to improve teacher competencies in teaching vocational skills. This training was held by various departments and organisations including businesses. School supervisors maintained that *“training is provided by government organisations, and we also give opportunities for vocational teachers to undertake internship in a secondary vocational school”* (Ssvp 2). Furthermore, another school supervisor asserted that *“schools can formulate their own training and workshops for their teachers”* (Ssvp 1).

In terms of teachers’ motivation, many teachers in special schools were described as having low motivation. One of the school supervisors maintained that *“because most of the teachers in this school are PNS they tend to have low*

motivation. They do not have enthusiasm to improve their quality of teaching” (Ssvp 3). Moreover, he asserted that “compared to regular teachers in regular schools, where they have the target that their student should pass the national exam, there is no such target in special schools. They hide behind the stigma that it is only a disabled student that they teach. They have no high expectations for the students, therefore they lack enthusiasm in teaching” (Ssvp 3).

School supervisor 3 also identified the lack of teachers’ sense of belonging in one of the special schools. He claimed that *“the division of the school based on type of disability has resulted in a lack of sense of belonging; they do not care for each other. They see each other as senior and junior, and it also has large numbers of teachers. The environment is just not healthy” (Ssvp 3). Furthermore, he maintained that “the principal also does not show good leadership. He is a former teacher in one of the department. His management skills do not show as satisfactory” (Ssvp 3).*

Business leaders also acknowledged that teachers in special schools were lacking in competence. A business leader asserted that teachers in special schools required improvement in *“their vocational skill teaching skills” (CBL3), and “marketing skills” (CBL 1).*

In terms of related services from other government organisations, it was identified that they lack adequate human resources. People with disability are marginalized, as one of the coordinators explicitly stated: *“so basically, we do not have time, energy, and money to think about disabled people. There are still a lot of more productive people that we should take care of” (MP).* In addition, a coordinator also stated that *“we are lacking human resources” (SA).*

Resource Allocation

The Department of Education, Youth and Sport provided financial support for special schools through Biaya Operasional Sekolah/school operational cost scheme. Besides that, schools also received funds for *“apprenticeship program that is allocated from Anggaran Pembangunan Biaya Daerah(APBD)/regional development budget and entrepreneurship program that are allocated from the Ministry”* (SE). However, these funds are *“limited”* (Ssvp 3) and *“inadequate”* (SE).

The Department of Social Affairs and the Department of Manpower and Transmigration have funds for training programs and social security money for people with severe disability, however *“the program is not effective in improving the employment skills of people with disability”* (DO). Another source of the fund was from APBD and these also were identified by the coordinators as *“limited”* (SA, MP).

School supervisors also identified that some special schools were lacking facilities such as tools and materials for teaching vocational skills, and there was also limited space in most special schools. One of school supervisors stated that *“most of our special schools have limited space and do not own the land, except for the state special school”* (Ssvp 2). However, because of the divisions created in the state school, there was *“a discrepancy in facilities between divisions”* (Ssvp 3).

Summary

Participants indicated that student interests should be correctly facilitated in the transition program. The school should identify these interests by using appropriate assessment procedures. The use of assessment was not only to recognise students' interests but also to identify the availability and opportunities to use these

skills in their environment. Furthermore, participants also suggested that student participation in program planning was also important.

In terms of student development, while support services for students with disability were limited, the participants point out that the school should be innovative in developing program where vocational education should receive a greater percentage of time and content compared to academic subjects. Entrepreneurship programs were also essential in the transition program. Furthermore, self-determination should be a crucial part of the program as it was the key to development of successful graduates. In facilitating employment skills, the participants specified that the school should provide advanced skills that would make their graduates marketable. Above all, appropriate work experience was valuable in providing real work opportunities for the students.

Even though most of the schools had collaboration with government and non-government departments, the participants proposed the need to improve existing interagency collaborations. While the participants noted evidence of interagency meetings, the implementation of meeting outcomes was still lacking.

Despite acknowledgement of the importance of family involvement in transition programs, the participants indicated that this involvement was limited. Programs such as family training and mentoring were among supports that could be utilised to improve family involvement, however financial and human resources for organising this were reported as inadequate.

Even though the participants comprehended that the severity of disability might affect levels of independence, they agreed that the organisation of the transition program should place emphasis on generating students' independence, not only in daily living skills, but also financial independent. The participants suggested

that this could be done through apprenticeships and entrepreneurship programs.

However, the main issue in applying this related to human resources. These needed to be enhanced: teacher quality, good leadership, adequate human resources; adequate financial resources; and strong implementation of legislation and policy.

The following discussion chapter interprets and discusses the main issues arising from the findings reported in chapter 5 (case studies in special schools) and chapter 6 (external stakeholders).

CHAPTER 7 DISCUSSION

Introduction

This chapter draws together the main research findings presented in the previous two chapters. The results are interpreted and possible explanations in relation to the existing literature are presented. The chapter also explains the implications of the main findings for implementation of more productive school to work transition programs for students with a physical disability in special schools in Indonesia.

The first research question in the study sought to determine the current implementation of school to work transition programs for students with a physical disability in special schools in Indonesia. The second question examined barriers and supports that existed in transition program implementation. The third question looked for the perspectives and expectations of external stakeholders (e.g. community business leaders, disability organisations, and government agencies) regarding school to work transition programs for students with a physical disability in special schools in Indonesia.

Rather than discussing each research question separately, the framework of this chapter will be based on the five categories and their clusters in the Taxonomy for Transition Programming (Kohler, 1996b) and will address all research questions integrally in each Taxonomy Cluster.

Taxonomy Category: Student Focused Planning

IEP Development

The data from this study showed that the concept and the practice of IEP development and use did not exist at any of the four schools. It occurred neither in the specific practice of transition programs, nor in special education practices in general.

The explanation for this is that the IEP is not recognised, nor used widely, in Indonesia. The only requirement to plan the teaching and learning process in special schools in Indonesia is what is called Rencana Pelaksanaan Pembelajaran (RPP) or a lesson plan. Hence the IEP is not implemented. Yet IEP development is important as it is a blueprint for directing a student's future life (Wehman & Targett, 2012).

Although there is a similarity in terms of personalisation of both RPP and IEP by tailoring each student's needs and current performance, the RPP differs from the IEP in several ways.

1. The RPP does not state an annual goal; instead it covers short term goals for a very specific topic or theme within a specific time allocation.
2. Accommodation in RPP is limited to facilitating the student's learning during specific lessons.
3. The RPP does not identify related services and supplementary aids and services required by the student.
4. Component evaluation in RPP is limited to evaluating student achievement in a specific lesson.
5. Any report to parents is available only through general comments on subjects and only available at the end of semester meeting.
6. The RPP does not accommodate the student's post school outcomes.

7. The RPP does not allow external participation.

In summary, the current mechanism does not make use of longitudinal outcomes-oriented planning (i.e., it lacks person-centred planning). Furthermore, the RPP fails to facilitate student direction and aspiration towards post school goals. This could lead to future disorientation, a lack of vision (Wigham et al., 2008), and failure by the student to attain further education and employment (Doren et al., 2013; Kohler & Field, 2003).

It is interesting to note that, despite the fact that only some external stakeholders work in the education field, all external stakeholder participants recognised that schools and teachers should put effort into making post school goals, especially living skills and employment, acknowledging them as key components in designing a transition program. This is consistent with the requirement of IDEA (2004) and the broader literature (see Austin & Wittig, 2013; Best et al., 2010; Crockett & Hardman, 2010a; Wehman & Targett, 2012).

The key findings from this study indicate a need to challenge existing policies and practices within secondary special schools in Indonesia in terms of documenting individual education plans (such as an IEP or ITP), and having outcomes oriented planning for students with disabilities. There is a strong need for policy and practice to facilitate a clear, accurate and comprehensive written statement regarding achievable post school outcomes for each student with a disability. This policy should reflect the student's and family's aspirations. This statement needs to be designed by various related stakeholders and include a pathway to achieve those goals.

Student Participation

The data from the study demonstrated that student participation in each school is limited, yet literature suggests that student participation needs to be a significant element in transition planning and programs (see Hendrick & Wehman, 2009; Kohler, 1993; Landmark et al., 2010), particularly in secondary special education practices (Kohler & Field, 2003; Rusch et al., 2009).

Student involvement in this study was limited to choosing vocational skills from an available list offered in Schools A and B. In Schools C and D students did not have the privilege to choose. The study revealed that the schools did not involve the student in program planning. The planning that did occur was based on the stereotype that the students are incapable of making decisions, and they did not have the initiative and capacity to be involved in program planning. This is not unique as it has been documented that special education teachers did restrict student involvement (Martin et al., 2012). In a study conducted by Martin et al., (2004) special educators took a dominant role in IEP meetings by controlling 51% of meeting time, compared to only 3% by students and 15% by family members.

The negative perceptions regarding student's lack of choice-making skills allows others, in this case the teachers, to decide what is best for the students (Mithaug, 2005). In addition, as discussed in the work of Bannerman, Sheldon, Sherman, and Harchik (1990), the argument to restrict choice by students with disabilities includes assumptions that: (a) the person will make poor or dangerous choices; (b) the person will choose the least important over other significant important skills; (c) the person will be unaware of the availability of other choices; and, (d) the person will not make appropriate choices. A problem in teachers choosing is that they often fail to recognise the ability of students with significant

disabilities; likely due to the nonconventional forms used to convey their preferences (Cannella et al., 2005; Lattimore et al., 2003). Restrictions on student participation can also be affected by limited preference availability (Wehmeyer, 2007) and cultural background (Agran & Hughes, 2005; Valenzuela & Martin, 2005; Zhang, 2005). In the schools in the current study, lack of options for students often forced them to select the teacher-preferred activity. As will be discussed later in this chapter, lack of vocational education skills by teachers often resulted in students being forced to undertake vocational skills that teachers were interested in, or had some knowledge of, regardless of whether that matched student needs or not.

The current study found that the external stakeholder participants expected the school to involve the student actively in program planning. Even though there is still some distance to go in achieving genuine participation (Wehmeyer, 2007), it is argued that students with disabilities could be involved in various stages of the IEP process including in planning, drafting the plan, meeting and revising the plan, and in its implementation (Konrad & Test, 2004). The literature suggests that students with disabilities can be educated and trained to be more engaged in the IEP process (see Allen et al., 2001; Cross et al., 1999; Griffin, 2011; Keyes & Owens-Johnson, 2003; Martin, Martin, & Osmani, 2014; Woods et al., 2010).

The current study showed that in School B only older students participated in the planning. This finding is in agreement with the results of the National Longitudinal Transition Study 2 funded by the US Department of Education (Cameto et al., 2004). The results of that study showed that a greater percentage of older students attend IEP meetings compared to younger students, with older students also taking a leadership role compared to younger students (Cameto et al., 2004). Similarly, a study conducted by Wagner et al., (2012) showed that, among older

students, 82.9% had attended transition planning compared to only 49.6% of younger students.

These findings suggest that there is a strong need to improve student participation in the areas of program planning, implementation and evaluation, so that the student feels greater ownership of their plan. This can only be accomplished if schools give students opportunities to be involved actively in the planning process, including opportunities for learning how to be actively involved in making decisions, self-determination, and self-advocacy in managing meaningful program planning. To do this however, required school staff to have the ability to provide and implement these skills. As discussed in the Human Resource Development category later in this chapter, this was extremely problematic for case study school staff and their leaders.

Planning Strategies

Although the external stakeholders highlighted the importance of taking account of student interest in developing a program (as mentioned earlier) instead of placing students at the centre of the planning process, the practice in the case study schools tended to be very teacher-centred. This finding strengthens the research findings that a teacher-centred approach has been used extensively in Indonesian educational practices (Azra, 2002; Bjork, 2013; Buchori, 2001; Darmaningtyas & Gusmian, 2004). Not only does this occur in implementation and evaluation, but also in planning decisions. However, it is very important that the transition decision is based on students' interests and goals (Austin & Wittig, 2013; Kohler & Field, 2003, IDEA, 2004). Taking student interest into account in transition planning is not enough, and schools should endeavour to move to student directed transition planning. Education should aim to prepare students with the skills needed in post

school life (Luft, 2013a). The only school that considered student interest was School B where older students were asked what sort of vocational skill they wanted to learn. The possible justification for this is the assumption on students' inability to make choices. In School B, older students are believed to be able to make appropriate choices compared to the younger students. At the other schools, this kind of choice making was not facilitated due to the common practice of teacher-centred decision making, restricted availability of resources, and lack of teacher skill in the area of transition and person-centred planning.

The planning process in transition programs should also be driven by the student and their family with a focus on the student's active role (Martin & Williams-Diehm, 2013; Rusch et al., 2009), however parental involvement in all schools was limited. Further discussion on parent involvement will occur in the Family Involvement category later in this chapter.

Promoting self-determination is a role of secondary education (Crockett & Hardman, 2010b) and transition education (Rusch et al., 2009), yet no schools in the case studies addressed self-determination skills. This finding was not unexpected due to lack of teacher understanding and competence regarding teaching self-determination (Agran et al., 1998; Grigal, Neubert, & Moon, 2005; Wehmeyer et al., 1998). The literature has shown that self-determination is associated with greater student involvement in transition services (Baer & Flexer, 2013; Lee et al., 2012; Wehmeyer, 2001; Wehmeyer et al., 1998). Another possible explanation for poor self-determination practices in all schools is that teachers have the power to determine what is best for their students. This is again derived from the negative assumption that students with disabilities are incapable of making decisions. Furthermore, self-determination is accommodated poorly in the curriculum. The

current educational practice in most general schools, and also in special schools, is that the students did what teachers told them to do. Consequently, choice-making and self-determination are not part of the schools' cultures (Azra, 2002; Bjork, 2013; Buchori, 2001).

These findings pose a significant challenge for special education practices in Indonesia in general, and transition programs in particular; that is; how to shift practice from "teacher dominance" to "student directed" in the planning process. In order to practise student-directed planning processes, students must be equipped with the appropriate skills such as self-determination skills. This means accommodating these skills in the curriculum is essential, together with having competent teachers teaching the skills.

Taxonomy Category: Student Development

Assessment

The data from this study demonstrates that use of assessment was limited in all schools to class placement at the beginning of the school year (Pierangelo & Giuliani, 2006) and, at the end of semester, a summative evaluation of student performance (Dorn, 2010). This finding contradicts best practice in transition which requires careful assessment before setting related transition goals and services (IDEA, 2004; "Kirby v Cabell County Board of Education," 2006; Kohler, 1996a; Kohler & Chapman, 1999; Kohler & Field, 2003; Levinson & Palmer, 2005; Neubert & Leconte, 2013). Furthermore, the quality of transition planning and services are defined by assessment validity and reliability ("Kirby v Cabell County Board of Education," 2006; Morningstar & Liss, 2008). This implies that without a proper assessment, schools fail to provide quality transition planning and services. A possible explanation for the limited use of assessment in all schools is related to

inadequate teacher competencies (Suryadarma & Jones, 2013) and the unavailability of standard formats of assessment (Neubert & Leconte, 2013). Schools are given the flexibility to develop and conduct their own formats of assessment, however, lack of teacher competencies in assessment practices in the case study schools were evident. Another possible explanation is the unavailability of a transition assessment related policy in Indonesia. In the USA, states and School Districts provide frameworks and guidelines for transition assessment to meet the legal requirements of transition services as outlined in the IDEA (Sitlington et al., 1997). However, in Indonesia such legislation and requirements do not exist. Although it is clear that schools should accommodate student interest and preferences (BNSP, 2006), there is no guidance for implementation and practice in Indonesia.

Despite School A and School B participants' acknowledgement of the importance of conducting vocational assessment, no schools implemented this practice comprehensively. Again, with a lack of policy regarding this matter, and inadequate teacher competencies, lack of evidence of such practices would be expected. Nevertheless, vocational assessment plays an important role in promoting career development and identification of needs for transition services in the area of employment (Neubert, 2003, 2012; Sitlington et al., 1997).

Another significant finding was evident in examining undocumented assessment. While work samples were kept in all schools, those work samples did not inform the teacher in regards to ongoing decision-making for further transition service arrangement and student feedback. Hence, they should not be seen as fulfilling a formative assessment role. Neubert and Leconte (2013) emphasised that documentation of assessment was important as evidence for developing transition goals and to inform students' annual IEP goals. Practices in the case study schools

were contradictory to the principles of transition assessment itself as an ongoing formative process (Neubert, 2012; Neubert & Leconte, 2013). Teacher participants in schools tended to use the work samples to monitor student progress without consideration of their use as interest inventories (Neubert, 2003). The inadequate use of students' work samples to make decisions in transition programming demonstrated a substantial lack of teacher knowledge of transition assessment practices. Furthermore, because of the limited use of written and/or guidance assessment tools, there was no written evidence or documentation of assessment results. Teachers tended to keep their observations to themselves, without sharing them formally with other teachers or parents. This could be seen as a reflection of the teacher-directed dominant culture in the schools.

Another significant finding was the limited use of assessment tools. In all schools most teachers used informal observation of students without developed observation guides and specific assessment tools for specific purposes (e.g., preference, experience, job matching and specific work task skill development). This is not unique, as direct observation has been used as a popular assessment tool in special education (Agran & Morgan, 1991). Yet, relying on only one informal assessment tool may generate inadequate career needs description and impede the effectiveness of potential career interventions (Niles & Harris-Bowlsbey, 2013). The unavailability of standardised assessment tools that fit the Indonesian context contributes significantly to poor assessment practices. Another possible explanation is the lack of teacher knowledge in developing assessment guidelines, and therefore assessment tools are not available in all schools. As mentioned earlier, the unguided teacher observations led to poor documentation of assessment results. Written reports

were not required by schools, parents or principals, further contributing to the lack of formal, documented assessment results.

Surprisingly, findings from external stakeholders suggest that the assessment process should take into account the student environment, reflecting a stronger and broader understanding of the concept of assessment than the teachers demonstrated. These findings support the trend of transition assessment which has moved from traditionally assessing student strengths, to more broadly assessing their potential environments (Flexer et al., 2013; Sitlington et al., 2007).

These findings pose significant challenges to assessment practices in Indonesia. Clearly there is a need to expand special educational policy in regard to transition services, with an emphasis on meaningful transition assessment that should be conducted by competent teachers. Preparing competent teachers is an issue that needs to be addressed in relation to the case study context and is discussed further in the HRD category later in the chapter.

Career and Vocational Curricula

The Indonesian government regulation requires all special schools to place greater emphasis on the vocational curriculum rather than the academic curriculum in order to prepare students for employment (BNSP, 2006). This regulation echoes the claim that preparing students with disabilities for work endeavours is a major issue in secondary schooling (Best et al., 2010; Crockett & Hardman, 2010a, 2010b).

Furthermore, providing career and vocational education in secondary school is essential (Repetto & Andrews, 2012). These findings mirror the study conducted by Alverson et al., (2010) where vocational education was one of the most frequently reported transition programs in schools. However, in the current study, implementation between the schools varied. Schools A and C implemented the

regulation inconsistently, whereas Schools B and D followed this regulation consistently (i.e., 60% of the curriculum allocated to vocational education).

The inconsistent implementation of the academic and vocational ratio in the curriculum occurred for various reasons. First of all, the schools narrowly defined their success based on high student academic achievement. Raihani (2010) confirms that one criteria of a successful school is excellent student academic achievement. Schools A and C therefore removed components of vocational education in the school to allow more units for subjects included in the National Examinations such as Mathematics, Indonesian language, and English. This is not unique as many schools have reduced the number of employment related curriculum subjects to increase high stakes testing subjects (Baer et al., 2003; Guy et al., 2008). Secondly, limited vocational education facilities, such as in Schools A and C, force teachers to lessen vocational education and deliver a more academic curriculum. Thirdly, parents' perceptions that school is a place for learning academic content puts pressure on teachers to place greater emphasis on academic matters.

In Indonesia the curriculum for students with a physical disability is divided into two categories. Curriculum D is for students without intellectual disability, and curriculum D1 is for students with both a physical and an intellectual disability. The letter D refers to the disability categorisation for physical disability. The difference between curriculum D and D1 includes the ratio of vocational skills where curriculum D1 places greater emphasis on vocational skills compared to D. Limited vocational education skills are taught in special schools and there is no real focus on the broader career education curriculum. This is limiting, as vocational skills are just a small part of career and vocational education (Repetto & Andrews, 2012). Furthermore, the curriculum provided in the schools lacked connections between

academic and vocational education. Yet, in order to be able to develop self-discovery skills that are important for career development, there should be an integrative approach between academic, career education and vocational education (Repetto & Andrews, 2012). A possible explanation for this is related to broader career development related policy that places less focus on career development for student with disabilities. Another possible explanation is the teachers' lack of knowledge on how to integrate academic and vocational education curricula. Teachers need to place emphasis on both academic and vocational skills' outcomes equitably.

Student participants in the current study identified the need to improve career education and vocational education through increased time allocation and providing more vocational skill choices. This extension to time allocation allows students to gain more, varied vocational skills. A greater variety of options means that the students will have a higher possibility of enrolling in vocational skills classes that match their interests. Furthermore, the need to improve vocational education was also identified by external stakeholders through developing an innovative vocational education curriculum. These findings are in agreement with the findings of Sitlington et al. (2010) that secondary schools should integrate programs of career and vocational education to facilitate students in developing their self-discovery skills for the purpose of career development.

In summary, these findings suggest that there is a need to improve policy and practice in the special education curriculum, particularly the enhancement of career development for students with disabilities, developing meaningful connections between academic and vocational education curriculum, and the integration of vocational education and career development.

Life Skills Instruction

The current study demonstrated that all case study schools facilitated life skills instruction in the area of basic daily living skills. Other areas of life skills, such as personal and social relationships and community participation, were not specifically targeted in non-academic content or through academic subject areas such as Indonesian languages and moral and ethics education. Yet, those skills are important for quality and productivity in the workplace (Levin, 2012); finding and maintaining employment (Carter et al., 2011); and, to navigate the workplace's culture and establish relationships with co-workers (Eisenman & Celestin, 2012). These findings further supports the idea of evidence-based practice related to life skills areas including community participation and satisfactory personal and social relationships which is often lacking in transition services (Benz & Halpern, 1993; Blalock & Patton, 1996; Bouck, 2010; Halpern et al., 1993; Johnson et al., 2002; Kardos & White, 2005; Sitlington, 1996). A possible explanation is that the concept of the "independent individual" was narrowly interpreted as by schools as being able to do basic daily activities independently. Therefore the schools needed to place greater emphasis on social relationships as well as on skills such as personal hygiene, dressing skills, grooming skills.

School B included community and religious values in the school program such as "*rewang*" and other religious routines. In the Javannesse community it is important to be involved in "*rewang*" because it demonstrates a sense of belonging, respect, and cooperation. School B taught the students activities involved in "*rewang*" such as making "*Samir*" and "*sudi*"; and also religious routines such as practicing "*dhuhr*" prayer before finishing school and making "*ketupat*" for "*idli fitr*". This is surprising as all the schools are located in the same municipality and

shared the same values, although three of the four schools did not address these values in their curriculum. A possible explanation for this is that the other schools neglected the importance of these skills and their purposes for student social and community inclusion. Alternatively the schools may have believed that students with disabilities were not able to understand such values; a very unfortunate and misplaced belief. The practices in School B were consistent with the purpose of transition services in regards to development of skills related to the cultural expectations of being a good neighbour, which is necessary to function in the local community (Clark et al., 1994). These values will also be important to maintain collegial relationships later when the student is in employment.

School A teachers reported that parents did not perceive life skills as being as important as academic content. Results suggested that, according to the teachers, some parents perceived academic content to be of greater importance for their child's education. These findings contradict a study conducted by Palmer, Borthwick-Duffy, Widaman, and Best (1998), where parents of children with severe disabilities placed more emphasis on daily living skills, rather than academic content. A potential explanation for this is the limited parent involvement in the program planning process, and therefore parents were not well informed about the importance of mastering life skills for their children's future.

These findings suggest that including a comprehensive life skills program in the curriculum that includes taking into account community values is important in preparing students with disabilities to actively participate in their communities. Involving parents in program planning will ensure that the importance of equipping students with life skills is fully communicated to the parents such that they are able to make informed contributions to the development of their child's education.

Employment Skills Instruction

Employment skills instruction in all four schools was limited to providing job-specific skills rather than broader vocational skills. Literature suggests that the majority of students with disabilities are able to learn vocational skills (Beirne-Smith et al., 2002; Spooner, Bowder, & Richter, 2011; Wehman et al., 1987). Employment skills instruction is not merely vocational skills, and should include work related behaviour and skills, and job seeking skills (Kohler, 1996a; Kohler & Chapman, 1999). All were poorly demonstrated in the case study schools. This echoes the literature that many students with disabilities do not obtain appropriate, employment related skills (Best et al., 2010; Crockett & Hardman, 2010a; Guy et al., 2008). The findings suggest that schools failed to recognise the importance of work related behaviour in the area of personal and social skills. Nevertheless, work related behaviours are popularly listed by employers for successful employment. These include appropriate work attitude and behaviour such as self-discipline, punctuality and attendance, ability to set goals, taking responsibility, and listening skills (Fischer, 2013).

A possible explanation for why the schools provided only vocational skills but neglected other related employment skills such as job seeking skills, may be due to the significantly limited availability of jobs for individuals with disabilities in most Indonesian regions. Therefore, the teachers may not have seen the advantages in teaching job seeking skills.

In relation to vocational skills offered in the schools, only School D provided skills that were matched to the school neighbourhood which is known as a batik and a bitternut cracker region. The school took advantage of the school environment potency for materials supply and marketing purposes. The other schools

offer vocational skills based on teachers' ability and "inheritance vocational skills"; that is the vocational skills that have been implemented from generation to generation in the school. This has resulted in program inefficacy and low student engagement, because the skills are irrelevant to students' interests. This has occurred due to limited resources and poor teacher competencies. Furthermore, in some schools, regardless of limited human resources and financial constraints, special education teachers should also teach vocational skills. This has resulted in less developed student vocational skills and mismatched job specific skills, which in turn limits basic skills and the making of unmarketable products (Agran et al., 1994; Forlin & Lian, 2008; Wehman & McLaughlin, 1980).

Compared to the other schools, the implementation of vocational skills in School A placed greater emphasis on theory than practice. This contradicts the nature of vocational education itself as a preparation to acquire specific skills that are needed in local workplace communities (Lucas et al., 2012). This may be related to limited facilities, such as in teaching cooking skills where the school did not have accessible kitchen tools and equipment. Therefore the activities in the cooking class were mostly writing down recipes. Furthermore, a monotonous activity level of vocational skills, such as in School C, occurred due to low teacher competency, where most who taught vocational skills at the schools were special education teachers with no, or limited, vocational skills background.

Another important finding related to employment skills instruction relates to safety skills instruction, which was poorly accommodated. The student accident in School B, where she spilled hot wax on her feet while producing "batik", did not receive appropriate treatment. The seizure experienced by one of the students in School D after peeling bitternuts for a prolonged period is also evidence of poor

safety practices. There were no guidelines for the students regarding work safety. These findings suggest that safety skills were not identified by the schools as an important component. This is not unique, as according to Agran et al. (2012), many students with disabilities did not receive systematic safety skills instruction. Furthermore, student safety skills have been largely ignored in the curriculum domain (Agran et al., 1998). A study conducted by Agran et al. (1998) revealed that only 32% of the respondents had received an ongoing safety skills training program. Yet, regardless of the type of job, it is important for individuals with disabilities to respond properly in an emergency situation to avoid serious consequences (Agran et al., 2012; Agran et al., 1998). Inadequacy of teaching safety skills may be due to the following reasons: (a) the assumption that students already possess basic safety skills therefore time is better allocated to teaching other skills; (b) low teacher expectation of the benefit of teaching safety skills to students with disabilities; (c) there is a small possibility of having an accident and, if it happened, there is always a teacher or responsible adult to intervene; or, (d) the assumption that teaching safety skills is not as important as teaching academic skills (Agran, 2012).

In summary, research findings in employment skills instruction suggests that preparing the student for employment is not purely about providing job specific skills such as vocational skills, but also should place emphasis on other behaviours such as safety skills, work behaviour skills, and social skills. In order to improve student engagement in vocational classes, it is also important to take into account student interest. Furthermore, individual employment skills instruction should be delivered in an appropriate manner by placing emphasis on practice rather than just theory.

Structured Work Experience

Work experience was available through different schemes in each school.

The schemes can be seen in Table 28 below.

Table 28 Work experience scheme in each special school

Name of the schools	Work experience scheme	Criteria
Special School A	Internship	Excludes students with a physical disability
Special School B	Internship	Students with a physical disability are able to participate but should meet the criteria
	Seasonal paid work experience	
Special School C	Internship	Excludes student with a physical disability
	Un-paid work experience	Only for students with hearing impairment
Special School D	Internship	Students with a physical disability are able to participate but should meet the criteria
	Paid work experience	Students with a physical disability are able to participate if the student wants to

While all schools can access government funding for an internship program, it is very competitive and is limited to only one student per school. Students with physical disabilities are typically selected last for this scheme. It is believed that compared to the other types of disability, students with a physical disability are the least capable of participation in the internship program. This is not unexpected as the literature suggests that work experience opportunities for people with severe disabilities were limited (Burbidge et al., 2008; Carter et al., 2010; Kraemer & Blacher, 2001). Yet, regardless of the disability, research supports the relationship between work experience in high school and postsecondary employment (e.g., Benz et al., 2000; Karpur et al., 2005; Luecking & Luecking, 2015; Rowjewski, 2002).

While the limited number of students who access the government funded internship program affects all students with disabilities, those with a physical disability are more likely to be excluded from apprenticeship programs and other work experience opportunities due to characteristics such as reduced mobility skills, interpersonal skills, and communication skills (Test et al., 2009). It can be argued that the more severe the disability the less access to work experience opportunities.

In all four schools, the internship program was poorly organised. There were no standards for safety procedures or published guidelines for implementation monitoring and evaluation, available for schools to follow. This is not surprising as there is limited demand and practice in the use of published standards and protocols; electronic or print. Yet, well-planned work experiences should be an integral part of transition preparation for all secondary and postsecondary school-aged youth (Lueking, 2009).

Another important finding regarding internships was the discrimination felt by students with a physical disability based on schools' exclusionary practices. Students commented that they wanted the same opportunities as the other students and argued that work experience would provide benefits for future employment. The external stakeholders also raised their concerns regarding the availability and the benefit of work experience regardless of students' disability type. Their arguments were supported by literature that suggested through work experience, youth with disabilities may develop autonomy, explore their vocational identities, develop career direction, and gain an understanding of workplace knowledge, skills, and values (Vondracek & Porfeli, 2008). Teacher participants also reported that students who were involved in paid work experience demonstrated high motivation, felt rewarded,

and showed greater responsibility. This is consistent with the OECD (2000) findings that work experience can develop positive attitudes.

Another significant finding related to work experience was the exploitation of students in School C. Although it did not involve students with physical disabilities it is worthy of mention. While the school collaborated with a business to produce underwear products, the company did not provide payment for students who were making the product. The company only provided the material and the school provided lunch money for the students from a funding source received from the government. Although this phenomenon is not unique, as Agran et al. (1994) suggested, individuals with disabilities are often involved in unpaid work experience. In this case it is concerning as the company received financial benefit from selling the products.

The findings pose a challenge to policy and practice regarding structured work experience. Regardless of the type of disability, the school should be able to provide planned work experience for their students. It is also important to establish clear guidance on how to implement the internship program from the provincial Department of Education, Youth and Sport as the fund provider, the school, and the businesses where students undertake internships. Effective coordination between the three organisations should be included in policy and practice guidelines in relation to monitoring and evaluation of internship programs.

Support Service

The lack of accessibility and access to information on employment, further training and education are among the failings of the limited support services that were identified by the research participants. Complexity of support services has been acknowledged as a hindering factor when it comes to transition services (Certo et al.,

2003; Morningstar et al., 1999). While research suggests that there has been intensive use of assistive and adaptive technology to support students with disabilities in transition services in developed countries (Burgstahler, 2003; Scherer et al., 2010), this is not true of the Indonesian context. International research suggests that the use of technology is not limited to the technology that is directly used by the student (e.g., word/speech recognition devices), but it includes using technology such as digital simulation (e.g., computer or online software) as a learning media in transition programs. Literature suggests that digital simulation is effective in improving acquisition of employment skills (Zionch, 2011), and self-determination (Wehmeyer et al., 2011). However, the current research participants failed to recognise the benefits of technology in supporting transition programming. There are several reasons why the use of assistive and adaptive technology is limited in the Indonesian context. Firstly, the professionals working in the area of special education are not familiar with the availability of these technologies; most of these technologies are invented overseas and not available in the Indonesian language. Secondly, the cost of the technologies is prohibitive, and the technologies are not available in Indonesian industries.

It can be argued that limited funding is also a significant contributor to the lack of accessible programs (e.g., unavailability of modified tools and equipment in cooking skills class in School A and modified sewing machines in sewing skills class in School C). In regards to limited access to information for employment, further education and training, it is believed that this is due to the ineffective sharing and collaboration between schools, government and disability agencies. Significant technology barriers affecting transition to adulthood include disintegration, replication and insufficiency of adult services and support (Sitlington et al., 2010).

The key findings indicated substantial challenges for implementation of appropriate support services. The schools and related organisations are being challenged to provide improved coordination of support services necessary to achieve effective transition services. Furthermore, the schools are being challenged to provide accessible facilities according to the nature of their students' disabilities.

Taxonomy Category: Interagency Collaboration

Collaborative Framework

The collaboration framework in all four schools can be characterised as unsystematic collaboration. The arranged MoUs between schools and businesses for the internship programs were unclear. Yet, organised collaboration is not only a critical element in ensuring effective transition (Conway, 2014a; Karpur, Brewer, & Golden, 2014; Mpofu & Wilson, 2004; Spooner, Bowder, & Uphold, 2011), but it is also a predictor of improved post school outcomes (Noonan & Morningstar, 2012; Test, Mazotti et al., 2009). This finding is not surprising as the literature suggests that interagency collaboration has emerged as a vital area in need of improvement by schools (Strnadova & Cumming, 2014; Johnson et al., 2002; Noonan et al., 2008).

The possible explanation for this poorly organised collaboration framework is the lack of well-defined expectations on what the schools and other agencies want to achieve in regards to student outcomes (Trach, 2012). Another possible reason is the lack of clear guidelines regarding the role of each agency in the collaboration. This is echoed in the research literature (see Agran et al., 2002; Oertle & Trach, 2007; Repetto et al., 2002) where transition professionals expressed uncertainty regarding who should be involved, their own roles and the roles of others.

This finding poses a challenge to the existing system and culture of the collaboration framework implemented in the schools. There is a need to establish a

well-defined collaboration framework that clearly outlines the goals of the collaboration and has clear identification of who should be involved, clear articulation of roles and responsibilities, and well developed procedures for monitoring collaboration.

Collaborative Service Delivery

With the exception of School D, service delivery was characterised by a lack of sharing information and poor communication between the school and related agencies. This is contradictory to features of a high quality transition service which includes information sharing (Kohler, 1996b, 1996c; Noonan & Morningstar, 2012). This finding is not unanticipated as a study conducted by Schmalzried and Harvey (2014) confirmed that regular communication between special educators and other transition personnel was non-existent. Furthermore, sharing information across agencies in relation to students characteristics and potencies also remains a challenge in interagency collaboration (Johnson et al., 2002). Subsequently, this lack of communication and sharing information would lead to ineffective interagency collaboration. Despite the importance of interagency collaboration for post school outcomes, no experimental research or evidence-base currently exists to guide professionals in best practices in this area (Mazzoti et al., 2013).

The possible justification for this is related to the absence of a well-established collaboration framework as a guideline for implementation between schools and related agencies. Secondly, countries (such as the USA for example) have a legal mandate that requires interagency collaboration in transition programming; however such mandates do not exist in Indonesia.

This finding might generate some challenges to existing policy and practice in relation to collaborative service delivery. As mentioned in the collaboration

framework section, there is a need to construct well-defined collaboration schemes that uphold the values of mutual relationships, shared responsibility, shared resources, and jointly developed authority and accountability for success (Mattessich, 2003).

Taxonomy Category: Family Involvement

Family Involvement

Parent involvement in program planning and evaluation in all case study schools was limited. These findings is not surprising in regards to the Indonesian context, where it has been reported that parent involvement in education remains low, including in school decision making (OECD/Asian Development, 2015) and in education in general (Werf, Creemers, & Guldemon, 2001). Although these research projects were conducted in general education, the situation also applies in special education settings. Despite an increase in parents attending IEP meetings in secondary special education (Cameto et al., 2004), many parents did not feel they are fully included or appreciated in IEP or transition meetings (Luft, 2013b).

Parents, however, reported that even though they were not involved in the decision making in the schools, they were involved in assisting their children with vocational skills related to homework and projects that their children brought home from school. The literature suggests that parents are involved in different ways that are not always apparent in the IEP. This includes providing their children with home support such as teaching about family values and culture (Powers et al., 2009), involvement in building positive work habits, promoting future vocational choice and preference, and generating job opportunities through family networking (Mpofu & Wilson, 2004).

The parents in School D were more involved in program implementation compared to the other schools. This is because School D implemented extended paid work experience with bitternut crackers for the students' families. Families were encouraged to bring raw bitternuts and process them into bitternut crackers at home. Located in the area where most of the parents have low socio-economic status, this kind of activity was seen as an opportunity to increase family income, and many families engaged actively in the program. This differed from School B, where some parents were involved in batik production for leisure and personal use, rather than as a means for generating income.

The lack of parental involvement may be due to limited parent education. This may also be the case for parents who sat on the school committee, where most have less education compared to the school staff. This is not unique, especially for schools located in poor suburbs. Even though they were invited to the school decision meeting, they did not understand their roles and were perceived as tokenistic parent representatives rather than being taken seriously by school staff. This was exacerbated by staff decisions that failed to acknowledge the students' (or family's) needs and interests (OECD/Asian Development Bank, 2015). Parents' lack of understanding of transition and their roles, also contributed to limited parent involvement. It can be argued that parents have a misconception that the school is solely responsible for the education of their children (Karsidi, Humona, Budiati, & Wardojo, 2013). Even though most parents stay at the schools during school hours, they did not get involved in school activities (OECD/Asian Development Bank, 2015). Parents lack of knowledge regarding transition has resulted in some making cynical comments regarding the vocational skills the students are engaged in.

Limited parent involvement was also affected by the cultural relationship between families and school staff, which is influenced by Javanese culture, such as “*manut*” (obedience), “*ewuh pakewuh*” (hesitance to question someone of higher position) and “*rukun*” (avoiding conflict). It has resulted in parents’ weakened position in any school decision making. Therefore, parent involvement may be perceived as futile, even though the quality of relationships between parents and educators is a key factor affecting family involvement in transition programs (DeFur et al., 2001; Landmark et al., 2007). Furthermore, low parent expectations regarding their children’s outcomes have also resulted in ignorance and discrimination. Parents did not bother to take student achievement reports home at the end of the semester and discriminated against their children with disabilities over their siblings. In addition, unlike in the US where parent involvement is mandated in the IDEA (2004), such regulation in Indonesia does not exist.

This finding suggests that there is a need to improve family involvement in the areas of program planning, implementation and evaluation, as family involvement is a predictor of the post-school outcomes process (Kohler & Field, 2003; Papay & Bambara, 2014; Test, Fowler, et al., 2009; Test, Mazzoti, et al., 2009). The quality of family involvement can only be improved if the schools give considerable opportunities to parents to be involved actively in the planning process (Luft, 2013b), and the government provides a framework that supports active family involvement.

Family Training

With the exception of School D that did involve families in vocational skills workshops, family training in the other schools was limited to parenting tips. However, this training is not sufficient to encourage further active family

involvement in the school. Families need fundamental knowledge and supports to become competent partners in transition services (Luft, 2013b; McDonnell & Nelson, 2009; Wandry & Pleet, 2012).

The lack of family training in the schools could be derived from a lack of understanding of the importance of family involvement. The schools failed to acknowledge that families could become an essential partner and resource in transition services. Research has placed emphasis on building conceptual models and recommendations for greater family involvement, however further investigation of the types of training needed to improve family involvement is needed (Targett & Wehman, 2013).

The findings challenge the existing family training framework that has been established in the schools. In order to actively involve parents in the transition process, not only should the schools equip families with transition related knowledge, but should also train the school staff on how to actively involve the family in transition programs. Most importantly the schools should accommodate greater family participation.

Family Empowerment

As mentioned in the earlier section, families were excluded from program planning. This could have occurred as a result of schools' perspectives and perceived value of school-family partnerships. The lack of person-centred planning that also places emphasis on families' needs and preferences also contributed to limited family empowerment in the schools. There is a strong need to empower families to become more engaged in transition programs through training and the use of planning strategies that involve greater parent contribution such as person-centred planning approaches.

Taxonomy Category: Program Structure

Program Philosophy

An inadequate vocational education curriculum structure was common in most case study schools. The programs provided in the schools placed more emphasis on competence-based, rather than outcome-based, activities. This also included a lack of structure and practice for promoting student focused planning, student development, family involvement, and interagency collaboration. In most of the schools there was an unclear structure for school to work transition-focused education, and therefore students were not appropriately equipped with employment skills. A possible reason is the lack of commitment and system supports for transition focused education at the government, business, and school levels. This finding is not surprising as a program philosophy is often lacking in school transition programs (Kohler, 1998). More recent research conducted in Queensland, Australia also suggested that the practices of program philosophy were characterised by low levels of implementation and high levels of uncertainty (Beamish et al., 2012).

Among the schools, only School A did not recognise employment as a post school outcome in their school documents. This was expected due to a lack of teacher competencies and the school staffs' low expectations in regards to student ability to enter employment, together with the limited vocational education facilities made available.

There is clearly a need to establish a solid structure in regards to transition-focused education that links related stakeholders. The structure should be able to sustain commitment and support from all stakeholders. Furthermore, the structure should facilitate clear guidelines on how the significant aspects of transition, such as

student focused planning, student development, interagency collaboration, and family involvement, can be accommodated effectively in transition programs.

Program Evaluation

The only available evaluation was teacher summative evaluation on how well students mastered the skills. There was no emphasis on post-school outcomes in terms of applying the skills. Furthermore, evaluation was not ongoing and is administered solely by the schools. These assessment practices contradicted the purpose of program evaluation in transition programs where evaluation should include relevant stakeholders in the process (Baer & Flexer, 2013). This finding supports previous research such as a study conducted by Test et al. (2004) that involved 280 teachers in North Carolina which suggested that the majority of schools gathered only students' performance skills data and did not collect post school outcomes data. Similarly, a study carried out by Beamish et al. (2012), which included 104 teachers in Queensland, also confirmed that there was a gap between teacher belief in formative and summative evaluation, and actual teacher practices. This gap occurred both in ongoing (formative) evaluation and twelve months post school (summative) evaluation.

There are various reasons that contribute to the limited implementation of adequate program evaluation. These circumstances are related to the lack of a framework regarding transition focused education in the program philosophy and, as a consequence, there is a lack of guidance on how the program should be evaluated. The lack of evaluation activities are also affected by the lack of personnel, expertise and funding (Grigal et al., 2005; Test et al., 2004).

These findings suggest that there are major challenges to policy and practices in evaluation procedures in the case study schools. It is essential to have a clear

structure for program evaluation, especially in relation to students' post school outcomes, that is supported with appropriate funding and qualified staff to implement it.

Strategic Planning

Strategic planning was undertaken differently in each school. While all schools implemented strategic planning at the school level only Schools B and D extended their strategic planning to a higher level. They provided students with physical disabilities further training in employment skills in government and non-government organisations. However, external stakeholders identified limited strategic planning in the government organisations both at District and Provincial levels. These related government organisations such as the Department of Social Affairs and the Department of Manpower and Transmigration provided only limited vocational training for people in general, without directly targeting students with disabilities. This is similar to the implementation in countries such as Malaysia where Government organisations provided a less positive response on school to work transition programming compared to Non-Government organisations (Abdullah et al., 2013). Low level implementation of strategic planning was also identified in the study conducted by Beamish et al. (2012).

While the difference between strategic planning practices across the case study schools was due to differing teacher competencies, the unavailability of strategic planning at District and Provincial levels was due to a lack of: funding, personnel, and effective collaboration between related organisations.

These finding suggest that there is an urgent requirement for reforming the area of strategic planning. In order to equip students with disabilities with essential skills for making positive contributions to society, strategic arrangements and

accommodations should be available at all levels. It is also important to note that transition services are not a school-only project, but should also involve the broader community including government organisations that held direct responsibilities to do so (such as the Department of Social Affairs and the Department of Manpower and Transmigration), and Non-Government Organisations that are involved in disability services. Those stakeholders should be able to work effectively in partnership to make arrangements and accommodations succeed.

Program Policy

In Indonesia, there are no specified policies related to transition education available at the National level, the Provincial level or the School level. Unlike the USA and the UK, where transition is mandated in IDEA (2004) and SEND ("Special Educational Needs and Disability Code of Practice: 0-25 years," 2015), such policy and legislation does not exist in Indonesia. The lack of such a policy has resulted in a lack of direction in transition services, both in the schools and in the government departments such as at the Department of Social Affairs and the Department of Manpower and Transmigration. It also leads to ambiguity in staff roles and responsibilities (Beamish et al., 2012). However, Indonesia is not alone in lacking national and state levels of policy for transition services. Developed countries such as Australia (Strnadova & Cumming, 2014; Beamish et al., 2012) and neighbouring countries such as Malaysia (Abdullah et al., 2013), Cambodia (Nhean, 2010), The Philippines (Olores, 2010), Thailand (Samart, 2010), Laos (Shithath, 2010), and Brunei Darussalam (Wong, 2010) also lack clear policies regarding school to work transition services.

The Indonesian government is being challenged to develop a series of transition service policies. These will not only regulate procedures and frameworks

related to school to work transition education in the schools, but also control and support related government and non-government organisations. This will occur by regulating the process of handover to other services following graduation, providing a framework of incentives for businesses that employ individuals with disabilities, and specifying an effective collaboration scheme.

Human Resource Development

Competent teachers are key to successful transition programming (Anderson et al., 2003; DeFur & Taymans, 1995), yet the data from the current study highlighted a lack of qualified teachers. This included lack of qualifications in vocational education, and failure by teachers and principals to demonstrate important competencies in planning and implementing transition programs. Nevertheless, special education teachers are still being assigned as the main providers of transition services (Knott & Asselin, 1999). Unlike the USA that has transition specialists and vocational rehabilitation personnel, additional personnel who assist special education teachers in delivering school to work transition services (Morningstar & Clark, 2003), these complimentary services staff did not exist in Indonesia. This is adding a further challenge for special educators in delivering transition program.

With the exception of School A, that employed vocational skills teachers, most of the teachers employed in the other schools were special education teachers with no background in vocational education, yet they were required to teach vocational skills. A lack of funding prevented other schools from hiring professional vocational education teachers. The lack of qualified teachers in vocational education has resulted in an absence of advanced vocational skills provision in the schools. Vocational skills provided in the case study schools were based on a teacher-centred approach and limited only to basic skills that were not marketable. Therefore, there is

a mismatch between vocational skills that were provided in the schools and the students' interests. Incompatibility between the students' skills and actual work skill demands are inevitable. Furthermore, inflexibility in the teacher rotating scheme, where teachers are most likely to stay in the same school throughout their teaching career, exaggerates the existence of limited vocational skills offered in the school. Unless teacher professional development is implemented effectively, there is little chance for the schools to vary their array of vocational skills. Literature suggests that teacher professional development positively impacts teacher competencies (Doren et al., 2013; Flannery, Lombardi, & Kato, 2015; Sitlington et al., 2010; Turnbull et al., 2007).

Teacher incompetence, together with teacher low expectation regarding students' employment abilities, has contributed to the neglect of employment outcomes when planning transition programs. One explanation for this is that special educators are not adequately prepared to plan and deliver transition programs (Anderson et al., 2003). This is not unique as research suggests that secondary teachers feel unprepared to deliver effective transition services (see Alnahdi, 2014; Morningstar et al., 2008). It is argued that insufficient teacher training and teacher education promotes this condition (Anderson et al., 2003; Benitez et al., 2009). Transition education is not part of the teacher education curriculum provided at Indonesian universities that offer special education programs. This is not surprising; less than half of special education program address transition standards (Anderson et al., 2003). Yet, there is a strong relationship between the levels of teacher preparation and transition programming. The more prepared the teacher, the more frequently the programs are delivered (Benitez et al., 2009). Consequently, universities that provide special education teacher training should provide coursework and experience that

enables their graduates to acquire transition related skills competences. This includes: (a) knowledge of principles and basic concepts of transition education services; (b) knowledge of models of transition education and services; (c) skills in using strategies in developing, organising and implementing transition education and services; (d) knowledge and use of collaboration strategies; and, (e) knowledge and skills to address systemic problems in transition service delivery (Morningstar & Clark, 2003).

In-service teacher training was available in government and non-government organisations; however it was limited in terms of improving teacher competencies in delivering vocational skills education. Furthermore, the participants reported that vocational training was often implemented ineffectively. There were limitations in terms of the number of teachers involved in the training. Training provided only basic skills in certain vocational skills and there was emphasis on theoretical rather than practical skills in teacher training. This is supported by Bjork (2013) who argues that Indonesian in-service training has been uninspiring as it is more focused on how to complete forms rather than modelling the instructional methods the Ministry of Education is encouraging teachers to adopt. Lack of funding, limited availability of in-service training in relation to transition education, no requirement for teachers to engage in continuing professional development to maintain teacher registration, and on-going certification of professional development are significant factors that contribute to ineffective training.

Training in other important areas such as developing student-focused planning, student development, interagency collaboration, and family involvement were not available. Yet, transition related competencies are not merely about teaching vocational skills. Skills related to coordination, communication, and

collaboration of transition services are among the top competencies needed for successful transition (DeFur & Taymans, 1995). Teacher professional development is believed to have significant power in assisting teachers to recognise goals and shift the focus from current students' educational goals and performance to future oriented planning processes (Doren et al., 2013; Flannery et al., 2015).

In addition, while three schools in this study were privately owned and one was government owned, most teachers employed in the schools were government employees (PNS). They were not known for their instructional excellence or commitment to the profession, but for dutifully following orders from their superiors (Bjork, 2013). Furthermore, the emphasis of teacher status as a PNS affected the culture of teaching practices that were anchored in obedience and paying more attention to the demands and obligations of the government rather than to their students. They also placed a higher priority on the roles as PNS, rather than being autonomous teachers (Bjork, 2013). Therefore, it is not surprising that teachers display low quality teaching practices and placed more focus on administrative tasks. Consequently, the government should provide a scheme that assesses and acknowledges teaching performance, including transition competencies, in teacher certification assessment.

Weak leadership was reported as occurring in School A. A possible reason for this was due to the large number of teachers in School A who were in separate departments according to the type of disability they taught. It requires strong efforts and effective strategies to become an effective principal. This condition not only affected the principal's leadership style, but also the teachers' relationships that were reported as being unhealthy, competitive and with a low sense of school-belonging.

Instead, visionary leadership is very important in directing the implementation of quality transition services (Hasazi, Furney, & Destefano, 1999).

The findings pose a challenge to the current policy and practices regarding human resources development across the schools, but specifically in transition services. Since transition services in Indonesia rely heavily on special educators, improving teacher education and professional development in the area of transition focused education is essential. This could be accomplished by including transition focused education as part of the curriculum in pre-service teacher training. Ongoing in-service training can be extended to not only providing training in vocational skills, but also in other important areas such as student focused planning, student development, interagency collaboration, and family involvement. It should also take account of the nature of the schools and characteristics of the school stakeholders.

Resource Allocation

The current study showed that the funds allocated for transition services were limited. This is not surprising as, senior secondary education receives significantly less funding (about 20%) than primary and junior education (50%) (Al-Samarrai & Cerdan-Infantes, 2013). Secondly, from that 20%, approximately 60% of the expenditure is allocated to teacher salaries and teacher certification incentives (Al-Samarrai & Cerdan-Infantes, 2013). Schools prefer to use funds on infrastructure, rather than spending it on resources and services that benefit students directly (OECD/Asian Development Bank, 2015).

The current study also found that there was a bureaucratic issue regarding use of funds. The Indonesian bureaucracy is known to be an extensive and complex process (OECD/Asian Development Bank, 2015). Issues such as lengthy processes for disbursement of funding and adherence to complex procedures may contribute to

inefficient use of funds. Furthermore, the schools' failure to recognise the importance of transition focused education, contributed to its low priority in their budgeting system.

Ineffective use of resources was reported as more extensive in School A compared to the other schools due to the specific characteristics of the school. These included a large number of teachers, and departmentalised, segregated delivery based on the type of disability. The lack of collaboration and willingness to pool resources by staff, and the principal's leadership style, generated a competitive culture and also resulted in uneven distribution of resources. Some departments had inadequate resources, while other departments had more than sufficient resources. As noted earlier, this did not occur to the same extent in the other three schools.

The findings pose a challenge to the arrangement of resource allocation. There is a need to improve funding systems to support the implementation of school to work transition focused education.

Summary

This chapter has made clear the key findings of the current study in relation to school to work transition for students with physical disabilities. Important issues are:

- unclear post-school outcomes regarding employment;
- the lack of qualified, competent teachers;
- the lack of an effective interagency collaboration framework;
- the lack of support for student and family involvement and development;
- the lack of legal and practical frameworks in school to work transition.

These findings either support the evidence of previous international research in school to work transition practice, or are distinctive due to the differences in values, contexts and resources that occur in the Indonesian context.

Having discussed the significant findings, the next chapter presents the recommended model of school to work transition programs for Indonesian schools educating students with a disability, particularly those with a physical disability. The model is based on the framework of the Taxonomy for Transition Programming (Kohler, 1996b) that has been used throughout the thesis, and addresses the important issues highlighted above. Recognising the importance of collaboration in delivering transition programs, the model will explore the Taxonomy at the three different levels of school, local and provincial, and government at a national level, and how they are inter-related.

CHAPTER 8

PROPOSED SCHOOL TO WORK TRANSITION PROGRAM MODEL

Introduction

This chapter connects important issues that emerged in the findings, discussion and the literature review. The connections are transformed into a proposed model to improve post-school employment outcomes for students with physical disabilities in Indonesian special schools. This model utilises the Taxonomy for Transition Programming (Kohler, 1996b) used throughout the current study and applied to ecological system perspectives theory (Bronfenbrenner, 1977, 1979, 1986). The ecological model (Bronfenbrenner, 1977, 1979, 1986) is a valuable concept to be used in exploring school to work transition program for students as it demonstrate that the school to work transition programs do not exclusively functioned but rather it operates in complex interactions between the individual and the broad environment. In this thesis, the level of influence on the students' transition to work program leading out from the individual through engagement with the Taxonomy within the schools, to engagement with the local district/provincial level, to the national government level.

Proposed Model

The core element in the model is the Taxonomy for Transition Programming (Kohler, 1996b) and the three ecological layers that impact on it: the school, external stakeholders (i.e., government and non-government organisations at district and/or provincial level), and the Indonesian national government. Although the model places emphasis on collaboration between these different stakeholders concurrently, the proposed new Indonesian model also explains what these stakeholders can do

individually. The model is illustrated in Figure 9. In order to understand the relationship between the different stakeholders in accommodating the Taxonomy, the initial explanation of actions in the model is focused on the categories of the Taxonomy, followed by the actions needed from each of the stakeholders. Finally, the interrelationships between layers in the ecosystem and the interaction between the five categories in the model are discussed.

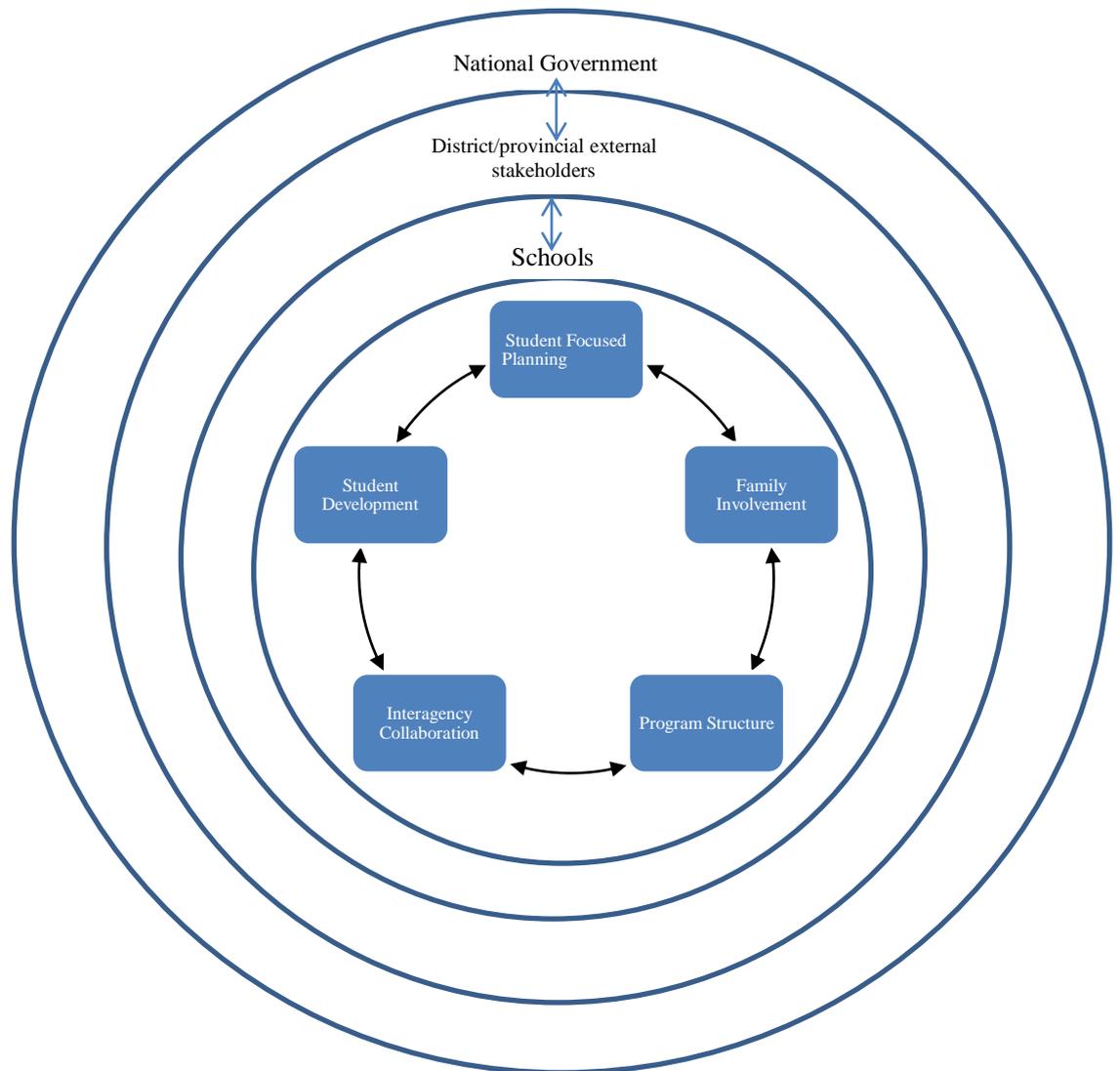


Figure 9 Proposed model for school to work transition program in Indonesian special schools setting

Student Focused Planning

The result of this study found that there are four important issues in the student focused planning category: (a) recognition of employment outcomes in curriculum planning; (b) documentation of individualised post school employment planning; (c) consideration of student interest in planning,; and, (d) student involvement in program planning.

To address these issues, actions need to be taken by different stakeholders. At the school level, post school employment outcomes should be highlighted in curriculum documents and individualised for each student according to their abilities and interests. An example of documentation for individual transition planning is the Individualized Transition Program (ITP). The ITP serves two different goals: firstly the identification of the student's post school outcomes, and secondly the supports required to achieve the student's outcomes (Austin & Wittig, 2013). In the Indonesian special school context, the ITP can serve as the umbrella for the PPI where the lesson plans in the PPI refer to the student's ITP. The school to work transition program should be formulated as early as possible similar to career development stages which have been discussed in table 7, chapter 2. The more specific example of school to work transition timeline can be found in appendix C.

Further important issues in the *student focused planning* category are having the student at the centre of program planning, and active student involvement at all stages. These two issues can be addressed by using Person-Centered Planning (PCP) when planning transition services. PCP assists students with disabilities to have greater control of their future as it is driven by the individual and their families, and it places emphasis on the student's abilities and availability of supports (Austin & Wittig, 2013).

It is essential that students, teachers, and families have fundamental skills regarding PCP to genuinely place students and families at the centre of program planning. Furthermore, the core of PCP is an emphasis on an active student role, the school curriculum needs to address critical skills required to ensure that active involvement. These skills will be discussed under the student development category and clusters, whereas issues regarding families' and teachers' roles in PCP will be discussed in family involvement and program structure categories respectively.

At the external stakeholder level, action needs to be taken to include strict supervision from the provincial Department of Education, Youth and Sport, through their school supervisors, to make sure that; (a) schools documents include post school employment outcomes as part of their curriculum, and (b) student individual transition planning is available and written according to a student-centered approach. District Department of Social Affairs, and the Department of Manpower and Transmigration are to be consulted when developing transition programs as they hold important information regarding post-school services available for individuals with disabilities.

In the long term, action needs to be taken at the government level including formulating policy that authorises clear, accurate and comprehensive written statements regarding achievable post school employment outcomes for each student with a disability, reflecting the student's and their family's aspirations.

These recommended actions are summarised in Table 29.

Table 29 Framework for Student Focused Planning

Categories: Student focused planning	School	External stakeholders	Government
Employment post school outcome acknowledgement.	Recognise post school employment outcomes in the curriculum.	School supervisors to make sure that post school employment outcomes are included in curriculum planning.	Formulate legislation that mandates individualised post school outcomes and student involvement.
Translating post school employment outcomes into documents.	Transcribe these post school employment outcomes into a student individualised document such as the Individualised Transition Program (ITP).	School supervisor to make sure that the documents exist at the school. Staff from Dept of Social Affairs, Dept of Manpower and Transmigration to be involved in the program planning.	
Student at the centre of program planning.	Take account of student interest by conducting proper pre-assessment with the student.		
Student involvement in program planning.	Teach student how to be actively involved in transition planning and follow through with a program.		

Student Development

The result of this study suggests that critical elements of the model in the category of *student development* include: (a) assessment ; (b) career and vocational education; (c) employment skills instruction including advanced vocational skills; (d) availability of work experience: and, (e) access to support services. These critical elements are discussed below.

In regards to *assessment*, practices that are age appropriate and on-target, can only be achieved if the school employs proper assessment tools and competent staff to develop and conduct the assessments. Therefore, it is essential for schools to develop assessment tools that can assess student ability (pre-assessment), student progress (on-going assessment) and student achievement (summative assessment).

Furthermore, the content of assessment should cover broad areas of development, and not simply focus on basic literacy and numeracy and basic independent living skills (e.g., toilet training), which is the case currently. Most importantly, as the students move towards senior secondary school, conducting vocational pre-assessment is essential. The results of these assessment practices should be available in a well-documented, written format so it can provide legitimate verification for the transition program received by students. It also provides clear information for developing plans with related stakeholders. As reported in the findings, most of the schools kept samples of students' work. The school should ensure that these samples are used to inform decisions for school to work transition program development.

Considering the inconsistency in implementing the vocational education ratio as required by government, schools should ensure that the ratio of 60-70% of vocational education is implemented correctly in their curriculum framework. In

addition, the practice of career and vocational education curriculum that currently focuses on vocational skills only, should be extended. Schools should develop a clear and longitudinal career and vocational education structure that covers broad areas such as career awareness, career exploration, career preparation, and job placement according to the appropriate level of schooling. An example of the program can be found in Appendix C. The curriculum framework should also support the connection between academic and vocational skills subjects.

The curriculum framework should also facilitate appropriate life skills and employment skills instruction. Life skills instruction, such as self-determination is an essential main component for active student involvement and future goals' direction (An example of life skills instruction can be seen in Table 11 of Chapter 3).

Moreover, schools should facilitate real vocational skills that are marketable and matched with student interest, job availability, and/or further training that is available in the community. When deciding on the types of vocational skills to be offered in the schools, it is important for each school to conduct appropriate student assessments and consult with relevant stakeholders that organise further training and provide jobs for individuals with physical disabilities in the community. In addition, considering reported accidents that occurred during vocational skills instruction and work experience, work safety skills should also be part of the curriculum. Students need to be aware of work safety and know how to react appropriately, either to avoid or act upon an emergency situation. Staff should be trained to prevent accidents, respond appropriately to incidents and teach students work safety skills.

In regards to issues in the *structured work experience* cluster, action needs to be taken by the school including providing suitable work experience regardless of the type of disability. This can be accomplished by establishing collaboration with

local businesses. Furthermore, reflecting upon the implementation of current internship programs; there is a strong need for the schools to formulate written standard procedures of how the program is planned, implemented, and evaluated. The roles of the school and relevant stakeholders should be articulated clearly in the document with standard procedures for sharing resources and information. Furthermore, students' work experience should also be documented for monitoring and evaluation purposes.

Required school actions in the *support service* cluster include facilitated access to physiotherapy. This physiotherapy support should occur from as young an age as possible. Schools that do not have physiotherapy facilities should establish collaborations to provide this service. Another important issue in support services is related to accessibility in which the school should consider accessibility for all facilities and infrastructure, as accessibility is crucial for active student involvement. School approachability in providing information regarding further education, training and employment opportunities is also important as that the findings demonstrated that most students and parents were not aware of the availability of such opportunities. Schools should form partnerships with relevant stakeholders to provide this information; similar to careers guidance programs in Australian schools.

At the external stakeholder level, the provincial Department of Education, Youth and Sport, through their school supervisors, should ensure that relevant assessment tools are available at the school, and teachers have developed the competencies to conduct assessments. Teacher competencies will be explained in detail in the *program structure* category later in this chapter. School supervisors should maintain effective procedures to ensure that the ratio of vocational education is correctly implemented. Also that the curriculum accommodates an appropriate

balance of career and vocational education, life skills, and employment skills instruction.

External stakeholders such as the District Department of Social Affairs, the Department of Manpower and Transmigration, NGOs, and business leaders need to be involved in the arrangement of work experience and support services. Together with the school, external stakeholders, particularly business leaders, must be included in formulating standard procedures for the internship program, and defining their roles in the program. These organisations hold important information on further education, training and employment for individuals with disabilities; it is essential to develop effective collaborative practices for information sharing.

At the national government level, long term goals include formulating policy specifically on a curriculum framework that includes transition education related skills. This policy should also obligate effective assessment practices and collaboration between related departments to facilitate quality transition programs. Furthermore, to reach the transition goal in terms of employment, policies by the national government should arrange specific, adequate supports for businesses and companies to hire persons with disabilities and provide sufficient support to encourage individuals with disabilities to be involved in self-employment (if appropriate). In addition, it is recommended that the government provides a support framework for special schools to operate small businesses at the school site (e.g., the bitternut cracker and batik production in Schools D and B). Government policy and legislation to ensure accessibility in public spaces, transportations and buildings are essential to the structural operations of transition programming and are necessary at the national level. These recommended actions are summarised in Table 30.

Table 30 Framework for Student Development

Category: Student Development	School	External stakeholders	Government
Assessment: Pre assessment and Vocational assessment	Employ sound assessment practices that are age appropriate and embrace broad areas of student development.	School supervisors to ensure that relevant assessment tools are available at the school and competent teachers are present to conduct the assessment.	Oblige effective assessment practice.
Assessment tools	Develop assessment tools that can assess student ability (pre-assessment), student progress (formative assessment) and student achievement (summative assessment).		
Assessment documentation	Provide written and well-documented evidence of assessments practices.		
Students' work samples and assessment to inform transition program	Use students work samples as part of assessment and use them to inform decisions in school to work transition program development.		
The ratio of 60-70% vocational education and 40-30% academic subjects	Ensure that the ratio of 60-70% of vocational education is implemented correctly in the curriculum framework.	School supervisors to maintain more effective procedures to ensure that the ratio is implemented correctly and also accommodate career and vocational education,	Formulate policy on curriculum framework that includes longitudinal transition education content.

Category: Student Development	School	External stakeholders	Government
Academic subject to support vocational skills subject	Ensure a connection between academic subject and vocational skills subject occurs.	life skills, and employment skills instruction appropriately.	
Longitudinal approach of vocational education	Develop clear and longitudinal career and vocational education structures that cover broad areas such as career awareness, career exploration, career preparation, and job placement appropriate to the level of schooling.		
Life skills and employment skills instruction	<p>Ensure that curriculum includes advanced Life Skills curriculum content such as self-determination, self-advocacy, social personal relationship skills that can improve employability.</p> <p>Provide advanced vocational skills that match with student interest and/or further training, marketable vocational skills.</p> <p>Provide work safety skills instruction.</p>		

Category: Student Development	School	External stakeholders	Government
Work experience	Provide suitable work experience regardless of disability type.	External stakeholders such as District Department of Social Affairs, Department of Manpower and Transmigration, NGOs, and business leaders involved in the arrangement of work experience, in collaboration with the school.	Establish policy in regards to collaboration between related departments to facilitate the quality of transition programs. Provide adequate support for businesses and companies to hire individual with disabilities. Provide sufficient supports to encourage individual with disabilities to be involved in self-employment.
	Establish collaboration with local businesses.	External stakeholders, especially business leaders, need to be included when formulating standard procedures for internship programs and defining their roles in the program.	Provide support for special schools that have small businesses on site.
	Record students' work experience for monitoring and evaluation purposes		

Category: Student Development	School	External stakeholders	Government
Support service	Provide physiotherapy access for students as early as possible	External stakeholders such as the District Department of Social Affairs, Department of Manpower and Transmigration, NGOs, and business leaders to be involved in the arrangement of work experience and support services.	Ensure that policy and practice regarding accessibility in public spaces, transportation and buildings are effective.
	Ensure that facilities and infrastructure are accessible Provide access information on further education and training and employment options.	Ensure that facilities and infrastructure are accessible Department of Social Affairs, Department of Manpower and Transmigration, business, and NGOs create effective cooperation for sharing information regarding further training and education and employment options.	Ensure that facilities and infrastructure are accessible by law.

Interagency Collaboration

With respect to the *Interagency Collaboration* category, two main issues were evident in the findings: (a) the current internship program in business sites; and, (b) collaboration with existing businesses, other government and non-government organisations. There is a need for schools and related stakeholders to develop written standard procedures of how the internship program is planned, implemented, and evaluated. The roles of the school, business, and other related stakeholders such as the Provincial Department of Education, Youth and Sport, as the financier, should be clearly articulated in the document with standard procedures for sharing resources and information. In regards to collaboration with existing businesses, schools need to have clear and well-defined guidelines that provide benefits not only to business, but also to the schools and their students to avoid exploitation. This guidance should be discussed and approved by all parties in the entrepreneurial arrangement to ensure strong commitment and mutual benefit. In relation to collaboration with other related stakeholders (such as the Department of Social Affairs, the Department of Manpower and Transmigration, and non-government organisations), it is important to note that collaboration based on personal relationships between the school principal/teachers with business leader or staff in related department, should be extended into systematic collaboration for greater sustainability. Possible collaboration includes further training and education, employment information, job placement, joint staff activities, and sharing of resources.

School supervisors are expected to ensure that the collaboration framework and practices comply with the values of mutual relationships, shared responsibility, shared resources, and jointly developed authority and accountability for success.

The action needed to be taken at the national government level is the handover/referral framework to support individuals with disability from birth until adulthood including employment, further education and training. This framework should make clear which government and non government organisations may be involved and outline an effective scheme of interagency collaboration. In relation to some schools that have small businesses on site, the government needs to designate related ministries or departments to provide a support framework to schools in the area of staff, equipment, and marketing. These recommended actions are summarised in Table 31.

Table 31 Framework for Interagency Collaboration

Category: Interagency Collaboration	School	External stakeholders	Government
Internship program	School and business to develop written standard procedures of how the internship program is planned, implemented, and evaluated.		Provide a referral framework to support individuals with disabilities from birth until adulthood including employment, further education and training.
Existing collaboration	School and business to establish clear and well-defined collaboration guidance framework.		
	Extend the current collaboration to more systematic model and sustainable collaboration.	School supervisors are expected to ensure that the collaboration framework and practices comply with the values of mutual relationships, shared responsibility, shared resources, and jointly developed authority and accountability for success.	Designate related ministries or departments to provide a support framework to the school that has a small business on site.

Family Involvement

Concern in the *family involvement* category includes (a) family involvement in the program planning; (b) family training in transition programs; and (c) family empowerment.

The most important issue needing to be addressed is the involvement of all parents in program planning, not only the few parents who sit on the school committee. By doing this, the unique individual family needs and circumstances will be addressed appropriately in the planning process. Active family involvement can be achieved by employing suitable approaches such as PCP that focuses on both the student's interests and family needs. Opportunities for active family involvement can be provided by the school through parent training including: (a) training to the family on effective program involvement; (b) family empowerment and advocacy; and (c) how to support their child to become a leader in program decision making. Schools can also establish collaboration with other related stakeholders to deliver training to families. In order to be able to provide considerable opportunities and effective training to parents, competent teachers are required. Schools should equip teachers with suitable knowledge and skills on how to collaborate with families effectively.

At the external stakeholder level, the school supervisor needs to create an effective scheme to ensure that families are involved in the transition program and that training is available and accessible to all families. A policy framework from the national government to support greater family involvement concurrently with support for active student involvement is recommended. These recommended actions are summarised in Table 32.

Table 32 Framework for Family Involvement

Category: Family Involvement	School	External stakeholders	Government
Family involvement	Acknowledge and engage parents in the transition program.	School supervisors to ensure that the family is actively involved in their child's transition program.	Establish legislation and support for family participation.
	Employ person-centred planning that emphasises active student and family involvement.		
	Provide extensive opportunities for greater family involvement.		
Family training	Deliver diverse training content related to transition education programs and family involvement.	School supervisor to ensure that effective training is available for parents.	

Program Structure

It is suggested that the model should address important issues within the *program structure* category that include: (a) employment as a post school outcome; (b) program evaluation; (c) strategic planning at district, provincial, and national levels; (d) program policy at school, provincial and national levels; (e) human resource development that includes qualified teachers, strong school leadership, ongoing staff professional development, and preservice teacher training; and, (f) resource arrangements that include sharing resources and improved funding.

In relation to employment as a designated post-school outcome, the school needs to acknowledge this in the curriculum through the provision of quality school to work transition programs that potentially lead to successful employment. Quality school to work transition programs cannot be accomplished unless the school seriously considers the individual needs and interests of students and families. School supervisors have the authority to ensure these provisions are performed by the school and therefore should take action accordingly. The national government is able to support this action by establishing a national framework for transition education.

As discussed earlier, improving interagency collaboration is essential in achieving quality school to work transition programs. Thus, the school needs to plan their strategies carefully to implement strong collaboration between related stakeholders at the school level, the external stakeholders at district and provincial levels, and Government organisations at the national level. The most important strategies at the school level include providing school to work transition programs that are student focused, fully develop student potential, and respect family

involvement. The district and provincial external stakeholder actions are discussed in the interagency collaboration section in this chapter.

The school also needs to formulate an effective scheme to evaluate school to work transition programs. This scheme should place emphasis on ongoing evaluation and use the evaluation outcomes for program improvement. This evaluation is not limited to the implementation of the transition program conducted at the school, but also places emphasis on the framework that includes related policies and procedures, and collaboration with related external stakeholders. Furthermore, the school needs to specify student and family roles in the evaluation, and the roles of related external stakeholders (if applicable). School supervisors should provide an effective scheme to ensure that program evaluation documentation is available at school, and that each stakeholder is actively involved in the evaluation.

Acknowledgment of the school to work transition program should be translated into school policy, and relevant actions need to be measured to ensure that the policies are implemented adequately. At the external stakeholder level, especially in government organisations, policies and practices that support school to work transition programs such as further training, work experience and other related services should be formulated. At the National level, a policy regarding school to work transition programming is needed to ensure access to funding is equitable among provinces.

Concerning issues related to human resource development, schools need to ensure that they have competent teachers to provide adequate school to work transition programs. This could be accomplished by providing ongoing professional development. Teacher training in strategic issues such as person-centred planning, formulating an ITP from an IEP, assessment, working with family and related

stakeholders are essential practices to be undertaken immediately. The Department of Education, Youth and Sport should ensure that appropriate ongoing professional development is available continuously for the teachers, whereas at the National Government level, schemes for teacher certification assessment should include assessing teaching performance and acknowledging transition competencies. The National Government should outline minimum standard competencies of initial teacher preparation programs, not only in the area of special education overall, but also in transition programs specifically. Universities that provide special education teacher preparation programs must equip their student teachers so they meet the minimum standard criteria of a beginner teacher. Furthermore, the national government should provide a framework that acknowledges ongoing professional development as a scheme to maintain teacher registration and certification. Before doing so, the national government should establish specific special education teacher standard competencies.

In order to maintain national quality education services, the Department of Education, Youth and Sport should ensure that competent teachers and funding are distributed equitably across special schools. In addition, teacher training opportunities should be allocated equitably among the schools, not one per school as is the current process. This will allow the development of a new, expanded cohort of competent teaching staff. Strong school leadership should be a key feature of a successful school. Therefore, school supervisors need to generate an effective scheme to ensure that quality leadership occurs in schools. This may be through a combination of professional development opportunities for principals and principal performance assessment.

Regarding resource allocation, schools need to develop a framework for sharing resources within the school (such as School A), and sharing resources with businesses (such as School C and D). The Department of Education, Youth and Sport can outline a framework for sharing resources between special schools located in the district or provincial level, and between special schools and businesses and/or relevant stakeholders. The school should provide an effective funding scheme for school to work transition programs and school supervisors need to monitor that allocated funding is spent appropriately. The national Government can provide additional funding for school to work transition programs, not only for special schools, but also for relevant departments and businesses that support individuals with disabilities' employment. These recommended actions are summarised in Table 33.

Table 33 Framework for Program Structure

Category: Program Structure	School	External stakeholders	Government
Employment is a designated post-school outcome.	Acknowledge it in the curriculum. Provide quality school to work transition programs.	School supervisors ensure these provisions are undertaken by the school.	Establish a national framework for transition education.
Strategic planning	Provide comprehensive structures for school to work transition programs that are student-focused, able to develop student potential fully, and respect family involvement. Plan their strategies to implement strong collaboration between stakeholders at school level, external stakeholders at district and provincial level, and Government organisations at the National level.	School supervisors are expected to ensure that the collaboration framework and practices comply with the values of mutual relationships, shared responsibility, shared resources, and jointly developed authority and accountability for success. Provide a planning scheme to support collaboration with special schools.	Formulate a national framework for supporting school to work transition programs.
Program evaluation	Formulate an effective scheme for evaluating the school's transition to work programs. Use the evaluation outcomes for program improvement. Place emphasis on ongoing evaluation of the program framework	School supervisors to ensure that a scheme of program evaluation is available at the schools. School supervisors to ensure the roles of each stakeholders in program evaluation is adequate	Provide a framework for transition program evaluation.

Category: Program Structure	School	External stakeholders	Government
	<p>including related policies and procedures, and collaboration with related external stakeholders.</p> <p>Specify students' and families' roles in the evaluation and also the roles of related external stakeholders (if applicable).</p>		
Program policy	<p>Translate the acknowledgement of the importance of school to work transition program into a school policy.</p> <p>Provide measures to ensure the policy is implemented.</p>	<p>Formulate policy and practices that support school to work transition programs such as further training, work experience and other related services.</p>	<p>Provide a policy framework regarding school to work transition programs to ensure access and funding is given equitably among provinces.</p>
Human resource development	<p>Ensure that the school has competent teachers to provide school to work transition programs.</p> <p>Provide ongoing professional development on strategic issues such as person-centred planning, formulating ITPs, forms of assessment, working with family and related stakeholders.</p>	<p>Department of Education, Youth and Sport should ensure that appropriate ongoing professional development is available for teachers continuously.</p> <p>Department of Education, Youth and Sport should ensure that competent teachers and equitable funding are fairly distributed across special schools.</p> <p>Department of Education, Youth and Sport should ensure that teacher</p>	<p>Formulate specific special education teacher competency standards.</p> <p>Include assessing teaching performance and acknowledging transition competencies in a scheme for teacher certification assessment.</p> <p>Outline minimum competency standards for initial teacher preparation, not only in the area of special education in general, but also in transition programs specifically.</p>

Category: Program Structure	School	External stakeholders	Government
Resource allocation	<p>Develop a framework for sharing resources within the school.</p> <p>Develop framework for sharing resources with business.</p> <p>Provide an effective funding scheme for school to work transition programs in the school.</p>	<p>training opportunities should be allocated equitably among the school.</p> <p>School supervisors need to generate an effective scheme to ensure that quality leadership is occurring in schools.</p> <p>Department of Education, Youth and Sport should also outline a framework for sharing resources between special schools located in the district or provincial, and between special schools and businesses or relevant stakeholders.</p> <p>School supervisor to monitor that the funding allocation is spent appropriately.</p>	<p>Provide a framework that acknowledges ongoing professional development as a scheme to maintain teacher registration and certification.</p> <p>Universities providing special education programs must equip their student teachers to meet the minimum competency criteria standards of a beginner teacher.</p> <p>Universities to include transition programs as part of their preservice teacher preparation curriculum.</p> <p>Provide better funding for school to work transition programs, not only for special schools, but also for relevant departments and businesses that support employment of individuals with disabilities.</p>

Interrelationships between categories and ecosystem layers

In order to deliver quality transition programs, the categories in the Taxonomy for Transition Programming (Kohler, 1996b) should not be seen as individual isolated categories as they are explicitly interconnected. The effort and commitment to deliver quality transition programs, should not be the sole responsibility of any individual organisation, but should be undertaken simultaneously by all stakeholders.

Providing transition programs based on student interest will enhance student participation. However, student interest will not be accommodated if teachers do not have adequate competencies to conduct appropriate assessment to establish a relevant program, and monitor its progress and outcomes. In addition, student participation in program planning will not occur if students are not equipped with appropriate skills. Therefore it is essential that the curriculum should place emphasis on developing these skills to enhance student involvement. Accordingly, ensuring that qualified teachers have the knowledge and skills to deliver such curriculum becomes critical. Hence, teacher upskilling and in-service training are essential and need to be provided appropriately by qualified and experienced staff; that in turn requires adequate funding.

Work experience plays an important role in school to work transition programs. In order to provide adequate student work experience, schools must develop collaborative partnerships with businesses. This enables students to undertake work experience in real work life settings. However, before undertaking work experience, students need to be equipped with appropriate employment skills instruction. Thus accommodating general and specific employment skills instruction in the curriculum will enhance student participation in work experience. In addition,

to work inclusively in the community, accessibility of facilities clearly needs to be addressed, not only by schools, but by businesses and the community in general.

Students's families are valuable resources in enhancing post-school outcomes and many have the potential to provide employment for their children. As such, involving parents in the school to work transition program is essential. Active family involvement however, will not occur if parents do not have the capacity to perform their roles in the process. Essential family training should be funded, planned, and provided by appropriate staff. Furthermore, a school culture that is welcoming of parent involvement needs to be evident, and demonstrated in the school's leaders and teachers' abilities to work with families to foster this involvement. Family involvement in the school to work transition program is important to support their child's active participation.

Development of school to work transition programs requires effort and commitment from different, yet related, stakeholders. It also requires an improved curriculum and teaching framework, effective financial support and planning, and competent human resources. Well-arranged school to work transition programs will not only improve the implementation of the program, but also assist in sustaining school to work transition goals. However, the school cannot accomplish this alone. Support and commitment from external stakeholders and the national government are critical.

In regards to the model's implementation, the first priorities need to be given to human resource development. There is an urgent need to develop teacher competencies, particularly up-skilling teachers with appropriate practical skills in assessment, formulating ITPs with parents, students and businesses, person-centred planning, and skills to connect family and stakeholders with the school. In order to

fill the gap between expected roles of the family and current actual involvement, the next priority should be given to family training. When student focused planning is implemented appropriately, the next priority is to improve student development categories. The school should develop curriculum and instruction that enables the student to achieve school to work transition goals based on their needs and interests. This includes providing work experiences that lead to the next priority; enhancing interagency collaboration with related external stakeholders. Eventually, attainment of these priorities will improve the program structure of school to work transition programming at school level.

The same priorities at the external stakeholders and National Government levels should be placed on human resource development. Following that, priorities need to be given to resources allocation such as improved funding for school to work transition programs. Policy and legislation are important to ensure the implementation of school to work transition within government requirements, however due to the lengthy bureaucratic process; this would be a long term goal.

Summary

This chapter has provided a framework for the proposed model of school to work transition programs in Indonesian special school settings. It described actions that need to be taken to develop appropriate school to work transition programs by engaging a variety of stakeholders. An explanation of these actions in each categories of the Taxonomy for Transition Programming (Kohler, 1996b), the interrelationship between categories in the Taxonomy and the importance of commitment from external stakeholders and the national government were also described. Finally, the priorities by which actions should be undertaken were explained.

Adequate focus should be placed equally among those five of the taxonomy' components to generate a quality transition program, for students with physical disability. As students with physical disability are part of complex interaction between their broad environments , the school to work transition program not only needs to focus on students and their families' involvement, but also establishing strong collaboration between different level of service deliveries at school, local/district government and stakeholders , and national government. Having discussed the proposed model of school to work transition program, the final chapter presents the concluding remarks.

CHAPTER 9

CONCLUSION

Introduction

This chapter highlights the main findings, contribution and significance of the research conducted in this thesis. This is followed by an explanation of implications of the findings, limitations of the research, and recommendations for future study.

Summary of the study

The aim of the study was to investigate the current practices of school to work transition programs for students with a physical disability in Indonesian special schools. A key element of the study was to develop a model of school to work transition through which the implementation of programs for students with a physical disability could be improved comprehensively. Importantly, The Taxonomy for Transition Programming (Kohler, 1996b) was used throughout this study as the key framework, both in exploring current practices in school to work transition programs, and in developing a functional model of school to work transition programs in Indonesian special school settings. This study was the first in relation to school to work transition programs conducted in Indonesian special school settings.

The research questions investigated were:

1. How do special schools implement school to work transition practices for students with a physical disability? What factors influence the implementation?
2. What barriers and supports affect implementation? How can these barriers be addressed? How can these supports be strengthened?

3. What are the perspectives and expectations of stakeholders (community business leaders, disability organisations, and government agencies) regarding school to work transition practice?

Most importantly, these research questions have assisted to formulate a model framework to improve school to work transition programming for students with a physical disability in Indonesia special school settings.

This study adopted a qualitative approach and was conducted in four special schools in Bantul District, Yogyakarta, Indonesia. It involved 57 participants consisting of principals, teachers, students, parents, school supervisors, business leaders, and multiple staff from District and Provincial Government and Non-Government Organisations. Data were gathered through observation, interview, and document analysis. Answers to the research questions were delivered in the results of the analysis.

Core findings of the study

This study has identified several key aspects in the implementation of school to work transition programs for students with a physical disability attending an Indonesian special school setting. In general, this study suggests that school to work transition programs in Indonesian special schools are limited in their ability to provide vocational skills and as a result of limited funding, funded work experience in business sites is not made available to students with a physical disability.

Findings suggest that while only older students in School B were involved in program planning, vocational skills selection by students in the other schools was nonexistent. The limited student participation in program planning was derived from existing education practice that placed emphasis on a teacher-centred approach, and the assumption that students were not capable of being actively involved in program

planning. The teacher-centred approach also created barriers to active family involvement. While it has been reported that some families in School D were involved in work experience together with their children, it was only to help generate income. Although findings from external stakeholders identified the importance of an agreement for active student and family participation, findings suggest this did not occur. It was also not articulated in legislation, and hence, the teachers did not have guidance, or training, on how to accommodate student and family participation in program planning. In addition it was suggested that parents do not have the knowledge and skills to be actively involved in their child's transition program. Therefore, family training is essential, along with teacher training.

The study has also demonstrated that a lack of teacher competencies is also a key reason for the inadequacy of school to work transition programs. Teachers' lack of skills resulted in limited assessment practices, and inadequate accommodation of student interests in implemented programs. Only School D offered vocational skills subjects in accord with the availability of natural resources in the school community; in this case bitternut produce. Although the students in School D were not involved in the program planning process, this connection to a community product meant that the vocational skills of making bitternut crackers were at least relevant to potential job opportunities. Furthermore, the school's collaboration with one of the business leaders provided paid work experience by which the students could earn money for every kilogram of bitternut cracker they produced. Despite the external stakeholders agreement on the benefit of having a work experience scheme, there was little evidence of it in practice.

The study indicated that the balance of vocational/career and academic education curriculum aspects is not addressed appropriately in the schools. While

there is an emphasis on vocational skills, most of the schools provide only basic vocational skills that are unmarketable. Furthermore, other employability related skills such as social skills, self-determination skills, and self-advocacy skills are not addressed in the curriculum. In addition, the government regulation of 60-70% vocational skills in secondary special schools is being violated, with most of the schools dedicating only 40% to vocational skills in their curriculum structure. Findings from external stakeholders suggest that schools should develop a less conventional curriculum that places emphasis on student interest and future life, creating a total transitional focused curriculum.

The findings clearly suggest that the program structure of school to work transition programs in most of the schools are in urgent need of major improvement. Issues such as weak leadership and incompetent teachers in the area of human resource development, and ineffective funding arrangements, were identified in this research as contributors to poor quality school to work transition programs.

In order to improve the implementation of school to work transition programs for students with a physical disability in Indonesian special school settings, the study developed a model for school to work transition programs. This model adopts the Taxonomy for Transition Programming (Kohler 1996b) that has been used throughout the research, and was informed by interacting ecological systems originating from Bronfenbrenner (1977). The proposed model provides actions that need to be taken by different levels of stakeholders (namely school, district/provincial external stakeholders, and national government) within and across the categories of the Taxonomy. Action taken in the one of the five categories will impact and improve the other categories in the Taxonomy. Furthermore, although the school is the main site to deliver school to work transition programs, the roles of

external stakeholders and the national government to improve the quality of school to work transition programs are fundamental.

One of the first priorities for improvement should be given to the development of human resources. This should include providing appropriate funding for upskilling pre-service and in-service teachers to acquire transition related skill competencies. The national government should also provide a clear scheme for teacher registration and certification to maintain teacher competencies. Student and family involvement in program planning is the next priority. If implemented correctly, it will lead to student focused planning practices, actively supported by aware parents. The next priority is the student development category through the school providing a curriculum structure that can enhance school to work transition programs. This includes work experience that is established through interagency collaboration with external stakeholders.

Limitations of the study

Despite identifying the current and proposed practices in transition to work programs in special schools, this study has a number of identified limitations.

The main epistemology underpinning this study is constructivism where the researcher relies strongly on the participants' perspectives. Therefore, the quality of data collected was determined by participants' responses during individual and focus groups interviews. The researcher used assistance from parents and peers to facilitate communication and interaction during focus group interviews. Given some of the students with a physical disability involved in the study also experienced communication difficulties, the quality of student responses may have been affected, although collaborating evidence suggests this was not a major problem.

The study adopted a case study approach which engaged four special schools in Bantul District, Yogyakarta Indonesia. Generalisation of findings was not the aim of the research. Hence, caution needs to be taken when applying the findings and conclusions. It is important to be aware that some findings may be specific to these special schools. However, application of the proposed framework model in Chapter 8 is likely relevant to other special schools in different districts and provinces. In addition, despite the focus on students with a physical disability as participants in this study, the framework could also apply to other types of disability.

The student participants in this study were all female. This was unintentional, as the researcher was only able to access students in transition to work programs at the four schools, all of whom happened to be female. There were no male students with a physical disability who met the research participant criteria as they were still at the primary or junior high school level. Nevertheless, the interview questions did not specifically target transition programs particular to female participants. The questions addressed general implementation of school to work transition programs applied in the schools.

While these limitations are acknowledged and help to place the present research in context, they also provide opportunities for further research in school to work transition programs in Indonesia.

Implications for policy and practice

While specific recommendations for policy and practice have been provided in Chapter 8, the general implications for policy and practice are as follows:

- (a) This research provided an understanding of how school to work transition programs are conducted. Fundamentally, the current research provides a useful blueprint for school leaders, teachers, related

stakeholders, and national government to improve school to work transition programs for students with a physical disability.

(b) The findings provided a useful framework from which to review policy and practice regarding:

- School management and leadership at the school level in relation to school to work transition programs for students with a physical disability and transition education in general;
- Upskilling teaching staff who are involved in delivering school to work transition programs, including both pre-service teacher preparation courses, and in-service professional development, particularly in all aspects of transition programs;
- Funding allocation for quality school to work transition programs;
- Student and family engagement in school to work transition programs;
- Interagency collaboration frameworks in delivering school to work transition programs; and,
- System changes that include policy related to transition education, teacher education and certification, and employment for individuals with disabilities.

(c) For the research community, the current research not only provides evidence of current practices in school to work transition programs for students with a physical disability in Indonesian special school settings, but importantly, the research has provided a model through which to improve these programs.

Implications for further research

The findings and the limitations indicate opportunities for potential further research in the area of transition programming. Suggestions for further research include:

- (a) The present study involved special schools in Bantul District, Yogyakarta, Indonesia. Further research could be undertaken involving other schools in other districts and/or other provinces. This could be useful for the purpose of comparison, and would provide a broader picture of the current practices of school to work transition programs in the context of special schools in Indonesia.
- (b) The current study focused on school to work transition programs for students with a physical disability. In addition, the student participants were all female. Further studies could be conducted involving other types of disabilities and male as well as female students. This is valuable in order to compare and contrast practices based on gender and type of disabilities.
- (c) Further research regarding the implementation of the proposed model in Chapter 8 is suggested. This may be a priority to investigate the effectiveness of the model under improved policy, practice, and funding.
- (d) Further research on each of the categories and/ or clusters of the Taxonomy for Transitioning Programming (Kohler, 1996b) could also be beneficial in terms of providing more in-depth and rich data.
- (e) The present research involved current students educated in secondary special schools. It would be important to hear the voices of students who

have graduated in order to understand the challenges of their transition process towards employment.

- (f) Further research focused on a longitudinal study that follows students from school programs into employment would also be beneficial.
- (g) The present research placed emphasis on school to work transition programs, further research on other post-school outcomes such as independent living, community participation and further education and training would be valuable in understanding transition education comprehensively.
- (h) Further research on teacher education in preparing initial teachers to deliver transition programs is recommended. Competent, well trained special education teachers are a key component to delivering quality transition programs at the school level.

Concluding statement

Engaging in employment activities is everyone's dream. However, this is difficult for individuals who have disabilities. A majority of individuals with disabilities experience difficulty in achieving post-school employment goals. School to work transition programs at the secondary level play an important role in preparing students with disability to engage actively in employment, whether it is supported or competitive employment.

This study has contributed to the growing understanding of the implementation of school to work transition programs, especially for students with a physical disability in special school settings. This study has identified key practices in implementing school to work transition programs based on the categories and clusters in the Taxonomy for Transition Programming (Kohler, 1996b) in four

special schools that educate students with physical disabilities in Bantul District, Yogyakarta, Indonesia. The majority of findings verify the practices of school to work transition programs internationally, and few practices are different due to specific policy and culture, human resources, and funding allocation in the Indonesian context.

The present study has addressed a gap in the research in the area of school to work transition programs in the Indonesian special school context. While it has clearly articulated that employment is one of the aims of Indonesian special education schooling practice, no literature has been found on how the schools prepare students to achieve transition goals. Evidence of best practice had to be obtained from developed countries.

Importantly, this study has provided a model framework to improve the implementation of school to work transition programs in the Indonesian special schools context. Further research on implementation of this model can assist in evaluating the effectiveness of an improved framework.

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APPENDICES

Appendix A: Disability Legislation and Policy in Selected Asian Countries

Name of Country	Law and Policy on disability	Support scheme
China	<ul style="list-style-type: none"> • Law on the Protection of People with Disabilities Revision in 2008 • Regulation on Education of People with Disabilities Adoption in 1994 • Regulation on Employment of People with Disabilities Adoption in 2007 • Mandate on Promoting Development of the Work for Persons with Disabilities Adoption in 2008 • Mandate on Accelerating the Development of Social Security System & Service System for Persons with Disabilities Adoption in 2010 • Regulation on Construction of Accessible Environment Adoption in 2012 • Sixth Five-Year Working Program on Disability, 2011–2015 Approval in 2011 	<p>There are no universal standards for disability benefit/pension/support schemes at the national level. Provinces and cities have their own schemes. Persons with disabilities are mostly covered by social insurance, old age pension and medical insurances. Persons with disabilities who have severe disability and are in poor economic conditions are subsidized by the Government to join the social insurance. Many persons with disabilities are covered by the basic living allowance system and some of them are provided with regular allowances or temporary relief.</p>
Hong Kong	<ul style="list-style-type: none"> • Disability Discrimination Ordinance, Cap. 487 year 1995 • Mental Health Ordinance, Cap. 136 year 1997 • Hong Kong Rehabilitation Policy adoption in 1970 • Hong Kong Rehabilitation Programme Plan, first release in 1976; latest version endorse in 2007 	<p>DISABILITY BENEFITS—Lower-rate allowance: Eligible are persons who have resided in Hong Kong for at least 7 years including one year of continuous residence before claiming the benefit, and who are assessed with a 100 per cent loss of earning capacity or as profoundly deaf by a competent medical authority or practitioner. HIGHER-RATE ALLOWANCE: Eligible are persons who have resided in Hong Kong for at least 7 years including one year of continuous residence before claiming the benefit and require constant attendance of another person to perform daily activities as assessed by a competent medical authority or practitioner. Other assistance schemes include rehabilitation services, e.g. residential care, community support, day training and vocational rehabilitation training and pre-school rehabilitation services; and other related services, e.g. transport services, medical services, employment support services.</p>

Name of Country	Law and Policy on disability	Support scheme
Japan	<ul style="list-style-type: none"> • Basic Act for Persons with Disabilities • Services and Supports for Persons with Disabilities Act • Act on Welfare of Physically Disabled Persons • Act on Welfare of Mentally Retarded Persons • Act on Mental Health and Welfare for the Mentally Disabled • Basic Program for Persons with Disabilities Five-year Plan for the Implementation of Priority Measures, 2008–2012 	BASIC DISABILITY PENSION—Eligibility: one of the criteria used is the severity of the impairment. The amount of pension is subject to the level of disability.
Mongolia	<ul style="list-style-type: none"> • Law of Mongolia on Social security of Persons with Disabilities National adopted in 2005 • Program for Promoting Persons with Disabilities, 2006-2012 	Not Available
Republic of Korea	<ul style="list-style-type: none"> • Welfare of Disabled Persons Act amended in 2010 • Anti-Discrimination against and Remedies for Persons with Disabilities Act adopted in 2007 • Employment Promotion and Vocational Rehabilitation of Disabled Persons Act amended in 2011 • Convenience Improvement for the Disabled, the Elderly, and Pregnant Women Act amended in 2010 • Act on Special Education for Disabled Persons adopted in 2007 • Disability Pensions Act adopted in 2010 • Disability care and support system 2011 • Rehabilitation services for children with disabilities 2009 • Prevention of violence against women with disabilities and support for the victims 2008 	DISABILITY PENSION—Eligibility: registered persons with severe disabilities aged 18 and above who are basic livelihood security recipients, next needy classes, or above; DISABILITY BENEFITS—Eligibility: persons with mild disabilities at the age of 18 or over in low-income households; DISABLED CHILD ALLOWANCE—Eligibility: in-home children with disabilities under the age of 18 in low-income households; EDUCATION COST SUPPORT FOR CHILDREN WITH DISABILITIES OR CHILDREN WHOSE PARENTS ARE DISABLED—Eligibility: middle and high school children with disability ratings of grade 1~3 and middle and high school children whose parents are disabled ratings of 1~3 in low-income households.
Brunei Darussalam	<ul style="list-style-type: none"> • Old Age and Disability Pensions Act revised in 1984 • Compulsory Education Order enacted in 2007 • Employment Order enacted in 2009 • Trafficking and Smuggling of Persons Order enacted in 2004 	DISABILITY BENEFIT—Eligibility for Provident Fund: persons aged 15 years old and above who are unable to work as the result of a physical or mental disability, the degree of which is assessed by the Medical Board. DISABILITY PENSION—Eligibility: the insured person is considered unable to work as assessed by the Medical Board, who has resided in

Name of Country	Law and Policy on disability	Support scheme
		Brunei in the 10 years immediately before the disability began.
Cambodia	<ul style="list-style-type: none"> • Law on the Protection and Promotion of the Rights of Persons with Disabilities adopted in 2009 • Inter-ministerial Prakas on Classification of Persons with Disabilities enacted in 2003 • Sub-Decree on Policy supporting the vulnerable people staying in Government centers enacted in 2006 • Policy on Education for Children with Disabilities adopted in 2008 • Prakas on the Establishment of Physical Rehabilitation Centers (provincial and municipality) enacted in 2008 • Circular on Improving the Quality of Vocational Training for persons with disabilities 2008 • National Plan of Action for persons with disabilities including landmine/ERW Survivors 2009-2011 	By Governmental subdecree N° 137 dated June 27, 2011 on the Policy Support for Poor Disabled at Community, support for poor persons with disabilities is provided. Other support initiatives include Health Equity Fund; Early Childhood Care and Development; and Social Security Fund for Veterans.
Indonesia	<ul style="list-style-type: none"> • Law No 4/1997 on Person with Disabilities-New draft currently being proposed to the Government • National Plans of Action on Persons with Disabilities, 2004–2013 • Minister of Welfare Decree No. 07/KEP/MENKO/KESRA/III/2005 on Coordinating in the Implementation of National Plans of Action for People with Disabilities 2004–2013 • Minister of Social Affairs Decree No. 96/HK/SE/2005 on Implementation of National Plans of Action for Persons with Disabilities 2004–2013 	DISABILITY BENEFIT—Eligibility: persons aged less than 55, with a total permanent incapacity for work as a result of a work injury. A medical doctor must certify the incapacity. The amount of the monthly benefit depends on the degree of disability.
Lao	-	-
Malaysia	<ul style="list-style-type: none"> • Persons with Disabilities Act adopted in 2008 • Persons with Disability Policy adopted in 2007 • Persons with Disability Plan of Action adopted in 2007 	DISABILITY PENSION—Eligibility: persons with disabilities who have at least 24 months of contributions in the last 40 months. The degree of disability is assessed by the Medical Board. DISABLED WORKER ALLOWANCE—An amount of MYR 300 is paid on a monthly basis to the workers with disabilities who earn below MYR 1,200. There are

Name of Country	Law and Policy on disability	Support scheme
		various programmes of financially supporting children and students with disabilities attending schools, tax relief for tax payers who have children with disabilities, reduced public transport fares for persons with disabilities, provision of free assistive devices and free medical care at Governmental hospitals
Myanmar	<ul style="list-style-type: none"> • Rehabilitation services for the Persons with Disabilities • National Plan of Action, 2010–2012 	-
Philippines	<ul style="list-style-type: none"> • 1987 Philippine Constitution (Article XIII, Section 11) • Magna Carta for Persons with Disabilities R. A. 7277 (Amendment through R.A.9442) • Act Establishing Mechanism for the Implementation of Programs and Services for Persons with Disabilities in Every Province, City and Municipality (R.A. 10070) • Act to Enhance Mobility of Persons with Disabilities (Batas Pambansa 344) • Social Reform Act • Children-Magna Carta for Women • Plan of Action for the Decade of Persons with Disabilities, 2003–2012 	Government Appropriation Act (GAA) provides 1 per cent allocation of total agency budget for programmes on disability.
Singapore	<ul style="list-style-type: none"> • Mental Capacity Act enacted in 2008 • Code on Accessibility in the Built Environment enacted in 2007 • Enabling Masterplan, 2012–2016 	<p>EARLY INTERVENTION PROGRAMMES FOR INFANTS AND CHILDREN—Provides therapy and educational support services to children with special needs. Eligibility: children aged 6 years and below, who have been diagnosed with developmental, intellectual, sensory or physical disabilities by a medical doctor or psychologist. OPEN DOOR FUND—Launched in May 2007, the Fund provides a comprehensive package of incentives to support companies’ initiatives to implement job redesign, workplace modification, integration and apprenticeship programmes for persons with disabilities.</p> <p>SPECIAL NEEDS SAVINGS SCHEME (SNSS)—Allows parents to set aside a portion of their Central</p>

Name of Country	Law and Policy on disability	Support scheme
Thailand	<ul style="list-style-type: none"> • Persons with Disabilities Empowerment Act adopted in 2007 • National Education Act enacted in 2010 • Fourth National Plan on the Empowerment of Persons with Disabilities, 2012–2016 	<p>Provident Fund (CPF) savings for the long-term care of their Children with Special Needs.</p> <p>LOAN FOR VOCATIONAL EMPOWERMENT OF PERSONS WITH DISABILITIES—Persons with disabilities who have reached 18 years of age can apply for loans to establish small businesses or for business expansion in an amount that does not exceed THB 40,000/individual applicant and THB 1,000,000/group applicant. Loans are interest free for the first 5 years</p> <ul style="list-style-type: none"> • Accommodation for persons with disabilities • Discounted fares for utilizing public transportation • Disability Allowance • Subvention for families of persons with disabilities • Medical/education/vocational services • Legal assistance services—sign language interpreter personal assistance services
Timor Leste	<ul style="list-style-type: none"> • National Disability Policy for Timor-Leste: Steps towards a Disability-Inclusive Society of Timor-Leste adopted in 2012 • General Implementation of the National Disability Policy adopted in 2012 • National Strategy of Community-based Rehabilitation approved in 2010 	<p>SUBSIDY FOR ELDERLY AND PERSONS WITH DISABILITIES—Eligibility: one must be 18 years old or above, totally impaired and unable to do any work.</p>
Vietnam	<ul style="list-style-type: none"> • Disability Law 51/2010/QH12 adopted in 2010 • Directive No. 01/2006/CT-TTg by Prime Minister on promoting the implementation of policies to assist persons with disabilities approved in 2006 • Scheme to Assist Persons with Disabilities, 2006–2010 approved in 2006 	<p>SOCIAL SECURITY PROGRAMME—In 2006–2010, 467,965 persons with disabilities benefited from the Social Security Programme, of which 395,000 people received allowances in their communities in accordance with Decree 67, 15,000 persons with disabilities living in institutions received allowances under Decree 67, 49,030 received social insurance allowances and 229,981 received other monthly allowances.</p>

Adapted from (ESCAP, 2012)

Appendix B: Example of the Life Skills Outcomes and Content

Work Education Years 7-10 Life Skills Unit: The World of work

<p>Unit title: The world of work</p> <p>Description: This unit involves students in developing skills and strategies to participate in personal transition planning. Students explore the roles of a range of services in the community, and experience a range of training and workplace environments. <i>Learning activities address selected 'learn about' and 'learn to' statements within the Life Skills content of the syllabus and may be prioritised and selected to suit the needs of students. The unit provides a range of ways in which students may engage in learning activities and students should participate at a level appropriate to their abilities and interests.</i></p>	
<p>Life Skills Outcomes Resources</p> <p>A student:</p> <p>LS.1 explores the nature of work and the workplace</p> <p>LS.3 identifies the roles and responsibilities of a variety of organisations in the community</p> <p>LS.4 identifies appropriate support personnel and agencies in the community</p> <p>LS.5 recognises the roles of education, employment and training systems</p> <p>LS.6 explores strategies that facilitate effective planning for and management of transition to further education, training and employment</p> <p>LS.7 communicates personal preferences and choices within the context of planning for transition to further education, training and employment</p> <p>LS.8 recognises skills for effective participation in the workplace</p> <p>LS.10 evaluates personal skills and strengths to facilitate participation in pathways planning</p> <p>LS.11 uses a variety of strategies to locate and select information</p> <p>LS.12 uses a variety of strategies to organise and communicate information.</p>	<p>Resources</p> <p>A student:</p> <p>LS.1 explores the nature of work and the workplace</p> <p>LS.3 identifies the roles and responsibilities of a variety of organisations in the community</p> <p>LS.4 identifies appropriate support personnel and agencies in the community</p> <p>LS.5 recognises the roles of education, employment and training systems</p> <p>LS.6 explores strategies that facilitate effective planning for and management of transition to further education, training and employment</p> <p>LS.7 communicates personal preferences and choices within the context of planning for transition to further education, training and employment</p> <p>LS.8 recognises skills for effective participation in the workplace</p> <p>LS.10 evaluates personal skills and strengths to facilitate participation in pathways planning</p> <p>LS.11 uses a variety of strategies to locate and select information</p> <p>LS.12 uses a variety of strategies to organise and communicate information.</p> <p>Contact details for education, training and employment service providers</p> <p>Images and video excerpts related to work safety</p> <p>Computer hardware, multimedia and word-processing software and access to the internet</p> <p>Websites</p> <p>Australian National Training Authority: http://www.anta.gov.au</p> <p>Australian Government Department of Education, Science and Training (Enterprise and</p>

	<p>Career Education Foundation): http://www.ecef.com.au WADU Resource (vocational education resources for Indigenous students and communities): http://www.ecef.com.au/WaduResource/WADU_PC.htm myfuture website: http://www.myfuture.edu.au Australian Council for Trade Unions (worksite for schools): http://www.worksite.actu.asn.au Australian Government Department of Employment and Workplace Relations: http://www.workplace.gov.au Resources produced by the NSW Department of Education and Training <i>The Student Guide to Workplace Learning</i> <i>The Employment Related Skills Logbook and Support Supplement</i> <i>School to Work Planning Teacher Resource</i> <i>WRAPS Careers: What Do You Want to Be?</i> (video)</p>
<p>Links A student: Drama LS.1.3 participates in drama experiences in which role-taking is used to enhance their understanding of ideas and feelings English LS.4 uses spoken language to communicate with a range of audiences LS.10 composes increasingly complex written texts LS.12 communicates for a range of purposes LS.13 communicates in a range of contexts LS.14 communicates with a range of audiences LS.17 uses individual and collaborative skills in the learning process Geography LS.1 experiences a range of environments LS.2 moves around in the environment.</p>	<p>A student: Information and Software Technology LS.5.3 uses a variety of techniques to present information and software technology solutions PDHPE LS.5 uses appropriate behaviours in social situations LS.7 uses appropriate strategies to initiate and manage relationships LS.10 recognises and responds to safe and unsafe situations LS.11 demonstrates safe practices that promote personal wellbeing LS.22 uses appropriate strategies in response to at-risk situations LS.26 uses problem-solving strategies in a variety of contexts Visual Arts LS.6 makes a variety of artworks that reflect experiences, responses or a point of view.</p>
<p>For students working towards Life Skills outcomes in regular classes, teachers may wish to link the activities in this unit with the Stage 5 unit ‘The World of Work’ in <i>Work Education Years 7–10: Advice on Programming and Assessment</i> (pp 16–33).</p>	

Focus: Planning ahead Outcomes: LS.5, LS.6, LS.7, LS.10, LS.11, LS.12				
Students learn about	Students learn to	Integrated learning experiences, instruction and Assessment	Evidence of learning <i>(words in italics refer to Life Skills outcomes)</i>	Feedback
<ul style="list-style-type: none"> • planning and managing the • transition to further education, training and employment • strategies for organizing information formats for communicating information 	<ul style="list-style-type: none"> • evaluate and order information • Select and use appropriate written, oral and graphic forms to communicate information 	<p>Teacher</p> <ul style="list-style-type: none"> • assists students to participate in planning processes on a day-by-day and/or weekly basis • assists students to recognise the importance of planning ahead for specific events • assists students to participate effectively in informal and formal planning processes. <p>Students</p> <ul style="list-style-type: none"> • participate in discussions about the importance of planning ahead and engage in processes that will facilitate planning. Activities may include using a daily and/or weekly school diary or timetable to plan ahead for specific events such as excursions, weekend trips, enrolling for the forthcoming sports season 	<p>Using a daily and/or weekly diary or timetable to plan ahead may indicate <i>using a variety of strategies to organise and communicate information.</i></p>	<p>Oral, visual and/or tangible feedback and prompting by the teacher to guide and affirm students’:</p> <ul style="list-style-type: none"> <input type="checkbox"/> demonstration of a range of strategies to plan ahead
<ul style="list-style-type: none"> • education and training systems • planning and managing the transition to further 	<ul style="list-style-type: none"> • recognise current education and training options • explore education and training options 	<ul style="list-style-type: none"> • participate in discussions to clarify the purpose and nature of transition planning. This may involve: <ul style="list-style-type: none"> - recognising the importance of planning ahead for future goals 	<p>Recognising the goals of transition planning may assist students in <i>communicating personal preferences and</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> identification of the goal of transition planning.

Focus: Planning ahead Outcomes: LS.5, LS.6, LS.7, LS.10, LS.11, LS.12				
Students learn about	Students learn to	Integrated learning experiences, instruction and Assessment	Evidence of learning <i>(words in italics refer to Life Skills outcomes)</i>	Feedback
education, training and employment • planning processes to assist transition to further education, training and employment	with family, carers and friends • explore options and requirements for education, training and employment with school and community-based personnel • recognise the purposes of planning processes and the role of the student in these processes	<ul style="list-style-type: none"> - recognising that discussions at a transition planning meeting will provide information about options for further education, training and/or employment - identifying the time and place for the meeting - identifying the people who will attend the meeting and the ways in which they can assist the student 	<i>choices within the context of planning for transition to further education, training and employment.</i>	
• identifying personal skills and strengths	• identify personal skills and strengths	<ul style="list-style-type: none"> • develop a personal folio/résumé that highlights what they like to do and their personal skills and strengths in preparation for discussions at a transition planning meeting. The personal folio should be in an appropriate format with photographs and/or visual/written text and may include information about: <ul style="list-style-type: none"> - preferred subjects at school - preferred work environments, eg inside/outside - preferred hobbies and interests - personal attributes such as negotiation/communication/listening skills, patience, perseverance, working in a team or independently - skill areas 	Developing a personal folio/resume to highlight their goals and personal skills/strengths and areas for development may assist students in <i>communicating personal preferences and choices within the context of planning for transition to</i>	Oral, visual and/or tangible feedback and prompting by the teacher to guide and affirm students': <input type="checkbox"/> identification of goals and personal skills/strengths

Focus: Planning ahead Outcomes: LS.5, LS.6, LS.7, LS.10, LS.11, LS.12				
Students learn about	Students learn to	Integrated learning experiences, instruction and Assessment	Evidence of learning <i>(words in italics refer to Life Skills outcomes)</i>	Feedback
		<ul style="list-style-type: none"> - details of previous work experience - acknowledged areas where improvement would enhance their personal skills and strengths such as the need to work as part of a team, resolve conflict, deal with criticism, punctuality, personal care and presentation 	<i>further education, training and employment.</i>	
<ul style="list-style-type: none"> • the communication skills required for effective participation in planning for transition • linking personal skills to pathways planning • participation in simulated transition planning meetings and communication of personal preferences and choices. 	<ul style="list-style-type: none"> • articulate goals, preferences and choices and give reasons for these • map personal skills and strengths in the context of pathways planning • participate in pathways planning 	<ul style="list-style-type: none"> • participate in simulated transition planning meetings. Students may use their folios as the basis for asking questions and seeking clarification about options for further education, training and employment. The scenarios should also provide an opportunity for students to defend a personal point of view about preferred options and choices • participate in a scheduled transition planning meeting. This may include: <ul style="list-style-type: none"> - using the information in their folio to express preferences - participating in decision-making processes eg expressing a point of view - listening, identifying and recording actions to be taken following the meeting - determining the timeframe for subsequent meetings - undertaking actions agreed to at the meeting. 	<p>Participation in structured role-plays may assist students in <i>communicating personal preferences and choices within the context of planning for transition to further education, training and employment.</i></p> <p>Participation in a transition planning meeting may indicate <i>communicating personal preferences and choices within the context of planning for transition to further education, training and employment</i> and/or <i>evaluating personal skills and</i></p>	<p>participation in simulated transition planning meetings and communication of personal preferences and choices.</p> <p>Oral, visual and/or tangible feedback and prompting by the teacher to guide and affirm students' active participation in the transition planning meeting.</p>

Focus: Planning ahead <i>Outcomes: LS.5, LS.6, LS.7, LS.10, LS.11, LS.12</i>				
Students learn about	Students learn to	Integrated learning experiences, instruction and Assessment	Evidence of learning <i>(words in italics refer to Life Skills outcomes)</i>	Feedback
			<i>strengths to facilitate participation in pathways planning.</i>	

Board of Studies NSW (2007, p. 107-111)

Appendix C: Timelines for Transition Planning

Level	Goals	Objectives	Possible activities areas
Primary school level: lower grade	Employability and independent living skills and attitudes	<ol style="list-style-type: none"> To develop positive work habits To appreciate all types of work To develop an understanding of how to cope with disability 	<ul style="list-style-type: none"> Inclusion activities Responsibility activities Work sample activities Career field trips Discussion about work Discussion of interest and aptitudes Exploration of technology Decision making and problem solving activities
Primary school: upper grade; Junior high school: lower grade	Career exploration and transition planning relative to course of study	<ol style="list-style-type: none"> To understand the relationships of school to work To understand interest, aptitudes, and preferences To understand work, education, independent living, and community options To determine secondary course of study To identify needed accommodations and supports for secondary education To specify transition service needed 	<ul style="list-style-type: none"> Visit to vocational and technical school Visits to high schools Complete interest inventories Functional vocational assessment Career fairs Survey transition needs and preferences Employability assessment Daily living skills classes Money and budgeting classes Community awareness classes Political awareness classes Job shadowing Career guidance Self-determination and advocacy training Training in use of disability technology and related services Computer training Mobility and orientation Counselling

Level	Goals	Objectives	Possible activities areas
			<ul style="list-style-type: none"> • Employability skills training • Decision-making and problem solving activities
Junior high school: upper grade Secondary school: lower grade	Career exploration and transition planning	<ol style="list-style-type: none"> 1. To develop meaningful and realistic postsecondary goals 2. To develop work, education, residential, and community participation skills and supports relevant to goals 3. To learn to manage disability technology and request accommodation 	<ul style="list-style-type: none"> • Technology assessment • Make agency referrals • Update transition goals • Self-determination instruction • Develop transition plan • Career and technical education • Placement in advanced classes • Work experiences • Job shadowing • Job placement • Job clubs • Linkage with adult services
Secondary school: upper grade	Transition and overlap into postsecondary environments desired by the students	<ol style="list-style-type: none"> 1. To test goals through experiences and activities 2. To secure options for employment 3. To develop residential and community participation supports and contacts 4. To develop linkage with adult service 5. To empower students and families to function in adult environments 	<ul style="list-style-type: none"> • Review and revise transition plans • Involve adult service • Self-determination instruction • Apply for adult services • Apply for postsecondary education • Financial planning • Visit relevant postsecondary environments • Develop job seeking skills • Job placement • Community membership • Transfer transition coordination • Develop follow-up supports • Transfer transition plan to family or adult services

Adapted from Baer, McMahan, and Flexer (1999, p. 9)

Appendix D: Letter of Introduction

LETTER OF INTRODUCTION

Dear Sir/Madam,

This letter is to introduce **Nur Azizah**, a PhD student in the School of Education in the Faculty of Education, Humanities and Law at The Flinders University of South Australia. **Your contact detail was obtained from the database of special schools located in the Bantul District that is available online on the website of the Ministry of National Education.** Nur is conducting research on the current school to work transition service for a student with a physical disability. Her study will lead to the production of a PhD thesis and/or other academic publications on this topic. Her research aims to investigate the current practice of school to work transition for students with a physical disability enrolled in special schools in Indonesia to inform the development of a best practice model in delivering the services for their students.

This research project has been approved by Flinders University's Social and Behavioural Research Ethics Committee and is supervised by me, Professor Robert Conway, and Dr. Julie McMillan from the School of Education.

Nur would be most grateful if you would volunteer to spare the time to assist in this project by agreeing to a personal individual and separate focus group interviews of teachers, students and parents; observation of training process in some of the classrooms; and providing access to documents generated and/or used by the school (e.g. curriculum, school policy on transition, student assessment record, student progress report, Individual Educational Program, Individual Transition Plan).

The individual interviews will be audio recorded and will last in no more than an hour. Each focus group interview will also be audio recorded, conducted with no more than 6 participants, and will last in no more than an hour. Classroom observations will be videotaped and conducted between April 2012 and June 2012.

All of the information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis, 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 Nur intends to make video recording of the program observations and audio recording of the individual and the focus group interviews, she will seek your consent, on the attached form, to record the observation and the interviews, to use the recordings or a transcriptions in preparing the thesis, report or other publications, on condition that your name or identity is not revealed, and to make the recordings available to other researchers on the same conditions. All audio and video content will be destroyed once data is coded.

Finally, should you have any enquiries regarding this research project, please feel free to contact me on (+61 8) 8201 2740 or e-mail bob.conway@flinders.edu.au or Dr. Julie McMillan on (+61 8) 82015748 or e-mail julie.mcmillan@flinders.edu.au. Nur can be contacted locally at this number: +62 274 7156569, e-mail aziz0010@flinders.edu.au

Thank you for your attention and assistance.

Yours sincerely,

Signed

Prof. Robert Conway
Dean of School of Education
Faculty of Education, Humanities, and Law

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 5475). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +61 8 8201 3116, by fax on +61 8 8201 2035 or by email human.researchethics@flinders.edu.au

Appendix E: Ethics Approval

Flinders University

SOCIAL AND BEHAVIOURAL RESEARCH ETHICS COMMITTEE

Research Services Office, Union Building, Flinders University
GPO Box 2100, ADELAIDE SA 5001 Phone: (08) 8201 3116
Email: human.researchethics@flinders.edu.au

FINAL APPROVAL NOTICE

Principal Researcher : Mrs. Nur Azizah
Email : aziz0010@flinders.edu.au
Address : 9 Klar Avenue Darlington SA 5042
Project title : School to Work Transition Program for Students with Physical Disability in Special Schools in Indonesia

Project No: 5475 Final Approval Date: 13 /01/2012 Approval expire date: 28/02/2015

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:

Additional Information Required

1. Please ensure that copies of letters granting permission to conduct the research from relevant school principals are provided to the Committee on receipt (Conditional approval notice – item 5).

Complaints

If any complaints are received or ethical issues arise during the course of the project, researchers should advise the Executive Officer of the Ethics Committee on 08 8201-3116 or human.researchethics@flinders.edu.au.

Adverse Events or Incidents

Researchers should notify the Ethics Committee immediately of any serious or unexpected adverse effects on participants or unforeseen events that may affect the ethical acceptability of the project.

Modifications to Project

Modifications to the project must not proceed until approval has been obtained from the Ethics Committee. Such matters include:

- proposed changes to the research protocol
- proposed changes to participant recruitment methods
- amendments to participant documentation and/or research tools
- amendment of expected project completion date
- changes to the research team (additions and removals)

To notify the Committee of any proposed modifications to the project please submit a Modification Request Form which is available from <http://www.flinders.edu.au/research/info-for-researchers/ethics/committees/social-and-behavioural-research-ethics-committee/modifying-an-approved-project.cfm>. Please note that extension of time requests should be submitted prior to the Ethics Approval Expiry Date listed on this notice.

Annual Progress / Final Reports

In order to comply with the monitoring requirements of the National Statement on Ethical Conduct in Human Research (March 2007) an annual progress report must be submitted each year on the 13 January (approval anniversary date) for the duration of the ethics approval.

If the project is completed before ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires please submit either:

- a final report; or
- an extension of time requests (using the Modification Request Form) and an annual report.

A copy of the report pro forma is available from <http://www.flinders.edu.au/research/info-for-researchers/ethics/committees/social-and-behavioural-research-ethics-committee/annual-progress-and-final-reports.cfm>. Please retain this notice for reference when completing annual progress or final reports.

Your first report is due on 13 January 2013 or on completion of the project, whichever is the earliest.

Signed

Andrea Mather
Executive Officer
Social and Behavioural Research Ethics Committee
13 January 2012

c.c Prof Robert Conway, bob.conway@flinders.edu.au
Dr Julie McMillan, julie.mcmillan@flinders.edu.au

Appendix F: Research Information Letter

INFORMATION SHEET

(by interview and focus group for adult participants)

You are invited to participate in research about *school to work transition services for student with a physical disability in special schools in Indonesia*. Before you decide whether or not you wish to participate in the research it is very important for you to clearly understand about it. Please take time to read the following information carefully. If there is anything that is not clear or if you need more information, please contact the researcher whose contact details are provided at the bottom of this information sheet.

What is the purpose of the research?

This research aims at investigating the current practice of school to work transition services for students with a physical disability enrolled in special school in Indonesia and exploring perspectives and expectations of different stakeholders to inform the development of a best practice model in delivering service for the students.

Do I have to participate?

No, participation in this research is voluntary. It is completely up to you to decide whether or not to participate. If you do decide to participate, we will ask you to sign a consent form and give you a copy of this information sheet and the consent form to keep. If you decide to participate, you are free not to continue your participation in the research at any time.

What will I be asked to do if I participate?

The researcher will hold an individual interview with you or a focus group discussion involving you and several other people, which will cover certain aspects of the topic about school to work transition service for students with a physical disability in special schools in Indonesia. Both the individual interview and focus group discussion will be audio recorded and will last in no more than an hour.

What are the possible benefits in participating in this research?

We do not expect there to be any direct benefits for you in participating in this research. However, the information you give us will be useful for the key stakeholders in terms of getting a much clearer picture of the implementation of school to work transition service for students with a physical disability this will inform for further development a best practice model in delivering the services.

What are the possible risks in participating in this research?

All of the interview questions will be about your views regarding the current policy and implementation of school to work transition service for students with a physical disability in special school and your views about future expectation regarding this matter. As such, the material that will be covered during the interviews is not likely to pose any psychological, emotional, or legal risks.

Will my participation in this research be kept confidential?

Yes. All of the information that you provide will be treated in the strictest confidence and your identity will be maintained unidentifiable in the resulting thesis, report or other publications.

Will I receive any rewards for participating in this research?

Although participation is voluntary, you will be compensated for your time and efforts participating in the research. You will get cash reimbursements that will vary between \$20 and \$40 depending on your position within the government and non-government organisation in Indonesian context.

What should do I do now?

Thank you for considering participating in this research. If you decide that you wish to participate in this research or you still need further information regarding this research, please feel free to contact the researcher, Nur Azizah, at this number: : +62 274 7156569 or e-mail aziz0010@flinders.edu.au or the supervisors of this research: Prof Robert Conway on (+61 8) 8201 2740 or email bob.conway@flinders.edu.au or Dr. Julie McMillan on (+61 8) 82015748 or e-mail julie.mcmillan@flinders.edu.au

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 5475.). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +61 8 8201 3116, by fax on +61 8 8201 2035 or by email human.researchethics@flinders.edu.au

INFORMATION SHEET

(by observation and focus group for students participants)

You are invited to participate in a research about your *school to work transition service*. Before you decide whether or not you wish to participate in the research it is very important for you to clearly understand about it. Below are a series of questions you may ask, with answers, about the research.

- Q. If I decide to participate in this research, what will I be asked to do?
A. You will be part of observations and a discussion about your opinions about the school to work transition service.
- Q. Where will the research be held?
A. The observation will be held in the classroom during vocational classes and the focus group discussion will be held at school.
- Q. Who will be in the focus group discussion and how large will they be?
A. The focus group discussion will consist of myself, you and around six of your friends at school.
- Q. How long will the focus group discussion take?
A. It should last for no more than one hour.
- Q. Will the information from the observation and focus group discussion be recorded?
A. The observation and the focus group discussion will be recorded on video and audio tape and then typed up into transcripts.
- Q. If I do participate in the research, how will it benefit me?
A. You will not directly benefit from taking part in this research
- Q. What if I decide to withdraw from the research?
A. You are free to withdraw from the research at any time without disadvantage.
- Q. Do I have to be appeared in video recording?
A. You can choose not to be appeared in video recording if you do not want to.
- Q. Do I have to answer every question in the focus group discussion?
A. You are free to decline to answer any particular questions.
- Q. Will I be identified in the resulting thesis?
A. While the information gained will be published, you will not be identified in the thesis or any reports or other publications, and all your information will remain confidential.
- Q. If I do participate or not, or if I withdraw from the research, how will my schooling be affected?

- A. Non-participation or withdrawal from the project will have no effect on your progress in your schooling, or on your results.
- Q. Can I ask to stop from the observation and the focus group discussion?
A. You can ask to stop the recording of the focus group discussion at any time.
- Q. What will happen to the information on the tapes and transcripts?
A. If you agree on the consent form, the information will be available to other researchers but your name and identity will not be revealed.
- Q. Will I receive any rewards for participating in this research?
A. Yes. You will get a gift package containing stationeries at the end of the focus group discussion as a compensation for your time and efforts participating in this research.
- Q. What should I do now?
A. Discuss the research with a family member or friend and if you have any questions at all please contact me and ask.

If you do have any questions about this research please feel free to contact me, **Nur Azizah**, by telephone on +62 274 7156569, or e-mail aziz0010@flinders.edu.au

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 5475). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +61 8 8201 3116, by fax on +61 8 8201 2035 or by email human.researchethics@flinders.edu.au

Appendix G: Accessible Information Sheet

**Accessible
Information Sheet
(for student)**

School to Work Transition Service
for Student with A Physical Disability

The study:
Conducted by: Nur
Azizah



What happen?
Voluntary



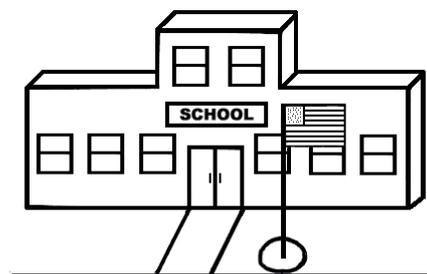
Observation will be video
recorded



Discussion will be audio
recorded



Where?
In your school



Observation Guide

What to do?
Do whatever you usually
do



When?
Between April 2012 and
June 2012



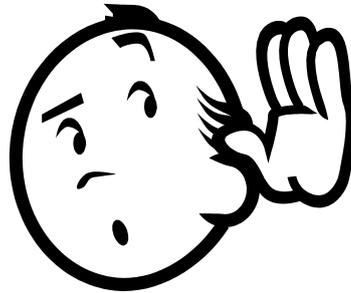
Discussion Guide

What to do?

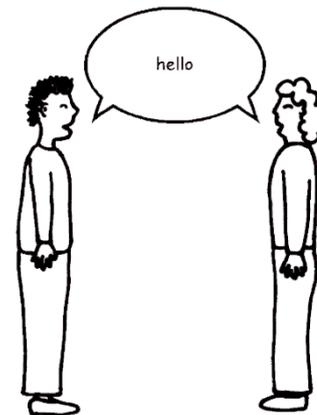
Sit with your friends



Listen



Talk



How long?

About 1 hour



Thank you

Gift of stationary



Extra information?

Telephone: +62 274 7156569
Email: aziz0010@flinders.edu.au



or



This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 5475). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +61 8 8201 3116, by fax on +61 8 8201 2035 or by email human.researchethics@flinders.edu.au

Appendix H: Observation Guide

Categories of items	Descriptions
Work habits	Attendance Punctuality Independent work skills Attention span Use and care of the tools and the equipment Organizing of work area Problem solving/judgement Quality of work Work endurance/work pace Flexibility Meeting deadlines Safety rules General appearances
Social skills	Interpersonal relation Communication (verbal and non-verbal) Following instruction Paying attention
Self Determination	Choice making Decision making Problem solving Goal setting Self-advocacy Self-awareness Self-control Self-knowledge

Appendix I: Individual and Group Interview Guide

Interviews Guide

(adapted from Kohler, PD., & Chapman, S. (1999). Literature review on school to work transition. Transition Research Institute: University Of Illinois Urbana-Champaign.)

Note: These questions are intended to guide the interview. Questions may vary based on participant responses to preceding questions

Interview Guide- Principals

1. Back ground questions
 - a. What is your background in Special Education?
 - b. How long have you been working as a principal in this school?
- STUDENT FOCUSED PLANNING
 - a. To what extent do students and parents actively participate in their IEP and ITP development?
 - b. What assessment information is collected and used in students' IEP and ITP development?
 - c. How is this information compiled and used in planning students' educational and transition program and services?
 - d. How and to what extent are students included in school-to-work activities and career development?
 - e. How are special education teachers involved in career development and awareness activities at the secondary level?
- STUDENT DEVELOPMENT
 - a. To what extent and how are life skills training related to work and employment, social skills, and self-determination skills addressed in the curriculum and policy?
 - b. To what extent does the school provide a career and vocational education curriculum?
 - c. How are occupation-specific vocational skills taught to the students?
 - d. What services are provided by the school regarding structured work experience (apprenticeships, paid work experience, work study program, job placement service)? To what extent and how it is implemented?
- INTERAGENCY COLLABORATION
 - a. What agencies are used and collaborate with the school?
 - b. How and to what extent do schools and the agencies coordinate, collect, and share information?
 - c. How are businesses and other agencies recruited and/or involved in identifying standards, developing curricula, participating in career awareness and exploration, providing work-based education, and providing professional development for teachers?
- FAMILY INVOLVEMENT
 - a. To what extent and how are parents and/or families of students with disabilities included in professional development activities and program planning, implementation, and evaluation?
 - b. What are barriers and supports in involving parents/family?
 - c. To what extent are training opportunities provided for parents and family members?
- PROGRAM STRUCTURE AND POLICY
 - a. What outcomes do students achieve with respect to employment?
 - b. To what extent and how do interagency coordinating bodies conduct strategic planning for collaborative service delivery and funding?
 - c. To what extent and how are school to work transition-related teacher competencies included in the licensure and certification standards. (
 - d. How do you find the adequacy of resources in relation to transition service needs of all students with a physical disability? What are barriers that challenge special schools in implementing school to work transition?
2. What are future expectations regarding school to work transition program/service implementation at school?

Group Interview-Teachers

(adapted from Kohler, PD., & Chapman, S. (1999). Literature review on school to work transition. Transition Research Institute: University Of Illinois Urbana-Champaign.)

Note: These questions are intended to guide the interview. Questions may vary based on participant responses to preceding questions

Categories of Questions	List of Questions
Opening	<ol style="list-style-type: none"> 1. Please introduce yourself by telling me your first name and the subjects you are teaching. 2. How long have you been teaching in special schools and in this school?
Introductory	<ol style="list-style-type: none"> 3. What kind of educational programs are provided to the students at secondary school?
Transition	<ol style="list-style-type: none"> 4. How are the educational programs related to work and employment established and facilitated?
Key	<ul style="list-style-type: none"> • STUDENT FOCUSED PLANNING 5. To what extent do students participate in planning, implementing and evaluating their IEP/ITP? 6. To what extent are students' interests, needs, and preferences determined and documented? 7. What assessment information is collected and used in students' IEP and ITP development? 8. How and to what extent are students with disabilities included in school-to-work activities and systems? 9. How and to what extent are special education teachers involved in career development and awareness activities at the secondary level? • STUDENT DEVELOPMENT 10. How are work-related behaviours and skills taught to the students? 11. How are job seeking skills taught to the students? 12. To what extent and how are occupation-specific vocational skills taught to the students? 13. How does the school identify and develop environmental adaptations for work related activities? 14. To what extent and how does the school identify and develop natural supports? 15. To what extent does the school provide provision of related services (e.g., OT, PT, speech therapy, transportation) 16. What services are provided by the school regarding structured work experience (apprenticeships, paid work experience, work study program, job placement service)? <ul style="list-style-type: none"> • INTERAGENCY COLLABORATION 17. How and to what extent do teachers and the agencies coordinate, collect, and share assessment information? 18. What interagency services are the students receiving? 19. What services do they need but are not receiving? <ul style="list-style-type: none"> • FAMILY INVOLVEMENT 20. To what extent and how are parents and/or families of students with disabilities included in IEP /ITP 21. In what roles do family members participate in providing school to work transition-related education and services? What are barriers and support in involving parents/family? 22. What are your expectations regarding family involvement that need to be implemented in school to work transition service?

	<ul style="list-style-type: none"> • PROGRAM STRUCTURE AND POLICY <p>23. What outcomes do students achieve with respect to employment?</p> <p>24. To what extent and how are school to work transition-related teacher competencies included in the licensure and certification standards (e.g., ability to teach self-determination, strategies for facilitating active student involvement in IEP planning, understanding of rehabilitation and other adult services systems and ability to work collaboratively with rehabilitation counsellors and adult agency personnel)?</p> <p>25. Are local resources adequate to meet the education and school to work transition service needs of students?</p>
Ending	Do you have any other comments that you would like to make?

Interview guide-School Supervisors

1. Back ground questions
 - a. How long have you been working as a school supervisor?
 - b. How long have you been working as a school supervisor for this school?
2. In your opinion, what is school to work transition and how should it be implemented in your school?
3. Roles and Responsibilities
 - a. What are your roles and responsibilities as a school supervisor?
 - b. What are your roles and responsibilities regarding implementation of school to work transition service?
 - c. To what extent do you coordinate, collect, and share school to work transition program/service information?
4. Implementation
 - a. How do you monitor the implementation of school to work transition service delivered in this school?
 - b. What are barriers that challenge this school in implementing school to work transition?
 - c. What supports are available to ensure success of school to work transition service in this school?
5. Future expectations
 - a. In your opinion, what are your expectations regarding school to work transition service delivered in the school?
 - b. In your opinion, what strategies should this school undertake to ensure the effectiveness of school to work transition service?

Interview guides-Special Education Coordinator

1. Background questions
 - a. How long have you been working as a special education coordinator in the department?
2. Roles and Responsibilities
 - a. What are your roles and responsibilities as a special education coordinator?
 - b. What are your roles and responsibilities regarding implementation of school to work transition service?
3. Implementation
 - a. What are policies and legislation on school to work transition service for students with a disability delivered in special schools initiated and implemented in your department?
 - b. To what extent is a school to work transition service for students with a disability reflected in the department vision statements?
 - c. What are your department expectations regarding transition services for students with physical disabilities?
 - d. How are school to work transition services for students with a physical disability perceived at the organisational level?
 - e. How do you monitor the implementation of school to work transition service delivered in special school?
 - f. To what extent do you coordinate, collect, and share school to work transition program/service information with schools.
 - g. To what extent and how are specific school to work transition-related teacher competencies included in the licensure and certification standards. (
 - h. How do you find the adequacy of resources in relation to transition service needs of all students with a physical disability?
 - i. What supports are available to ensure success of school to work transition service in special schools?
 - j. Do current data collection systems satisfy data information needs? To what extent are data collection systems compatible (e.g., state employment services, rehabilitation, vocational and special education, other services)?
 - k. To what extent are the data collections systems (across agencies) combined and used to address service and funding issues?
 - l. To what extent and how are local training, resource, and other local needs accessed and communicated to different stakeholders?
 - m. To what extent and how are individuals with disabilities included in decision-making roles?
4. Future expectations
 - a. In your opinion, what are your expectations regarding school to work transition service delivered in special schools?
 - b. In your opinion, what strategies should you undertake to ensure the effectiveness of school to work transition service?
 - c. In your opinion, what strategies should special schools undertake to ensure the effectiveness of school to work transition service?

Interview guide-Disability Coordinators

1. Background questions
 - a. How long have you been working a disability coordinator in the department?
2. Roles and Responsibilities
 - a. What are your roles and responsibilities as a disability coordinator in this department?
 - b. What are your roles and responsibilities regarding implementation of school to work transition service in special school?
3. Implementation
 - a. What are policies and legislations on school to work transition service for student with a physical disability delivered in special schools initiated and implemented in your department?
 - b. To what extent is a school to work transition service for students with a physical disability reflected in department vision statements? What your department expectations for students with disabilities?
 - c. How are school to work transition service for students with a physical disability perceived at organisational level?
 - d. To what extent and how do you do you coordinate, collect, and share school to work transition program/service information with special schools and family?
 - e. What are your current involvements with the school to work transition service for student with a physical disability in special schools?
 - f. What supports are available in your department regarding school to work transition service for students with a physical disability?
 - g. How do you find the adequacy of resources in relation to transition service needs of all students with a physical disability? What barriers are available?
 - h. Do current data collection systems satisfy data information needs? To what extent are data collection systems compatible (e.g., state employment services, rehabilitation, vocational and special education, other services)? To what extent are the data combined and used to address service and funding issues? To what extent and how are local training, resource, and other local needs accessed and communicated to different stakeholders?
 - i. To what extent and how are students with a physical disability portrayed and/or included in all resource and dissemination materials? To what extent and how are individuals with disabilities included in decision-making roles?
 - j. How school to work transition services approached and facilitated in your department?
4. Future expectations
 - a. In your opinion, what are your expectations regarding approach and facilitation on school to work transition service delivered in special school?
 - b. In your opinion, what strategies should you/your department undertook to ensure the effectiveness of school to work transition service for students with a physical disability?
 - c. How can you involved in future school to work transition service?

Interview guide- Community Business Leaders

1. Background questions
 - a. How long have you been working as leaders of the business associations?
 - b. What type of businesses are mainly involved in your association?
 - c. What do you know about people with a physical disability?
2. Roles and Responsibility
 - a. What is your role and responsibility as a leader of the business association?
 - b. What your role and responsibility regarding employment matters in your association?
 - c. What do you know about involving people with disability in employment?
3. Implementation

In your opinion,

- a. How and to what extent are people with a physical disability involved in your businesses?
 - b. What factors are considered when hiring or not hiring people with a physical disabilities as workers?
 - c. What are advantages of hiring people with disability as workers?
 - d. What barriers are impeding hiring people with disabilities?
 - e. What type of work might be suitable for people with disability?
 - f. What should schools do to ensure employability of their students with a physical disability?
 - g. What involvement can businesses/companies have in special schools regarding school to work transition?
 - h. To what extent are students with disabilities involved in job placement in local businesses?
 - i. How are businesses and labour unions involved in identifying standards, participating in career awareness and exploration, providing work-based education, and providing professional development for teachers?
 - j. How many special schools have up-to-date collaborative agreements with your association regarding career awareness and exploration, providing work-based education for students, and providing professional development for teachers?
4. Future expectation

In your opinion,

- a. What kind of network should your association and schools establish?
- b. How can you or business associations become involved in future school to work transition services?

Interview guide- Disability Organisation

1. Background questions
 - a. How long have you been involved in disability organisation?
 - b. How long have you been a director of disability organisation?
 - c. How many people with disabilities are involved in the organisation?
2. Roles and Responsibility
 - a. What is your role and responsibilities as a director of a disability organisation?

3. Implementation

In your opinion,

- a. How and to what extent are people with a physical disability involved in businesses/careers?
 - b. What factors are considered when hiring or not hiring people with a physical disabilities as workers?
 - c. What are advantages of hiring people with disability as workers?
 - d. What barriers are impeding hiring of people with disability as workers?
 - e. What types of business are suitable for people with a disability?
 - f. What could special schools do to ensure employability of their students with a disability?
 - g. How can disability organisations become involved in special school regarding school to work transition?
4. Future expectation
- In your opinion,
- a. What kind of network should disability organisations and special schools establish?
 - b. How can disability organisations be involved in future school to work transition service?

Interview Guide-Students

Categories of Questions	List of Questions
Opening	1. Please tell me your first name and what grade you are in.
Introductory	2. What are you going to do when you graduate from school? 3. How does the school provide you with the opportunities to pursue your future goals?
Transition	4. What kind of job would you like to do when you graduate from school? 5. To what extent does the school provide you with the opportunities to pursue that goal?
Key	6. To what extent do you actively participate in your IEP and ITP development? 7. How are your' interests, needs, and preferences taken into account in your program? 8. To what extent are training opportunities regarding work and employment provided by the school? 9. How satisfied are you with those programs? 10. How do you perceive the effectiveness of school to work transition-focused education and services (e.g career education, career awareness, job placement, vocational training, and apprenticeship)? 11. What are your future expectations regarding school to work transition services (e.g career education, career awareness, job placement, vocational training, apprenticeship) delivered in this school?
Ending	12. Do you have any other comments?

Interview Guide-Parents

Categories of Questions	List of Questions
Opening	Please tell me your first name and what grade your children are in.
Introductory	<ol style="list-style-type: none"> 1. How would you describe your involvement in your child's education? 2. What are your expectations for your child when s/he graduates? 3. To what extent does the school assist in meeting these expectations?
Transition	<ol style="list-style-type: none"> 4. What are your expectations regarding work and employment for your child when s/he graduates? 5. To what extent does the school assist in meeting your expectations?
Key	<ol style="list-style-type: none"> 6. How and to what extent are you involved in your child's program planning, implementation and evaluation of school to work transition-related education and service (e.g career education, career awareness, job placement, vocational training, and apprenticeship)? 7. What barriers are impeding your involvement? 8. What supports are available that facilitate your involvement? 9. How satisfied are you with your involvement in your child's program planning, implementation and evaluation of school to work transition-related education and service (e.g career education, career awareness, job placement, vocational training, and apprenticeship)? 10. How do you perceive the effectiveness of school to work transition-focused education and services? 11. To what extent are training opportunities regarding family involvement provided? 12. How effective are these activities in increasing your knowledge and skills? 13. Do these activities positively impact the extent to which you are involved in school to work transition-related education and service delivery? 14. What are future expectations regarding school to work transition services delivered in this school?
Ending	<ol style="list-style-type: none"> 15. Do you have any other comments that you would like to make?