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The Personal and Contextual Factors Influencing Teacher Agency and Self-Efficacy when Planning and Implementing Individual Education Plans		
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A thesis presented in partial fulfilment of the requirements for the degree of		
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at Massey University, Palmerston North, Manawatū, New Zealand.		
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Abstract

There is an increasing amount of literature that examines how teacher agency and self-efficacy influence inclusive education. Research demonstrates that when teachers feel confident in their capabilities, they are capable of actions that allow them to teach in a more inclusive manner. Individual Education Plans (IEPs) are one tool teachers can collaboratively use to support students with disabilities to access the curriculum. This study explores the personal and contextual factors that influence teacher agency and self-efficacy when planning and implementing IEPs by using a mixed-methods explanatory-sequential design. Participants were 42 primary school teachers without positions of senior responsibility, from the North Island of New Zealand. Each teacher had participated in at least one IEP in the last twelve months. Phase one employed an e-questionnaire, followed by four semi-structured interviews in phase two. The e-questionnaire measured participant's perceived self-efficacy, and examined their perceptions of the IEP process, and experiences of professional learning and development (PLD) related to the planning and implementation of IEPs. Face-to-face interviews explored and expanded on phase one themes. Results demonstrated that a number of personal and contextual factors influence teacher agency when planning and implementing IEPs. Strong pedagogical knowledge, teaching experience, the ability to form collaborative relationships, understanding the teacher's role in an IEP team were required for teachers to experience enhanced self-efficacy and agency. Having collaborative relationships within the IEP team, time, and inclusive school policies were contextual factors that enabled and inhibited teacher agency and self-efficacy. While the majority of participants had not received PLD relating to planning and implementing IEPs, they

identified that efficacious PLD would need to be specific and needs-based, collaborative in approach, expert facilitated and readily available to enhance teacher self-efficacy and enable agency when planning and implementing IEPs. Primary teachers in New Zealand would benefit from school management providing teachers with increased PLD on the use of IEPs and inclusive education, if they are to experience high self-efficacy and achieve agency when planning and implementing IEPs for students with disabilities.

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Chapter 1

Introduction

A move towards inclusive education has always been at the forefront of educational policies in New Zealand. The education policy *Success for All – Every School, Every Child* (New Zealand Ministry of Education, 2010) (Now referred to as MoE), required schools to demonstrate fully inclusive practices by 2014 so all students, regardless of needs, may experience success at schooling. The MoE (2015b) define inclusive education as:

Students being able to take part in all aspects of school life. Diversity is respected and upheld. Inclusive schools believe all students are confident, connected, actively involved, lifelong learners and work towards this within the New Zealand Curriculum. Students' identities, languages, abilities, and talents are recognised and affirmed and their learning needs are addressed (Paragraph 2).

However, Kearney (2013) argues the definition of what inclusive education means in schools has been confused; largely because of the negative connotations surrounding terminology associated with 'special' education. Kearney asserts inclusive education is "one where all children and young people can participate and achieve and is based on notions of human rights, respect, and equity" (Kearney, 2013, p.40). Language plays a significant part in our understanding of children and young people, and in our interpretations of inclusive education. The term *special education needs* has been critiqued for its deficit orientation, and is considered by some to be exclusionary in that it implies a difference or deviation from what society considers 'normal' (Runswick-Cole & Hodge, 2009).

While the term *special education needs* is currently used by the New Zealand Ministry of Education (MoE), Carrington and MacArthur (2012) argue 'special education needs' creates a segregated education, which is in conflict with the government's drive for inclusive education. An impaired individual becomes disabled when faced with barriers placed by society that exclude them from participating in the way they would like (Carrington & MacArthur, 2012; Ministry of Health, 2001). Therefore, impaired students can be disabled if society is not set up in a way that allows them to fully participate. This study will adopt a social model perspective in relation to language, and use the terms *students with disabilities* to reflect that the education system can disable impaired students when appropriate provision is not made for them.

Every classroom has students who require varying degrees of support to access the curriculum. The teacher has a role within a collaborative team to ensure all students' learning needs are appropriately met. One tool teachers can use to meet the needs of students requiring intensive support is the individual Education Plan (IEP). For students with disabilities for whom school is not set up in such a way as to meet their needs, the IEP can support students' inclusion in classroom programmes.

1.1 IEP Definition

IEPs establish students' learning goals and demonstrate the adaptations needed within the school environment or curriculum for students to experience schooling success. IEPs also include: strategies required to support the student; knowledge from people who best know the student (including the student themselves); and how the plan will enrich the student's experiences through goal setting and success criteria. Burns (2006, p.3) claims IEPs should outline "accommodations, goals and

services a child needs to receive an appropriate education". IEPs are a planning process that includes the formulation of an IEP document. IEPs should be working, living documents that record achievements, and plan for the next step in a student's learning. IEPs are an ongoing, collaborative process of meeting, setting goals, agreeing, planning, teaching, learning, reviewing, and reporting (See Figure 1). The success of an IEP requires all IEP team members to work collaboratively to support the child in meeting these goals (New Zealand Ministry of Education, 2011 (Now referred to as MoE).

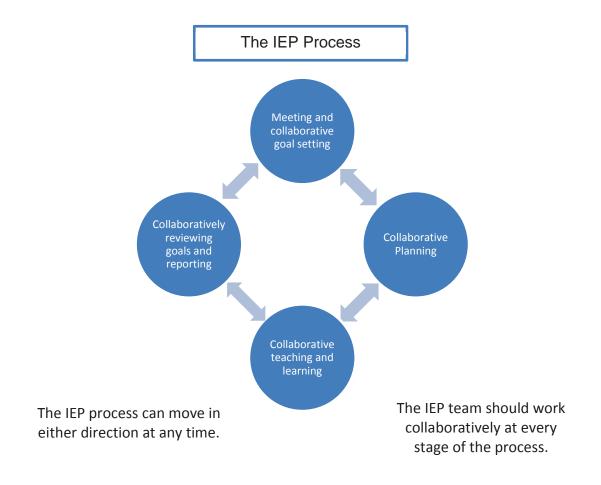


Figure 1: Diagram of the IEP process in New Zealand (MoE, 2011).

1.2 History and Policy

IEPs originated in the United States of America (USA) in response to the Legislation of all Handicapped Children Act in 1975 (Burns, 2006; Mitchell, Morton, & Hornby, 2010). Since then, IEP legislation in the USA has been revised under the Individuals with Disabilities Act in 1990, 1997, and 2004 to ensure students between the ages of 3 and 21 have access to the general curriculum (Mitchell et al., 2010).

IEPs have been used in New Zealand schools since the 1970's. Unlike the USA, New Zealand does not have specific legislation regarding IEPs. However, schools are legally required to provide all students access to the general curriculum. The National Administration Goal: 1C outlines the legal obligation for school boards of trustees to make provision for students with disabilities. The legislation states that,

Each board, through the principal and staff, is required to:

c. on the basis of good quality assessment information, identify students and groups of students:

i.who are not achieving;

ii.who are at risk of not achieving;

iii.who have special needs (including gifted and talented students); and

iv. ...develop and implement teaching and learning strategies to address the needs of students and aspects of the curriculum identified in (c) above; (MoE, 2013, Paragraph 2, Line 17).

This legislation asks governing boards of trustees be aware of students with disabilities within their schools, and ensure programmes work towards improving student achievement. In addition, legislation under the current National Education

Goals 7 require schools to demonstrate "Success in their learning for those with special needs by ensuring that they are identified and receive appropriate support" (MoE, 2009, Paragraph 8).

1.3 Who Receives an IEP?

In New Zealand, schools and parents determine who receives an IEP. Generally it is students with particularly high learning, behavioural, or physical impairments. IEPs should only be used when: obstacles to learning have been identified; different teaching approaches are required; changes to the curriculum, class, or school environment are required in order for the child to access the curriculum; or if the transition between schools, classes, or leaving school requires more planning, teaching, and learning (MoE, 2011). The MoE argue few students should receive IEPs as most students' needs are met by differentiation of the classroom programme and environment (Ministry of Education, 2011). Students who receive specialised support through the Ongoing Resource Scheme (ORS¹) are required to have an IEP and students who have severe learning or behavioural difficulties and receive support from Resource Teachers of Learning and Behaviour (RTLBs²) or Resource Teachers of Literacy (RTLits³) may also have an IEP.

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¹ ORS – The Ongoing Resource Scheme is funding targeted at students with ongoing disabilities working at Level 1 of the New Zealand Curriculum. This funding can be used for assistive technology, teacher release, or teacher aides. (MoE, 2016a)

² Resource Teacher of Learning and Behaviour are specialist teachers who are employed by the Ministry of Education to work with students with moderate learning or behavioural difficulties, their teachers, and their whanau.

³ Resource Teachers of Literacy are specialist literacy teachers who work with students, teachers, and families to increase literacy achievement.

1.4 Teacher Role in the IEP Process

IEPs are a collaborative process, and involve a number of people. The teacher's role within the process is critical as they have a sound knowledge of the child's academic and key competency abilities within the schooling environment (Prohm, 2015). The teacher is primarily responsible for delivering the curriculum in a way that allows the child to experience success. They are responsible for the ongoing assessment of academic achievement, and can provide other professionals⁴ with information that may not be directly observed by said professionals. In order for a teacher to fully collaborate successfully within the IEP team, teacher agency and self-efficacy are important.

1.5 Teacher Agency

Agency is a social construct referring to an individual's ability to act resulting in change within the constructs and restrictions of the environment they are situated in (Deed et al., 2014; Emirbayer & Mische, 1998; Pajares & Urden, 2006). Bandura (1997, p.3) states "Agency refers to acts done intentionally". Therefore, teacher agency can refer to teachers' capabilities to act within the schooling environment in a way that influences student's outcomes. In order for IEPs to be successfully planned and implemented, teachers require a sense of agency.

1.6 Self-efficacy

Self-efficacy is the belief in one's capabilities to organise and execute given performances (Bandura, 1997). Bandura argues self-efficacy beliefs are the main

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⁴ Other professionals - This refers to educational or child psychologists, speech language therapists, occupational therapists, play therapists, or other professionals working with the child from outside the school.

contributing factor to human agency and without conviction in one's abilities to reach a goal, the individual is unlikely to attempt it. Self-efficacy has a significant influence on how teachers behave in the classroom. Because high levels of teacher self-efficacy has been shown to increase student achievement (Ashton & Webb, 1986), and influence learning in a positive way (Klassen, Durksen, & Tze, 2014), it important to explore how teachers in New Zealand perceive their feelings of self-efficacy when planning implementing IEPs.

1.7 Professional Learning and Development

Professional learning and development (PLD) can impact on a teacher's sense of agency as agency is heavily influenced by contextual factors (Biesta & Tedder, 2007). Research shows PLD increases feelings of self-efficacy when teaching students with disabilities (See Kosko & Wilkins, 2009).

1.8 Research Rationale

There is a growing body of research that addresses the importance of teacher agency and self-efficacy in relation to inclusive education (Bruggink, Goel, & Koot, 2016; Kosko & Wilkins, 2009; Savolainen, Engelbrecht, Nel, & Malinen, 2012; Sharma, Loreman, & Forlin, 2012; Urton, Wilbert, & Hennemann, 2014). While there is research demonstrating factors influencing teacher agency and self-efficacy, there is a lack of literature related to what personal and contextual factors influence teacher agency and self-efficacy when planning and implementing IEPs in the New Zealand context. This study aims to add to the literature related to IEPs, teacher agency, and self-efficacy in primary teachers in New Zealand.

Chapter 2

Literature Review

This chapter reviews the literature related to teacher agency, self-efficacy and the planning and implementation of IEPs. Social cognitive theory will be briefly outlined. Teacher agency is defined and explored. Self-efficacy, its effects on student achievement, and the contextual and personal factors influencing teacher self-efficacy will be discussed. Finally, professional learning and development (PLD) and IEPs will be explored, before the effects of PLD on teacher self-efficacy and agency are outlined.

2.1 Individual Education Plans

Since their inception in the United States in the 1970's, a great deal of research has been generated examining the utility of IEPs, teachers' and parents' perceptions of IEPs, and effective ways to plan and implement them. However, despite legislation which necessitates IEPs in countries such as the USA, there is little empirical evidence supporting their use to improve student achievement (Mitchell et al., 2010; Shaddock, MacDonald, Hook, Giorcelli, & Arthur-Kelly, 2009). Nevertheless, self-reported studies using questionnaires, interviews, and focus groups have demonstrated teachers believe IEPs support the planning and implementation of IEPs (Lee-Tarver, 2006; Prohm, 2015; Thomson & Rowan, 1995).

2.2 Social Cognitive Theory

Social cognitive theory was developed by Albert Bandura (1986, 1997), and asserts that an individual's thoughts and beliefs affect their behavior (Stipek, 2002). Bandura (1986) describes the social cognitive view as "a model of triadic reciprocality in which

behaviour, cognitive and other personal factors, and environmental events all operate as interacting determinants of each other" (p. 18). Bandura (1997) claims peoples' beliefs in their capabilities to perform a task (self-efficacy) affect their ability to exercise control over their actions (personal agency). How individuals interpret events will affect their expectations, and in turn, affect their behaviour (Bandura, 1986; Stipek, 2002). Two components of this theory that are important to this study are personal agency and self-efficacy. The ability for teachers to teach students with disabilities inclusively and effectively requires high levels of self-efficacy and agency.

2.3 Teacher Agency

Research on teacher agency emerged as a way to explain the significant difference that can be made to student outcomes and achievement through the choices and actions of teachers (Toom, Pyhältö, & O'Connell Rust, 2015). The definition of teacher agency is debated and difficult to define (Biesta & Tedder, 2006; Edwards, 2015). Edwards (2015) argues there are conceptual differences on how teacher agency is defined and this is hidden by language choices used to describe it. For example, Eteläpelto, Vähäsantanen, and Hökkä (2015) claim teacher agency is the result of influence, stances, and choices individuals can make, and is a phenomenon teachers practice within the school and classroom environment. Pyhältö, Pietarinen, and Soini (2015) describe teachers' professional agency as a capability that allows them create their own learning through reciprocal learning relationships. The teacher is viewed as an active learner who is decisive, reflective, and intentional in their actions.

Priestley, Biesta, and Robinson (2013) claim agency is not an internal quality within the individual, but "something that is achieved through engagement with very specific contextual conditions" (p.188). They define teacher agency from an ecological perspective, where individuals can create change that is influenced by previous experiences and dependent on the current situational conditions. This is based on Emirbayer and Mische (1998), who argue there are three dimensions to agency; agency is developed from previous experiences, acted out within the current situation, and with a view to future change. They refer to these dimensions as iterational, projective, and practical-evaluative respectively and known as the "chordal triad".

The ecological model of teacher agency draws on life and professional histories of teachers, distinguishes between the cultural, structural, and material aspects that influence the present action, and has short and long term potential courses of action. Priestley et al. (2013) argue teacher agency is achieved, and something one does, resulting from the circumstances and ecological conditions within a school. Because New Zealand schools vary in their levels of inclusion and the IEP process, Priestley et al.'s (2015) ecological definition of teacher agency will be used in this study.

2.3.1 Influences on Teacher Agency

Teachers achieve agency on a daily basis. Understanding what enables teachers to achieve agency is important; agency influences student outcomes (Priestley et al., 2013; Priestley, Biesta, & Robinson, 2015) and can have both positive and negative unintended consequences (Bandura, 1997). Contextual factors such as external and contextual environments, and personal factors such as cognition, affective and biological events as well as behaviour, all influence teacher agency (Bandura, 1997). Individuals can be enabled or constrained by their environments (Bandura, 1997; Priestley et al., 2015). This is particularly true of teachers. Teachers are only capable

of achieving agency within the constraints of the school they are situated in (Giddens, 1984, as cited by Deed et al., 2014). Contextual factors such as school leadership, government policy, and PLD, and personal factors such as beliefs and self-efficacy influence teachers' achievement of agency.

2.3.2 Teacher Agency and IEPs

There is limited literature examining how agency influences the planning and implementation of IEPs. One study completed in Finland investigated the use of IEPs as an agentic force between teachers and parents (Alasuutari, 2015). This research proposed a model regarding the use of IEPs, and actions occurring as a result of the IEP. The research questioned how discourse between teachers and parents were resolved using IEPs. Alasuutari (2015) found underlying tensions and power imbalances between parents and teachers could affect set goals. This study was situated in early childhood centres in Finland, where IEPs are used for all students and not specifically for students with disabilities. The research did not examine the contextual or personal factors influencing interactions between teacher and parent when developing IEP goals.

2.4 Self-efficacy

Self-efficacy is the belief in ones capabilities to perform a specific task that produces expected results within a specific context (Bandura, 1977; Loreman, Sharma, & Forlin, 2013; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). The four sources of self-efficacy are: mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal (Bandura, 1997). Performance accomplishment is argued as the most important source of self-efficacy judgment and is based on personal mastery experiences (Bandura, 1977; Stipek, 2002; Tschannen-Moran et al., 1998).

Past successes or repeated failures can affect expected future outcomes with success increasing feelings of self-efficacy and failures lowering it (Bandura, 1977; Tschannen-Moran et al., 1998). Vicarious experience refers to the observation of others in order to learn. Seeing individuals succeed can increase self-efficacy considerably, assuming there is a high level of similarity between the observed individuals and the observer's situation (Bandura, 1997). Verbal persuasion is the specific or general spoken encouragement by others (Tschannen-Moran et al., 1998). Stipek (2002) argues verbal persuasion is only effective if there is past experience to reinforce it, and a realistic goal. While it is considered a weaker way of raising efficacy expectations than one's actual accomplishments (Bandura, 1977), verbal persuasion can be effective in some situations. Tschannen-Moran and Woolfolk-Hoy (2007) found verbal persuasion was an effective means of raising selfefficacy in novice teachers, but mastery experiences were still considered as having the strongest effect. The final factor, physiological arousal, is the body's response to situations. This physiological arousal can weaken self-efficacy if there is an expectation a negative outcome would occur, leading to avoidance behaviours (Bandura, 1977).

2.5 Teacher Self-efficacy

Tschannen-Moran et al. (1998) define teacher self-efficacy as "...the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (p.233). Teacher self-efficacy demonstrates a teacher's "belief that their efforts, either individually or collectively, will bring about student learning" (Ross, 1998, p. 50). Ross (1998) argues teachers' personal characteristics, as well as the schools in

which they work, affect levels of self-efficacy. Levels of self-efficacy influence the amount of time spent on academic activities (Gibson & Dembo, 1984); levels of student achievement (Ashton & Webb, 1986); levels of positivity in a behaviour management approach (Woolfolk, Rosoff, & Hoy, 1990); the effort expended in teaching, and goal setting (Tschannen-Moran & Woolfolk Hoy, 2001); and the effort spent on the classroom planning, organizing and teaching of lessons (Allinder, 1994; Bandura, 1997). Self-efficacy is cyclic in nature, as past experiences shapes future efficacy beliefs.

The definition of teacher self-efficacy as a concept has been much debated and many measures and models such as the Teacher Efficacy Scale (Gibson & Dembo, 1984) and the Integrated Teacher Efficacy Model (Tschannen-Moran et al., 1998) have been proposed. When Gibson and Dembo (1984) developed a measure for teacher efficacy, they divided teacher self-efficacy into two constructs: General teacher efficacy and personal teacher efficacy. They argued teacher efficacy needed to encompass both situational factors as well as personal factors. Personal teacher efficacy (PTE) was described as the belief a teacher was able to influence student learning through their teaching skills. General teacher efficacy (GTE) was the belief teachers' actions could create change in students, despite external factors such as home life, or socioeconomic status. Gibson and Dembo argue that PTE is more important than GTE. Bandura's (1997) argument that outcome expectancy is related to the actions of the individual, and their own capabilities, and not external factors supports this. Bandura (1997) argued high efficacy teachers are able to create mastery experiences for students, which promote learning. However, Tschannen-Moran and Woolfolk Hoy (2001) claim PTE and GTE scales lack clarity as selfefficacy is context specific. They argue the scales have only moderate correlations

between the two factors of PTE and GTE, and are conceptually and statistically flawed.

2.5.1 Teacher Self-efficacy and Student Achievement

Research demonstrates teachers' self-efficacy regarding their pedagogical practice has a significant effect on student's academic achievement (Ashton & Webb, 1986; Bandura, 1993; Gibson & Dembo, 1984). When teachers have high self-efficacy, more effort is expended, and better performance occurs, leading to further increased self-efficacy (Woolfolk Hoy & Davis, 2006).

Mastery experiences increase the level of persistence and effort exerted by teachers, leading to greater self-efficacy when teaching students with disabilities. Ross (1998) found teachers demonstrated higher levels of self-efficacy when teaching higher ability students but demonstrated persistence with, and set higher goals for, lower ability students. This contradiction was related to the context specificity of self-efficacy. Students with disabilities may not demonstrate academic success in the same way, or with the same speed as high ability students, meaning the persistence and effort of teachers becomes even more important. Teachers with low self-efficacy spend less time working with, and are more critical of, struggling students (Ashton & Webb, 1986; Gibson & Dembo, 1984). In a study of 188 general educators in New Jersey, Soodak, Podell, and Lehman (1998) found high efficacy teachers differentiated their programmes and had lower hostility towards the inclusion of students with disabilities. Bandura (1993) argues teachers with high self-efficacy related to their instructional practices will create mastery experiences for their students, raising student self-efficacy and supporting their cognitive

development. Therefore, a teacher's self-efficacy when teaching students with IEPs is important if the students are to experience schooling success.

2.5.2 Influences on Teacher Self-efficacy

A number of personal and contextual factors have been found to directly affect teacher self-efficacy. Bandura (1997) asserts human functioning results from a mixture of behavior, personal factors, and the environment known as reciprocal causation. Personal factors refer to the thoughts and feelings influencing one's own confidence and self-efficacy. Behavioural factors refer to the way people respond to situations. Environmental factors refer to the situations a person finds themselves in, what other people are involved, and the interactions they may have with them (Gonzalez-DeHass & Willems, 2013). Reciprocal factors all impact on what happens in classrooms and how self-efficacy is affected.

Teaching Experience. Beliefs' resulting from teaching experience as a personal factor influencing teacher self-efficacy has been thoroughly researched. Teacher self-efficacy is developed early in an individual's career and once the beliefs are formed, Tschannen-Moran et al. (1998) argue they are difficult to change, unless compelling reasons are presented. Ross (1994) discovered less experienced teachers had higher self-efficacy. However, other studies have shown teacher self-efficacy lowers in the first years after pre-service training but it is possible to increase self-efficacy beliefs over time (Hansen, 2005; Tschannen-Moran & Woolfolk-Hoy, 2007).

Collaborative Relationships. Collaborative relationships between school management and teachers have been shown to influence teacher efficacy. A number of studies have found working in a collaborative environment has a significant effect on teacher

self-efficacy (Beasley, Gartin, Lincoln, & Penner-Williams, 2013; Chong & Kong, 2012; Ross, 1994; Soodak et al., 1998). Working with supportive principals who were responsive to teachers' needs and gave teachers autonomy led to higher levels of teacher self-efficacy (Hoy & Woolfolk, 1993; Ross, 1998; Scott, 2011). Hoy and Woolfolk (1993) found principals who protected their staff from disruption when teaching also increased teacher efficacy.

2.6 Teacher Perceptions of IEPs

A significant amount of research has examined teacher perceptions of IEPs, with mixed results. Dudley-Marling (1985) found that while most teachers saw IEPs as generally useful for their students, less than half surveyed used the IEP within their daily planning, and the majority of teachers referred to the IEP less than weekly. Dudley-Marling claimed the IEP had failed as a working document that influenced classroom instruction. Lee-Tarver (2006) found the majority of teachers she surveyed (n=123) felt IEPs helped provide a curriculum for students and supported the planning and implementation of teaching and learning. Forty percent of teachers surveyed believed IEPs made them better teachers. She also found teachers gained valuable information for the IEP planning through collaboration, and played active roles in formulating student's goals. A limitation to the study conducted by Lee-Tarver (2006) is its generalisability to the New Zealand context. Other research has shown similar findings (See Rose, Shevlin, Winter, O'Raw, & Zhao, 2012; Rotter, 2014; Simon, 2006).

2.6.1. Teacher Perceptions of IEPs in New Zealand

There has been limited research published in New Zealand focused on the planning and implementation, or teacher perception, of IEPs in primary schools. In a mixed methods study Thomson and Rowan (1995) examined teachers' and parents' perceptions of IEPs from 36 schools from the lower North Island and Upper South Island of New Zealand. They identified a number of issues with the IEP process, including a lack of training for teachers in order fully contribute to meetings and the IEP process itself. Nearly half of the teachers (48%) surveyed had received training in the use of IEPs, but only half of this number thought the training was effective. Thomson and Rowan found 53% of teachers at that time had received training in the planning and development of IEPs for students. Most teachers surveyed felt the IEP was useful in their teaching. Strengths and advantages of the IEP process teachers in the study identified were: consulting with parents, collegial support, identification of personal teaching strengths and weaknesses, gaining different ideas to access the curriculum, and access to other professionals.

This study also identified a number of weaknesses and disadvantages in the IEP process including: a lack of professional development, cultural neutrality, generalisability, and time; the need for more collaboration with and support for teachers, and an intimidating process for some parents. This study did not identify the type of PLD teachers received, but recommended increased training in the IEP process. The disadvantages and weaknesses identified in this report are not in-line with current government policy on inclusive education. For example, Thomson and Rowan (1995) found the lack of PLD available for teachers may have resulted from a lack of centralised guidelines available for the implementation of the IEP process.

The Ministry of Education now provides clear guidelines for schools through the *Collaboration for Success* document (MoE, 2011).

In a recent New Zealand study, Prohm (2015) found teachers who received PLD were more motivated to engage in the IEP process. Teachers in this study also felt the IEP process was time consuming, and the ability to collaborate effectively with professionals were barriers to motivation regarding the IEP process. Prohm found teachers were more motivated and engaged in the IEP process when they had participated in more than ten IEPs during their career. The need for schools to be implementing effective planning systems such as IEPs has become even more pertinent to schools with the government's vision of fully inclusive practices in New Zealand. These teachers appeared to see a utility and efficacy to the IEP process, when planning and implementing programmes for students with disabilities.

2.7 Collaboration Supporting the IEP Process

Collaboration between IEP team members affects teacher self-efficacy and agency when planning and implementing IEPs. Research shows IEPs are best planned collaboratively as a team, including all people directly involved with the child's learning (Mitchell et al., 2010; MoE, 2011). Clark (2000) argues effective team collaboration during IEP development can influence a change in how teachers approach teaching. However, effective collaboration between IEP team members can be challenging. A number of studies have identified barriers to collaboration between IEP team members including: a lack of understanding of the IEP purpose, unrealistic or inappropriate goal setting, the logistics of parents attending meetings, social and cultural differences between team members, and a lack of training on the planning and implementation of IEPs (Mitchell et al., 2010). Other identified barriers

include a lack of understanding of the process by parents (Stroggilos & Xanthacou, 2006), blurred instructional responsibilities between general and special education teachers, and difficulties understanding roles and negotiating power between teachers (Hamilton-Jones & Vail, 2014).

Several studies have examined the link between self-efficacy and collaboration. Working collaboratively provides mastery and vicarious experiences, leading to increased self-efficacy (Chong & Kong, 2012). Other studies have shown collaborative teaching experiences have a positive correlation to increased self-efficacy (Ross, 1994). Teachers with lower self-efficacy saw fewer opportunities to collaborate and were more hostile towards inclusive education (Soodak et al., 1998). A sense of community within a school was the biggest predictor of efficacy (Lee et al., 1991).

Collaborative practices can enable teacher agency. Charteris and Smardon (2015) found teachers built a sense of agency through professional learning conversations and feedback, leading to greater collegiality and collaboration. In this New Zealand case study of nine teachers, Charteris and Smardon discovered professional learning conversations provided opportunities for teachers to reflect on their practice, with a projective view of adapting and changing practice in the future. Teacher agency was enabled when teachers understood cultural and structural elements of group interactions, and they allowed others to contribute freely to group discussions. IEPs are more constructive and successful when all IEP team members contribute. Being able to contribute allows teachers to develop a sense of agency when implementing the IEP.

Collaborative relationships between school leadership and teachers can enable teacher agency teachers are empowered to make changes and be influential within a school, and school leadership protects them from government bureaucracy (Eteläpelto et al., 2015). School leadership can also protect staff from growing demands, ensure manageable workloads, and encouraging teacher leadership to enable a sense of agency (Wenner & Settlage, 2015). When school leaders provide teachers with room to develop and pursue their own teaching goals, this can encourage risk taking, adaptability, and a willingness for teachers to act on their ideas (Ketelaar, Beijaard, Boshuizen, & Den Brok, 2012). However, Ketelaar et al. found five participants who felt highly agentic, considered their agency was inhibited by restrictions placed on them by the school or colleagues, and this prevented them reaching their goals.

2.8 Teacher Role in the IEP Process

The role of the classroom teacher is crucial to the IEP process as they are primarily responsible for supporting the development and implementation of the IEP within the classroom. Martin, Marshall, and HuberSale (2004) found when teachers were present at meetings, groups collaborated more successfully and effectively for the benefit of the child. Members of the team talked more, especially about strengths and needs, and felt more empowered to make important decisions. In a survey of 123 general educators in Utah, USA, Menlove, Hudson, and Suter (2001) found teachers viewed their role within the IEP process as undervalued; decisions were often made without them, their concerns were ignored, or their opinion was never asked for. This lack of input left teachers in this study feeling disconnected from the IEP team.

2.9 Policy

Government and school policy can influence teacher agency. Being able to achieve teacher agency allows greater autonomy over the taught curriculum (Priestley et al., 2015). In countries such as Finland and New Zealand, government policies offer teachers a high level of autonomy by providing a less prescriptive approach to education. In New Zealand, schools can develop their own curriculums to meet the diverse needs of their students and communities using the set national curriculum as a guideline (New Zealand Ministry of Education, 2007). Research demonstrates government policy can disable teacher agency by using a less prescriptive approach to curriculum planning, but demanding more teacher accountability (Buchanan, 2015; Priestley et al., 2015). Through adaptation and appropriation, programmes can accommodate and satisfy government policy and the individual needs of the students, thus enhancing teacher agency (Stillman & Anderson, 2015).

In New Zealand, where government policies such as *National Standards* (NS)⁵ influence how curriculum is created, agentic educators can negotiate policy successfully in a way that meets all students' needs, especially when planning and implementing IEPs. The implementation of NS, which demands more teacher accountability, is challenging for some teachers. Wylie and Berg (2013) found 50% of teachers in their study (n=713) thought the curriculum had narrowed as a result of NS, 44% of teachers required additional support to increase student achievement, and 74% of teachers claimed NS did nothing to support the inclusion of special needs students. Policies like NS affect teacher's agency by placing additional pressure and accountability on the teacher when planning and implementation IEPs

⁵ National Standards are government proposed levels, which students are supposed to achieve during their primary school years. Boards of Trustees and schools are required to report student achievement levels each year to parents and the Ministry of Education.

to achieve the standards, despite the standards potentially being unattainable for some students. Being able to negotiate and appropriate policies like this will allow teachers to develop their agency for the benefit of these students.

2.10 Professional Learning and Development

Mastery experiences drive teachers' skills and knowledge, their professional beliefs about teaching and education, and the values they hold (Priestley et al., 2015; Van der Heijden, Geldens, Beijaard, & Popeijus, 2015). Priestley et al. (2015) argue teachers' past experiences build their agency in their present context. They believe professional learning and development enables agency, so teachers become "resources for judgment and action" (p.5). Van der Heijden et al. (2015) noted teachers who display a willingness to change and are flexible in how they think and reflect, and meet externally placed demands, are agentic.

Teachers report a lack of PLD as a barrier to IEP engagement (Martin, Marshall, & HuberSale, 2004; Thomson & Rowan, 1995). Teachers may feel unprepared to engage in the IEP process if they lack mastery experiences of teaching students with disabilities. Buxton et al. (2015) argue individual's understandings are shaped by the activities they engage in, so it is important to consider the type of PLD available to teachers, which enables their sense of agency. According to Poskitt (2005, p. 137)

[The] acquisition of a knowledge and skills base is gained through active ongoing professional learning, through experience in and reflection on classroom-based practice, deepening theoretical and practical content and pedagogical knowledge, and involvement in professional communities of learning where teachers engage in meaningful dialogue.

This is particularly pertinent to PLD in New Zealand because of the significant impact on student achievement when teachers are given the opportunity to engage in PLD (Timperley, Wilson, Barrar, & Fung, 2007). Timperley et al. (2007) claim current practices in New Zealand of one-day workshops or conferences have little long-term effect on student achievement and it is important that sufficient time is spent on PLD.

There is limited research focused on identifying PLD that enables teacher agency. PLD provides teachers with pedagogical knowledge, which can enable agency. When teachers have access to appropriate PLD, they demonstrate life-long learning, and seek to improve their practice (Van der Heijden et al., 2015), are more willing to try new ideas, have higher self-efficacy, are more flexible in their approach, and respond to changes occurring in the classroom (Buxton et al., 2015). PLD can enable agency when it includes: teaching skills, constructing a positive interdependency, and actively seeking assistance, and enhances self-efficacy beliefs (Pyhältö et al., 2015). Pyhältö et al. (2015) state agency is "embedded in a variety of professional activities ranging from active development work to asking for help in different situations" (Pyhältö et al., 2015, p. 12). While the study did use a large sample of teachers, and produced interesting results that added to the literature gap on teachers' professional learning and agency, the cross-sectional scale was not validated in other countries, and is yet to be replicated in other education systems.

A significant amount of literature supports the need for more in-service PLD in order for teachers to experience higher levels of self-efficacy (See Flannery, Lombardi, & McGrath Kato, 2015; Ingvarson, Meiers, & Beavis, 2005; Kosko & Wilkins, 2009; Tymitz, 1981). An analysis of studies was undertaken in Australia examined the impact PLD had on different factors, including teacher efficacy (Ingvarson et al.,

2005). They found the most effective PLD offered to teachers included opportunities to: learn and focus on content knowledge, work collaboratively with other teachers, reflect on their pedagogical knowledge and practice, and open their classroom practice for critical appraisal by their colleagues. PLD based on inclusive practices has been shown to have a positive impact on student learning, which increases teacher efficacy (Forlin & Sin, 2010; Ingvarson et al., 2005).

There is little research examining the effects of PLD on teacher self-efficacy when planning and implementing IEPs. PLD was found to increase self-efficacy in managing behaviour, inclusive instruction, and working collaboratively with others (Forlin & Sin, 2010). Kosko and Wilkins (2009) examined the relationship between teacher self-efficacy, PLD, and experience when adapting instruction for students with IEPs using data from the Study of Personnel Needs in Special Education (SPeNSE). In a sample of 1126 general education teachers, administrators and paraprofessionals in the USA, they found a minimum of eight hours PLD was required to increase teachers' self-efficacy when adapting instruction for students with IEPs. Kosko and Wilkins (2009) found teachers do not take PLD courses to support teaching students with disabilities. Within New Zealand, there is limited PLD available to teachers regarding the use of IEPs or inclusive education. Courses are limited with teachers often having to resort to further tertiary study at their own cost (Hornby, 2012), or rely on in-service PLD via RTLBs, RTLits, or Special Education Needs Coordinators (SENCO) in their schools.

Pindiprolu, Peterson, and Berglof (2007) examined teachers' views on what PLD was important when implementing programmes for students with disabilities in general education classes. They found PLD was needed, especially to develop

programmes for students with behavioural issues. Teachers' identified needs related to intervention and inclusion strategies, effective collaboration skills, and effective teaching procedures when teaching students with IEPs. Teachers preferred having PLD delivered as either: in service courses, cooperative workgroups with other colleagues at the school site, or a series of brief workshops. Cooperative workgroups were the preferred method of receiving PLD (Little, 2005; Pindiprolu et al., 2007). When teachers are receiving PLD in a manner they choose, at a site they choose, the PLD may be more efficacious and valued by the teachers (Pindiprolu et al., 2007).

The level of teacher preparedness is essential to the success of inclusive education (Carrington & MacArthur, 2012; Tymitz, 1981). Therefore, there is a need for PLD to be delivered in a manner that allows teachers to demonstrate high levels of engagement. High levels of engagement support teachers in developing agency within their practice (Buxton et al., 2015).

2.11 Summary

This chapter outlined teacher agency and its importance to planning and implementing IEPs. Self-efficacy was defined before being discussed in relation to IEPs. Personal and contextual factors influencing teacher agency and self-efficacy were discussed including teaching experience, and collaborative relationships. Teacher perceptions of IEPs from overseas and in New Zealand were explored. Collaboration, the role of the teacher within the IEP, and policy were discussed. Finally, professional learning and development was discussed in relation to teacher agency and self-efficacy when planning and implementing IEPs.

2.12 Research Questions

There is a gap in the literature examining the personal and contextual factors influencing teacher agency and self-efficacy when planning and implementing IEPs. This study aims to address this by exploring the following questions:

- 1. How do teachers perceive their teacher agency and self-efficacy when planning and implementing IEPs?
- 2. What contextual factors influence teacher agency and self-efficacy when planning and implementing IEPs?
- 3. What professional learning and development do teachers find efficacious to enhance their agency and self-efficacy when planning and implementing IEPs?

Chapter 3

Methodology

This chapter outlines the methodology used in this study. The theoretical framework and epistemology of social constructionism is presented. The sequential explanatory design of a two-phase mixed methods approach is outlined. An explanation and justification for the use of an e-questionnaire and semi structured interviews is discussed. The use of purposive sampling and the chosen setting is explained and outlined. Finally, the position of the researcher and ethical considerations of the research will be explored.

3.1 Theoretical Framework

A number of steps were considered before deciding on the methodology used. Crotty (1998) suggests the justification of methods and methodologies involve four elements, and the understanding of epistemology and theoretical perspectives held will shape the methodology and methods. Each step informs the next. A mixed methodology approach to research was used with an interpretative framework of social constructionism.

3.2 Social Constructionism

In response to a growing disenchantment with positivism as an ontology and epistemology, researchers developed an approach that recognises knowledge and meaning are created by people within the social contexts they are in (Tuffin, 2005). Social constructionism acknowledges that peoples' knowledge and reality is constructed through the interaction of others and their lived world, and conducted within a social background (Crotty, 1998; Merriam, 1998). Social constructionism

encompasses the emotional responses people develop through the social settings in which they occur (Savin-Baden & Major, 2013). Researchers interpret the meaning of subjective experiences that participants have (Creswell, 2013). While positivism holds a single truth paradigm, constructionism has multiple truths (Rubin & Rubin, 2012).

The social constructionism epistemology fitted well with this study. The research explored teacher's experiences when designing and implementing IEPs. These subjective experiences gave insight into how teacher self-efficacy and agency was influenced when working through the IEP process, and interpreted in the context of the current educational climate of New Zealand.

3.3 Research Design

Social constructionism takes into account individuals contexts, and their understanding of their lived reality, so when exploring phenomenon in different schools and with different teachers, a mixed approach of quantitative and qualitative methodology allows for richer interpretation than using approach alone (Creswell, 2014). A mixed methodology using a sequential explanatory design was used for this study.

3.3.1 Sequential Explanatory Design

Mixed methodology research uses both quantitative and qualitative data collection methods, before findings are integrated or merged (See Figure 3.1). Findings are then interpreted to gain a rich understanding and address research problems or questions (Creswell, 2015; Plano Clark & Ivankova, 2016). A sequential explanatory design is one of several different designs used in mixed methods. In a sequential

explanatory design, quantitative data is collected and analysed first. Qualitative data is then collected and analysed, and used to explain quantitative findings before inferences are drawn (Creswell, 2015). Emphasis can be given to either the quantitative or qualitative strands (Plano Clark & Ivankova, 2016).



Figure 3.1 Sequential explanatory design used in Mixed Methods Research (Adapted from Plano Clark & Ivankova, 2016).

This study used an e-questionnaire followed by semi-structured interviews with representative sampling of participants. The design allowed participants to share their experiences and provide a deeper understanding of the personal and contextual factors affecting their teacher agency and self-efficacy when planning and implementing IEPs. Each participant had unique experiences with the IEP process and the gathered data needed to reflect these differences.

3.4 Methods

Phase one consisted of an e-questionnaire (See Appendix 4) based on the Teacher Efficacy of Inclusive Practices Scale (TEIPS) (Sharma et al., 2012) and adapted questions from a report examining IEP use in New Zealand schools (Thomson & Rowan, 1995). Research questions can be better addressed by using an e-questionnaire in conjunction with other data gathering methods (Gillham, 2000; Hancock & Algozzine, 2011). For this reason, and in order to gain more in-depth

understanding, the second phase involved four semi-structured interviews (See Table 3.1). These interviews followed up on themes that emerged from the initial phase one data in more depth.

Table 3.1

Data tools and participants

	Data gathering tool	Participants
Phase one	E-Questionnaire	Scale A teachers who do not hold positions of senior management or SENCO in primary schools.
Phase two	Semi-structured interviews	Scale A teachers who do not hold positions of senior management or SENCO in primary schools who offer to participate.

3.5 Phase 1: e-Questionnaire

An e-questionnaire was created using a Likert scale, and a range of open and closed questions to give breadth to the data gathered (Gillham, 2000), in order to gain an understanding of teachers' perceptions about IEPs and their self-efficacy and agency relating to the IEP process. Closed questions can present a limitation to questionnaires (Gillham, 2000), so the e-questionnaire had both closed and openended questions for participants to express and elaborate on their experiences. Some argue that using web-based surveys and questionnaires results in better, more detailed, and comprehensive responses when compared to traditional pen and paper questionnaire (Lefever, Dal, & Matthíasdóttir, 2007).

The researcher chose an e-questionnaire over a standard pen and paper questionnaire to limit the fieldwork required to administer and collect mailed questionnaires, reduce the cost of printing, postage, and data entry, and reduce researcher bias (Gillham, 2000; Kaplowitz, Hadlock, & Levine, 2004; Lefever et al., 2007; Wright, 2005).

3.5.1 Teacher Efficacy of Inclusive Practices Scale

The first section of the e-questionnaire gathered teachers' perceptions of the IEP process and their self-efficacy when planning and implementing IEPs. The Likert scale was placed at the start of the e-questionnaire for ease of use and to encourage participants to complete the whole questionnaire when followed by open ended background guestions (Galesic & Bosnjak, 2009; Gorard, 2001). A range of teacher efficacy scales have been developed and tested in the past thirty years (See Gibson & Dembo, 1984; Sharma et al., 2012; Tschannen-Moran & Woolfolk Hoy, 2001). For this study, TEIPS (Sharma et al., 2012) was selected as it was an adaptation of Tschannen-Moran and Woolfolk Hoy (2001) scale, which incorporated a focus on personal teacher efficacy, with adaptations to measure teacher efficacy using inclusive practice. The scale excludes general teacher efficacy, which takes into account the external factors such as family influence, or socioeconomic factors that can impact on student learning (Tschannen-Moran & Woolfolk Hoy, 2001). Researchers argued that these factors are beyond the control of teachers, and focus should be on a teacher's internal beliefs about their ability to influence the academic outcome of students. (Klassen et al., 2014; Tschannen-Moran & Woolfolk Hoy, 2001). The TEIPS was developed and tested in Australia, which has a similar education system to New Zealand.

3.5.2 e-Questionnaire Items

The second section of the e-questionnaire consisted of a mixture of closed and open-ended questions adapted from Thomson and Rowan's (1995) report on the use of IEPs in New Zealand schools. By using both open and closed questions, participants could elaborate on what they felt enabled and impacted on their ability to engage with the IEP process, supporting the identification of potential enablers and barriers to teacher agency. Participants were able to answer in language that suited them (Gorard, 2001). The use of open questions helped elaborate on teacher ideas of their inclusive practice efficacy and identify themes in order to develop phase two interview questions.

3.5.3 e-Questionnaire Data Collection

The researcher used SurveyMonkey, an online data-gathering tool, to collect the e-questionnaire responses. When compared to the traditional pen and paper surveys, web-based survey response rates are shown to be equivalent, especially if there is advanced notification (Kaplowitz et al., 2004). Lefever et al. (2007) state there is always a risk of fraudulent responses, but this is true of all questionnaires. Information that could lead to the identification of participants such as names, ages, or schools where participants worked was not collected to limit the possibility of participant identification.

3.5.4 Participants in the e-Questionnaire

Primary teachers were selected for this study. The rationale for the selection of New Zealand primary teachers was because most primary teachers will experience the IEP process at some stage during their career. In New Zealand, there is limited

research that specifically examines general classroom teachers' experiences with the IEP process, and or explores factors influencing primary school teachers' agency and self-efficacy when planning and implementing IEPs.

Initially purposive sampling was used to gain participants for the study. Phase one criteria for participation was: Year 1-8 Scale A teachers⁶, without positions in senior management such as assistant or deputy principal, or Special Education Needs Cocoordinator (SENCO), and who had used an IEP in the past twelve months. SENCOs and senior management were excluded because management personnel are often present at IEP meetings, but not always classroom teachers (Thomson & Rowan, 1995). General education teachers also play a crucial role in the implementation of the IEP within the classroom (Mitchell et al., 2010). Kura Kaupapa Māori schools and schools catering for students with disabilities were excluded from this study. The researcher did not have the appropriate language skills to conduct the research in Kura Kaupapa Māori schools, and special schools were excluded because their knowledge of IEPs was more likely to be greater than the average teacher due to the nature of special schools.

Principals of full, contributing, and intermediate schools (N=1298) were emailed and invited to forward the information sheet to teachers within their school. The email contained information for teachers and principals regarding the study and a hyperlink leading to the e-questionnaire (See Appendix 1). At the end of the e-questionnaire, participants interested in being interviewed for phase two could contact the researcher directly via a hyperlinked email address, while retaining the anonymity of their questionnaire data. Completion the e-questionnaire was voluntary so the

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⁶ Scale A teachers – A teacher who does not hold an additional paid position of responsibility or management.

researcher avoided coercion. Follow-up emails were sent to all schools, after three weeks of the e-questionnaire being open.

3.5.5 Setting

Primary schools in the Manawatu, Taranaki, Hawkes Bay, Rangitikei, Tararua, Whanganui, Horowhenua, Wairarapa, Kapiti Coast, and Wellington regions of New Zealand were invited to participate in the study. After the initial email out to these primary schools, the area was extended twice to include the greater Auckland region, Waikato, South Waikato, Rotorua, and the Bay of Plenty. The study was limited to one part of the country due to the timeframe of the study and accessibility and proximity to phase two participants.

3.6 Phase 2 - Semi-structured Interviews

There are many qualitative data collection methods available including: interviews, questionnaires, focus groups, observations, document reviews and audio-visual material (Creswell, 2013, 2014). Interviews offer an opportunity to view perspectives from many angles, and respond to new ideas as they arise (Merriam, 1998; Rubin & Rubin, 2012). Wolgemuth et al. (2015) argue there are a number of positive aspects for participants resulting from interviews including: opportunities to share and connect with others, self-reflect, and become more knowledgeable about a topic.

Semi-structured interviews use pre-set questions but allow researchers the flexibility to focus on particular ideas and keep the interview focused (Savin-Baden & Major, 2013). Some advantages of conducting interviews include receiving information from participants that directly answer some research questions, and added credibility (Savin-Baden & Major, 2013). An identified disadvantage to interviewing participants

involves the time intensive nature of the data collection (Creswell, 2013). The participants were interviewed once, so a semi-structured approach was considered appropriate.

3.6.1 Interview Participants

Interested phase two participants emailed the researcher directly. The researcher then emailed an information sheet containing the interview purpose and procedures (See Appendix 3), and participants replied to confirm their participation. Four teachers indicated interest in participating in semi-structured interviews. There was a range of decile rankings⁷ and teaching experience amongst the four participants (See Table 3.2).

Table 3.2

Participants with Teaching Experience and Decile of School Currently Employed In

Participants ⁸	Teaching Experience	Decile of School currently employed in
Penelope	12 years	5
Julie	3 years	4
Fiona	1.5 years	3
Bethany	12 years	3

-

⁷ Decile ranking is used by the Ministry of Education to establish funding levels and is based on the socioeconomic status of households, house prices, and employment rates in the area. The lower the decile ranking, the more funding for additional resources is given (MoE, 2015c).

⁸ Participants' identities were protected by the use of pseudonyms.

3.6.2 Interview Setting

Interviews took place in the teachers' homes. Conducting face-to-face interviews meant the researcher could develop a positive rapport with participants. This allowed a trusting relationship to be built between, which is an important aspect of responsive interviewing (Rubin & Rubin, 2012). Two participants, at their request, were interviewed using Skype, an online videoconferencing tool. While the researcher preferred to avoid videoconferencing for interviewing, and thus avoid any technical issues such as time lag during the live feed, poor internet connection or internet speed, or equipment difficulties (Sullivan, 2013), this was not possible due to two participants' geographical locations. No technical issues were encountered during interviews that affected the conversation flow, or quality of the data collected.

3.6.3 Interview Data Collection

Interviews were recorded using the Voice Recorder Pro application on an iPad mini. This tool was selected for its ease of use, portability, and ability to store data in the cloud for added security. Each interview lasted approximately forty-five minutes to an hour in length. Interviews were transcribed and returned to the participants for review to ensure accuracy. Checking accuracy is important as errors can significantly affect the validity and reliability of any study (Brink, 1993). Participants completed and returned an authority to release the transcripts when satisfied with the transcript.

The interview schedule was developed after the online questionnaire had been completed and collated. Interview questions (See Appendix 5) emerged from the identified themes of phase one. Probes were used to provide interviewees with the opportunity to expand on ideas and themes if the initial response was limited. This is a distinct advantage to conducting interviews (Merriam, 1998).

To ensure participants had a clear understanding of the interview topic, participants were provided with definitions of self-efficacy and teacher agency. Self-efficacy was defined as "a person's belief in their capabilities". Teacher agency was defined as "a teacher's ability to act in a way that influences student outcomes within the schooling environment they are situated in".

3.7 Data Analysis: Phase One.

The data was analysed using descriptive statistics to identify main themes. SPSS was used to gain the means and standard deviations of questions 1 to 18. Means and standard deviations were examined to establish if there were any statistically significant findings. Qualitative data from e-questionnaire questions 10, 11, 17 to 20 were coded using numbers to establish the frequency of themes as they occurred. Themes emerging from phase one data included: time, support, relationships, parental involvement, other professionals, planning IEPs and implementing IEPs.

3.7.1 Responses

The questionnaire was kept as short as possible to ensure a higher response rate (Galesic & Bosnjak, 2009). The e-questionnaire was designed to take a maximum of 15 minutes to complete. Any longer could have potentially caused a loss in interest, and lower response rate by participants, thus affecting result reliability (Galesic & Bosnjak, 2009; Lefever et al., 2007). Phase one gathered 50 responses in total, of which 42 were deemed useable.

3.8 Data Analysis: Phase Two

A thematic analysis of the data was undertaken. Once checked for reliability and accuracy, the data was manually coded using regularly occurring phrases,

sentences, and longer pieces of text. Codes were then examined for frequency, and then reduced. Codes were grouped together under emerging common themes. Themes were defined, refined, and reduced in order to answer the research questions.

3.9 The Place of the Researcher

A researcher must identify their position in order to identify and minimize bias when interpreting data (Simons, 2009). Participants view their current experiences subjectively, and are influenced by previous experiences (Merriam, 1998; Rubin & Rubin, 2012). A researcher's worldviews, values and perspectives will colour the analysis of qualitative research, because humans are the primary instruments in which data is gathered and analysed (Merriam, 1998). Constructionists understand these biases are unable to be completely eradicated because there are multiple truths to be explored (Rubin & Rubin, 2012).

In this study, the researcher is an experienced teacher and brings her experiences and opinions of teacher agency when engaging in the IEP process. To limit researcher bias and add reliability, the questionnaire replicated an adapted, trialled, teacher efficacy scale, and questions from a previously published report on IEP use in New Zealand. The researcher used the same base questions for each interview. While other probing interview questions were used, applying the same base questions to interviews added consistency to the study.

3.10 Ethical considerations

Ethical research requires the researcher to take into account any potential harm that could come to participants, researcher, or university the researcher is attached to.

Research should be conducted in a manner that preserves a participant's dignity and integrity, while building a trusting relationship between researcher and participant (Simons, 2009). A full ethics review was submitted and approved by the Massey University Human Ethics Committee: Southern B, Application 15/36. Phase two was deemed low risk by the Massey University Human Ethics Committee: Southern B, Application 4000016151.

An information sheet was emailed to all schools' principals and Boards of Trustees prior to data collection (See Appendix 2). Participants expressed their informed, voluntary consent by completing the e-questionnaire. Phase two interviewees gave written consent prior to interviews happening. Risk of harm to participants was deemed minimal. A possible research benefit for participants was the opportunity for teachers to share their experiences of the IEP process. Schools could use this information to review their IEP processes, to further improve educational outcomes for students. No interviewees were known to the researcher. Data on ethnicity was not collected for this study, as the focus was on Scale A primary school teachers, and not specific ethnicity of teachers. A cultural advisor was available should it have been required.

3.11 Summary

This chapter outlined the research methodology and methods employed to gather data in this study. The sequential explanatory design, using an e-questionnaire followed by semi-structured interviews used was. Phase one quantitative data was analysed using descriptive statistics. Phase one qualitative e-questionnaire data was analysed using thematic analysis. Phase two data was thematically analysed to develop themes that addressed the research questions. The researcher's bias was

identified. Ethical considerations were identified and outlined in line with the Massey University Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants (Massey University, 2015).

Chapter 4

Results

This chapter describes the demographics and sample from phase one and two; reports the findings from the e-questionnaire collected in phase one; and the four semi-structured interviews from phase two in relation to the three research questions.

4.1 Phase One Demographics.

Of the 50 primary school teachers who completed the e-questionnaire, 42 e-questionnaires were useable. Eight were rejected as participants had completed less than 75% of the e-questionnaire. While the numbers who participated in the e-questionnaire were low, there was a representation of teachers from all decile rankings and most school types (See Table 4.1). Most participants (88.6%) worked in state funded schools, and 11.4% worked in integrated schools. No participants identified as working in a private school.

Participants were predominantly female (86.4%), 13.6% were male. This is in-line with the current demographics of primary school teachers in New Zealand, where the majority are female (MoE, 2016b). While there was a range of teaching experience represented in the data, most teachers had more than five years teaching experience (See Table 4.1).

Table 4.1

Demographics of Phase One Sample

Demographic	Туре	%
Gender	Female	86.4
	Male	13.6
Decile Ranking	1	11.4
	2	2.3
	3	13.6
	4	22.7
	5	6.8
	6	2.3
	7	6.8
	8	6.8
	9	13.6
	10	13.6
School Type	Contributing Primary	34.1
	Full Primary	43.2
	Intermediate school	20.4
	Area School	2.3
Years Teaching Experience	0-2 years	4.6
	3-5 years	13.6
	5 – 9 years	27.2
	10< years	54.6

4.2 Phase One Results

Firstly, results from phase one regarding teacher perception of IEPs are reported, before presenting the self-reported levels of teachers' self-efficacy in relation to IEP planning and implementation. Finally, results regarding teacher perceptions of professional learning and development (PLD) relating to the planning and implementation of IEPs are presented.

4.2.1 Teacher Perceptions of IEPs.

To establish teachers' perceptions of the IEP process, participants were asked about their views on the utility of the IEP document for teaching purposes and collaboration; the perceived advantages and disadvantages of the IEP process; and their thoughts regarding what could be done to improve the process.

Table 4.2

Teacher perceptions of the Utility of the IEP Process

Question	Answer Options	%
Would you take part in the IEP process if	Yes	83.3
there were no requirement to do so?	No	16.7
I consider that for teaching purposes the	Not useful	4.8
IEP document is:	Useful	66.7
	Very useful	28.5
I consider that to assist me in teaching	Extremely helpful	11.9
students in my class who have special needs, the IEP process is:	Very Helpful	47.6
ricodo, trio 121 proceso io.	Helpful	38.1
	Not Helpful	2.4

Most teachers surveyed believed the IEP was useful and 83.3% would participate in the process, even if they were not required to (See Table 4.2). Most teachers found the IEP process to be helpful (38.1%), or very helpful (40.6%) in regards to teaching students with disabilities. The majority of teachers felt IEPs were useful (66.7%) or very useful (28.5%) for teaching purposes.

4.2.2 Collaboration with Staff and Parents.

Participants were given three options regarding their perceptions of how useful the IEP document was when collaborating with parents and other staff members during the IEP process.

Table 4.3

Teacher Perceptions of the Utility of the IEP Process for Collaboration Purposes

Question	Answer Options	%
I consider that for the purposes of collaboration with parents, the IEP document is:	Not useful Useful	4.8 61.9
	Very Useful	33.3
I consider that for the purposes of collaboration	Not useful	4.8
with teacher aides, and other staff working with the child, the IEP document is:	Useful	54.8
	Very Useful	40.4

Most teachers (40.4%) found the IEP document very useful for collaboration with IEP team members who work with the student (See Table 4.3). For the purposes of collaborating with parents, the majority of participants (61.9%). found the document to be useful.

Some participants (15.4%) felt communication with parents was advantaged by the use of IEPs. No teachers elaborated on why they thought this. A small percentage of phase one participants (10%) felt the process was threatening to some parents. Two participants mentioned parents could find the process intimidating but did not elaborate on how or why. When asked how the overall IEP process could be improved, three teachers highlighted the importance of collaboration with parents with comments such as "Some more interaction with parents and schools so everyone is on the same wavelength."

4.2.3 Collaboration with Other Professionals

When collaborating with other professionals such as educational psychologists, most participants (54.8%) found the IEP document to be useful (See Table 4.3). However, one participant felt this collaboration could be improved if other professionals were more involved and realistic about the nature of the busy classroom. She stated, "If the other education professionals were actively involved in implementing some of the targeted actions. If the other education professionals had a more contemporary understanding of teaching in a classroom with 30 other students." Another participant claimed, "I find input from 'experts' to be very limited as they simply do not know the students very well".

4.2.4 Advantages of the IEP Process

Participants were given a range of factors shown in the literature to be advantages to the IEP process, and were asked to choose one option they viewed as the biggest advantage (See Table 4.4).

Table 4.4

Perceived Advantages of the IEP Process

Advantages of the IEP process	Communication with parents	Support from colleagues	Identification of teaching needs	Ideas for teaching	Access to other professionals
Percentage of respondents	15.4	2.6	53.8	12.8	15.4

Over half the participants felt identification of teaching needs (53.8%) was the greatest advantage to the IEP process. Six participants elaborated on advantages to the process with comments such as "it assists on specifying priority needs as some class teachers need guidance in recognising the finer grained progressions". Four other respondents stated "All of the above" implying there are a number of advantages to the IEP process.

4.2.5 Disadvantages to the IEP process.

Participants were asked to choose one option from a possible six options shown in the literature as disadvantages to the IEP process.

Table 4.5

Perceived Disadvantages to the IEP Process

Disadvantages of the IEP process	Time Consuming	Lack of consultation with teacher	Cultural Biased	Threatening for some parents	Lack of PLD for teachers	Lack of support for teachers
Percentage of respondents	30	2.5	5	10	40	12.5

Forty percent of participants rated a lack of PLD as the biggest disadvantage to the IEP process (See Table 4.5). A third of participants viewed the 'Time consuming'

nature of IEPs as a disadvantage. Five participants elaborated on the time consuming nature of the IEP process with comments such as, "[It's difficult] getting busy teachers to the table and then to use the IEP goals as intended".

One factor identified by 12.5% of participants as detracting from the success of the IEP process was a lack of support for teachers. Two participants elaborated. One participant stated, "Support with the action plan" would improve the IEP process, and another stating "In the past due to lack of ... support I have not really followed through with the IEP".

4.2.6 Perceived self-efficacy in relation to IEP planning and implementation.

Planning. Participants' self-reported self-efficacy in relation to planning IEPs was analysed using descriptive statistics. The scale was rated 1 (strongly agree) through to 6 (strongly disagree).

Table 4.6

Perceived Self-efficacy Relating to Planning IEPs

	N	Minimum	Maximum	Mean	Std. Deviation
Overall self-efficacy regarding planning IEPs.	41	1.00	3.57	1.96	0.587
Collaborate with other professionals (e.g., RTLBs, speech therapists, speech therapists, IWS)	42	1.00	3.00	1.76	0.692
Collaborate with families to plan and review an IEP.	42	1.00	3.00	1.81	0.707
Have a complete understanding of the student's current learning progress so I am able to actively contribute as part of an IEP team.	42	1.00	4.00	1.88	0.705
Actively contribute to planning for very capable students.	42	1.00	3.00	1.91	0.726
Design learning tasks so that the individual needs of students are accommodated.	42	1.00	5.00	2.02	0.781
Use a variety of assessment strategies (E.g. portfolio assessment, modified tests, performance based assessment, dynamic assessment, etc.)	41	1.00	5.00	2.09	0.860
Effectively plan for students with significant learning difficulties.	42	1.00	4.00	2.14	0.751
Valid N	41				

Participants reported high levels of self-efficacy (M=1.81, SD=0.707) when collaborating with families to plan IEPs (See Table 4.6). There was limited variability between scores around the mean.

Most participants reported high levels of self-efficacy overall in relation to the planning component of the IEP process (M=1.9547, SD= 0.5867). This suggests that overall teachers felt confident in their abilities to plan IEPs for students with disabilities (M=2.149, SD=0.7513).

Implementation. Participants' self-reported self-efficacy in relation to implementing IEPs was analysed using descriptive statistics. A scale was rating 1 as strongly agree through to 6 as strongly disagree was used.

Table 4.7

Perceived Self-efficacy in Relation to Implementing IEPs

	N	Minimum	Maximum	Mean	Std. Deviation
Implementation of IEPs	42	1.10	3.30	1.95	0.496
Support parents to feel comfortable about its implementation.	42	1.00	4.00	1.93	0.712
Deliver learning tasks so the individual needs of students are accommodated.	42	1.00	4.00	1.93	0.677
Accurately gauge students' comprehension of my teaching to ensure their goals are met.	42	1.00	4.00	2.07	0.745
Teach very capable students in order for them to meet their goals.	42	1.00	3.00	1.93	0.6005
Get parents involved in the school activities of their children.	42	1.00	4.00	2.33	0.6502
Work with other professionals and staff (e.g. teacher aides, other teachers).	42	1.00	3.00	1.59	0.587
Use a variety of assessment strategies (E.g. portfolio assessment, modified tests, performance based assessment, dynamic assessment, etc.).	42	1.00	5.00	1.98	0.841
Provide a range of adapted learning opportunities for students.	42	1.00	3.00	1.95	0.623
Support the most academically challenged students to achieve some success.	42	1.00	4.00	1.98	0.7805
Help students to believe they can do well in schoolwork.	42	1.00	3.00	1.79	0.682
Valid N	42				

Most participants reported high levels of self-efficacy (M=1.95, SD=0.496) relating to their self-efficacy when implementing IEPs (See Table 4.7). This means participants felt they were confident in their abilities to implement IEPs within the classroom, work with other professionals (M=1.59, SD=0.587), and use assessment strategies during the implementation of IEPs (M=1.98, SD=0.841). When implementing IEPs, participants also expressed high levels of self-efficacy when collaborating with parents by supporting them to feel comfortable about the implementation of IEPs (M=1.93, SD=0.712), and getting parents involved in their children's school activities (M=2.33, SD=0.6502).

There were no statistically significant findings when teachers' self-efficacy was compared to teaching experience, gender, school type, decile, and school authority when planning and implementing IEPs. This suggests that for these participants, their feelings of self-efficacy were unaffected by those variables. Research shows that demographic variables do not usually affect teacher self-efficacy (Tschannen-Moran & Woolfolk-Hoy, 2007). However, given the small sample, these results should be interpreted with caution.

4.2.7 Professional Learning and Development Relating to IEP Planning and Implementation

Participants were asked if they had received PLD for the planning and implementation of IEPs. The majority of participants (78.1%) answered 'no'. Some participants (21.9%) had received some form of PLD. When asked to indicate their satisfaction levels with the PLD participants had received, 14 participants answered the question with results ranging from 35.7% believing the PLD to be unsatisfactory to 7.1% believing the PLD they had received to be excellent (See Figure 4.1).

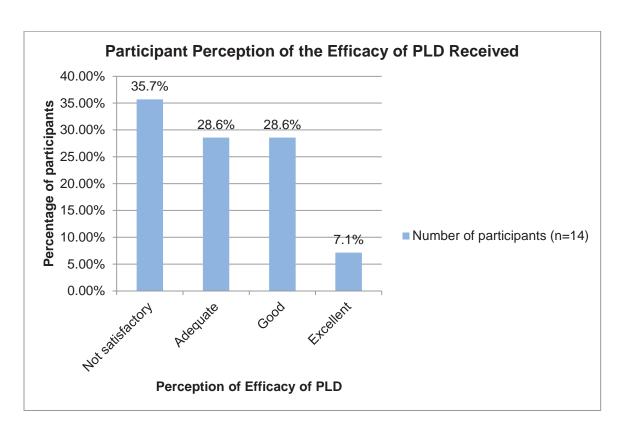


Figure 4.1 Participant perceptions of the efficacy of PLD received regarding planning and implementing IEPs

RTLBs⁹ were the most common providers of PLD to teachers (42.9%), followed by colleagues (35.7%). However, teachers' perceptions surrounding this trainings' efficacy varied (See Figure 4.2). Teachers elaborated with comments such as "PD was as we filled out the IEP" and "I didn't have any PD going into any ILP's¹⁰ [but] I did talk to a colleague". Respondents did not elaborate further on why they felt the PD they had received was inadequate.

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⁹ RTLB – See footnote 2.

¹⁰ ILP – Individual Learning Plan. ILP's are similar to an individual education plan. It is not a commonly used term in New Zealand.

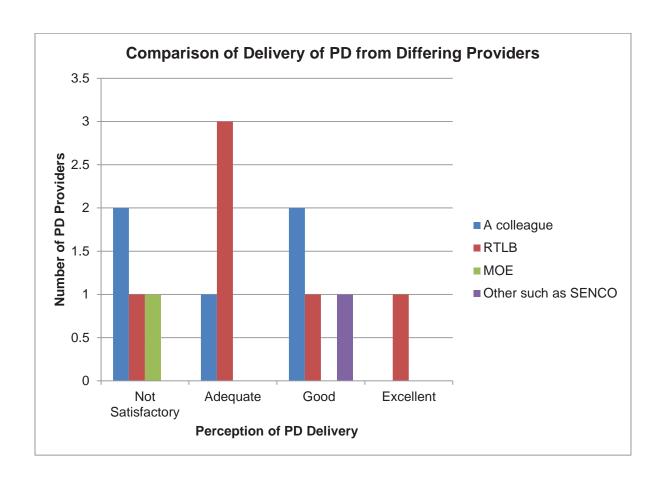


Figure 4.2 Comparison of delivery of PD from differing providers

When asked what participants thought was the most useful delivery to receive PLD to plan and implement IEPs, the majority of participants felt a face-to-face learning format in a professional group was most efficacious (33.3%) (See Figure 4.3). followed by cluster groups of other schools and one-on-one training with a professional from outside of the school. Comments included "or staff meeting - problem with staff meetings is a lot of time can be wasted". No participants felt 'research in my own time' was an efficacious method of receiving PLD.

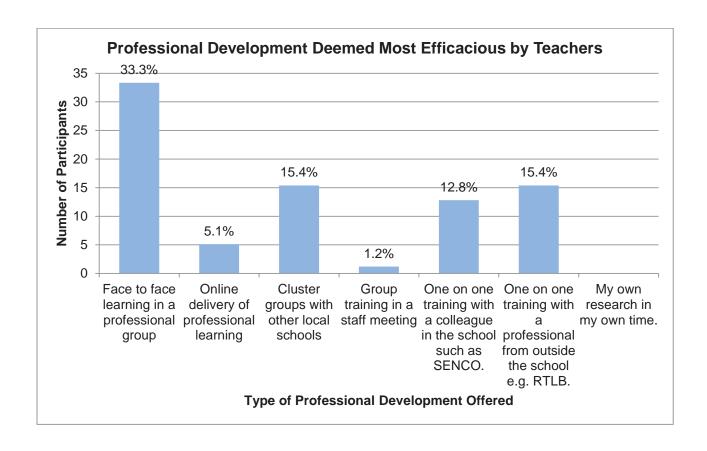


Figure 4.3 Professional development deemed most efficacious by teachers

4.3 Summary of Key Findings from Phase One

Participants reported high self-efficacy in relation to planning and implementing IEPs. The IEP process was perceived to be useful, allowing participants to collaborate effectively with others. Relationships, collaboration, and time were themes emerging from the qualitative data that participants perceived influenced their self-efficacy and agency when planning and implementing IEPs. The majority of teachers had not received PLD for the planning and implementation of IEPs. Those that had received IEPs reported feeling dissatisfied with the PLD they had received. PLD was considered most efficacious when delivered in groups, either at school or in clusters with other schools.

4.4 Phase Two Demographics.

Phase two involved semi-structured interviews with four participants. All interview participants were teaching in state funded, contributing primary schools from a range of deciles and with a range of teaching experience. Participants were given pseudonyms to maintain anonymity (See Table 4.8).

Table 4.8

Demographics of Phase Two Sample

Name	Gender	Years content teaching experience	;	Decile of school currently employed in	School Type	School Authority
Bethany	Female	12	;	3	Contributing	State Funded
Penelope	Female	13	;	5	Contributing	State Funded
Sally	Female	2.5	•	7	Contributing	State Funded
Fiona	Female	1.5	;	3	Contributing	State Funded

4.5 Phase Two Results

The interviews further explored participants' experiences with and perceptions of IEPs, and their feelings of self-efficacy and agency when planning and implementing IEPs. A number of contextual factors influencing participants' agency and self-efficacy are presented. The interviewee's views on PLD and what they consider efficacious delivery are discussed.

4.5.1 Participants' Experiences and Perceptions of the IEP Process

The four participants' experiences and perceptions of the IEP process varied significantly. Three participants described their experiences with the IEP process in

terms of meetings. Sally and Fiona had little experience with the IEP process as teachers. Sally was unsure how the process was supposed to occur. Her SENCO had heavily supported Sally throughout her first experience with the IEP process. Fiona had some experience and a basic understanding with and of the IEP process and principles. Both participants could see a purpose to having an IEP for students with disabilities, especially if IEP team members all shared similar goals.

Bethany viewed the IEP process as a series of meetings that did not enable her sense of agency. She was skeptical about the utility of the IEP. She thought IEPs lacked relevance, as she had the ability to plan and implement programmes for all students. Bethany stated, "...teachers know where they're going. They're dealing with this child every day...." Bethany felt the outcomes did not warrant the time it took to work through the process

Penelope had a positive view of the IEP process. She had participated in at least one IEP team each year in her current school of employment. Her experiences had shaped a positive view of the process. Penelope saw many benefits, including building her pedagogical knowledge, and developing strong relationships that supported her ability to teach students effectively.

4.5.2 Role within the IEP Process

Bethany, Penelope, and Fiona were clear about their role within the IEP process. These participants viewed themselves as active participants with knowledge and skills to offer the IEP team. Most participants described the teacher's role in the IEP process as information giving, goal setting, and providing support for the child.

Participants' involvement in the IEP process ranged from minimal participation to

leading and facilitating IEP teams. Fiona and Bethany described their roles as small in comparison with other team members. Bethany felt her role in IEP meetings was to report her assessment and observations of the child to the other professionals. Prior to her current school of employment, Penelope had limited involvement with the IEP process. She felt she had little to offer those IEP teams. Her confidence grew when she began facilitating IEP team meetings in her present school. Sally described minimal participation in the IEP process. She was unsure of her role within the process, stating, "To be honest, I don't really know if I know". Sally viewed her role as small but felt this was due to her inexperience with the IEP process. She wondered whether her insufficient understanding of the process was a result of the high levels of support she had received or ignorance on her part. Sally described a low sense of self-efficacy, regarding her role in the IEP process.

4.6 Teacher Perceptions of the Personal Factors Influencing Teacher Agency

Results of phase one suggest that a range of personal factors affected their teacher agency. Teacher agency was further explored during the interviews. Personal factors such as having a teacher's voice within the process, strong pedagogical knowledge of teaching and learning, teaching experience, and self-efficacy all influenced participants' teacher agency.

4.6.1 Teacher Voice

Having a "voice" within the IEP process, particularly during IEP meetings, was considered important by some participants to achieve teacher agency. Having a voice and feeling valued led teachers to contribute more effectively to the child's IEP and implement plans successfully. For example Fiona said, "Well I suppose really, it's like having that teacher's voice um [...] yeah, being able to put forward what my

feelings are about what that child might need ..." Bethany stated that when she was able to suggest ideas, and management supported her when implementing IEPs, she was able to achieve more for the child.

4.6.2 Pedagogical Knowledge

Participants felt strong pedagogical knowledge helped them to achieve teacher agency. Participants often related pedagogical knowledge to PLD, and the need for support. For example, Sally felt PLD would enhance her ability to teach students with disabilities, but lacked the PLD to achieve agency. She felt her involvement made some difference in a child's overall education, but little difference to the development of IEPs because "Probably, honestly, because I don't feel I know enough about it...at this point." Sally felt PLD on the IEP process, specific strategies to teach diverse needs, and ways to implement goals successfully within the classroom would enhance her teacher agency.

4.6.3 Teaching Experience

In contrast to phase one findings, phase two participants reported varying self-efficacy depending on their years of teaching experience. Fiona, with 1.5 years of teaching experience, demonstrated high levels of self-efficacy when developing and implementing IEPs, which was in line with other provisionally registered teachers who completed the e-questionnaire. She believed this due to the small amount of PLD she had received. Sally, in her third year of teaching, expressed lower self-efficacy, especially when implementing IEPs. The high levels of support she had received, such as paperwork being completed for her, and the organization of the IEP team and subsequent meetings, may have inadvertently limited her professional growth. This support did not enhance her knowledge of the process: she was not

given either the opportunity to develop a mastery experience by completing the work herself or a vicarious experience as she did not witness the work being completed. This meant sometimes the set goals did not align with what she felt the child required. She found implementing some of these goals challenging. The high levels of support Sally received resulted in a disconnect form the process; she experienced a sense of disempowerment during the planning process, and particularly during IEP meetings.

4.6.4 Teacher Self-efficacy

Participants' levels of self-efficacy enabled and inhibited their achievement of agency. While overall, phase one participants reported high levels of self-efficacy regarding their abilities to plan and implement IEPs, phase two participants described varying levels of self-efficacy in their abilities. Most participants felt confident in their teaching abilities, and this confidence allowed them to make active changes to the way they planned and implemented IEPs. However, Sally's lack of experience with and of the IEP process influenced her self-efficacy. For example, Sally stated: "I'm not super confident. I don't know the process at all".

Fiona and Penelope expressed higher self-efficacy regarding the IEP process resulting from support they received from school management. For example:

"Well...[I feel] relatively confident because you've got so much support and so many other people involved that it's sort of a partnership and everyone's working together" (Fiona)

"I feel like I'm on the right track, and I've got good support. So my SENCO is there to support me, we've got a nice planning format that I can use that helps me think about which areas to target" (Penelope)

For these two teachers, experience with IEPs and supportive relationships with management enhanced their sense of self-efficacy when planning and implementing IEPs. Some teachers in phase one indicated they lacked support during the IEP process, and this negatively affected their self-efficacy.

4.7 Contextual Factors Influencing Teacher Self-efficacy and Agency

A number of themes emerged from the data regarding contextual factors that affect teacher self-efficacy and agency. Participants described their teacher agency as influenced by contextual factors within the schooling environment including: collaborative relationships, time, school policies, and PLD.

4.7.1 Collaborative Relationships

All four participants felt strong, collaborative relationships between IEP team members of parents, teacher aides, school colleagues, and other professionals all influenced teacher agency.

4.7.2 Collaborative Relationships with Parents

Most interviewed participants described and valued supportive, collaborative relationships with parents of students with IEPs. All participants felt confident in their abilities to collaborate with parents, which is in line with phase one data. Some spoke highly of parental involvement, feeling it was a crucial part of the IEP process and helped keep teachers and parents accountable for the IEPs success. These teachers expressed confidence in their abilities to include parents in the IEP process. Penelope stated her confidence had grown as she had become more experienced

with the process, and found it was the parents themselves, through their engagement in the process that enhanced her self-efficacy.

Participants viewed parents who contributed to their teacher agency as proactive, involved, supportive, and shared a level of accountability with teachers regarding students' goals. Penelope felt parents had a lot to offer teachers in terms of knowledge; knowledge of their child, and often on specific disabilities. This knowledge enabled teacher agency, and affected how she planned and implemented IEPs. For example, Penelope felt when parents' shared knowledge of their child; this affected how she interacted with the child in class. She said:

[Parents are] great teachers on how things work, especially because just because a child is autistic, doesn't mean, "Oh I know what that means." Because every child seems to be completely different, even siblings in the same family, completely different...but yes, they teach me so much about how their child works.

This also meant that Penelope felt more confident in implementing and assessing the goals set for the child.

However, some participants felt parental input could restrict teacher agency. When parents' knowledge and expectations of the IEP process, and the support their child should receive, differed from the other IEP team members, their ability to achieve agency was restricted. Two teachers expressed concern regarding a parental lack of understanding of academic goals, and doubt whether parents had the educational knowledge to play an active part in the academic goal setting. Fiona's achievement of agency was restricted when parents were not as supportive as they initially appeared, and did not follow up and support set goals. She wondered if parents had

the appropriate knowledge to help set realistic academic goals. Sally felt her ability to achieve agency was restricted when parents' IEP goals did not align with what other team members felt were important. She thought some parents were naïve in their expectations of state schools, particularly in terms of available funding for children. Sally felt parents could be skeptical about the support children received, but this skepticism was more about parents' own naivety regarding the process than her abilities as a teacher. All teachers felt their confidence was enhanced when there was strong communication and relationships with parents, and realistic goal setting by the IEP team.

Parental voice emerged as a subtheme for some of the teachers. Teachers felt parental voice was critical to the IEPs success, as parents have the best knowledge of the child's capabilities. Bethany stated, "It was good hearing the parent's viewpoints and I probably would have liked more time to hear from the parents than really from the speech therapist, and the play therapist to be truthful." Some participants expressed concern that parents could be intimidated by the process, which prevented their views from being heard by other team members during meetings. For example, Bethany stated,

...When it came up to intermediate school time for her, ahh, I felt maybe the parents were somewhat intimidated then, and didn't speak out because there was a big push to send her to a special needs school and they didn't want that. And I think with all this group talking about this special needs school and pushing, pushing, pushing for it...ummm...they felt a bit intimidated in those meetings.

Reflective of phase one data, where 10% of participants felt the IEP process could

intimidate some parents, all four participants shared these sentiments in different ways. Teachers emphasized the importance of developing strong relationships by welcoming parents into the classroom, regularly contacting parents, and ensuring parental opinions were heard and valued by the teacher. Fiona highlighted that parents could feel intimidated if their own schooling experience was negative, meaning it was important to ensure the relationship between teacher and parent was strong, and trust was maintained throughout the process.

4.7.3 Collaboration with Teacher Aides

Participants highlighted how effective communication and positive relationships with teacher aides (TAs) supported their agency. All participants were confident in their abilities to collaborate with TAs. Participants understood TAs were often untrained, but brought life and work experience to the role. This enhanced teachers' confidence in their TA's abilities to implement goals within the classroom, but not plan programmes for children. Sally stated, "...they are fantastic teacher aides. But it is not their jobs to set...for them to differentiate, to set their goals...it's up to me to plan for him...yet for them to work with him..." Penelope maintained her TA was an integral part of the IEP process, so planning for students with IEPs was done conjointly. She said "Well, the teacher aide and I are touching base constantly in the classroom. So that informs our next steps in our planning". Penelope highlighted the importance she placed on collaboration with TAs when she stated:

I feel it's a really collaborative thing, and I think my teacher aide actually is the person who has the most knowledge in the school setting of this child. So I work really closely with her to nut out what's going on for the child. And I actually go and say, "I'm thinking of doing this during my ORS time. What do

you think?" you know? Yeah, so it's really collaborative.

Communication and support from TAs allowed most participants to teach more inclusively, and the relationships enabled teachers to achieve agency within their classrooms.

4.7.4 Collaboration with School Colleagues.

All participants felt they could collaborate with most of their school colleagues and SENCOs, which enhanced their feelings of self-efficacy and enabled them to achieve teacher agency when planning and implementing IEPs. For example, Bethany stated, "So we bounce ideas off each other, and um, sometimes one of us will have an idea and the other one will either really support it or say nah, nah, nah, you're taking that too far or whatever..."

Participants felt positive relationships and communication between teachers and school management enabled their agency. Teachers reported this communication led to professional learning. For example, Sally and Fiona highlighted the support they received, particularly from SENCOs, as part of ongoing learning conversations regarding the IEP process. While participants rarely mentioned principals during interviews, the comments made emphasized the importance teachers placed on the support and communication they had with school leaders. For example, Penelope stated:

It's not that [school management] watch over my shoulder to make sure I'm doing a good job, but they're definitely involved and they know what's going on. So they can offer advice or suggestions, different things...And they are, in our school, senior management are very accomplished senior educators

themselves, so they've got a lot to offer us and a lot of good ideas and they share that wisdom.

This type of support from senior management enabled these teachers to achieve agency within the IEP process.

School management supported teacher self-efficacy and agency through the development of strong systems, supporting the IEP process, and the implementation new teaching initiatives. For example, Bethany stated, "The management of the school is open. You know anything that teachers want to give a go; they're really open and supportive of..." School management also enhanced teachers' self-efficacy and enabled their agency through provision of PLD for the teachers. Participants who received PLD viewed it as having a positive impact on the implementation of IEPs within the classroom.

4.7.5 Collaboration with Other Professionals

While phase one and two participants reported high levels of self-efficacy when working with other professionals¹¹, they felt these professionals inhibited their achievement of agency. In line with phase one data, no participants expressed strong relationships with other professionals from outside the school. Some participants felt a lack of collaborative relationships between teachers and other professionals restricted their agency. Other professionals within the IEP team were often unknown to the participants. Some participants did not know other team members' names or their role within the IEP team. For example, "So we've been discussing with our Ministry person. I don't know what his title even is". Yet often

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¹¹ Other professionals - This refers to educational or child psychologists, speech language therapists, occupational therapists, play therapists, or other professionals working with the child from outside the school.

employees from the MoE led the IEP meeting. This disconnect between team members had negative connotations for participants. Comments included:

I'm not sure why we needed all these peripheral people [other professionals] to be truthful. (Bethany)

But because they're dealing with much more extreme children I think it makes it hard. [Because] where we see these children need prioritizing, these children need help, [MoE employees are] saying, "Actually, they're not that bad". (Fiona)

These [other professionals], we rarely saw so we weren't working collaboratively with them. (Penelope)

These participants' comments reflect a perceived lack of support from other professionals when planning and implementing IEPs. Phase one results were similar, where participants' qualitative comments implied a lack of input and relationship with other professionals restricted their achievement of agency.

Interviewed participants considered access to supports outside of the classroom would enable their achievement of teacher agency. All four participants described a detachment from other professionals involved in the IEP team and a lack of relationship between teachers and these professionals. Participants often viewed the team members from the MoE as superior in knowledge to others, but this knowledge was not necessarily shared in a way that enabled their agency. Participants emphasised that it was difficult to access support from other professionals. This meant participants found involving these professionals difficult due to their lack of availability. For example, Fiona found MoE employees impacted on her agency

when she had to wait extended periods for available appointments. She mentioned IEP meetings were sometimes conducted without other professionals present due to a lack of availability. This lack of availability meant that some children who should have received an IEP did not receive it in a timely manner. She said:

Well, even getting appointments with [other professionals] can be difficult with her. But I think now they're on to it, and they're realising that actually, we haven't seen her for a long time, and she is ORS funded and actually, she needs to have all this.

Participants viewed interventions such as the RTLBs, RTLits, and Reading Recovery teachers positively, but access to these services was restricted due to limited funding. Fiona highlighted the limited access to interventions due to oversubscription. She thought available funding for children with disabilities was unfairly distributed under current government policy.

4.7.6 Time

Time emerged as a major theme in the phase one data that restricted teacher's achieving agency when planning and implementing IEPs. This theme was further explored during the interviews (See Table 4.9). Three participants had release time available to them for the planning and implementation of IEPs. These teachers used their release time to plan, assess, develop resources, and have meetings with parents or other members of the IEP team. Participants valued their release time and carefully utilised it. How schools structured Ongoing Resource Scheme (ORS) funded release time could support teachers to achieve agency. For example, Penelope's school expected release time to be used by the teacher to work one on one with the child in the classroom, while the release teacher taught the rest of the

class. Penelope was still learning how to best utilise this time but the expectation supported her in developing a strong relationship with the child, and enabled her agency.

Table 4.9

Subthemes Related to Time as a Barrier to Teacher Agency from Phase One Data

Time	Comments
Time consuming process	 It is also time consuming and you can loose (sic) track easily of the main point.
Lack of time for meetings	 Getting busy teachers to the table. Enough time given for meetings with all parties to develop the IEP, rather than trying to squeeze meetings into limited time slots. Time to be part of these meetings and implement IEPs If we could get classroom release for them we wouldn't have to rush them whilst trying to eat a sandwich over lunch!
Lack of time to work within the IEP process	I would say that lack of the time that is needed to conduct them sensitively are disadvantages
	Time given to observe student, find out more about their 'special needs'
	 Allow time for those that are actually affected to sit, collaborate and make resources to help the child and not just plan because the teacher has other students to cater for.
	 Release time provided for each student needing an IEP so that the teacher can do the appropriate research and put programmes in place.
	 In the past due to a lack of timeI have not really followed through with the IEP.
Lack of time for parents to be fully involved	Time-consuming for parents

Participants described the time required to prepare for IEP meetings and excessive meeting length as affecting their ability to achieve agency. Meetings were considered excessively long, and for Bethany, the resulting outcomes did not justify the length of time. Not all teachers were released during school contact hours for the planning and

reviewing of IEPs. This was considered a barrier because, as Sally stated "Time is always an issue. Time is an issue for every part of teaching". Fiona also felt the IEP process required a lot of time to prepare, plan, assess, and implement. Some participants felt increased release time to complete these tasks would be useful, however, the extra time would take them away from their other classroom teaching, and this was also not desirable.

4.7.7 School policies

Participants considered inclusive school policies enabled teacher agency. Some participants highlighted how inclusive school policies supported their teaching by providing IEP guidelines and support. Penelope described "clip on" experiences of inclusive education in schools before her current place of employment, where students with disabilities were considered separate from the rest of the class in some manner. She stated:

I worked in another school with a special needs child and it was more of a clip on sort of experience. That the teacher aide and the child worked in the classroom environment and I included them, but really my main job was inclusion. And then after a while they'd be taken away to do something one on one with their teacher aide so it was more of a clip on sort of experience for me as a teacher.

In terms of achieving agency, Penelope elaborated saying her current school's policies she adhered to had taught her more about inclusive education and the planning and implementation IEPs in the classroom. Penelope said,

I just feel very lucky that I work at my current school...We're a magnet school for [students with disabilities] because we...parent's know that we handle them very well and we're a really inclusive school for them and I think going to any other school from here, I'll take that with me. But I think that if I hadn't worked here, it would all be very scary. You know I wouldn't have the confidence that I do now.

Other participants did not mention school policy to the same extent as Penelope, but mention was made of school policy regarding class size in terms of numbers and physical size of the classroom environment.

4.8 Professional Learning and Development

The majority of phase one participants reported a lack of professional learning and development regarding the planning and implementation of IEPs. This was explored further in phase two. Phase two participants were asked about PLD that had changed how they approached the IEP process, and teaching students with IEPs. Two participants had professional discussions about the IEP process with a colleague before embarking on the IEP process for the first time, and two had "learned on the job". All four participants felt that understanding the IEP process would enable their agency, as there was a lack of knowledge of the process, and uncertainty as to whether the IEPs were being efficaciously planned and implemented.

Three participants felt more PLD was required for effective implementation of IEPs. PLD needed to be specific, and based on teachers' context, experience, and individual needs. For example, Sally thought PLD that was unrelated to her current students would be of little benefit to either the students or her own pedagogy. She

said, "[PD] was almost like, if it didn't relate to you, you tuned out almost...And so it would need to be, for it to be valuable, it would need to be relevant".

Some participants thought PLD that focused on specific disabilities and effective strategies for the implementation of IEPs would enhance their achievement of agency. Penelope had received a significant amount of PLD relating to disabilities such as Autistic Spectrum Disorder, and this empowered her when teaching. However, Sally thought specific PLD was unattainable or unsustainable due to cost and time.

In terms of PLD delivery, three teachers had undertaken day courses related specific disabilities. These teachers reported the learning gained did not necessarily translate into practice when supporting students with IEPs. Researching information by oneself was the least preferred option of PLD delivery in phase one, yet phase two participants often undertook their own research regarding specific disabilities. Other preferred ways of PLD delivery included day courses, and outside 'experts' such as RTLBs running in school sessions. Fiona expressed considered working in cluster groups with other schools was a good way to receive PLD and would ensure that TAs could be involved in the PLD as well.

4.9 Summary of Key Findings from Phase Two.

Teacher's perceptions of the utility of the IEP process varied, depending on participants' experiences and contextual factors. Self-efficacy and agency was enhanced by the personal factors of teacher voice, pedagogical knowledge, teaching experience, and self-efficacy. Contextual factors influencing teacher agency and self-efficacy in relation to planning and implementing IEPs included: collaborative and

supportive relationships within the IEP team, time, school policies and professional learning and development.

Chapter 5

Discussion

This study set out to explore the personal and contextual factors that influence teacher agency and self-efficacy when planning and implementing IEPs. This chapter discusses the main findings of the three research questions in light of the literature. The personal factors teachers perceived to influence teacher agency and self-efficacy when planning and implementing IEPs in this study were: pedagogical knowledge, ability to form collaborative relationships, teaching experience, and knowledge of the teacher's role within the IEP process. The contextual factors found to influence teacher self-efficacy and agency in this study are: collaborative relationships with teacher aides, parents, school management, and other professionals, time, school policy, and professional learning and development (PLD). The themes that emerged regarding efficacious PLD which could enable teacher agency when planning and implementing IEPs were: specific needs based PLD, expert facilitation, and collaborative approach, and availability of PLD.

5.1 Research Question One: How do Teachers Perceive their Teacher Agency and Self-efficacy when Planning and Implementing IEPs?

The main themes emerging from phase one and two data analysis in relation to this question were: pedagogical knowledge, ability to form collaborative relationships, teaching experience, and knowledge of a teacher's role within the IEP process. Each theme is discussed separately.

5.1.1 Pedagogical Knowledge

Participants from both phases expressed high levels of self-efficacy when planning IEPs for students with disabilities. They believed they had the capabilities to plan an inclusive curriculum. This is in line with other research, which demonstrated that teachers with high levels of self-efficacy feel more confident and competent adapting curriculum to meet student needs (Brady & Woolfson, 2008). Findings from this study suggests PLD would support teachers' self-efficacy as increasing pedagogical and subject specific knowledge provided teachers with confidence when planning and implementing IEPs. This in turn would enable teachers to collaboratively plan with confidence, and contribute effectively to meetings. This echoes Forlin and Sin's (2010) research, which found teacher self-efficacy increased after PLD on inclusive practices. All phase two participants expressed a desire for increased PLD to increase their confidence when planning and differentiating the curriculum for students with disabilities. Penelope felt high levels of quality PLD increased her selfefficacy and agency when planning to meet specific needs of students. PLD has been shown to increase teachers' self-efficacy in relation to adapting planned lessons for students with IEPs (Allinder, 1994; Kosko & Wilkins, 2009), goal setting (Flannery et al., 2015), and modifying the curriculum to promote inclusive education (Forlin & Sin, 2010). Providing sufficient PLD that encourages inclusiveness, curriculum differentiation and adaptation, and knowledge of specific disabilities when required by teachers could further support teacher self-efficacy, and agency when planning and implementing IEPs.

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5.1.2 Collaborative and Supportive Relationships

Teachers have interdependent relationships with those around them and these are an important contextual component of teacher self-efficacy (Friedman & Kass, 2002), and agency (Charteris & Smardon, 2015). Participants in both phases reported high levels of self-efficacy when working with parents and other colleagues to successfully plan and implement IEPs. All phase two participants highlighted the importance of collaborative and supportive relationships within the IEP team. Research shows that teachers who work collaboratively are more innovative and experimental in their teaching approach when working with students with disabilities (Allinder, 1994). Relationships were strengthened when teachers felt the other team members valued their input. Ensuring IEP team members feel valued can increase their motivation to engage in the process (Menlove et al., 2001). This study suggests supportive relationships that are formed at the beginning of the IEP process builds an environment, which can allow all IEP team members to feel equally valued.

Most phase two participants experienced enhanced self-efficacy when school management demonstrated trust in them by giving teachers autonomy over the planning and implementation of the IEP. Teachers experience a higher sense of self-efficacy when supported by school administrators and management (Bandura, 1997; Scott, 2011). However, this study found excessive support from school management decreased a novice teacher's self-efficacy. Sally described high levels of support from her SENCO in relation to paperwork requirements and the IEP organization. This support inadvertently disempowered her, leaving her unsure of her role within the process, especially in regards to the IEP meeting. The experience lowered her sense of self-efficacy as it restricted her opportunities to learn through mastery or

vicarious experiences. This study found if inexperienced teachers have the sufficient support that allows them to learn through mastery and vicarious experiences, their self-efficacy and sense of agency would increase when engaging in the IEP process

5.1.3 Teaching Experience

Research demonstrates that teaching experience influences teacher self-efficacy (Bandura, 1997; Hansen, 2005; Tschannen-Moran & Woolfolk-Hoy, 2007). While phase one results demonstrated minimal difference between teacher experience and self-efficacy, this may be due to small numbers of participants with less than five years' experience in this study. Conversely, the amount of involvement that phase two participants had experienced with the IEP process did influence their self-efficacy.

There was a range of teaching experience between phase two participants, from less than three years, to more than ten years' experience. All participants had differing levels of self-efficacy. Fiona, in her first year of teaching, expressed high levels of self-efficacy. This is in contrast to research from the United States, where teacher self-efficacy is often at its lowest in the first year of teaching (Tschannen-Moran & Woolfolk-Hoy, 2007; Woolfolk-Hoy & Spero, 2005). In New Zealand, provisionally registered teachers¹² usually receive considerable support in their first two years of teaching. In Fiona's case, her school's SENCO had spent time with her going through the IEP process and MoE guidelines, which increased her self-efficacy and teacher agency as she began the IEP process for the first time. This professional learning along with the verbal persuasion she received enhanced her self-efficacy. This is in line with research demonstrating the importance of verbal persuasion as

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¹² All teachers in New Zealand are required to teach for two years under the supervision of a mentor teacher before gaining full registration with the Education Council of Aotearoa/New Zealand.

well as mastery experiences for novice teachers to develop self-efficacy (Tschannen-Moran & Woolfolk-Hoy, 2007).

This level of support may not be available to all provisionally registered teachers. Sally was newly registered, and in her first year without the guidance of a mentor teacher. She expressed the lowest sense of self-efficacy of the four participants in phase two, especially in relation to her knowledge of, and her role within the process. Sally had experienced limited involvement with the IEP process, so lacked mastery experiences to draw upon which might enhance her self-efficacy. The verbal persuasion she had received from her SENCO should have increased her selfefficacy. In this case, it did not. This is not unusual as verbal persuasion can increase self-efficacy in novice teachers, but require mastery experiences as well (Tschannen-Woolfolk & Hoy, 2007). However, Tschannen-Woolfolk and Hoy (2007) argue that novice teachers, with lower self-efficacy, are more reliant on their colleagues for support. As the teacher becomes more experienced, and has mastery experiences to draw upon, the need for verbal persuasion decreases. This study found that more experienced participants' demonstrated higher levels of self-efficacy in relation to the planning and implementation of IEPs. As self-efficacy beliefs are developed in the initial years of teaching, and can be resistant to change once formed (Tschannen-Moran & Woolfolk-Hoy, 2007), this study highlights the importance of providing novice teachers with opportunities to engage in the IEP process, in order to develop mastery experiences if high levels of self-efficacy are to be developed.

Teaching experience influences self-efficacy and agency when planning and implementing IEPs. Teachers' beliefs in their abilities to successfully plan and

implement IEPs will increase through mastery and vicarious experiences. Verbal persuasion is particularly important for inexperienced teachers, and providing verbal support and encouragement is imperative if teachers are to develop self-efficacy that persists throughout their careers (Tschannen-Moran & Woolfolk-Hoy, 2007).

5.1.4 Teacher Role in the IEP Team

Uncertainty regarding the teacher's role within the IEP process and particularly in the IEP meeting influenced the self-efficacy and agency of some participants. The role of the teacher and special education teacher are integral to the IEP process (Mitchell et al., 2010). When participants lacked an understanding of the role they played within the IEP team and process, this influenced how much they felt they could contribute to IEP meetings. A lack of familiarity of the teacher's role within the IEP team has been shown to influence how much teachers will contribute to the IEP meeting (Martin, Marshall, & Sale, 2004). In this study, teachers who were familiar with their role in the IEP team, and the expectations of others within the process, experienced enhanced self-efficacy, and agency when planning and implementing IEPs.

Some phase two participants perceived their role within the process was to provide information, such as behaviour observations and curriculum assessment, for the benefit of other professionals. This implies for some teachers, insufficient understanding of the teacher's role may have contributed to a perceived lack of collaboration within the IEP team. Bethany did not feel the input from other professionals supported her ability to implement IEPs as successfully as she would have liked. When teachers feel supported by other IEP team members, they were more likely to feel positive about the process (Nevin, Seemel & McCann, 1983, as cited by Menlove et al., 2001). This study suggests a lack of understanding of and

limited experience with the IEP process results in a lack of mastery experiences for teachers to draw upon, and therefore build their self-efficacy when planning and implementing IEPs.

This study suggests the perception's teachers hold regarding the roles of other professionals who came from outside the school, such as the Ministry of Education (MoE) can influence teacher self-efficacy, and enable or inhibit their agency. Other professionals within the IEP team can be perceived as 'experts', especially if the team member appeared to have more experience and knowledge of working with students with disabilities than the teacher. For these participants, perceptions of other participants as experts lowered their sense of self-efficacy to contribute to the IEP meeting. Teachers felt their contribution was not always valued by other team members. When teachers feel undervalued within the IEP process, they are less likely to engage in IEP meetings (Menlove et al., 2001). This suggests some phase two participants may have high levels of self-efficacy to plan and implement IEPs, but within the IEP team, a perceived disconnect between what participants thought was their role, and how they perceived others' roles, inhibited their agency. For some participants, these perceptions lessened their engagement in the process. The MoE guidelines (MoE, 2011) do not explicitly state which team member should lead or facilitate the IEP process. However, IEP Online (MoE, 2015a) states the teacher should take leadership of the IEP meeting. This lack of clarity regarding the role teachers' play may be one reason why some participants did not believe they had a strong voice within the process. In this study, when participants understood their role within the process, and felt that their opinions were valued, their sense of teacher agency and self-efficacy were increased.

5.2 Research Question 2: What Contextual Factors Influence Teacher Agency and Self-efficacy when Planning and Implementing IEPs?

The main themes emerging from phase one and two data analysis relating to contextual factors that influence self-efficacy and teacher agency were: collaborative relationships, time, and school policies. Each theme is discussed separately.

5.2.1 Collaborative Relationships

Teacher agency is highly relational and involves a reciprocal and collaborative relationship between teachers, parents, and school management (Pyhältö et al., 2015). Agency is achieved through the interplay between teachers in the schooling context. One identified theme influencing teacher agency when planning and implementing IEPs was the collaborative nature of relationships required within the IEP team. Collaboration between team members is at the heart of all IEPs (MoE, 2011). Therefore, collaborative relationships are essential between teachers and parents, teacher aides, school management, and other professionals to enable teacher agency when planning and implementing IEPs.

5.2.2 Collaborative Relationships with Parents

A number of studies highlight the importance of collaboration and communication with parents when planning and implementing IEPs (Fish, 2008; Hornby & Witte, 2010; Lytle & Bordin, 2001; Mitchell et al., 2010). This study found collaborative relationships between teachers and parents enabled teacher agency to plan and implement IEPs when both teacher and parent worked towards a shared goal, and acted in a manner that supported the student's achievement. In both phases of this research, participants reported high levels of self-efficacy relating to their ability to

work and engage with parents during the planning and implementation of IEPs.

Communication and establishing positive relationships with parents were key factors to enabling teacher agency when planning and implementing IEPs.

Frequent and open communication encourages parental support during the planning and implementation of IEPs. Regular communication increased participants' sense of agency as they felt supported in the way they taught, and they were working collaboratively towards shared goals with the parents. Parents are more willing to be supportive of teachers and the IEP process when they feel treated as equals (Fish, 2008), and frequent, regular communication is one way teachers and foster positive relationships. Findings from this study suggest that when parents supported how IEP goals were implemented, teachers could implement programmes more successfully.

Participants reported high levels of self-efficacy when involving parents in the planning and implementation of the IEP. Some participants from both phases were aware of potential cultural biases in the IEP process, and acknowledged these could create barriers to positive relationship with parents. This means some teachers were required to act in a proactive manner to ensure the process was culturally inclusive. Taking into account a family's culture can enhance relationships, as the family will feel more valued within the process (Mitchell et al., 2010). Ensuring teachers are provided with adequate PLD to support them working with parents from diverse backgrounds is important if families are to be effectively included in the IEP process (Hornby & Witte, 2010).

Most participants were positive about parental involvement in the IEP process. Some barriers to enhancing teacher agency identified by participants included parental

knowledge of the education system; expectations of the schooling system; and available support. This study found when parents lacked knowledge of the IEP process or had certain expectations of the schooling system, this prevented teachers from acting in a way that benefited the child and lead to frustration within the IEP team. This resulted in inappropriate or unachievable goals being set and affected the way teachers were able to teach. Participants felt when parents were well informed about the support available to their child; their expectations were more realistic, and lead to a collaborative, honest, and open relationship. Educators can be proactive when working collaboratively with parents. Acknowledging each party may have differing goals and agendas; attitudes towards the process may differ; and the language used during the process is understood by all can ensure parents are more involved (Hornby, 2011). Relationships have been shown to strengthen when parents learn more of the IEP process, and teachers become more educated on specific disabilities (Fish, 2006). Positive parental relationships allow teachers to confidence plan and implement IEPs confidently, and increase their sense of teacher agency.

5.2.3 Collaborative relationships with teacher aides

There is a level of interdependence and support required from IEP team members, including teacher aides (Lytle & Bordin, 2001). Findings from this study suggest teacher agency is achievable when participants have collaborative relationships with their teacher aides (TAs). Phase two participants identified TAs as key members of the IEP team. They considered TA's abilities to contribute to the planning and implementation of IEPs as crucial to the IEPs success. Some participants thought TAs had the greatest knowledge of the student within the school setting. All phase

two participants described TAs as having a high level of responsibility for implementing IEP goals and differentiated curriculum when working with the student, and valued their contributions. TA's roles differed greatly depending on the expectation of the school and classroom teacher. Research shows that a TA's role often goes beyond the primary role of supporting a student, and can include planning and implementing programmes without any formal training (Harris, 2015). This study suggests previous positive experiences when working collaboratively with TAs to plan and implement IEPs enables teacher agency; previous positive involvements with TAs will develop mastery experiences, thus enhancing teacher self-efficacy (Bandura, 1997). Teachers' past experiences can influence how they view their capabilities to act and interact with TAs in the present and future. This study suggests TAs can support teachers during both the planning and implementation of IEPs, especially when teachers value their input. The support TAs provide becomes an important factor in increasing teacher agency as they plan and implement IEPs.

Phase two participants had positive collaborative relationships with their TAs when there was a shared understanding of each other's expectations and roles were clearly defined when planning and implementing the IEP. TAs who were highly involved with the planning and implementation of IEP goals were trusted by teachers to support them in the curriculum delivery to the student, regardless of the TA's level of formal teaching or education qualifications. Sally described how her relationship with her TA during the planning phase of the IEP affected her agency. She felt it was not a TA's job to plan differentiated programmes as they lacked the formal teacher training to do this. This implied she viewed her own abilities to plan for students as having a greater impact on student outcomes than the collaborative relationship she shared with her TA. Rutherford (2012) argues knowledge of the curriculum is

required in order to decisions to be made regarding a student's learning. Often this task has been known to fall to TAs in classes where students with disabilities are treated in an exclusionary manner. Teachers and TAs should be working collaboratively within an inclusive schooling environment, and have clearly defined roles and expectations of each other, if they are able to support students' educational and social growth within the class (Rutherford, 2012).

Collaborative relationships lead to cohesive planning and implementation of IEPs (Lytle & Bordin, 2001; Mitchell et al., 2010). When there is ambiguity about the role of the TA within the IEP process, there is less cohesiveness. IEP team members require clearly defined roles to ensure a supportive and positive working environment occurs, leading to improved student outcomes (Lytle & Bordin, 2001). This study suggests teacher agency is achievable when schools provide clearly defined roles and appropriate training to TAs to support them to work collaboratively within the IEP team. Appropriate PLD for TAs has been shown to benefit how they work in the classroom (Butt & Lowe, 2012). This will provide teachers and schools with further confidence in TA's abilities to effectively collaborate within the IEP team, and thus support teacher's actions to enhance student outcomes.

5.2.4 Collaborative Relationships with School Management

Teacher agency can be achieved through collaborative relationships with school management. Phase two participants highlighted the importance of supportive school leadership if teachers were to achieve agency when planning and implementing IEPs. Support from school management could include providing teachers with higher degrees of autonomy over how they negotiate the curriculum to ensure inclusion in the class (Eteläpelto et al., 2015), and shielding teachers from

the pressure of government policy (Wenner & Settlage, 2015) such as National Standards, through provision of adapted school structures to accommodate the policy. The provision of these opportunities will allow teachers to be proactive in how they approach inclusive education and IEPs in the present, and influence student outcomes in the future when planning and implementing IEPs.

When school management allowed participants a sense of autonomy when implementing an IEP, these participants expressed high levels of engagement and motivation with the process. Supportive school leadership increases teacher self-efficacy and teachers with high self-efficacy are more willing to engage in new practice and ideas (Bandura, 1997; Tschannen-Moran & Woolfolk Hoy, 2001). Agency was achieved when management provided support to implement new ideas and practice. This implies that students who are taught by engaged, motivated, and supported teachers will experience improved IEP outcomes.

5.2.5 Collaborative Relationships with Other Professionals

There is a lack of research examining how collaborative relationships with other professionals such as educational psychologists or occupational therapists can influence teacher agency, especially in relation of the IEP process. Lytle and Bordin (2001) argue professionals such as these have an important role within the IEP process, but they should be respectful of other team members' perspectives. In this study, participants expressed a lack of collaborative relationships between themselves and other professionals, but a lack of relationship did not necessarily affect their teacher agency. Participants found ways to negotiate barriers and still work in a collaborative manner with the rest of the IEP team. Participants believed government policy influenced their agency by preventing easy, regular access to

higher levels of support for students with IEPs. Participants' past experiences significantly influenced their views of other professionals, particularly MoE employees. The lack of relationship between participants and other professionals caused some participants concern. Regular contact between professionals and other IEP team members is crucial if constructive relationships are to be formed in the IEP team (Lytle & Bordin, 2001). Contact from other professionals was often insufficient for positive and collaborative relationships to be formed with teachers. The lack of relationship and availability of other professionals limited some teachers' agency. Some participants felt they were unable to plan IEPs in a timely manner due to a lack of contact from other professionals, or receive the support or funding they required when planning and implementing IEPs. School leadership can support teachers to be released in order to accommodate the time required to work with other professionals (Mitchell, 2013). Some participants had low expectations of the support they expected to receive from other professionals. This study suggests teacher agency is negatively impacted when there is a lack of engagement and interaction between teachers and other professionals which prevents them from acting in a manner that would best support students when planning and implementing IEPs.

5.2.6 Time

The lack of time available to teachers to fully participate in the IEP process was considered a major barrier to teacher agency by some phase one and two participants. The amount of time IEPs take to plan and implement, and the lack of time available for teachers to fully participate in the process has been found to affect engagement with the IEP process (Prohm, 2015; Thomson & Rowan, 1995). This is unsurprising given the busy nature of the teaching profession. As Sally stated,

"There's not enough time for anything". Research shows teachers feel more time is required to plan for students with disabilities (Avramidis, Bayliss & Burdin, 2000). This study found more time was desired by participants to also attend meetings, assess and observe children, and work one-on-one with them. The time taken to work through the process, especially when rushed, and with some team members unable to participate meant the IEP could lack all perspectives.

This study suggests school management can support teacher agency by providing teachers with adequate time to work through the IEP process. While providing release time for teachers and other members of the IEP team, such as SENCOs and TAs can be costly, when all members of the IEP team are adequately prepared and able to participate, the resulting IEP process will be improved.

5.2.7 School Policies

Teacher agency is influenced by the context within which it occurs (Priestley et al., 2015). With increasing accountability for schools regarding student achievement, this study suggests school policies supporting inclusive education and providing clear guidelines for the planning and implementing IEPs will influence teacher agency. Penelope described how school policies influenced her actions when planning and implementing IEPs by providing clear expectations and guidelines of the IEP process, and how release time for ORS funded students was used. She was able to act in a manner that best supported students because she was aware of professional expectations, and any contextual limitations there were when working through the IEP process. Buchanan (2015) argues teachers will behave in a manner that aligns with their school and professional context. This study implies that teacher agency is

achievable when teachers are empowered through a supportive and inclusive school policy.

5.3 Research Questions 3: What Professional Learning and Development do Teachers Find Efficacious to Enable their Agency when Planning and Implementing IEPs?

Having access to PLD when teachers need it is important if they are to achieve agency to develop IEPs in the future (Van der Heijden et al., 2015). PLD can positively influence student achievement when delivered over a period of time and with the right expertise (Timperley et al., 2007). Therefore, the need for PLD relating to planning and implementing IEPs is important. Analysis of phase one and two data uncovered the following themes relating to what PLD was deemed efficacious to enhance teacher agency when planning and implementing IEPs: Specific needs based PLD; collaborative delivery; expert facilitation; and availability.

5.3.1 Specific Needs Based PLD

A desire for specific, needs-based PLD that supports understanding of the IEP process and how to implement the IEP plan into the classroom, and increases their knowledge of specific disabilities would be beneficial for teachers. Penelope and Fiona had received PLD, which enhanced their self-efficacy and supported their teacher agency in relation to inclusive education and IEPs. When PLD was specific to the teacher's needs, participants felt empowered. Pindripolu et al. (2007) argue specific strategies and skills are required to effectively teach students with disabilities. Penelope's school leadership had a proactive approach to PLD, allowing teachers to attend courses and conferences that enhanced their capabilities when teaching students with disabilities. She found these courses useful as they enhanced

her knowledge of disabilities, and gave her ideas and strategies when planning and teaching students with disabilities. This approach of providing teachers with one-off PLD opportunities will adequately address specific learning needs when information is being received, such as information about specific disabilities, or alerting teachers to new teaching ideas (Timperley et al., 2007). High self-efficacy levels enable teacher agency. However, it has been argued that in order to increase teacher self-efficacy, PLD should be delivered over a longer periods of time, to allow for teachers to put new ideas into practice, and observe changes in student outcomes (Kosko & Wilkins, 2009; Poskitt, 2005). By applying new teaching knowledge with fidelity, teachers create mastery experiences for themselves. Self-efficacy was enhanced for some teachers in this study after needs based PLD. They were able to implement ideas, and having created mastery experiences for themselves, their teacher agency also increased when planning and implementing IEPs. Teacher agency is achieved through the enactment of teaching practices (Riveros, Newton, & Burgess, 2012).

Some phase two participants believed that receiving PLD in a 'just in time' basis supported their agency when planning and implementing IEPs. Prior to teaching, Sally worked as a teacher aide in Germany, where she received PLD in the form of short day courses on a range of specific learning disabilities. She felt this type of PLD was useful, but lacked relevance to her at the time she received it. Sally thought if PLD was not used immediately after receiving it, then the learning would be lost. The teaching as inquiry model (New Zealand Ministry of Education, 2007) utilised in New Zealand schools can support teachers to achieve this 'just in time' learning, and can provide teachers the opportunity to identify needs as a professional, research appropriate information and interventions, and reflect on their practice in order to make future changes to how they teach. This three-phase inquiry model increases

teacher agency by identifying the specific needs of the student/s, and then requiring teachers to inform their practice based on research in order to enhance student outcomes. Effective PLD should require teachers to question their practice, and become adaptive in their approach (Professional Learning and Development Advisory Group, 2014).

5.3.2 Collaborative Approach to PLD

In line with other research demonstrating that collaborative practices influence teacher agency (Ingvarson, 2005; Riveros et al., 2012), participants of this study desired PLD that included opportunities to co-construct and share knowledge with other teachers, and across schools to enhance their sense of agency and self-efficacy. Professional learning communities have been shown to reinforce the currently used teaching practice through talking and collaboration of teachers, but when teachers are supported by experts to consider the impact of learning on their teaching, teacher and student learning is enhanced (Timperley et al., 2007). Collaborative communities of learning are most effective when structural constraints of schools affecting teacher agency are taken into account (Riveros et al., 2012).

Participants in phase one reported finding research on their own was the least favourable or efficacious method of receiving PLD that would enable their agency. This is in line with other research demonstrating self-study is not a preferred form of PLD delivery for teachers (Das, Gichuru, & Singh, 2013). New Zealand teachers are expected to undertake research throughout their careers, in order to seek efficacious teaching methods for working with the diverse needs of students. The current teaching as inquiry model employed in New Zealand schools requires teachers to conduct their own research in order to improve teaching practice. Research shows

professional learning conversations with colleagues are required if there is to be change to student outcomes and achievement (Timperley et al., 2007), and these conversations can enable teacher agency (Charteris & Smardon, 2015). This study suggests isolating individual teachers to seek their own PLD would not necessarily enable teacher agency because the research found may not be in congruence with contextual structures of their schools policies or philosophies. School leaders can support teachers by providing a supportive learning culture for teachers, giving teachers opportunities to learn, and having a clear vision of how the professional learning can positively influence student outcomes (Timperley et al., 2007).

5.3.3 Expert Facilitation

Participants in this study reported PLD by an expert facilitator with a high level of knowledge would enable their teacher agency. While Timperley et al. (2007) argue delivery of PLD from external experts did not guarantee the PLD would successfully lead to a change in teacher actions and student outcomes, for these participants, there was significant value placed on knowledge gained from these experts. Some phase two participants expressed excitement regarding information and ideas they had gained from expert facilitated PLD, and felt this translated into understandings they could act upon within their planning and implementation of IEPs. Phase two participants often viewed other professionals as experts. This perception does not allow for teachers themselves, to be considered experts, and does not acknowledge the vast knowledge that teachers can contribute to the IEP process. Ingvarson et al. (2005) argue professional courses delivered by expert facilitators, and opportunities for teachers to work and learn collaboratively are also effective PLD. Research shows teachers prefer PLD to include working in teams, with modeling of strategies

by experts, and support for the PLD from school management (Bryant, Linan-Thompson, Ugel, Hamff, & Hougen, 2001), as well as utilizing experts from outside the school setting (Cordingley, Bell, Thomason, & Firth, 2005).

5.3.4 Availability

Teacher agency is achieved through the interplay of individual effort, as well as social, knowledge, and physical structures, and available resources (Biesta & Tedder, 2007). This study indicates for these participants to achieve agency when planning and implementing IEPs, they need access to appropriate, effective, needs based PLD.

Thomson and Rowan's (1995) research demonstrated over 50% of teachers in their study had received PLD in relation to IEPs. However, the majority of participants in this study had not received PLD in relation to planning and implementing IEPs, and still reported high levels of self-efficacy. The difference in results may be a result of the small sample size of this study, compared to Thomson and Rowan's larger study. This means for the participants in this study, there was no relationship between receiving PLD and their levels of self-efficacy. There are a number of reasons why participants may not have received PLD relating to IEPs and education for students with disabilities. These may include: a lack of availability of the required PLD, lack of available funding within the school, a lack of desire from teachers for specific PLD on the planning and implementation of IEPs, or different identified priorities for school wide PLD. Kosko and Wilkins (2009) found that teachers do not take courses that support their pedagogical knowledge of inclusive education. School leadership and PLD providers should place an emphasis on the provision of quality PLD for teachers. This will support teachers, who currently may be are forced to seek PLD at

their own cost, due to a lack of availability of courses in New Zealand (Hornby, 2012).

5.4 Summary

This chapter outlined the discussion of the three research questions. A number of personal and contextual factors were found to influence teachers' self-efficacy when planning and implementing IEPs. Knowledge of the teacher's role within the IEP process, and teaching experience affected teacher self-efficacy and agency for some of the participants in this study. When participants had collaborative and supportive relationships with parents, school management and other colleagues, they experienced increased self-efficacy and could achieve agency during the IEP process. Time, inclusive school policies, and increased professional learning and development were contextual factors influencing teacher agency for these participants. This study suggests for these participants, professional learning and development enhanced teacher efficacy when it was available, delivered by experts, in a collaborative manner with other teachers, and targeted on teachers' specific needs in order to best plan and implement IEPs for students with disabilities.

Chapter 6

Conclusion

This chapter outlines the conclusion, implications, future research possibilities, and limitations resulting from this study.

6.1 Conclusion

This study examined the personal and contextual factors influencing teacher agency and self-efficacy when planning and implementing IEPs. For the teachers in this study, their previous experiences shaped their beliefs in their capability and ability to plan and implement IEPs. This study argues when teachers have high levels of selfefficacy, they can collaborate with others, plan, adapt, and assess effective classroom programmes in ways that benefit students with disabilities, and their families. Teachers achieve this sense of self-efficacy when they feel they have the knowledge, the teaching experience, and the ability to form collaborative relationships with parents, other colleagues including school leadership and teacher aides, where they feel supported, and have a level of autonomy and trust. Teacher agency was achievable for these teachers when they had time, support from their colleagues, and collaborative relationships. Professional learning and development was considered an influencing factor on teacher agency, as PLD increased their selfefficacy when planning and implementing IEPs. These teachers thought they could have a high sense of self-efficacy, but contextual factors could enable, or place barriers to their achievement of agency.

Most participants in this study reported high levels of self-efficacy when planning and implementing IEPs despite a lack of PLD, This lack of PLD affected their sense of

teacher agency, as they felt knowledge and skills gained from PLD would empower them. In order to increase their teacher agency, this study suggests when professional development is individually needs based, specific in content, based on their identified needs, delivered by experts in their field, and conducted in a collaborative manner that allows them to draw on the knowledge of research and practice based evidence of their colleagues, that teacher agency was more achievable when planning and implementing IEPs.

6.2 Limitations

There are a number of limitations to this study that should be considered when interpreting the results. Firstly, the overall results are unable to be generalized to the wider teaching population in New Zealand due to the small number of participants. However the data presented helps to identify barriers and enablers to self-efficacy and teacher agency for teachers in the area. The low number of phase two participants means that their stories about their teacher agency and self-efficacy are their experiences, and not the experiences of all primary teachers in New Zealand. There were no statistically significant differences in self-efficacy when gender, decile rating, school type, or school authority were considered. Given the small number of participants in both phases, this may not be the case across all of New Zealand. Further research with large participation numbers may yield different results.

A large majority of participants in this study reported high levels of self-efficacy when planning and implementing IEPs. This does not mean all New Zealand teachers have high self-efficacy when they plan and implement IEPs, but rather these participants did. A larger sample may not generate the similar results. There were a number of reasons there were low participant numbers. The criteria excluded

principals, senior management, and SENCOs, and schools with low roll numbers where there was a teaching principal. Another reason for the low response rate may have been the length of the e-questionnaire. Adams and Gale (1982) found that shorter e-questionnaires of three pages or less had a higher response rate. The researcher emailed out the e-questionnaires during the first term of the school year. The first term of the school year is often one of the busiest for teachers. Principals and teachers may not have viewed research e-questionnaires as a priority during this time of year. Gate-keeping by principals, school secretaries, and office administrators may have meant the survey was not passed on to teachers, and thus protecting them from excessive workload.

The e-questionnaire was unable to be pilot tested due to time constraints of the study. Research demonstrates the importance of pilot testing of e-questionnaires in order to refine and establish an effective survey (Johnson & Christensen, 2014). The reliability and validity of results may be questioned, and therefore not able to be generalised.

In relation to phase one data, the e-questionnaire was self-reported. Observations of participants were not undertaken to examine if self-reported behaviours and observed behaviour in the classroom aligned which limits generalisability. Self-reporting can create a response bias. While this study used a tested self-efficacy scale, this scale was adapted to fit this study, and was unable to be trialled due to time constraints. The majority of participants were female, which may also have given a gender bias to this study. Further research on how male primary teachers perceive their self-efficacy and agency in implementing IEPs and inclusive education may be beneficial.

Interviews were conducted face-to-face, either in person or with the use of Skype. A lack of internet access or possibilities of disruption during the interview can present barriers to participation in interviews when using Skype (Deakin & Wakefield, 2014). For this study, providing participants who were not in close geographical proximity with the option Skype or traditional face to face interviews increased participation, and decreased cost and time to the researcher.

6.3 Implications

Inclusive education is achievable when teachers have high levels of self-efficacy and agency within schools, especially when planning and implementing IEPs for students with disabilities. School leadership plays a crucial part in ensuring that teachers achieve agency when planning and implementing IEPs. Ensuring staff have necessary time, professional learning and development (PLD), and inclusive school policies are some ways that school leadership can support teachers in achieving agency. PLD for teachers and teacher aides with focus on working with students with disabilities and the IEP process would be beneficial (Butt & Lowe, 2012), as well as ensuring parents have the appropriate knowledge and are supported when working within the IEP team. Providing individually needs based PLD that is led by experts in inclusive education and IEPs, gives teachers the opportunity to work collaboratively with others will be beneficial to teacher practice when planning and implementing IEPs. Including TAs in this PLD will allow the teacher to work more collaboratively with them when planning and implementing IEPs.

6.4 Future Research

This study focused on how personal and contextual factors affected teacher selfefficacy and agency when planning and implementing IEPs. This study did not examine how principals, senior management, parents, or other invested parties such as Ministry of Education employees viewed their self-efficacy and agency within the IEP process in primary schools. Further research that addresses how these IEP team members perceive their self-efficacy and agency within the process would be useful to help deduce the utility of the process.

Teacher self-efficacy and agency in secondary school teachers was not undertaken in this study. Investigating how secondary school teachers perceive their self-efficacy and agency when planning and implementing IEPs given the different nature of secondary schooling to primary, would be beneficial for school leadership teams, teachers, students and their families as students' transition from primary to high school.

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Appendices

Appendix 1: Information sheet for phase one participants



Educational Psychology Programme
Institute of Education
Massey University
Private Bag 102904
North Shore, Auckland 0745
New Zealand

Factors that affect teachers' agency in relation to the planning and implementation of Individual Education Plans (IEPs).

INFORMATION SHEET

Tēnā koe, my name is Stephanie McKay. I am a student studying towards my Masters in Educational Psychology at Massey University. For my Master's thesis I would like to explore the personal and contextual factors that impact on teacher agency when developing and implementing Individual Education Plans. The purpose of the study is to highlight the factors that can improve the planning and implementation of IEPs for the benefit of the students.

Who are the participants?

The online e-questionnaire is intended for practicing Scale A teachers in primary and intermediate schools in the Manawatu, Horowhenua, Wairarapa, Rangitikei, and Wellington regions who do not hold senior management or special needs coordinator positions. The participants for the second phase will be drawn from among the e-questionnaire participants.

What does the study involve?

The study is being conducted in two phases.

Phase 1: In this phase, I am conducting an e-questionnaire. The questionnaire focuses on how teachers view their levels of self-efficacy when teaching children with special learning needs, and what other factors teachers believe impact on their ability to develop and implement IEPs as successfully as possible. The e-questionnaire will be completed online and will take approximately 10 minutes. All responses to the e-questionnaire are anonymous.

You will be asked to indicate your willingness to participate in the second phase of the study at the end of the e-questionnaire through a separate link to maintain anonymity. You can terminate your participation at any time throughout the equestionnaire. Upon completion of analysis a copy of the initial e-questionnaire results will be available upon request from the researcher.

Phase 2: The second phase involves semi-structured interviews with 6 teachers in Term 2, 2016. Teachers who have consented to be interviewed in the equestionnaire will be selected to ensure that the participants are representative of a range of schools, teaching experience, and levels. These interviews are to gain a deeper understanding of how self-efficacy and agency impacts teachers' actions regarding the development and implementation required for an IEP. By developing an understanding of what impacts teachers' abilities to have agency within the IEP process could lead to better support for teachers and students, and ultimately greater student achievement for children with IEPs.

This e-questionnaire has been approved by the Massey University Human Ethics Committee, Southern B Application 15/36. My supervisors are Dr. Vijaya Dharan, and Dr. Alison Kearney. Their contact details are: v.m.dharan@massey.ac.nz and a.c.kearney@massey.ac.nz. Completion of the e-questionnaire signals a teacher's informed consent to be part of the project. I am grateful for your participation.

By participating in the online e-questionnaire, you are giving consent. You are under no obligation to accept this invitation. If you do decide to participate, you have the right to decline to answer any question. You have the right to withdraw from the study at any time. You have the right to ask questions about the study at any time during your participation. You have the right to see a summary of the research findings at its conclusion if you request.

The e-questionnaire will be open from the 15th of February to the 30th April, 2016.

I know that the start of the year is a busy time for teachers and schools, so I appreciate your support.

Kind regards,

Stephanie McKay

PH: 021 506 232 or (06) 326 8237 Email: mckaysteph@hotmail.com School of Educational Psychology Institute of Education Massey University

Appendix 2: Information sheet for principals



Educational Psychology Programme
Institute of Education
Massey University
Private Bag 102904
North Shore, Auckland 0745
New Zealand

Factors affecting teachers' agency in relation to the planning and implementation of Individual Education Plans (IEPs).

Dear Principal,

I am a student doing my Masters in Educational Psychology at Massey University. For my Master's thesis I would like to explore the personal and contextual factors that impact on teacher agency in relationship to the development and implementation of Individual Education Plans. The purpose of the study is to highlight the factors that can improve the planning and implementation of IEPs for the benefit of the students.

I would like to invite you to forward this email to your scale a staff teaching years 1-8 who do not hold senior management such as AP or DP, or a SENCO positions. Clicking on the link provided at the bottom of the email will take the participating staff to the e-questionnaire and the information sheet.

Who are the participants?

The e-questionnaire is intended for practicing Scale A teachers in primary and intermediate schools in the Manawatu, Wanganui, Tararua, Horowhenua, Wairarapa, Rangitikei, Ruapehu, Kapiti Coast, Rotorua, Taupo, Waikato, South Waikato, Hawkes Bay, Taranaki, Wellington, Bay of Plenty, Gisborne, and the wider Auckland districts who do not hold senior management such as DP or AP, or special needs coordinator positions. The participants for the second phase will be drawn from among the e-questionnaire participants.

What does the study involve?

The study is being conducted in two phases.

Phase 1: In this phase, I will be conducting an e-questionnaire. The e-questionnaire focuses on how teachers view their levels of self-efficacy when teaching children with special learning needs, and what other factors teachers believe impact on their ability to work collaboratively when developing and implementing IEPs as successfully as possible. The survey will be completed online and will take

approximately 10 minutes. All responses to this survey are anonymous.

At the end of the e-questionnaire, the respondents are asked to indicate their willingness to participate in the second phase of the study. Participants can email me directly in order to maintain the e-questionnaire anonymity. Participating teachers can terminate their participation at any time throughout the survey.

Upon completion of analysis a copy of the initial e-questionnaire results will be available upon request from me.

Phase 2: The second phase of the study involves semi-structured interviews with 6 teachers in Term 2, 2016. Teachers who have consented to be interviewed in the equestionnaire will be selected to ensure that the participants are representative of a range of schools, teaching experience, and levels. These interviews are to gain a deeper understanding of how self-efficacy and agency impacts teachers' actions when working collaboratively to development and implementation an IEP. By developing an understanding of what impacts on teachers' agency within the IEP process could lead to better support for teachers and students, and ultimately greater student achievement for children with IEPs. Interviews will be conducted at a time best suited to the participant, and outside of school contact hours.

This e-questionnaire has been approved by the Massey University Human Ethics Committee, Southern B Application 15/36. My supervisors are Dr. Alison Kearney and Dr. Jude MacArthur. Their contact details are: a.c.kearney@massey.ac.nz and j.a.macarthur@massey.ac.nz.

Completion of the survey signals a teacher's informed consent to be part of the project. I am grateful for your participation.

The survey will be open from the 30th of March to the 30th of April, 2016.

https://www.research.net/r/RRXDMNN

I know that the start of the year is a busy time for schools, so I really appreciate your support.

Kind regards,

Stephanie McKay

Ph: (021) 506232 or (06) 3268237

Appendix 3: Information sheet for phase two participants



Educational Psychology Programme
Institute of Education
Massey University
Private Bag 102904
North Shore, Auckland 0745
New Zealand

Factors that affect teachers' agency in relation to the planning and implementation of Individual Education Plans (IEPs).

INFORMATION SHEET

Tēnā koe, my name is Stephanie McKay. I am currently working towards my Masters in Educational Psychology at Massey University under the supervision of Dr. Alison Kearney and Dr. Jude MacArthur. If you have any questions you can contact me directly 021 506 232 or if you would like to speak with either Alison or Jude, they can be contacted through Massey University on 0800 MASSEY (0800 627739).

What is the study about?

This study will examine the personal and contextual factors that influence teacher's agency during IEP planning and implementation process. Specifically, this study will investigate: how primary teachers describe their personal and general self-efficacy and agency in relation to planning and implementing IEPs; how contextual factors affect teachers' self-efficacy when developing and implementing IEPs; what primary teachers perceive to be barriers that influence teacher agency and ownership of IEP planning and implementation; and what professional learning and development are perceived to be most efficacious by teachers in order to improve teacher agency of IEP planning and implementation?

How is this study being conducted, and what does this mean for you?

This study will use an e-questionnaire and semi-structured interviews. Participants need to be a current Year 1-8 teacher in a New Zealand primary school that has been a part of planning and implementing an IEP in the past twelve months. This study excludes any teachers who are a Special Education Needs Co-coordinator (SENCO) or part of a schools senior management team such as Deputy Principal or Assistant Principal. This will give you a chance to think and talk about your experiences planning and implementing IEPs, and an opportunity to reflect on what factors affect your ability to plan and implement an IEP for a special needs child in your class. This is also a chance for you to consider what forms of professional

learning do you think would support you in regards to planning and teaching children with IEPs.

Interviews will take approximately one hour at a time and will take place at your school. This interview will be audio recorded if you agree. The interview will then be transcribed and a copy given to you to ensure accuracy. A small koha in the form of a gift will be given to you at the end of the interview to thank you for your time and participation. All information gathered will be kept confidential to my supervisors and me. Your identity will not be revealed in the study and a pseudonym shall be used.

If you are interested in taking part in the research study as a participant, you will need to sign a consent form. You are under no obligation to accept this invitation. If you do decide to participate, you have the right to decline to answer any question. You have the right to withdraw from the study at any time, and for any reasons. You have the right to ask questions about the study at any time during your participation. You would be providing information on the understanding that your name will not be used unless you gave express permission to me, Stephanie McKay, to use it. As the interviews are to be recorded, you have the right to ask for the audio recorder to be turned off at any point in time during the interview. You have the right to see a summary of the research findings at its conclusion if you request.

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director (Research Ethics), email humanethics@massey.ac.nz.

If you have any questions, please feel free to contact me.

Stephanie McKay
PH: 021 506 232 or (06) 326 8237
Email: mckaysteph@hotmail.com
School of Educational Psychology
Institute of Education
Massey University

Appendix 4: e-Questionnaire

	Adapted Teachers' Sense of Efficacy in Inclusive Practices Scale.								
Sec	Section 1: Planning of IEP's								
		Strongly disagree	Disagree	Disagree Somewhat	Agree Somewhat	Agree	Strongly agree		
Whe	en planning an I	EP, I believe	that I can:						
1	Collaborate with families to plan and review an IEP.	1	2	3	4	5	6		
2	Have a complete understandin g of the student's current learning progress so I am able to actively contribute as part of an IEP team.	1	2	3	4	5	6		
3	Actively contribute to planning for very capable students	1	2	3	4	5	6		
4	Effectively plan for students with significant learning difficulties	1	2	3	4	5	6		

5	Design learning tasks so that the individual needs of students are accommodat	1	2	3	4	5	6
	ed.						
6	Collaborate with other professionals (e.g., RTLB's, speech therapists, speech therapists, IWS)	1	2	3	4	5	6
7	Use a variety of assessment strategies (E.g. portfolio assessment, modified tests, performance based assessment, dynamic assessment, etc.)	1	2	3	4	5	6

	Section 2: Implementing IEP's								
Whe	en implementing	g an IEP, I bel	ieve that I car	า:					
8	Support parents to feel comfortable about its implementation	1	2	3	4	5	6		
9	Assist families in helping their children do well in school.	1	2	3	4	5	6		
10	Deliver learning tasks so the individual needs of students are accommodat ed	1	2	3	4	5	6		

	Λ			ı	I		
	Accurately	4				_	
11	gauge	1	2	3	4	5	6
	students'						
	comprehensi						
	on of my						
	teaching to						
	ensure their						
	goals are						
	met.						
	Teach very	1	2	3	4	5	6
12	capable					-	
	students to						
	meet their						
	goals						
	Get parents	1	2	3	4	5	6
	involved in	'		3	4	3	O
13	the school						
13							
	activities of						
	their children.						
	Work with						
ا بر ا	other						
14	professionals	_	_	_	_	_	_
	and staff (e.g.	1	2	3	4	5	6
	teacher						
	aides, other						
	teachers)						
	Use a variety						
	of						
15	assessment						
	strategies	1	2	3	4	5	6
	(E.g. portfolio						
	assessment,						
	modified						
	tests,						
	performance						
	based						
	assessment,						
	dynamic						
	assessment,						
	etc.).						
	Provide a						
16	range of	4	2	2	A	F	6
16	adapted	1		3	4	5	6
	learning						
	opportunities						
\vdash	for students						
	Support the						
	most	_	_	_	_	_	_
17	academically	1	2	3	4	5	6
	challenged						
	students to						
	achieve some						
	success.						
\vdash	Holp ctudents						
10	Help students	1	2	2	4	F	6
18	to believe	1	2	3	4	5	6
	they can do						
	well in						
	schoolwork.						

Sec	tion 3: Profession	onal Learn	ing a	nd t	he planning	g and in	nple	emei	ntatio	n of IE	P's		
19	I have received professional development in the planning and implementatio n of IEP's.	Yes					No						
	If no, go to question 22												
20	I consider that the professional development that I received for planning and implementing the IEP process was:	Not satis	facto	ory Adequate				Good			Excellent		nt
21	I received professional development from:	A colleaç	gue		RTLB	IV	WS Univer		iversity	Other (Please specify)			
22	If I were to receive professional learning to effectively plan and implement an IEP in my classroom, I think the most useful delivery would be:	A face to face profess- ional learning in a group	deliv c prof	nal	with other local	Group training in a staff meeting		trai wi col ue t sc suc	e on ne ining th a leag e in he hool ch as NCO	One one traini with profesiona fron outsine scholars.	e ng a ss- al n de e ool	My own researc h in my own time	Other

Sec	Section 4: Teacher Perception of the IEP process							
23	I consider that to assist me in teaching students in my class who have special needs, the IEP process is:	Not helpful	Helpful	Very helpful	Extremely helpful			

	I consider											
24	that for teaching purposes the IEP	Not useful				Useful			Very useful			
25	document is: I consider that for the purposes of collaboration with teacher aides, and other staff working with the child, the IEP document is:	Not useful				Useful				Very useful		
26	I consider that for the purposes of collaboration with parents, the IEP document is:	Not useful				Useful			Very useful			
27	Would you take part in the IEP process if there were no requirement to do so?	Yes				No						
28	What do you see as major advantages of the IEP process?	Communi- cation with parents	from	Support from colleagues		dentifica- tion of Ideas for teaching teaching needs			(ccess to outside gencies	Others (Please specify)	
29	What do you see as major disadvantage s of the IEP process?	Time consum- ing	Lack of consulta- tion with teacher	consulta- Consulta-		ing so	aten- for me ents	Lack profes iona develo ment t	ss- I op- for	Lack of support for teachers	Other (Please specify)	
30	In which ways do you think the IEP process could be improved?			ı								
31	Please comment on any aspects of the process that you wish that have not been covered above.											

Appendix 5: Semi-structured interview questions

Question	Probes
Could we begin by looking at your own experience with the IEP process?	
How would you describe your role in the IEP process?	
How confident do you feel about working through the process?	Are there any areas where you feel you need to know more or don't know as much as you'd like to?
What about working collaboratively as a member of the IEP team? How do you feel about that?	What builds your confidence when you are working collaboratively in a team to develop and implement IEPs?
Tell me about the things that impact on your ability to develop and implement an IEP – What are the things that help? What are the things that get in the way of doing this well?	What role do you see parents having in the IEP process? How can teachers implement the IEP process in ways that parents feel able to be valued participants in the IEP process? How confident do you feel about parental involvement in the IEPs you are a part of? Are there any areas where you would like more information or guidance? Are there any areas where you would like to see change or improvement?
Here is a definition of teacher agency. What does teacher agency mean to you in relation to planning and implementing IEPs?	
What supports or prevents your ability to make a change in a child's education that has an IEP?	Do you think that your involvement makes a difference? Tell me about what support you have had or needed when working on an IEP
	What builds your confidence when working

	on an IEP?
Tell me about professional learning and development which has made a change to the way you approach teaching and learning for children with IEPs?	What type of professional learning do you think you'd like which would increase your confidence and ability to make positive change when working on an IEP?
Is there anything else you'd like to say about the IEP process or professional development	
around IEPs?	