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Appraisal of Collaborative Problem Solving (CPS) within a Context of Current Waikato Principles and Practices

A thesis presented in partial fulfillment of the requirements for the degree of

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Carol Ann Dickinson

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Abstract
This research evaluated the Collaborative Problem Solving (CPS) model, an established evidence-based practice from the United States (Greene, 1998), within a Waikato context in New Zealand. Special education practitioners employed at the Ministry of Education (MOE) drew from MOE principles and practices, as well as their professional expertise as they reviewed and critiqued the CPS model. The study identified aspects of the CPS programme that could contribute to current Ministry practices and aspects which are incongruent with New Zealand MOE practice guidelines and/or the cultural context of Waikato. Outcomes of the project included a summary of existing evidence supporting the CPS model, a critique of its cultural relevance to the New Zealand context as well as, recommendations for how CPS practices might inform or strengthen the Ministry of Education’s (MOE) current model of collaborative problem solving practice.
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Chapter One
Introduction to the study

Students in the Waikato area who exhibit persistent and difficult behavioural challenges are referred to the Hamilton Ministry of Education (MOE) Severe Behaviour Service. These children require intensive support, in and out of school. The MOE regularly considers evidence of effective programmes from the research literature as a means of strengthening its services in this area. Some examples of highly effective programmes used to reduce school wide rates of undesirable student behaviours adopted by the Ministry of Education include Positive Behaviour for Learning (PB4L), a framework implemented across school environments, the Incredible Years Parenting programme, and the Incredible Years Teachers programme (Ministry of Education, 2012), Restorative Practice (Ministry of Education, 2009), and the Intensive Wraparound Service (Ministry of Education, 2013).

The aim of this study was to evaluate an evidence based practice to ascertain whether it could contribute to current ministry practice. The model of practice selected for evaluation in this study was Collaborative Problem Solving (CPS).

Background

The Collaborative Problem Solving (CPS) model was originally developed by Dr Ross Greene (2008). Greene is also the author of “Lost at School,” (2009) and “The Explosive Child” (2010) and co-author of “Treating Explosive Kids: The Collaborative Problem Solving Approach” (Greene and Ablon, 2006). The CPS model has been further developed by Greene, Ablon (2010) and associates at Massachusetts General Hospital, and Harvard Medical School. Greene originally developed the CPS model to address challenging behaviours in children and youth often labeled as defiant, aggressive, raging, noncompliant and willful, as well as many diagnosed disorders such as oppositional defiant disorder (ODD), conduct disorder (CD), autism spectrum disorders (ASD), Attention Deficit Hyperactivity Disorder (ADHD) and mood and anxiety disorders. Over the past ten years, the CPS model has been used with many children and adults exhibiting
social, emotional and behavioural challenges and promoted as effective in a variety of settings including the home, mainstream and special schools, inpatient, and residential and juvenile detention facilities (Gorman, 2007).

Greene’s CPS model has been described as an “evidence-based cognitive behaviourial, psychosocial treatment approach including a combination of ‘developmental theory, systems theory and social learning theory’” (Greene, 2010, p. 193) and neuroscience research. He maintains that the CPS model relies heavily on transactional or reciprocal models of development, which implies that the function of behaviour is determined by the “degree of fit or compatibility between characteristics of the child and characteristics of the child’s environment” (2010, p. 193). The aim of the CPS model is for adults and children to identify undeveloped cognitive skills, and through collaborative problem solving, learn to solve the problems precipitating challenging behaviour, while simultaneously learning new skills.

A growing body of research, reviews and empirical evaluations has shown that CPS is a highly effective approach to reducing challenging behaviours (Martin, Krieg, Esposito, Stubbe & Cardona, 2008). Schaubman, Stetson and Plog (2011) add that CPS has also demonstrated effectiveness in reducing stress associated with the management of maladaptive behaviour. Furthermore, studies have shown that CPS has a positive impact on academic outcomes (Gorman, 2007), staff dynamics (Greene, Ablon & Martin, 2006), and improved teacher parent, teacher student and parent child communication and relationships (Epstein & Saltzman-Benaiah, 2010). Finally, studies have shown that the effectiveness of the CPS model is attributed to factors relating to its implementation.

While there has been evidence that CPS is effective, and evaluations of the approach are generally presented as positive, some documented reviews (e.g., Diller, 2001; Rennicke, 2008) claim there are concerns with the efficacy of the model. In particular, Diller (2001) questions the validity of the results of the research as most children in Greene’s clinical studies are on medication. He states that Greene has openly acknowledged that for some
children medication is necessary just to enable his approaches to work. It is therefore unclear as to whether it is the CPS approach or medication that effectively reduces the challenging behaviour.

Due to its similarities with the Ministry of Education’s practices in producing positive outcomes for children and families, the CPS model may be able to make a contribution to Ministry of Education and thus merits further review.

**Rationale for Evaluating CPS within a Waikato Context**

The rationale for evaluating the CPS model within a Waikato context rests on the potential relevance which team-based intervention practices and supports have for contributing to efficacious practice. The forum for evaluating the CPS model will provide participants with an opportunity to illustrate effective practice in a New Zealand Ministry of Education context that is supported within an ecological framework model.

The evaluation of the CPS model will be conducted in collaboration with practitioners from diverse cultural backgrounds and experiences in working with children, families, educators, and community based agencies within a New Zealand Waikato context. Within this forum, the practitioners will be able to evaluate new approaches (Ministry of Education, 2004), and provide evidence of the effectiveness of their contributions through a process of reciprocated learning. Evidence from the research will be used to inform practice and the practice will contribute to research (Meyer, 2003).

The types of problems faced by field practitioners at the New Zealand Ministry of Education on a daily basis are often different to those identified and investigated by researchers (Heale, 2004). The impact of research on practice therefore depends on the degree to which it reflects the experience of practitioners. “The fact that most practitioners learn more from one another than from research indicates the need for research to be conducted from within the New Zealand Ministry of Education, and therefore align with practice” (2004, p. 55).
**Thesis Overview**

Chapter two contains the literature review that summarises relevant published material in this field. Chapter three contains the methods by which data was gathered and analysed in this study. In chapter four the findings and discussion are integrated to reflect the context in which the information was attained and link the outcomes of the research questions. Lastly, chapter five explores the strengths, limitations and implications of the study, which outlines contributions and indicates possible directions for future study.
Chapter Two  
Literature Review  

This literature review is in four parts. The first section presents a review of the favourable aspects of the Collaborative Problem Solving model (CPS) and examines its reported success for parents and teachers in understanding children’s maladaptive behaviour. The second section explores the history of evidence-based practice and examines the definition debate as viewed within a broad context. This section also includes a discussion of the value of evidence-based practice for working with children and families then moves into an investigation on what constitutes high quality research and the criteria used to measure quality research across varied fields of practice. Section three presents a review of the New Zealand Ministry of Education principles and practices in relation to the purpose of EBP to guide practitioner service, and explores criteria for evaluating EBP in a New Zealand context. Lastly section four provides a critique of the CPS model and evaluates the efficacy of the CPS approach.

Collaborative Problem Solving Model  

Greene’s books and positive reviews claim to present a ‘new approach’ for understanding maladaptive behaviour and propose to be more effective than traditional intervention approaches. It challenges conventional wisdom on why children are presenting with difficult behaviour. In one review, Thompson (2006 as cited in Greene, 2008) shares, “Greene goes inside the minds of children and school personnel to explain why old fashioned school discipline and Zero Tolerance policies have failed. Then he offers original and tested new strategies for working with the most behaviourally challenging children” (p. 1).

Greene’s espoused theory. In a review of the CPS model, Rennicke (2008) shared that the CPS approach is promoted as a ‘sense of acceptance’ and ‘hope’ for parents and teachers who are seeking to understand children’s challenging behaviour. Greene explains the reported success by using learning as an analogy to understanding...
undeveloped cognitive skills in behaviour. “In the same way that kids who are delayed in reading are having difficulty mastering the skills required for becoming proficient readers, challenging kids are having difficulty mastering the skills required for becoming proficient in handling life’s social, emotional, and behavioural challenges” (Greene, 2010, pp. 7-8). The cognitive skills to which Greene is referring are flexibility, frustration tolerance, and problem solving. The analogy attempts to provide parents and teachers with a sense of hope for change and supports his theory that undeveloped skills in behaviour can also be learned and further developed through collaborative problem solving. Mitchell, Morton and Hornby (2010) state that, “Collaborative problem solving and decision making focused on teaching and learning for students with disabilities have the potential to create fundamental change in the ways that teachers teach and students learn” (p. 24).

**CPS intervention approach.** In the CPS approach, problem solving occurs through a process of collaboration with the child. Greene said that generally there are three ways to manage problems. He refers to the three different management styles as Plan A, Plan B and Plan C. He explains that when adults are using Plan A, they are ‘imposing’ their ‘will’ on the child. For example an attempt at control is attained through using words such as, “No,” “You must,” or “You can’t” (Greene, 2010, p. 84). Greene’s Plan A is closely aligned with Baumrind’s (1991) authoritarian parenting style which consists of a high level of control and a low level of warmth. Coloroso (2010) refers to this style of parenting as the ‘Brick wall family where there’s a rule for everything’ and ‘strict adherence to rules and structure becomes a barrier to young people developing autonomy or making and learning from mistakes. This is not to say that when Plan A is being used, the adult is not a warm and caring person, but that warmth may not be conveyed (Coloroso, 2010)

The second plan, Plan B involves collaborative problem solving. This collaborative process is further divided into three steps known as the ‘empathy’ step, ‘define the problem’ step and the ‘invitation’ step. The aim of the empathy step is to “gather
information” from the child to “achieve the clearest possible understanding of his concern or perspective on a given unsolved problem” (Greene, 2010, p. 91). Greene states that step two, the ‘define the problem’ step is concerned with defining the two concerns of interest, one involving the child and the other the adult. Following on from this, the ‘invitation’ step provides an opportunity to “brainstorm potential solutions” (Greene, 2010, p. 105).

Greene (2010) asserts that the best time to action Plan B is before a child gets ‘heated up’ as this is the time when the child is able to think more clearly. He calls this, ‘Proactive Plan B.’ Greene explains that when Plan B is being used in the ‘midst of dealing with an unsolved problem,’ this is known as using ‘Emergency Plan B,’ which is not the most effective time to use the Plan. He states that, “The goal is to get the problem solved ahead of time before it comes up again” (Greene, 2010, p. 19). For example, if a child’s predictable behaviour is to complain every time they are directed to turn off the television and start their homework, the appropriate time to hold a discussion about the behaviour is before the problem arises.

However, Greene (2010) suggests that as a general rule Proactive Plan B is preferable to using Emergency Plan B, for some children, Emergency Plan B is the preferred choice. For instance, he states that some children experience difficulty participating in Proactive Plan B because they find it difficult to remember the ‘specifics of problems’ being discussed. The reason for this is because the problem is only ‘memorable and salient’ when the child is in the ‘midst’ of the problem (pp. 115-116). Greene shares that in his experience when children become more familiar with problem solving, they are more able to participate in proactive discussions.

Greene’s Plan B closely resembles an authoritative parenting style in that it recognizes the need for the child to be empowered throughout the collaborative process. Belsky, Lerner and Spanier (1984) claim that authoritative parenting is competent parenting as it conveys
warmth, acceptance, and opportunities for problem solving and learning. Coloroso (2010) further maintains that an authoritative parenting style, or ‘Backbone family, works well because it mixes flexibility with limit setting.

In contrast, Greene’s Plan C, which closely resembles Baumrind’s (2008) permissive parenting style and Coloroso’s (2010) ‘jellyfish family, where anything goes,’ and involves temporarily ‘parking’ an expectation in favour of a higher priority expectation. For example, ignoring a child’s complaining so that the focus is on the child following through with the instruction. Greene explains that Plan C is often erroneously perceived as the adult “giving in” to the child’s demands. Rogers (2011) refers to low priority behaviour as secondary behaviour. By ignoring the secondary behaviour, or low priority behaviour, the shift in focus potentially reduces the risk of an escalation in behaviour (2011). Conversely, Greene (2009) explains that the focus of Plan C is to help the child be more “available to work on higher priority problems or skills,” thus reducing the likelihood of challenging behaviour (p. 52).

Greene (2010) writes that Plan A, Plan B and Plan C are not a ranking system but represent distinct ways of responding to unsolved problems. He states that by responding to children using Plan A, ‘imposing your will’, the likelihood of ‘explosive’ behaviour is increased. In contrast, responding to a child’s behaviour using Plan C, where an expectation is temporarily dropped, reduces the likelihood of ‘explosive’ behaviour but at the ‘expense’ of temporarily ‘eliminating or reducing a given adult expectation’ (Greene & Ablon, 2006, p. 50). While Proactive Plan B, ‘clarifying concerns and working out solutions that are realistic and mutually satisfactory and solving problems durably,’ is applied before a behaviour has become challenging, so that potential for challenging behaviour is reduced (Greene, p. 91).

In the book “Treating Explosive Kids” and “The Explosive Child” (Greene, 2006, 2010), Greene presents the plans out of order starting with Plan A, followed by Plan C and then lastly Plan B. The mixed order of the plans in the books is to demonstrate that from
Greene and Ablon’s (2006) perspective, Plan B is ‘the key to successful treatment’ (p. 50). Rennicke (2008) states that the strength of the CPS approach, is its ‘clear articulation of the three most common parental intervention styles and its emphasis on parental choice about which style to use’ (p.2). Further, the plans provide opportunities for adults to reflect on the way in which they approach problem solving and adapt their approach to managing children’s challenging behaviour (Rennicke, 2008).

**Home school partnership.** Greene (2009) writes that many teachers cite managing children with challenging behaviours and challenging teacher-parent relationships is one of the major reasons for teachers leaving the profession. He adds, that parents have reported that they feel blamed for their children’s maladaptive behaviour and that their children’s behaviours are misunderstood and mistreated. Views shared by some school staff as presented by Bagley, Woods and Glatter (1996) show that they purposely deflect, avoid and even manipulate the views of parents so that the control of education is obtained. As a result “educational professions have been criticized for adopting a so called ‘conversion’ approach to parental involvement, seeking to change parents attitudes and bring them round to the professionals’ view point” (Woods, 1994, p. 201). Conversely, home-school partnerships are also challenged by parents perceptions of teachers’ attitudes, the role parents feel they play in their children’s education and parents’ own personal schooling experiences (Bull, Brooking & Campbell, 2008). Research literature shows that when teachers see the home-school partnership as being a benefit to their teaching practice, and the learning and behaviour of the children, the commitment to building positive collaborative relationships is not seen as a burden (Bull, Brooking & Campbell, 2008).

In some New Zealand schooling contexts, such as Kura Kaupapa Maori, home-school partnerships are fundamental to the operation of the school (Bull, Brooking & Campbell, 2008). The Ministry of Education (2008) home-school partnership model describes the link between home and school in Kura Kaupapa Maori and some special schools as “seamlessness” (p. 6).
The seamlessness implies interconnectedness where home and school are working collaboratively together.

This interconnectedness presents itself as whanau participation where school policies, practices and processes are developed and implemented as part of a commitment to the ‘everyday life of the kura’ (Bull, Brooking & Campbell, 2008, p. 6). Research has shown that successful outcomes for students can result when effective partnerships between schools and parents, whanau and communities are developed (Education Review Office, 2008). The collaborative consultative approach of working together is consistent with the ecological paradigm, which recognises that learning and behaviour of students is a result of the interaction between the student and the learning context” (Thomson, et al, 2003, p. 104). Ecological theory explores how “factors in the child’s maturing biology, his immediate family and community environment, and the societal landscape fuels and steers his development” (Paquette & Ryan, 2001, p. 1). Therefore, any form of analysis needs to be systemic to ensure that all aspects of a child’s environment is included. The stated intention of the CPS approach, therefore, appears to address not only the needs of the child but also the need to work collaboratively with everyone involved with supporting the child (Greene, 2009).

This section introduced the CPS model as an effective practice in reducing children’s challenging behaviour and stress associated with managing maladaptive behaviour through a process of collaborative problem solving. The term ‘effective practice,’ or also referred to as evidence-based practice or ‘best practice’ is examined further in the following section.

**Evidence-Based Practice: Overview and Definitions**

Evidence-based practice extends back to the mid nineteenth century (Bennett et al., 1987) where it originated in the field of medicine as evidence-based medicine (Frederickson, 2002). The contemporary period of evidence-based practice surfaced in the early 1970s and 1980s (Bennett et al., 1987) and was established in Great Britain in
the early 1990s (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). Evidence-based practice was initially developed to inform medical students (Biesta, 2007). Evidence-based medicine refers to “The integration of clinical practitioner expertise with best ‘external clinical evidence from systematic research”’ (Sackett, 2002). Evidence-based practice now extends to other contexts such as psychology, education, dentistry and nursing (Trinder & Reynolds, 2000), and has been recommended and adopted in fields such as social work, probation, human resource management and education (Sackett, et al., 1996).

Over the past twenty years the value of evidence-based practice for children and families has been the focus of many authors and independent researchers. The driving force behind the promotion of evidence-based practice is societal expectations on professionals to provide ‘best current evidence’ (Department of Health, 1998a) and ‘best practice’ in providing quality services (Morris and Mather, 2008). A fundamental goal of evidence-based practice is to continuously improve patient care based on new research developments (Madhavji, Araujo, Kim & Buschang, 2011). Evidence-based practice, therefore is a way in which professionals can be accountable for conducting a service that ensures that children and families receive the “best possible intervention, service, or support based on an assessment of needs, preferences, and available options” (Friesen, 2004, p. 3). Accountability derives from how evidence from research is used to inform practice and how practice should also contribute to research (Meyer, 2003).

In recent years, the term ‘evidence-based practice’ has been defined and redefined by practitioners and academics as part of a definition debate (Aveyard & Sharp, 2009). One of the earliest definitions of evidence-based practice, as applied to a clinical setting, is Sackett, Rosenberg, Gray, Haynes and Richardson (1996) who state that evidence-based practice is “the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patient/clients” (pp. 71-72). This definition highlights two points 1) that practitioners need to be making the best use of research to inform decisions as professional judgement is linked to evidence-based
practice and 2) that the decision making lies with the practitioner rather than the client/patient (Aveyard & Sharp, 2009).

In a more recent definition, Dawes, et al., (2005) make reference to the role of the patient/client in the decision making. “Evidence-based practice requires that decisions about health and social care are based on the best available, current, valid and relevant evidence. These decisions should be made by those receiving care informed by the tacit and explicit knowledge of those providing care, within the context of available resources” (Dawes, et al., p.7). This definition also recognises the place of tacit knowledge as well as what can be explained by the practitioner (Aveyard & Sharp, 2009). Further, in the field of psychology, evidence based practice has been defined as, “the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences” (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000, p. 273). This interpretation of evidence-based practice identifies the link between best research evidence, clinical expertise and patient values in providing ‘best practice.’ The American Psychology Association (APA) have adopted this definition of evidence-based practice to take into account the complete range of evidence required to provide ‘best practice’ and as a way of integrating science and practice.

EBP in the New Zealand context – three dimensions.

In a New Zealand educational context, evidence is considered as deriving from these three sources 1) professional practitioners, 2) families, whanau, young people and their life experiences, and 3) research both nationally and internationally. Evidence-based practice also includes gaining a wealth of information from working with people in diverse ethnic communities, (Bell, 1998) and utilizing knowledge from community resources (Ministry of Education, 2005). The Ministry of Education (2005) state that it is important to work in collaboration with the wider range of community organizations as their skills, expertise and knowledge can lead to better outcomes. Gambrill (2005) states that practice that is evidence informed encourages” effective use of professional judgement in integrating information regarding each client’s unique characteristics,
circumstances, preferences, and actions and external research findings” (p. 9). The Ministry of Education (2012) described evidence-based practice as the integration of research, professional expertise and the life experiences of families and young people. Action is dictated by evidence-based practice that combines the three core elements (Shlonsky & Gibbs 2004). Figure 1 illustrates this integration in a Venn diagram developed in the Ministry by Bourke, Holden and Curzon (2005).

**Figure 1. The collective elements of Evidence Based Practice**

**Practitioner knowledge.** Although practitioner expertise is generally accepted as a combination of professional knowledge and individual experiences, Kennedy (1992) states that the term ‘expertise’ is more than knowledge, it is “knowledge that is tied to action and is tied to decisions about what actions to take” (p. 1). Sackett, Straus, Richardson, Rosenberg, and Haynes (2000) add that practitioner expertise also refers to a professional’s “ability to use their skills to identify individual patient’s unique health state and diagnosis, individual risks and benefits of potential interventions, and personal values and expectations” (p. 147).
In a clinical setting, practitioner expertise is informed by controlled research, which can be inconclusive, conflicting in conclusions or misleading, or may even be unavailable (Reed, 2013). Practitioner knowledge therefore should not be dependent on research efficacy as being the sole basis for accepted evidence. Conversely, practitioner knowledge, theories and approaches can also be unsupported by empirical evidence (Beutler, 2000) and information imparted to clients and patients may conflict with practice. This is known as a discrepancy between espoused theory, “what we say we think, and theory in use, what we do we do” (Annan & Priestley, 2011, p.3). This contradiction was originally identified by Argyris and Schon (1974) who observed a group of educational administrators espousing particular views in contradiction with their practice.

In an educational and special educational setting, practitioner expertise or decisions are based on the individual needs of the students. For example, evidence-based instructional approaches are not always going to meet the diverse learning and cultural needs of students with disabilities as they may have different needs and goals than their able bodied peers. Therefore, educational professionals working with students with disabilities “must exercise their professional wisdom to a) judiciously select EBPs to implement and b) adapt selected EBPs to meet the individual needs and goals of specific students” (Cook, Tankersley & Webb, 2008, p. 107).

**Child / young person / family / whanau.** The Ministry of Education (2004) states that evidence-based research, “combines research knowledge and evidence; skills, knowledge and aspirations of children, young people, their parents, families and whanau, and the knowledge and experience of their educators; and the professional expertise of the practitioner” (p. 62). In Aotearoa, New Zealand, evidence-based practice further includes the cultural connection with Maori through their epistemology and genealogy (Ministry of Education, 2008) and “honoring the Treaty of Waitangi, which is the principal founding document of their land” (T. Paenga, personal communication, 7 April, 2013). The collective voice of the child, young person, families and whanau is a valued
contribution to evidence-based practice. It is through this collaborative process that shared understanding of perspectives and desired outcomes, and negotiation of the process of collecting evidence is established (Ministry of Education, 2012).

**Research.** The word ‘evidence’ has been described by Graham (2003, p. 9) as a ‘trophy’ word, or “words or phrases everyone tries to capture for their own beliefs or activities to give them extra value.” The power behind a trophy word or phrase is in its ability to restrict or broaden meaning. For example, the trophy word ‘research’ is devalued when a study is dismissed as not being good research. Therefore, in the wrong hands, trophy words are seen as dangerous. The difficulty therein lies in challenging definitions of a trophy word, such as ‘evidence,’ to refer to different or broader sets of beliefs or attitudes (Graham, 2003).

In conventional use, evidence is defined as “information that is helpful in making the right decision” (Graham, 2003, p. 9). For example, juries weigh up the evidence when making decisions regarding a guilty or not guilty verdict. Video footage can provide evidence to umpires judging whether a ball is in or out of court and DNA evidence is used to determine paternity. However, evidence needs to be of a sufficient quality to support a claim. For example in court, scientific evidence is preferred over eyewitness accounts as too many variables can affect the quality of memory and quality of testimony (Cline, 2013). This measure of evidence quality was first introduced by Sackett, Straus, Richardson, Rosenberg and Haynes (2000) in their defense of evidence-based medicine. They proposed that the word ‘evidence’ should be limited to information obtained from systematic clinical trials and if these were unattainable, the next best external evidence available.

However, what counts as evidence is debatable (Maxwell, Robertson, Kingi, Morris & Cunningham, 2004 & Morrison, 2001). For example Bateman (2006) states that the term ‘evidence’ will hold different meanings for different people as diversity in culture, worldview and experiences all influence individuals and specific groups’ interpretation
and justification of the term. In the New Zealand education sector, questions have been raised as to what constitutes as ‘evidence’ and who is involved in creating a clear definition of the concept (Bateman, 2006). Uncertainty surrounding a clear definition of the term ‘evidence’ suggests risks in the application of evidence-based practice particularly in the appropriateness of assessment and planning for New Zealand’s indigenous (Māori) children and their whanau (Bateman, 2006).

Although evidence in a New Zealand context is considered as deriving from a combination of research, practitioner skills and experiences, and child, young person and family knowledge, elements such as the ‘expert’ (medical) model, trial and error, a process for mediating information, and sharing experiences and identifying patterns have also been recognised as contributing to evidence-based practice by the Ministry of Education (2012).

**International Perspectives on High Quality Research: Quality and Quantity**

One of the core elements identified in the Venn diagram describing evidence-based practice (see Figure 1) as being an important component is research. Best current evidence research “gives patients up to date treatment that research has shown to be safe, effective, and efficient” (Madhavji, Araujo, Kim & Buschang, 2011, p. 309). Further, Deming (2009) states that, “evidence-based practice represents the practitioner’s commitment to use all means possible to locate the best, most effective evidence for any given problem at all points of planning and contacts with clients” (p. 451). Here the authors are referring to two related concepts, quality evidence, and quality research. In relation to research based knowledge, quality evidence is the summative collection of research on a specific topic that answers specific and important questions (Raudenbush & Bryk 2002; Shavelson & Towne, 2002). The relevancy of the information is judged on the strength and confidence placed on the research findings (Mosteller & Boruch, 2002; Shavelson & Towne, 2002). The level of confidence in the evidence lies in the “robustness of the research and the analysis done to synthesise that research” (Lohr, 2004, p. 1). For example, a feature of a trustworthy study exists in the
evidence of acceptable implementation fidelity (Cook, Tankersley & Landrum, 2009). Conclusions on the effectiveness of the study are meaningless if the intervention is not implemented as designed (Cook, Tankersley & Landrum, 2009). Whereas quality research relates to the “scientific process that comprises all aspects of study design such as the match between the methods and questions, selection of subjects, measurement of outcomes, and protection against systematic bias, nonsystematic bias, and inferential error” (Shavelson & Towne, 2002 p. 1).

The two terms, ‘quality evidence’ and ‘quality ‘research’ have prompted a recurring debate amongst practitioners in the fields of health, disability, education and social welfare (Gersten, Baker & Lloyd, 2000; Shavelson & Towne, 2002). In particular, education, and child and family services express uncertainty about what represents quality research (Fox, 2003). One of the reasons for this ambiguity may lie in the fact that “no single objective definition or accepted standard of what constitutes good quality research” has been identified (Hillage, Pearson, Anderson & Tamkin, 2008, p. 4). This may be due in part to difficulties in establishing evidence in these settings where ethical and practical barriers often prevent randomly assigning individuals to different interventions (Mattox & Kilburn, 2012). For example, in the United Kingdom it is viewed as unethical to conduct a randomised trial where separated groups of students are given different types of interventions because this would mean aspects of a student’s learning is determined arbitrarily (Goldacre, 2013).

However, Carnine and Gersten (2000) argue, “without experimental research based in the classroom rather than the laboratory, there will continue to be inappropriate innovations within the field of education” (p. 94).

In many fields of research, practitioners are of the general belief that quality of scientific research is imbalanced and lacks credibility making it difficult to be confident in the outcome results (Levin & O’Donnell, 1999; Mosteller & Boruch, 2002; Shavelson & Towne, 2002) and many researchers are in disagreement with the specific standards for
assessing quality research and quality evidence (Gersten, Baker & Lloyd, 2000 and Mosteller & Bourch, 2002) or the nature of the evidence (Frederickson, 2002). In education and child and family services significant differences are noted in how programmes and interventions are evaluated (Mattox & Kilburn, 2012). For instance it has been argued by several researchers that current peer review processes and standards for assessing quality are not compatible with research in the disability arena (Gersten et al., 2000; Spooner & Browder, 2003).

Criteria for Measuring Quality of Research. In the health sector, it has been agreed that a hierarchy framework will be used to evaluate the quality of research in programme/treatment effectiveness (Roth & Fonaghy, 1996). This hierarchy of research applies to a diverse range of professionals in the health sector, which includes speech therapists, doctors, nurses, and clinical psychologists. One example of a research hierarchy method is depicted below as described by Scott, Shaw, and Joughin, (2001):

1. Several systematic reviews of randomised controlled trials
2. Several review of randomised controlled trials
3. Randomised controlled trials
4. Quasi-experimental trials
5. Case control and cohort studies
6. Expert consensus opinion
7. Individual opinion

According to the hierarchy the most reliable and stronger level of evidence is represented in descending order. What is noteworthy here is that individual experience and qualitative research sits on the lowest rungs implying favour for quantitative evidence (Davies, Nutley, & Smith, 2000).

Systematic reviews of randomised controlled trials (RCT) are the accepted ‘gold standard’ for research and qualitative studies and professional opinion rate at the lower end of the hierarchy of evidence. A systematic review is a “literature review focused on a research question that tries to identify, appraise, select and synthesize all high quality
research evidence relevant to that research question” (Madhavji, 2011, p. 2). A systematic review of RCTs determines whether a cause-effect relation exists between treatment and outcome (Sibbald & Roland, 1998). Trials include randomizing participants into different treatment conditions or to treatment or non-treatment groups. Attempts are made to control different variables such as age, gender, and problem severity and for implementation variables such as characteristics or professional experience of the person conducting the research, knowledge, and environment in which the research takes place (Cook, Tankersley & Landrum, 2009). A systematic review that has identified many RCTs is more inclined to be looked upon more favourably (Madhavji, 2011) and viewed as ‘good quality’ research (Fox, 2003).

**Limitations of the hierarchy.** Although the traditional hierarchy of evidence is widely accepted as a useful means for evaluating evidence based practice, a number of reservations have been expressed (Fox, 2003). It has been noted that while tightly controlled studies are useful in determining intervention efficacy, it is not the same as determining effectiveness in practice (Fox, 2003). Efficacy is defined as the “power to produce a desired effect,” and ‘effectiveness’ is defined as “the quality of being able to bring about an effect” (Advanced English Dictionary, 2013). In other words, “Efficiency is concerned with doing things right and effectiveness is doing the right things” (Drucker, 1993, p. 60). Harrington (2001, as cited in Fox, 2003, p. 99) further distinguishes these differences as “Can it work?” and “Does it work?” The questions “Can it work?” relates to efficacy and can be established by controlled conditions, whereas the questions “Does it work?” deals with effectiveness of an intervention and requires that a study replicates the circumstances of every day practice (Harrington, 2001). For instance, efficacy studies are generally conducted with tightly defined homogeneous group members who are anonymous, unlike in practice, and who may be unrepresentative so excluded from the study i.e., children displaying additional difficulties such as behavioural challenges as well as reading problems (Harrington, 2001). Further, interventions in efficacy studies are administered by well-trained practitioners whose performance on the programme is monitored, and who
carefully follow the proposed intervention guidelines (Roth & Fonaghy, 1996).

Concerns have also been expressed that “exclusive compliance to the traditional hierarchy could undervalue newly developed interventions where the evidence base is still to be established” (Fox, 2003, p. 99). In the traditional hierarchy there is no criteria identifying studies that are lacking in empirical support, despite well designed research studies, and newly investigated studies which require further research (Fox, 2003). It is not only important to know that an intervention works but also how it works (Hughes, 2000). By having a theoretical understanding of the mechanisms that are accountable for effecting change, psychologists will be able to judge the appropriateness of the intervention and adapt it to meet the needs of individuals in different practice settings (Hughes, 2000).

In the field of children’s mental health considerable controversy exists regarding issues of trust in and shared meaning of evidence-based practice. Much of the concern relates to fear that EBP will become a requirement and implemented with groups or populations not tested or have not been indicated (Waddell & Godderis, 2005). For example, limitations of EBP include; the narrow definition of ‘evidence, and its focus on linear cause effect relationships (Webb, 2001), and the exclusion of representative samples of children and families, receiving mental health care, from randomised controlled trials because of socioeconomic or cultural factors or family stress, culturally diverse youth, and youth with complex disorders (Brannan, 2003; Espiritu, 2003; Krakau, 2000; Margison, 2003). In addition, family choice, which is important to families, is not easily examined in controlled studies (Brannan, 2003; Huang, Hepburn, & Espiritu, 2003) and evidence-based practice precludes contemporary interventions, traditional healing practices and medicinal treatments developed by specific cultural groups (Espiritu, 2003; Huang, Hepburn & Espiritu, 2003). Many relevant questions pertaining to RCTs have been unanswered. For instance, central to mental health practice is therapeutic
relationships; however, “efficacy research typically focuses on techniques that can be investigated quantitatively, such as cognitive behaviour therapy (CBT) (Tanenbaum, 2005).

Limitations of RCTs in the field of educational psychology. In the field of educational psychology, randomised controlled trials are not recognised as being appropriate for educational psychologists (Fox, 2003). One of the objections lies in the fact that RCTs are regarded as not being practical or the most valid form of research in this field. Fox (2003) asserts, “I am a practicing Educational Psychologist not a research analyst. I am not certain that I can recognise good research. Tied to this, but paradoxically, I also believe that there is not enough research material to base my professional practice on” (p. 95). He further added that a great deal of evidence “seems to be contradictory” and that there is not enough “time to read, or make sense of all these different points of view” (Fox, 2003, p. 96).

A guide to ‘good’ practice for educational psychologists, teachers, social workers, and even some doctors is through professional experience (Fox, 2003). Knowledge is accumulated through reflection of individual practice. Fox (2003) asserts, “I know what to do through reflecting on my practice not from an evidence-based research. I also have certain values as an educational psychologist. I do not intend to change my values even I the best, present research evidence contradicts them (p. 96).

This information is relevant to the current study because it shows that there are contextual differences in the way in which evidence-based practice is evaluated in one field in relation to another. For example, in this study, Greene’s CPS model was originally developed for use in a medical setting and has been adapted for use in other settings such as education.
Criteria for determining EBP in other professions. Following in the footsteps of the medical field, clinical psychology, school psychology and general education have developed their own criteria and procedures for identifying evidence-based practice in their field (Cook, Tankersley & Landrum, 2009). In the field of Clinical psychology, the Division 12 (Division of Clinical Psychology) Task Force on Promotion and Dissemination of Psychological Procedures (1995) developed criteria of well-established and efficacious treatments in clinical psychology (Cook, Tankersley & Landrum, 2009). The only studies considered to determine well established and efficacious treatments in clinical psychology are between group experimental and social science research (SSR) designs. A psychological treatment is considered well established when the minimum of two good between group design experiments or nine SSR studies support it (Chambless, et al., 1996). The task force consider treatment efficacy when “supported by at least a) one group experiment that meets all methodological criteria for group experiments except the requirement for multiple investigators, b) two group experiments that produce superior outcomes in comparison with a wait list control groups, or c) three SSR studies that meet all SSR criteria except the requirement for multiple investigators” (Chambless et al., 1998, p. 368).

Following on from this, in the field of school psychology, Division 16 and the Society for the Study of School Psychology Task Force established a “detailed system for coding and describing multiple aspects of research studies” (Task Force on Evidence Based interventions in School Psychology, 2003, p. 367). The coding system provided a detailed research base, from which individuals, “draw their own conclusions based on the evidence provided” (Kratochwill & Stoiber, 2002, p. 360). The research design used to develop criteria includes descriptions of group research, SSR, confirmatory programme evaluation, and qualitative research (Kratochwill & Stoiber, 2002, p. 368). School psychology has not chosen to use a quantity measure to categorize practice regarding to its effectiveness and so criteria has not been established.
In the general educational setting, the What Works Clearinghouse (WWC) set up in 2002 by the United States Department of Education’s Institute of Education Sciences, use a rating system to grade reviewed practices as having “positive, potentially positive, mixed, no discernible, potentially negative, or negative effects” (Cook, Tankersley & Landrum, 2009, p. 368). The WWC (2008) regards only randomised controlled trials, quasi-experimental studies and SSR when deciding intervention effectiveness. Quantity measures include at “least one or two studies for a practice or curriculum to be considered as having positive, potentially positive, mixed, potentially negative, or negative effects” (Cook, Tankersley & Landrum, 2009, p. 368).

Critiques of criteria processes. Criticism of the processes used in the fields of clinical psychology, School psychology and general education above relate to concerns regarding the “general endeavour of designating evidence-based practice and objection to particular standards and criteria used” (Cook, Tankersley & Landrum, 2009, p. 370). Criticism was directed toward the dependency on “randomised clinical trials, psychological diagnoses, and adherence to treatment manuals, and for being too lenient” (Cook, Tankersley & Landrum, 2009, p. 370). In addition coding procedures used with Division 16 (Division of School Psychology) were judged as being “overwhelming and overly complex” (Durlak, 2002; Levin, 2002; Nelson & Epstein, 2002, & Stoiber, 2002, p. 370), and for endorsing research designs that are not useful in making causal inferences (Nelson & Epstein, 2002), and for creating ambiguous, descriptive reports rather than designating evidence- based practice (Wampold, 2002). In the general education review, researchers criticized RCTs as being difficult to conduct in a school setting and for being overly rigorous, resulting in few practices with positive effects identified.

The difficulty with designating a practice as evidence-based using criteria and/or standards that are limited in the number of studies of any design without stringent methodological standards is that it generates erroneous certainty (Cook, Tankersley & Landrum, 2009).
A further contentious issue lies with categorizing practices as evidence-based or not evidence-based. The problem with this pre-compiling scheme is that complexities involved in interpreting research literature may be overlooked, as well as “promoting the unfounded view that practices are either completely effective or completely ineffective” (Cook, Tankersley & Landrum, 2009, p. 370). Conversely, comprehensive descriptions of research may be of less practical value to educators pursuing direction on how to develop their teaching practices and classroom management (Cook, Tankersley & Landrum 2009).

The critique above is not supposed to deter professionals from developing an approach that determines what works in their particular field of work. Rather it recognizes that evidence-based practice is determined by matching the criteria and standards with the unique characteristics, such as goals, values, and traditions with the field that will use it (Cook, Tankersley & Landrum, 2009).

**Educational Research**

The quantity and quality of evidence required to answer a research question with confidence depends on the number of relevant-well designed studies and the consistency of the results across studies (Grace, 2009). A systematic review is used to assure that all available evidence is considered and that decision on what evidence is included is based on objective measures of design quality (Grace, 2009).

As education research comprises of a “wide range of subject matter and academic disciplines, methodologies and approaches,” (Hillage, Pearson, Anderson & Tamkin, 1998, p. 1) it can be difficult to define. However, for the purpose of a study conducted at the Department for Education and Employment, education research was defined as that which “critically informs education judgments and decisions in order to improve educational action” (Hillage et. al, 1998, p. 2). In essence, the purpose of educational research is to increase knowledge about what happens in schools (Knuper & McLellan, 2001), improve practice, address gaps in knowledge, and expand...
on and replicate knowledge, and contribute individual voice to knowledge (Biddix, 2009).

A further definition holds that educational research is a careful, systematic investigation into any aspect of education” (Picciano, 2013, p. 1). This definition proposes that research needs to be based on carefully designed research studies.

In the United States (US), quality education for all American children is the focus of educational policy (U.S. Department of Education, 2003). The key goal is to identify ‘what works’ in achieving improved outcomes for learners (Stoiber & Waas, 2002). The US Department of Education (2003) urges educators to utilise teaching pedagogy that have been proven to work (U.S. Department of Education, 2003). However concerns have been raised with regards to the quality of scientific research in the field of education and whether scientific evidence is an adequate standard or representation of ‘best’ evidence (Stoiber & Waas, 2002). A requirement of national policies such as the “No Child Left Behind” Act (NCLB) (2001) is that teachers use scientifically proven practices in the classroom to determine quality evidence. However, identifying ‘what works’ is very complex as instructional and ecological conditions of schools challenge the ability to “manipulate independent variables and/or intervention components and to measure intervention outcomes with the level of precision that is possible in research labs” (Stoiber & Waas, 2002, p. 7). A further concern relates to the different types of methodologies required to investigate scientific questions related to education (Shavelson & Towne, 2002). Following an examination of the status of scientific research in education by a committee created by the National Academy of Sciences (NAS), an operating assumption of the panel was that research questions need to guide researchers’ selection of scientific methods (Shavelson & Towne, 2002). It was suggested that these research questions be grouped into three types 1) description of what is happening, 2) cause and effect, and 3) process or mechanism demonstrating why or how it is occurring.
Conversely, other agencies and research synthesis organisations such as the ‘What Works Clearinghouse’ (WWC) are interested in whether a practice is effective and suggested that the randomised experimental group designs (RCT) are used to address this question (WWC, 2003b). In January 2003, the Council for Exceptional Children’s (CEC) Division for Research established a task force to investigate some of these concerns as they apply to special education (Odom et al., 2005). The task force added to the National Academy of Sciences (NAS) committee’s operating assumptions by including four types of research methodologies identified in special education. They include 1) experimental group, 2) correlational, 3) single subject design, and 4) qualitative designs. Quality indicators were attached to each of the methodologies along with a proposal on how evidence from each methodology could be used to recognise and understand successful practices in special education (Odom et al., 2005). As newly effective practices are being discovered and developed researchers may be required to conduct study in naturalistic contexts where experimental control is not able to be conducted) or where flexibility in changing certain elements of an intervention based on the learners responses is required (Cobb, Confrey, diSessa, Lehrer & Schauble, 2003). This descriptive and process composed research may lend itself more to qualitative methods (Brantlinger, Jimenes, Klingner, Pugach & Richardson, 2004). The value of mixing methodologies has been acknowledged by educational researchers as providing compatible information that would more effectively inform practice (Greene, Caracelli and Graham, 1989; Li, Marquart & Zercher, 2000).

**Descriptive and experimental research.** Descriptive and experimental research approaches are used in relation to specific research questions (Knupfer & McLellan, 2001). These questions direct the analysis into two areas, 1) describing data as it exists, and 2) drawing inferences about cause and effect (Knupfer & McLellan, 2001). Descriptive research examines questions related to finding out ‘what is,’ as in questions such as ‘What have been the reactions to the use of a television studio in school?’ or how do teachers feel about the National Standards in reporting students’ academic success? Conversely, experimental research seeks to find
out ‘what works’ as in ‘Does the implementation of response cost reduce challenging behaviour?’ or ‘Has reading recovery improved reading levels in students identified as remedial?’ (Cook, Tankersley, Cook & Landrum, 2008). However, identifying ‘what works,’ in practice can be complex when conducted in an educational setting. For instance, Stoiber and Waas (2002) explain that the “instructional and ecological conditions of schools make it difficult to manipulate independent variables and/or intervention components and to measure intervention outcomes with the level of precision that is possible in research labs” (p. 7). This is where descriptive research is useful in that it can provide information from another perspective (Knupfer & McLellan, 2001). Descriptive data or “what is can be compared with ‘what we would like,’ which supports educators in identifying areas that need to be addressed” (Knupfer & McLellan, 2001, p. 1). Further, descriptive research is useful in providing information that can isolate variables that will ultimately be used to measure cause and effect and provide additional information to support interpretations of research questions (Knupfer & McLellan, 2001). Different types of research as illustrated above can be used to address specific questions and experimenters should use them accordingly (Cook, Tankersley, Cook & Landrum, 2008).

**Quasi-experimental research.** A quasi experiment consists of some features of a randomised controlled trial, such as a manipulated independent variable but without important controls (random selection), or it can feature important controls but lack a manipulated independent variable (Oswald, 2008). The prefix ‘quasi’ means ‘sort of,’ which fits with the description that it is ‘sort’ of an experiment but not a true experiment. Aveyard and Sharp (2009) state that ‘quasi-experiments are most useful when you need to find out if something is effective but are not able to undertake a randomised controlled trial (p.60). Quasi- experiments explore outcomes to questions relating to whether an intervention or treatment has impact and relationships between practice and outcome (Dimsdale & Kutner, 2004).
Evidence-based practice summary. The evidence-based practice literature presented in this review suggests that since its inception in the mid-19th century, EBP has been a widely debated topic, particularly in relation to its definition and its ability to represent standardized criteria for identifying quality evidence across different fields of practice. Despite these criticisms, the literature demonstrates that across a variety of settings and populations a shared expectation exists that the fundamental goal of EBP is to provide ‘best’ current evidence, and ‘best’ current practice in contributing quality services. Furthermore, the literature identified that current views of evidence-based practice identify ‘best’ evidence as deriving from a combination of research, practitioner knowledge and child, young person and family knowledge. Within this framework of practice, this literature review recognised how different fields of professional practice developed their own criteria and standards to evaluate ‘quality’ evidence-based on a contextual frame of reference. The literature acknowledges that evidence-based practice is determined in different ways by different people and that criteria reflect the unique qualities of each field that uses it.

New Zealand Ministry of Education Principles and Practices
This review of the literature on evidence-based practice in the field of education has been presented through the lens of the New Zealand Ministry of Education context. The focus of the review is on the purpose of evidence-based practice to guide Ministry of Education practitioners in identifying and acknowledging “what works” for New Zealand children and families when drawing on worldwide research. At the New Zealand Ministry of Education current research along with ministry principles on “behaviour best practice” are documented in the Behaviour Practice Framework (2012).

At the New Zealand Ministry of Education individualized behaviour services are provided by the Early Intervention Teams and School Severe Behaviour Teams to students referred for behaviour support and delivered within the education and learning setting. An individualized service includes assessment and intervention that is “tailor made to meet the specific needs of the child, family and the educational and cultural
context” (Behaviour Practice Framework, 2012, p. 17). Behaviour service at the New Zealand Ministry of Education is guided by the Behaviour Specialist Service Standards (Ministry of Education, 2013), which have been developed by “specialist service providers, parents, specialist, young people and educators through a process of collaboration and consultation” (Ministry of Education, 2013, p. 3). The process of development reflects Ministry’s commitment to the Principles of the Treaty of Waitangi and recognition of Māori as tangata whenua (original inhabitants of New Zealand) (Behaviour Practice Framework, 2012).

The capacity for behaviour service at the Ministry is fixed and not driven by demand. Referrals from schools are considered against a national criteria and access to the service is prioritised to ensure that children with severe and challenging behaviour are able to access the service (Behaviour Practice Framework, 2012). Behaviour service is provided on a continuum which identifies the type of support required. Children identified as exhibiting moderate behaviours are referred for support from Resource Teacher Learning and Behaviour (RTLB), while children with severe challenging behaviour are referred to the MOE behaviour service.

The Specialist Service Standards (2013) are built around the Service Pathway or ‘Poutama,’ which guides practitioners service through a series of eight steps each representing a service expectation. The steps include, access, engagement, assessment and analysis, programme planning, implementation, review, closure and follow up and reflection (The Specialist Service Standards, 2013). Cultural support in the form of Kaitakawaenga (Māori Special Education Adviser) and/or Pouarahi a Takiwa (Pacific Island Special Education Adviser) is made available if a child referred for behaviour support is identified as Māori or Pacific Island decent (Group Special Education Service Guidelines, 2008). Although the linear approach to the service pathway appears as a process of steps, it accommodates the “needs of the children and families and to the needs of evidenced-based practice” (Behaviour Practice Framework, p. 17, 2012).
The context for delivery of evidence-based practices reflects the core principles of inclusive practice, engaged families and active participation of the child and/or young person (Ministry of Education, 2012). This ecological approach is reflected throughout the Service Pathway. For example, the child and their family, whanau and educators contribute to the assessment, information gathering, and analysis and programme planning (National Service Description for Special Education Services, 2005). Information is gathered from a range of sources and includes the child or young person’s history, observations of the child or young person in different settings and is, “culturally and developmentally appropriate and guided by current research and evidence-based practice” (National Service Description for Special Education Services, 2005, p.12). The process of assessment and planning is collaborative and involves the child and family in identifying “current skills, key strengths, concerns and variations in home and school philosophies” (National Service Description for Special Education Services, 2005, p. 13). In addition, the Ministry has provided practice guidelines and services for the provision of assessment and management of serious risks. These include the Serious Risk Assessment and Management Practice Guideline and the Behaviour Crisis Response Service and the Intensive Wraparound Service (Behaviour Practice Framework, 2012, p. 20).

In most instances, “effective behaviour practice involves interagency collaboration as behaviour has its origins and influences within the wider ecology of a child’s life” (Behaviour Practice Framework, 2012, p. 5). These agencies may include, Infant, Child and Adolescent Mental Health (ICAMHS), Child, Youth and Family (CYF), and/or other non-government support agencies such as Parentline and Birthright.

The principles that inform behaviour practices for practitioners at the Ministry are documented in the Behaviour Practice Framework (2012). This document has been developed for behaviour practitioners, teams, and managers working in the Behaviour Service, and is delivered in line with the Special Education 2000 policy framework (Complex Needs practice Framework, 2012). The Behaviour Practice Framework (2012)
is evidence informed drawing on current research on ‘behaviour best practice’ and includes key principles and practices valued by the Ministry. The primary focus of the framework is the theoretical and practice rationale for working with children and young people exhibiting severe and challenging behaviour (Ministry of Education, 2012).

At the Ministry severe and challenging behaviour includes the, “wide spectrum of childhood conduct problems including antisocial, aggressive, dishonest, delinquent, defiant and disruptive behaviours. It is estimated that these behaviour difficulties affect 5-10% of New Zealand children” (Church, 2003, as cited in Behaviour Practice Framework, 2012, p. 12). Church added that these severe behaviours are predictors of future chronic antisocial behaviour and other unfavourable outcomes such as “crime, mental health problems, substance abuse, teen pregnancy, partner violence, educational under achievement and poor physical health” (2003, as cited in Behaviour Practice Framework, 2012, p.12). The Ministry’s severe behaviour service also provides support for children experiencing learning and/or intellectual disability.

Evidence-based practice in special education. At the Ministry of Education, evidence based-practice is conducted in collaboration with all stakeholders who share their experiences, knowledge and ideas (Ministry of Education, 2008). Carr, Dunlap, Horner, Koegel, Turnbull and Sailor, Anderson, Albin, Koegel and Fox (2002) explain that this approach is known as Positive Behaviour Support (PBS) where assessment and planning is driven by the stakeholders in collaboration with the case worker. Batemen (2006) states that an approach needs to fit a culture’s context and practices.

Moreover, Bishop, Berryman, Tiakiwai and Richardson (2003), and Wearmouth, Glynn and Berryman (2005) state that programme effectiveness for Māori, Pacific Island and children from different ethnic communities needs to be based on an adapted approach that focuses on the life experiences of the culture. Furthermore, Glynn, Berryman, Atvars, and Harawira (1997) and Glynn, Berryman, Walker, Reweti and O’Brien (2001)
explain that the approach used to assess behaviour for Māori is based on He Awhina Matua. The emphasis is on assessing behaviour in the social and physical context, which is in contrast to traditional approaches in which the assessment focus is on the child’s behaviour rather than the context in which the behaviour occurs.

Annan and Priestley (2011) posits that “to determine ‘what will work’ in a specific situation, analysis needs to include social, historical and cultural knowledge gained through interaction among participants” (p. 13). As every situation is unique interventions need to be ‘tailor made’ to meet the requirements of the participants in each situation (Annan & Priestley, 2011).

**Criteria for evaluating EBP in a New Zealand context.** Evidence-based practice in New Zealand has permeated the field of education and special education in response to an increasing demand for accountability and “focus on managing for outcomes” (Bateman, 2006, p.1). The purpose of evidence-based practice is to guide and support practitioners to identify and apply knowledge of “what works for diverse (all) learners” (Alton-Lee, 2012, p. 5). However, as Bateman (2006) pointed out earlier evidence of ‘what works’ for some can be quite different to ‘what works’ for others, particularly when applying international research in a New Zealand context.

As a way of assessing knowledge of ‘what works’ for children in a New Zealand context, the New Zealand Ministry of Education (2002) developed the Iterative Best Evidence Synthesis Programme (BES), which was formally established in late 2003 (Alton-Lee, 2005). It originated in the “need for a community and system development to be more responsive to diverse learners” (Alton-Lee, 2005, p. 2) that was at least “partially prompted by recognition that New Zealand students show relatively high levels of disparity in achievement (PISA study, OECD, 2002 and 2004)” (Alton-Lee, 2005, p. 1).
The Iterative Best Evidence Synthesis (BES) Programme (2005) is a “collaborative knowledge building approach across policy, research, and practice in New Zealand.” The programme assists in “strengthening the accessibility and use of rigorous evidence-based research in education” (Alton-Lee, 2007, p. 253). The main purpose of BES is “to support a sustainable educational development whereby a whole education system and its communities strengthen a range of desired outcomes for all learners through iterative processes of shared knowledge building and use” (Alton-Lee, 2007, p. 71).

The criteria links connections to learner outcomes and focuses “specifically on what can be learned from the evidence about what works, under what conditions, why and how” (Alton-Lee, 2007, p. 73). This is achieved through triangulating patterns in the international research with New Zealand evidence, through identifying context specific consistency and incongruence. The methodology developed to evaluate, sort and synthesis the evidence from different paradigms is the “jigsaw methodology.” The jigsaw pieces represent the influences on learner outcomes that often embedded within a variety of research studies. The jigsaw methodology involves drawing in and connecting the pieces of the puzzle. The potential of this method is to “deepen understanding of what works in education and illuminate the impacts of context” (Alton-Lee, 2004a, p. 5).

As the Iterative Best Evidence Synthesis programme is a New Zealand programme, it particular focuses attention to what makes a bigger difference for diverse Māori learners in English and Māori-medium education. Valued outcomes include a priority for Māori achieving success as Māori in New Zealand education. BES is informed by knowledge attained from Māori researchers whose work has been identified as an “area of national strength” (Alcorn, 2004, p. 6).

BES has been pivotal in providing teachers with an opportunity to identify and “reclaim the research on educational practice as their own” (Alton-Lee, 2007, p. 74). The Iterative BES Programme has been described by the World Education Yearbook (2006) “as the most comprehensive approach to evidence” and goes onto say, “What is distinctive about
the New Zealand approach is its willingness to consider all forms of research evidence regardless of methodological paradigms and ideological rectitude and its concern in finding, effective, appropriate and locally powerful examples of ‘what works’ (Luke & Hogan, 2006, p. 173-174).

This is relevant to the current study because it illuminates the importance of broadening the parameter of evidence-based practice so that it is purposeful in meeting individual needs and the varied fields of practice.

*Ethical practice.* At the New Zealand Ministry of Education, behaviour practitioners, and their colleagues and managers are ultimately responsible for evidence-based behaviour practice. Practitioners are accountable for ensuring that “their practice is in accordance with; organisational guidelines and standards, any ethical guidelines or codes that guide their discipline and the needs of the children, families and educators that they work alongside” (Ministry of Education, 2012, p. 4). Practitioners are expected to reflect on any practice issues and consult with colleagues in the form of supervision, peer and team reviews, case presentations and attendance at ministry service meetings to problem solve and improve practice. Further, “when making decisions or recommendations, practitioners are required to critically appraise evidence and integrate it with information about the child/young person and their home education context, the preferences and values of the people involved, and with the practitioner’s own knowledge, skills and values” (Behaviour Practice Framework, 2012, p. 8).

Practitioners at the New Zealand Ministry of Education are also ethically required to use assessment tools that are “current, evidenced-based and appropriate to the New Zealand context” (Behaviour Practice Framework, 2012, p. 20). The Ministry requires assessment methods to be

- culturally appropriate and take into account the language background of the child
- planned, purposeful, systematic, useful, ecological and collaborative
• Undertaken across key settings and include observations, and information from parents and educators and the child or young person
• Look at the child or young person’s functioning across curriculum areas
• Presented from a strengths based perspective
• Be as unobtrusive as possible” (Ministry of Education, 2006).

Additionally, assessment practice needs to be “authentic and measure capabilities in real world contexts” (Behaviour Practice Framework, 2012, p. 21). Assessment should occur in a child’s natural setting such as in classrooms, homes and the community and “create opportunities that reflect the typical, useful and meaningful experiences of the child” (Behaviour Practice Framework, 2012, p. 21). Assessment practice needs to include a range of tools and methods, for example, interviews, observations, and review of the child records (Behaviour Practice Framework, 2012, p. 21).

One of the ethical and legal requirements of the services at the Ministry is the process of informed consent. Fraser (1998) states, “Informed consent is a process rather than a one off event. The essential elements of this process are effective communication, full information, and freely-given competent consent” (p. 1). At the Ministry, informed consent is an ethical and legal requirement. Guidelines about informed consent come under the Code of Health and Disability Services Consumers’ Rights. All Ministry staff working with students with disabilities is expected to comply with the requirements of this Code (Ministry of Education, 2007). At the Ministry informed consent and initial service negotiation occurs at the beginning of the service pathway. During this phase the child/young person, their family, whanau and educators are informed as to the type of service and eligibility they can expect from the Ministry.

The Code of Ethics guidelines inform psychologists of the professional ethics of the profession and should be considered when making decisions regarding professional and research practice (New Zealand Psychologists Board, 2012). Dunsmuir, Brown, Iyadurai, and Monsen (2009) state that a psychologist adherence to the Code of Ethics provides participants with protection from harm and assures children have access to the best available interventions. The New Zealand Psychologist Board recommends that Psychologists should bring the Code to the attention of anyone the psychologist is involved in teaching, supervising and/or employing (New Zealand Psychologists Board, 2012). All registered psychologists are required to continually seek professional development to upgrade their academic and professional competence (Annan & Priestly, 2011).

Summary of EBP in a New Zealand context
The literature review identifies a New Zealand initiative, the Iterative Best Evidence Synthesis Programme (BES), for determining criteria of effective practice. This is achieved through triangulating New Zealand research with international research. The value of the BES programme, as illustrated in the review is that it reflects a New Zealand context, and in particular Māori research, which supports Māori achieving success as Māori in New Zealand education.

The literature review concludes this section by drawing attention to accountability of practitioners at the New Zealand Ministry of Education to deliver services that are evidence-based practices, ethical and meet organisation guidelines and service standards. This can be enhanced through professional development and attendance in regularly scheduled supervision.

Critique of the CPS Model
Despite the potential benefits that Greene’s Collaborative Problem Solving (CPS) model proposes for parents and schools, a more in depth view of the approach have revealed
some inconsistencies with aspects of New Zealand Ministry of Education practice
guidelines, and cultural context of Waikato region.

Discrepancies are revealed in the areas of the efficacy of the model, in terms of the
research methodology and use of medication, evidence of the data, theories of practice,
and the definition of ‘collaborative.’ Further, incongruence is identified in the use of
assessment and implementation of the approach for parents and teachers, and relationship
challenges between the school, teacher and parents and/or between the teacher and the
child, and psychosocial interventions. In addition, views regarding teacher and parent
support with personal skill development, the philosophy of the CPS approach, ownership
of the problem, labeling, and the role traditional and contemporary theories and practices
play in modifying behaviour is explored.

Use of the term “collaborative.” Incongruence has also been observed in
Greene’s use of the term ‘collaborative’ in relation to more contemporary conceptions of
this term. For example, Greene’s collaborative model in the school setting involves an
interaction between the child and teacher and sometimes a school psychologist. In the
home setting ‘collaboration’ is between the child and parent in contrast.

The term ‘collaborative’ depicted in contemporary New Zealand based models such as
Durie’s (1994) Te Whare Tapa Wha model espouses an ecological view of problem
solving taking into account the wider social and cultural context. Ecological theory,
originally developed by
behaviour and learning as relating to social and historical contexts in which they occur. In
other words, the focus shifts from characteristics within the individual to the “quality and
context of the individual’s environment”
(Paquette & Ryan, 2001, p. 3). For Māori, the social and cultural context includes
whanau, extended whanau, the community, kaumatua, outside professional agencies and
the school (Bateman, 2006).
**Labels.** Greene originally developed the CPS model to address challenging behaviours often labeled as defiant, aggressive, raging, noncompliant and willful, as well as many diagnosed disorders such as oppositional defiant disorder (ODD), conduct disorder (CD), autism spectrum disorders (ASD), Attention Deficit Hyperactivity Disorder (ADHD) and mood and anxiety disorders. He refers to the children exhibiting behaviours consistent with these conditions as inflexible, stubborn and ‘explosive’ as illustrated in his books titled ‘The Explosive Child’ (Greene, 2012) and ‘Treating Explosive Kids’ (Greene, 2009). Diller (2001) argues that these ‘negative’ personality qualities, which coincidentally are ‘core descriptors of bipolar child behaviour,’ could best be described neutrally as intense, determined, persistent or coping poorly with transitions’ (p. 3). However, he states that the labels and disorders themselves are less useful in providing the answers to reducing challenging behaviours. Greene (2010) adds that ‘lagging’ cognitive skills that lie beneath the maladaptive behaviour provide more useful information as to why a child’s behaviour is challenging than labels and disorders. This view suggests a contradiction between his use of labeling as evident in the title of two of his books and with his comment on usefulness of labeling in seeking solutions to reducing challenging behaviour.

**Greene’s philosophy.** The philosophy underlying Greene’s CPS approach is that “Kids do well if they can.” Greene (2010) stated that if children could do well they would do well. “If they had these skills they would use them” (p. 29) simply because there is a preference to doing well rather than not doing well. Greene (2010) terms these undeveloped skills as ‘lagging’ cognitive skills in the domains of ‘flexibility, frustration, tolerance and problem solving.’ Research in the neurosciences supports the view that challenging behaviour is a form of developmental delay (Graham, 2012).

Greene’s philosophy provides adults with an opportunity to view children through a different lens and understand challenging behaviour from a different perspective. However, Greene’s perception is based on his perspective of what ‘doing well’ means to
children. His assumption is that ‘doing well is a good achievement. For a child living in a low income home where food is scarce and there is care and protection issues ‘doing well’ may be just getting through their day unharmed, or able to have breakfast or a packed lunch for school.

**Assessment.** The mechanism used for assessing lagging skills and unsolved problems, also known as antecedents, is the Assessment of Lagging Skills and Unsolved Problems checklist (ALSUP). A recent updated version is now available from the authors, along with a Thinking Skills Inventory, a parent report measure. In the original CPS treatment manual this was known as the Pathways Inventory (Greene & Ablon, 2006).

The ALSUP is made up of a list of commonly identified lagging skills, along with a section for identifying unsolved problems (antecedents) (Greene, 2009). ALSUP shares similarities with functional behaviour analysis (FBA) where the function (cause) of behaviour is identified. Greene (2009) states that this is where the similarity ends as FBAs work on the assumption that maladaptive behaviour is, “working for a kid by allowing him to get something desirable i.e., attention, peer approval or escape or avoidance of something undesirable such as a difficult task” (p. 36). ALSUP on the other hand involves a deeper level of analysis which identifies lagging skills that, “help us understand why the kid is getting, avoiding, and escaping in such a maladaptive fashion” (2009, p. 37). Greene states that to get to the ‘core’ of challenging behaviour ALSUP will achieve this more effectively than using a FBA. Conversely, Horner, Carr, Strain, Todd, and Reed, (2002), Scotti, Evans, Meyer and Walker (1991), and Scottie, Ujcich, Weigle, Holland and Kirk (1996) argue, “For any intervention to be effective, it must be based on information gathered through a functional assessment to determine the purposes of challenging behaviour and the antecedents predicating its occurrence” (p. 72).
Church (2003) adds, “A functional assessment analysis has been widely researched as a reliable and effective method for assessing the contexts, situations and people that give rise to problem behaviour in children” (p. 86). In a New Zealand Ministry of Education context, “Functional assessment is the preferred diagnostic procedure for children with severe behaviour difficulties” (Church, 2003, p. 86) as it aligns with Ministry Specialist Service Standards.

ALSUP is also available in a Likert-scale format. Along with a team of adult caregivers, a consensus on the skills the child or young person is lacking is achieved (Greene, 2009). Greene (2009) states that by identifying undeveloped skills, adults will have a better understanding of why a kid is exhibiting challenging behaviour and, “which skills the kid needs to learn” (p.11).

Despite Greene’s intention to identify precipitating factors in challenging behaviours so that skills can be developed, in effect it implies that the problem lies within the child and the child requires fixing (Rennicke, 2008). The focus shifts from a deficit in ‘problem’ behaviour to a deficit in a ‘lack’ of skills. This application of a deficit model is what Bronfenbrenner claims is used to determine the level of support a child and their family will receive when parents are forced to declare themselves as ‘deficient’ (Paquette & Ryan, 2001).

Although identification of skill deficits can provide direction for remediation, Rennicke (2008) argues that advice on what can be effective in remedying these deficits is less forthcoming. Furthermore, Diller (2001) states that by focusing only on skill deficits all aspects of experience are narrowly viewed. The focus needs to be on “seeing the ‘big picture’ of what a student is able to accomplish” (Fraser, Moltzen & Ryba, 1995, p. 141) so that a greater sense of achievement is maintained. By broadening the view of the positive aspects of an individual’s experience, problems can be viewed in relation to the ‘supports of people’s lives’ (Annan and Priestley, 2011). An example of this in a New Zealand context is provided in
the Ministry of Education (2012) resource Ka Hikitia, which “advocates investing in strengths, opportunities, and potential” as a way of achieving greater outcomes for Maori. The approach “seeks to shift the focus from addressing problems and disparities to expanding on the successes” (Ka Hikitia, 2012, p. 19). Annan (2012 in press) considers that “next steps are a continuation of development” rather than an intervention aimed at gaps to be filled.

Contemporary positive psychology proposes that solutions are built upon foundations of strength rather than driven by deficits. Effective solutions depend on the identification of student’s strengths and abilities as well as areas to develop, which can be reframed so that the student is able to experience successful outcomes (Steinberg & Whiteside, 2002). Often people get so caught up in the problems and deficits of a child’s behaviour that their competencies are ignored (Steinberg & Whiteside, 2002).

Although the process of assessment between the CPS model and the New Zealand Ministry of Education is similar, in that it involves parents and educators in identifying undeveloped cognitive skills, the range of sources CPS uses to gather information is incongruent with MOE assessment practice.

**CPS Plan B.** In the CPS model, Greene (2009) states that the collaborative problem solving plan or intervention is referred to as Plan B. Greene (2009) goes on to say that Plan B involves the practitioner training the educators in how to implement the plan. A child’s first knowledge of and involvement in the plan occurs when the intervention takes place. Plan B involves a process of collaboration between the child and the adult. The aim of Plan B is to gather information, define two concerns of interest, that of the child and adult, and develop potential solutions (Greene, 2009). Although Plan B involves an aspect of collaboration, (the student and teacher engaging in the process of problem solving); the plan follows a specific process of delivery and is primarily directed by the practitioner. Greene (2009) states that Plan B, “goes awry” if an adult has missed
one of the steps” (p.119). In other words, if the steps of the plan are not followed in sequence or as prescribed in the script, it is ineffective.

Conversely, in a New Zealand Ministry of Education context, “interventions are planned collaboratively with the school and family” (Behaviour Practice Framework, 2012, p. 22). The team involved in the process i.e., family/whanau, and school are involved in “selecting and negotiating the best fitting interventions for the individual child and/or their family and whanau” (Behaviour Practice Framework, 2012, p. 22). The practitioner’s responsibility in this process is to ensure that communication is tailored to suit a particular purpose and is clearly understood by all stakeholders. Where possible, “information to families and whanau is provided in their first or preferred language (National Service Description, 2005, p. 11). Programme planning is flexible in that it is responsive to changes occurring in a child or young person’s environment (Ministry of Education, 2012). The New Zealand Ministry of Education (2005) states, “A child or young person’s journey through our service is rarely a one way process. They may return to a specific phase in the process as new information becomes available or as their circumstances change” (p. 12).

**Culturally appropriate practices for Maori**

In New Zealand there is a shortage of empirical intervention research corroborating culturally appropriate and effective planning and intervention approaches for Māori (Meyer & Evans, 2006). However, substantial theory and best practice guidelines relating to culturally appropriate programme planning and intervention approaches for Māori does exist. An example of best practice for Māori is provided by, Bishop, Berryman, et al. (2003), Glynn and Berryman (2005) and Wearmouth, Glynn and Berryman (2005) who state, “Culturally sensitive and appropriate interventions require adaptations demonstrating “contextual fit” (p.77). Intervention planning for Māori needs to involve collaboration with whanau and be respectful of the contributions of the Māori community (Meyer & Evans, 2006). This approach is based on Hei Awhina Matua
(Behaviour management project supporting a Maori worldview), which assesses behaviour in a social and physical context in which the behaviour occurs (Berryman & Glynn, 2004). This contrasts with traditional approaches that focused on developing interventions based on information about the child’s behaviour rather than on the circumstances and contexts in which the behaviour occurs (Berryman & Glynn, 2004).

Cultural context is significant to this study as it paints a view of what evidence-based practice looks like in practice for a particular culture. As pointed out earlier in the evidence-based section of the literature review, people from diverse ethnic communities provide a wealth of information that contributes to ‘best practice.’

**Relationships.** Greene (2009) refers to Plan B as a ‘relationship building process’ (p. 55). He states that relationships are developed between the adult and child in the empathy step of Plan B. Greene says that through understanding a child’s concerns or perspective, “you gain a problem solving partner” (p. 92). However, a reported example provided in Greene’s book ‘Lost at School’ (Greene, 2009), demonstrates that relationships occurring between the parent and the school, the child and the school, and the school and the psychologist are displaced. For instance, the principal in the example exclaimed, “We will not tolerate this sort of thing in our school. Joey’s classmates have a right to a safe learning environment and that right was violated today. When a student assaults a teacher in this school system and threatens to kill people, our school discipline code says we need to notify the police.” The mother’s response was that she had, ‘heard enough.’ She left the office with her son, got into her car and drove off (Greene, 2009, p. 4-5).” Glynn, Berryman, Walker, Reweti and O’Brien (2011) state that when one person takes the stance of superiority over another and solutions to problems are imposed with little or no consultation with others destructive outcomes can be the result. Relationships also break down and respect, dignity and integrity are compromised.
Research clearly shows that when effective relationships and partnerships exist between schools, parents, whanau and communities better outcomes are achieved by students (Education Review Office, ERO, 2008). At the New Zealand Ministry of Education, relationships are developed in the access and engagement steps of the service pathway. The engagement process involves holding a meeting between the child or young person, their families, whanau and educators. This meeting or hui is about empowering all stakeholders as partners in their relationships with specialists and specialist service providers (Group Special Education, Service Guidelines, 2008). Moreover, Macfarlane (2007, as cited in Bateman, 2008) states that all instances of conferencing are by definition intended to promote discussion and achieve desirable outcomes.

At the New Zealand Ministry of Education, the Maori Education Strategy (Ka Hikitia), (2008-2012) provides a framework for delivering services to Māori in ways that are both culturally appropriate and empowering for Māori clients. The Māori Education Strategy (2008-2012), is underpinned by the Treaty of Waitangi as an all-enveloping korowai (cloak) that covers all service delivery at Special Education. Article one of the Treaty refers to Partnership or Kawanatanga. “When working with all families, not just Māori, it is important to provide our service based on the articles set out in the Treaty of Waitangi. Throughout our service at the Ministry, Whanau are guaranteed and involved in decision making. They are consulted and they are partners. This applies to all cultures” (T. Paenga, personal communication, April 12, 2013). Although engagement is about building relationships and developing plans in collaboration, partnerships are respected and maintained throughout all other areas of the service pathway. Whakangatangata (shared experiences) needs to be on going and continue to maintain and build trusting relationships (Batemen, 2008).

Article two of the Treaty applies to ‘Protection or Rangatiratanga.’ During the hui service providers need to be engaging and communicating with whanau in appropriate ways, while respecting their preferences and practices. The links of Māori learners genealogically to their human kith and kin through whakapapa as well as to their natural
environment is critical. It is within these links that enduring positive interventions can be forged (Bateman, 2008). An understanding of the knowledge of the culture, “whakapapa,” along with the support of a cultural advisor provides the support required by both the whanau and the service providers. By having a cultural advisor present it can demonstrate to the family that as the lead worker we are learning alongside them. This can help toward building respectful relationships which are not based on the misuse of power. At the conclusion of the hui, the family or whanau receive a copy of the meeting plan and notes. This is referred to in Māori as, ‘whakarorongo.’ All information gathered and shared has included input from the family, student or whanau and a copy is left with them (Evans & Paewai, 1999).

The section on relationships is relevant to this study as it identifies incongruence between New Zealand principles and practices and the approach used in the CPS model. It further highlights the importance of making positive connections with people so that successful outcomes can be achieved.

**Problem ownership.** In the CPS model, the first time a child is made aware that a problem exists with them is when they are involved in Plan B. Greene (2009) states that “Plan B helps adults clarify and understand a child’s concerns or perspective on a particular unsolved problem” (Greene, 2009, p. 53). However, the unsolved problem or problems have previously been identified by the adults rather than the child. For example, Greene’s Assessment of Lagging Skills and Unsolved Problems (ALSUP) checklist, parental interviews and formal assessment is undertaken by team who hypothesize that the problem is the result of undeveloped cognitive skills within the child. Greene states that the team involved in the assessment achieves a consensus on the “skills the kid seems to be lacking” (Greene, 2009, p. 27).

In the example above, the child’s voice is absent along with the child’s view of the problem. Steinberg and Whiteside (2010) argue that a child may relinquish all ownership of a problem if they do not view themselves as having a problem and will be less
motivated to change it. For example, during the empathy step of the CPS programme, the problem is presented as a question to the child. “I’ve noticed that you’ve been getting pretty mad at some of the other kids lately. What’s up?” (Greene, 2009, p. 87) This prescriptive approach reflects the adult’s assumption that aggression is a problem for the child. The child may however, share a different perspective on the problem. For instance, the child might not care, or even understand why aggression is an issue if aggression is viewed as ‘common and accepted within the child’s cultural group’ (McIntyre & Silva, 1992). To cite an example of this a teacher in America was told by parents of a poor, urban black youth to “whup” (paddle) him if he misbehaved in class. Hanna (1988) and Stack (1974, as cited in McIntyre & Silva, 1992) claim that this discipline practice is more likely to occur in the “low income black culture” and “may even be viewed by the child as a sign of caring and affection” (p. 10).

McIntyre and Silva (1992) assert that with regard to discipline, teachers should be mindful that certain practices that may cause harm to children in their own culture may not be viewed as excessive or harmful by another culture.

Steinberg and Whiteside (2002) state that patterns of belief held by the family influences both behaviour and the perception of their problems. To determine problem ownership, it is important to explore the way each stakeholder experiences a problematic situation. They added that through this understanding of differences in perspectives effective solutions can be achieved (Steinberg & Whiteside, 2002). By involving all stakeholders in the shared understanding of the problem grounds for misjudgment and misinterpretation can be avoided (Steinberg & Whiteside, 2002).

**Theory of behaviour.** Greene’s theory of ‘poor’ behaviour is that it is biological in nature and “stemming from the children themselves. He believes the children’s challenging behaviour is the result of their genetically derived temperaments or inherent to the children themselves and not the result of environment or experience” (Diller, 2001, p. 2). Conversely, widespread research shows that multiple theories of child and human development explain how severe and challenging behaviour develops
over time (Behaviour Practice Framework, 2012) and the origin and sources of influence on behaviour is “always multiply determined” (Meyer & Evans, 2006, p. 14). Bronfenbrenner’s (1979) ecological systems theory for example suggests, “In order to understand the behaviour of a child, the environmental influences must be considered” (Horowitz-Deagan, 1980, p. 634). Church (2003) adds, “There is a large body of research that supports the view that for some children antisocial behaviour is initially acquired during the day to day interactions of which family life is composed and for many children, well established by aged four. It is this research that has informed service providers of the advantages of intervening early on in a child’s life (Behaviour Practice Framework, 2012) and to” take into account the environmental influences as well as the cognitive factors” (Horowitz-Degan, 1980, p. 634).

Traditional and contemporary behavioural practices and theories. Although the CPS approach reflects aspects of an ecological approach, wherein adaptive behaviour is achieved through compatibility between characteristics of a child and his environment, the model challenges the role traditional and contemporary behavioural practices and theories play in modifying challenging behaviour. For example, in Diller’s (2001) review of the CPS approach, he reports that Greene explains that behaviour modification programmes do not work for children with challenging behaviour because ‘kids’ brains make them incapable of responding to normal rewards and punishments. He maintains that these forms of unilateral interventions tend to be unreliable, short lived and potentially act as precipitants to challenging behaviour. This view challenges Skinner’s (1938) operant conditioning theory, based on Thorndike’s (1905) ‘law of effect’ theory, that behaviour which is reinforced is more likely to be repeated. Lieberman (2000) states that Skinner did not approve of the use of punishment as a behavioural modification technique, instead Skinner advocated for the frequent use of positive reinforcement.
Positive reinforcement can be presented as intrinsic, such as specific verbal praise and attention, or extrinsic as in the use of token economy, class points or play money (McLeod, 2007). However, the effectiveness of positive reinforcement in modifying behaviour depends on the saliency, ‘or degree in which an individual prefers the reinforcement,’ and the ‘time delay between the operant behaviour and the reinforcer’ (McLeod, 2007). Further, Diller (2001) points out when rewards are given immediately and are tangible, such as stickers for younger children and money for older children, they have a role in shaping behaviour. Although teachers and parents have rewarded children for good behaviour well before Skinner’s theories were developed, many contemporary school behaviour management practices are directly influenced by Skinner’s work (Lieberman, 2000).

Further, as part of a review of Greene’s CPS model, Rennicke argued that Greene and his colleagues controversially reject “the automatic assumption that a child has learned that explosive episodes are an effective means of seeking attention” (2008, p. 216). Learned behaviour or classical conditioning was based on Watson’s idea (1913 as cited in McLeod, 2007) that differences in behaviour were the result of different experiences of learning.

In addition, rationale for interventions such as time out and withdrawal of attention are challenged by Greene and his colleagues as being the ‘best’ means of intervention for children with challenging behaviour. Diller (2001) argues that conventional practices such as ‘time out’ have a place in modifying behaviour. For example, if Johnny is hitting his mother in anger and he is sent to time out, “parental immediacy and consistency should in time cause Johnny to think twice about his actions” (Diller, 2001, para. 23). Greene (2010) however, argues that the reason these conventional practices are often ineffective in changing behaviour is because maladaptive behaviour reflects a developmental delay in the areas of flexibility, frustration tolerance and problem solving. “Focusing your energy on rewarding and punishing your child and teaching him who’s the boss may actually be counterproductive because such an approach often sets the stage
for ‘explosions’ and won’t teach him the skills he’s lacking” (Greene, 2010, p. 15). He
does, however, acknowledge conventional practices that reflect traditional theories and
views may not always reflect contemporary understanding of maladaptive behaviour.

**Psychosocial interventions.** Greene challenges psychosocial interventions such
as social skills training (Cole & Dodge, 1998; Kendall, 1985; 1991; Kendall & MacDonald, 1993), problem
solving skill training (Kazdin, Esveldt-Dawson, French, & Unis, 1987) and anger
management skills (Feindler, 2011). He claims that these interventions do not foster a
transactional process because they have a unidirectional orientation and focus more on
factors within the child so as to improve the transaction between the child and the
environment. Greene (2010) considers that collaborative problem solving improves
‘compatibility between child and adult’ rather than focusing on ‘fix the problem child and
fix the problem adult’ models of intervention (p. 5).

However, like with any new intervention ‘overuse or use to the exclusion of other
methods’ can be a common ‘pitfall’ in implementing a programme (Regan, 2006).
Diller (2001) posits that “no one approach works all the time for all children” (p. 4). For
some children, just being held and comforted is enough to reduce the tears to sniffles and
fears to reassurance. Steinberg and Whiteside (2002) further support this view by stating
that when there is difficulty producing change in a child’s cognitions, emotions, or
behaviour, sometimes a shift or diminishment of the behaviour occurs following an
adjustment in the circumstances that supports them. For example, the quality time the
child has with others may be what changes the behaviour rather than the actual problem
solving. The further add that sometimes quality time with children, whether it is one to
one or with a supportive network of people, can reduce challenging behaviour (2002).
This therefore raises the question as to whether the quality time and attention experienced
by the child in the collaborative problem solving context is effecting change in behaviour or whether the problem solving aspect of the approach is creating positive outcomes.

**Family support.** Another factor to consider when questioning the effectiveness of previously trialed interventions is the support families need to implement these approaches. For instance, Diller (2001) raises the point that when families are supported in maintaining consistency and immediacy in using interventions previously claimed as ineffective, success can be experienced. Diller’s point regarding support for the family raises the question whether there is too much emphasis placed on the ineffectiveness of interventions rather than on the approach and the difficulties many parents and teachers face implementing the interventions.

**Teacher and parent support.** Rennicke (2008) raised a question about whether, or not the CPS approach can be effective if parents or teachers also have skill deficits. Greene and Ablon (2006) point out that the CPS approach can be affected as a result of multigenerational skill deficits. The focus of the intervention therefore shifts toward the parents and teachers who may be experiencing their own difficulties anticipating problems before they occur, or during stressful events difficulty may be experienced in the regulation of emotions. In addition, other factors that have the potential to influence the nature of the CPS intervention in a particular setting may include trauma histories and social, cultural and historical contexts, life experiences and expectation belief systems. For example, Steinberg and Whiteside (2002) claim that family beliefs can influence a teacher’s expectations of what it takes to be an educator and this can in turn influence interactions with children exhibiting challenging behaviour. Additionally, a teacher and/or parent’s attributional style may influence their approach in managing a child with difficult behaviour as individuals differ in the way they interpret the ambiguities and events of life. For instance, a teacher and/or parent who use an internal attributional approach tend to personalize everything that happens to them. Whereas using an externalized attributional approach, teachers and/or parents view problems as either inherently unchangeable or possibly changeable (Steinberg & Whiteside, 2002).
Greene (2009) maintains that in his experience many teachers have acknowledged that they would like more support in working with children with challenging behaviour. Chaplain (2004) states that teacher support needs to start with adequate and effective support provided for teachers by middle and senior managers responsible for managing school behaviour. Research has shown that proactive, positive approaches have produced greater benefits to both teachers and students (Ayres, Meyer, Erevelles & Park-Lee, 1994).

**Teacher stress.** Teaching can be a stressful occupation (Jepson & Forrest, 2006; Margolis & Nagel, 2006) and one of the primary causes of teacher stress has been identified as student misbehaviour (Geving, 2007). In New Zealand the Post Primary Teachers’ Association (PPTA) conference (NZPPTA, 2006) have communicated concern regarding an increase in challenging behaviours in New Zealand schools and the shortage of information and resources to address the issue (Towl, 2007). Findings from the PPTA report indicate that assaults on teachers have risen and nearly a third of teachers experience some form of bullying on a daily and weekly basis (Benefield, 2004). Data from the Ministry of Education in New Zealand used in the PPTA report (2004), showed that in 2006 serious attacks on teachers led to 4% of school suspensions (Ministry of Education, 2006).

The effects of challenging behaviour can also be felt in the wider community as society pays a heavy price whenever a young person is not able to attend school as a result of challenging behaviour. Towl (2007) states that many schools remain challenged in seeking solutions to reduce the rise in suspension and exclusion figures.

Challenging behaviour in schools has been linked, in some cases, to a specific condition such as Attention Deficit Hyperactivity Disorder (ADHD); conduct disorder (OD), Autism or a brain injury which presents difficulties for classroom teachers (Towl, 2007).
Teachers are often expected to be able to manage these challenging behaviours at the same time as teaching the class with limited support and training (Chaplin, 2003).

Balson (1992) proposes that teachers experience difficulty in managing challenging behaviour because they are trying to apply “old traditional” methods of classroom management in present day climate. Conversely, Church (2003) attributes challenging behaviour to consequences of family relationships. From a New Zealand perspective, Church (2003) maintains that antisocial behaviour develops at a very young age when a child is exposed to experiences in his or her environment that puts them at risk of challenging behaviour in adolescence.

Teacher stress can also be affected by factors other than student behaviour. For example, school expectations on raising academic achievement, marking, extra curricula involvement and burnout, which can markedly affect a teacher’s ability to perform (Margolis & Nagel, 2006).

Consideration should also be given to whether teacher stress contributes to student behaviour (Santavirta, Solovieva & Theorell, 2000). Teachers who feel unsupported and stressed may use personal judgment in respect of their tolerance for student misbehaviour. Unfortunately the problem with personal judgment is that it can be bias, labeling or misinformed, which can lead to poor relationships between teacher and child.

A teacher’s judgment on a child’s behaviour can also be affected by their inability to manage the child (Church, 2003). Baker, Grant, and Morlock (2008) claim that when there is a warm and trusting relationship between a student and their teacher, the chance of a positive outcome is increased. However, relationship building can be challenged when there is tension between a teacher and child exhibiting challenging behaviours. Christenson, Ysseldyke, Wang, and Algozzine claim that when a teacher is stressed by a child’s behaviour, judgment toward the child may be unrealistically biased thus resulting in poor outcomes for the child (1983). Teachers may therefore be reluctant to develop
relationships with children with challenging behaviours. Greene (2009) acknowledges that some adults experience more difficulty forging relationships with children who have challenging behaviours than others however he claims everyone has the ability to develop these skills with support.

Although Greene’s (2010) ‘empathy’ step can be seen as an initial building block toward developing a relationship between the teacher and child the activity appears to focus more on attaining information. Greene states, “The goal of the empathy step is to gather information from your kid to achieve the clearest possible understanding of his concern or perspective on a given unsolved problem” (p. 91). He suggests that although some useful information can be provided by the child during the empathy step, ‘drilling’ can provide further clarification of the problem. The goal of ‘drilling,’ not ‘grilling,’ as Greene states this implies an ‘act of intimidation,’ is to demonstrate to the child, ‘you really want to understand’ (Greene, 2010, p. 95). Despite his attempt to clarify the difference between these two terms in the examples above, the focus on the problem needs to be secondary to understanding the child as a person including their strengths, skills and interests.

Conversely, Meyer (2003) claims that some behaviour that is socially judged as challenging is typical or developmentally appropriate. MacFarlane, Glynn, Cavanagh and Bateman (2007) state that educators who believe they are from the dominant and more powerful culture may hold attitudes of imposition toward students who belong to non-dominant cultures. Through this belief, the educator may not consider the child or young person’s behaviour as being a direct result from interactions from within the classroom.

Often teachers are unaware of the influence they have on a child’s behaviour, whether that child is from another culture or not. Meyer and Evans (2006) state that some approaches and values generally regarded as affirming of the rights of children with disabilities can have the opposite effect on Māori families, which further alienates them.
with the teacher. This feeling of discontent may then transfer to the home setting between the parents and the child, potentially exasperating further relationships between the child and the school.

In addition to challenging behaviour, Greene (2009) states that ‘dealing’ with parents are the reason many teachers experience elevated stress levels. Benson and Martin (2003) state that many researchers have documented frustrations described by teachers and parents when attempting to communicate with each other.

In a New Zealand bicultural and multi-cultural context there is a need to be culturally sensitive and respectful in developing relationships, particularly when relationships are strained and require other family members to be present in the problem solving process. For example, in New Zealand, when working with Māori children and their whanau, communication and engagement needs to be respectful of the family’s cultural preferences and practices. Bateman (2008) maintains, “The links of Māori learners genealogically to their human kith and kin through whakapapa as well as to their natural environment is critical as it is within these links that enduring positive interventions can be forged” (p. 12).

**CPS Research: Context of the Studies**

Although the CPS model has been adopted and applied in a number of specialized and mainstream school contexts and family homes, studies into the efficacy of the CPS approach have been largely conducted in clinical contexts. For example, Diller (2001) states that Greene is “head of the psychotherapy arm of treatment at the Clinical and Research Program in Pediatric Psychopharmacology of Harvard’s Massachusetts General Hospital, which is the leading child psychiatric drug research center in the country” (p. 2). Many clinical studies on the effectiveness of the CPS approach have been conducted at the hospital by Greene and his colleagues, therefore any results from these studies, along with articles, chapters and reports on the effectiveness of the CPS approach written by Green and Ablon have the potential to be presented as biased (Diller, 2001).
Information based on these clinical studies is documented as being useful to parents and teachers in Greene’s books. However, the clinical context is markedly different to the school context and the results of a study in one area would not necessarily generalize to another. As Burden (2009) states, people make sense of their world based on the unique context in which they interact. Studies conducted in a clinical setting often reflect a medical context, whereas studies conducted in the home and school settings will reflect different experiences for children, parents and teachers.

**Efficacy of the model.** Although reviews of the CPS model favour the approach and are generally presented as positive, documented reviews challenging the CPS approach (e.g., Diller, 2001; Rennicke, 2008), claim there are concerns with the efficacy of the model. In particular, Diller (2001) questions the validity of the results of the research as most children in Greene’s clinical studies are on medication. He claims that Greene has acknowledged that ‘most’ of the children he treats at the hospital are on some form of psychiatric medication, which is necessary in order for the CPS approach to start to work. Although, in his book titled, “The Explosive Child,” (Greene, 2010), Greene states that some children benefit from medication but says, “These days too many children are prescribed medication unnecessarily, too many of them are on too much medication, and too many are on medication for things medication does not address well” (p. 176).

Greene’s view above raises the question whether the effectiveness of the CPS approach is contingent on the children being medicated before intervention or whether the CPS intervention will be effective if children are taken off medication. It is questionable how much the change in behaviour is the result of medication or the CPS intervention, or possibly the result of both.

Rennicke (2008) also challenges the efficacy and impact of the CPS model as preliminary outcome data taken from treatment trials and a small number of studies (Epstein & Saltzman-Benaiah, 2010) report ‘remarkable’ outcomes, which are based on
limited data sets. For example, a ten week clinical trial comparing the efficacy of the CPS approach with Barkley’s (1997) behavioural Parent Training (PT) on children diagnosed with Oppositional Defiance Disorder (ODD), showed that children involved in the CPS intervention were found to have greater gains in more global domains of functioning such as a reduction in parental stress and improved interactions between parents and children (Rennicke, 2008). Further, results of a published study conducted by Greene, Ablon and Martin (2006) in one inpatient unit, showed that after implementing CPS results showed a significant decrease in elimination of rates of restraint and locked door seclusion, and reduced injury rates to patients and staff (Hone, 2010). Despite the limited data sets, indubitably further research into the efficacy of the CPS approach is necessary considering the impressive initial findings (Rennicke, 2008).

**CPS: Review of empirical studies.** The CPS approach has been developed with a clinic-based intervention context in mind i.e., therapists helping parents, and clinicians to understand maladaptive behaviour as a skill deficit or learning difficulty and through collaboration solve problems and learn new skills. CPS has been adapted and implemented in a variety of settings including the home, mainstream and special schools, inpatient, outpatient, and juvenile detention facilities (Moeller, 2007).

The CPS model has been used with many children and young persons ranging in age from three to eighteen years and adults, including parents, and teachers. Children in the studies exhibit social, emotional and behavioural challenges “commonly referred to as oppositional, difficult, challenging, explosive, defiant, or aggressive” (Pollastri, Epstein, Heath & Ablon, 2013, p. 188). These behaviours often include diagnoses of oppositional defiance disorder (ODD), Tourette syndrome, attention deficit disorder (ADHD), adjustment disorder, intermittent explosive disorder, anxiety, mood and developmental disorder, bipolar and major depressive disorder, and psychosis (2013).
For the purposes of this research project, I have selected a range of studies that are relevant to New Zealand Ministry of Education practice, in that they align with the practice of supporting children, families and teachers who are experiencing severe and challenging behaviour (Ministry of Education, 2012), and which have been useful in providing broad observations.

In an attempt to evaluate the efficacy of the CPS approach, Pollastri et al (2013) identified and reviewed six published empirical studies on outcomes related to implementing CPS. Of these two studies conducted by Greene (2013) and his colleagues, one remains the only randomised controlled trial published on the effectiveness of the CPS approach. All the studies were conducted across a range of settings, and described treatment findings on the effectiveness of the CPS approach. In addition to the published research, Pollastri et al (2013) identified a number of unpublished studies. The study findings have been used to inform future intervention evaluation and efforts, and as a result, caution has been attributed to interpreting the findings.

Research results on the effectiveness of the CPS approach in the management of children’s challenging behaviour across settings, generally documents primary benefits for implementing the programme (Pollastri et. al., 2013). For instance, research conducted in outpatient (Greene & Ablon; Goring, Blakely, Markey, Monuteaux, Henin, Edwards, & Rabbitt, 2004), inpatient (Greene, Ablon & Martin, 2006), and juvenile corrections units’ (Pollastri et. al., 2013) show significant reductions in the use of restraint and seclusion in children and young persons. In addition, studies have reported notable improvements in multiple domains of functioning, reduced staff and patient injuries, reduced oppositional and explosive behaviour and levels of frustration.

An unpublished study conducted in a residential unit for boys in Nova Scotia, Pollastri et al (2013) reported a reduction in outbursts/meltdowns, an increase in community participation, and improved social skills. While research conducted in a youth offender’s detention center in Maine showed a reduction in assault and the use of force,
and recidivist offending (Pollastri et al., 2013). Outcomes reported in published and unpublished studies conducted in school settings have reported reductions in discipline referrals, suspensions, detentions and expulsions (Pollastri et al., 2013). Further, in a study conducted by (Schaubman, Stetson and Plog, 2011) a reduction in disciplinary action included students who were not specifically targeted for intervention. Secondary benefits following implementation of CPS across settings, demonstrate reduced teacher and parental stress, improved staff relationships and working environment dynamics, and improved adult-child interactions.

In the tables below (see table 1 and table 2), I have selected two studies that are relevant to the type of work behaviour practitioners are involved in at the New Zealand Ministry of Education. The studies include 1) a school study which involved training teachers in the CPS method and 2) a study conducted in Sweden involving the training of parents in implementing CPS with their children with Attention Deficit Hyperactivity Disorder (ADHD) and Oppositional Defiant Disorder (ODD).
In this study, a group of children are taking medication for their symptoms while the other group is not taking any pharmacological treatment.

**Selective review: Study one.** The single published research account in a school setting occurred in an alternative day school in Colorado, which assessed the associations between the CPS intervention and discipline referrals and teacher stress (Pollastri et. al, 2013). This study examined whether teachers trained in CPS would experience reduced stress levels related to children’s challenging behaviour. Although results showed a reduction in teacher stress and a decline in problematic behaviour after implementing the CPS, Schaubman, Stetson and Plog (2011) argue that it is possible that the support teachers received in their efforts to manage maladaptive behaviour may have contributed to the promising results therefore the result is not solely attributable to the CPS intervention.

<table>
<thead>
<tr>
<th>Publication</th>
<th>Setting</th>
<th>Number of participants</th>
<th>Age</th>
<th>Child characteristics</th>
<th>Study Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing Teacher Stress by Implementing Collaborative problem Solving in a School Setting (Schaubman, Stetson &amp; Plog, 2011)</td>
<td>Alternative day school</td>
<td>16 children 8 teachers</td>
<td>12-13 years</td>
<td>Children in need of alternative day school</td>
<td>Quasi-experimental comparison</td>
</tr>
</tbody>
</table>

**Training/Treatment details**
Eight teachers attended 12 hours of CPS training and received weekly 75 minute consultations for 8 weeks; also received individual support and coaching as needed.

**Main findings**
Teacher stress decreased significantly in multiple stress domains; effects stronger for teachers with highest fidelity.
Discipline referrals decreased significantly; effect generalised to the whole
Significant reduction in the number of discipline referrals for target and non-target children
Table 2

<table>
<thead>
<tr>
<th>Publication</th>
<th>Setting</th>
<th>Number of participants</th>
<th>Age</th>
<th>Child characteristics</th>
<th>Study Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention-Deficit hyperactivity disorder with oppositional defiant disorder in Swedish children – an open study of collaborative problem solving (Johnson, Ostlund, Fransson, Landgren, Nasic, Kadesjo, Gillberg &amp; Fennell (2011).</td>
<td>Outpatient family therapy</td>
<td>17</td>
<td>6-13</td>
<td>71% male ODD and ADHD</td>
<td>Pre/post within subjects</td>
</tr>
</tbody>
</table>

Training/treatment details
Families received 6-10 weeks of CPS based on need; poor responders were offered ADHD medication after outpatient intervention was completed (prior to 6 month follow up)

Main findings
ADHD and ODD symptoms decreased significantly from baseline to post-treatment. 53% of children were rated by their pediatricians as “much” or “very much” improved post treatment. At 6 month follow up 81% of participants were rated by pediatricians as “much” or “very much” improved.

Selective review: Study two. The aim of this study was to evaluate the effectiveness of CPS in non-medicated children, while observing whether some children could benefit from CPS without mediation. Families in this study were informed at baseline that pharmacological treatment for the children with ADHD might be initiated during the time post intervention. Findings showed that eight families opted for medication post intervention to improve ADHD symptoms. It was further noted that one of the male participants in the study already on medication for ADHD symptoms, continued on the same dosage several years after the completion of the study. At the six month follow up nine children were still taking medication.

The findings showed that during the intervention the behaviour of the non-medicated children improved significantly in comparison to the medicated group even up to six
months following the study. However, no significant differences were reported in symptom reductions between both groups. A positive outcome of the study showed marked improvement in emotional symptoms throughout the study, which may demonstrate the effectiveness of CPS in reducing frustration and explosive behaviour.

Overall, Pollastri, et al (2013) conclude that although children with ADHD and ODD and their families can benefit from the CPS intervention, findings suggest that a combination of CPS and pharmacological treatment may be necessary for some children. They added that a key element of the CPS success lies in the adult’s understanding of the child’s lagging skills so that they are able to avoid situations that challenge the child’s problems with flexibility and frustration tolerance.

The results further highlighted the importance of a multidisciplinary approach in supporting families and children with challenging behaviour. Pollastri et al (2013) concluded that a lack of efficacy in the study could reflect difficulties parents had in learning how to implement the CPS model. Difficulties included the ability of parents to control impulse and to shift mindset in adopting the CPS strategies. It was suggested that future studies for inclusion should consider various types of comparison groups and include waiting list controls (Pollastri, et. al., 2013).

**Unpublished school research.** A number of non-published school studies report promising findings, however results have focused on outcomes relating to “consequences of student’s oppositional behaviours, such as restraints, seclusions, suspensions, and office referrals, rather than on the behaviours themselves” (Pollastri, et. al., 2013, p. 196). Conversely, a few schools have provided outcome measures of increased positive factors after the implementation of CPS, along with measures of reductions in disciplinary outcomes. For example, an alternative school in New York accommodating 44 students from kindergarten to fifth grade with severe behaviour and/or academic challenges reported a drop in suspensions in one year from 200 pre intervention to one post
intervention following the implementation of CPS. In addition, it was reported that there was a “48% increase in school attendance and 250% increase in family participation. Similarly, six schools across Colorado implemented CPS with a reported 62% decrease in perceived stress in the classroom, 67% reported increased confidence in their general ability to work with students, and 86% reported an improved relationship with students after measures by the Index of Teacher Stress” (Pollastri, et. al., 2013, p.196).

Although CPS has been implemented in a number of school wide special and mainstream settings, much of the research remains unpublished, limiting reliability of the conclusions (Pollastrie et al., 2013). Findings, however from both published and unpublished research has demonstrated that implementation of CPS in school settings has produced consistent results in the management of school behavioural challenges and improved relationships between students and teaching staff (Pollastri et al., 2013). In addition, benefits to the implementation of CPS have been resulted in improved social skills, executive functioning, student attendance and family participation. In order to validate these preparatory, reassuring findings rigorous and controlled research will be necessary (Pollastri et al., 2013).
Chapter Three
Methodology
The purpose of the present study was for special education practitioners and educational psychologists to evaluate the CPS model within a Waikato context in New Zealand. Specific questions were framed within the qualitative tradition of inquiry and utilized a case study methodology to guide the research activities.

Using focus group procedures, a MOE team of special education practitioners was tasked with determining whether the CPS model’s framework and practices could inform and enhance existing special education practices in the New Zealand educational context. I facilitated a series of three focus group sessions in a manner that allowed participants to utilize their knowledge of MOE principles, effective practices, and professional expertise to review and critique the CPS model’s strengths and shortcomings. These activities resulted in a thorough evaluation of CPS’s potential relevance for addressing the needs of New Zealand’s children, families, teachers and special service providers by contributing and enhancing existing special education practice.

This chapter provides a summary of the purpose and questions under scrutiny and reports on the methods and procedures of the study. After stating the specific aims and describing the theoretical approach to this project, and participants, this chapter details focus group procedures, as well as instruments used for data collection and analysis. Finally, a brief description of the ethical challenges of the activity is described followed by an account of the methods used for managing tensions inherent in this type of research.

Aim and Research Questions
The aim of this research was to evaluate the Collaborative Problem Solving (CPS) model (Greene, 1998) through the lens of Ministry of Education (MOE) principles and practices, and professional expertise. Based on the focus group’s evaluation suitable adaptations to the programme would be discussed for a local context.
**Research questions.** To achieve the aim of the research the following questions were developed.

1. What aspects of the CPS programme are congruent with New Zealand Ministry of Education (MOE) practice guidelines and/or the cultural context in the Waikato?
2. What aspects of the CPS programme are incongruent with Ministry of Education (MOE) practice guidelines and/or the cultural context of Waikato
3. What adaptations, if any, could be proposed if the CPS programme was to be adopted by the Ministry of Education as evidence based practice?

**Theoretical Approach and Methodological Justification**

This study is theoretically contextualized from a socio-cultural point of view. Socio-cultural theory is “concerned with relationships between the individual and the social, cultural and historical context that frames learning and development” (St George, Brown, and O’Neill, 2008, p.25). In other words, people learn through social interactions within their social context.

In this study the participants were all Ministry practitioners working in the severe behaviour team in the Waikato region of New Zealand. Within this particular socio-cultural framework, the participants drew from Ministry principles and practices and shared their knowledge, experiences, insights and interpretations as they evaluated the CPS model.

One of the strengths of using the socio-cultural approach lies within the close collaborative process developed between the researcher and participant/s, which enables them to share their stories (Crabtree & Miller, 1999). Thus participant’s views of reality provide greater insight and understanding as to their actions (Lather, 1992; Robottom & Hart, 1993).
One approach to research that is congruent with a socio-cultural theoretical frame is case study. A case study method provides a holistic description (Fraenkel, Wallen & Hyun, 2009) of an issue or issues and provides an opportunity for participants to explain why certain outcomes might happen (Denscombe, 2010).

There are different theories about what constitutes a case study. Researchers such as, (Yin, 1994; Merriam, 1998; Stake, 1995, 1998; Miles & Hubermann, 1994 & Gillham, 2001), might all agree that the term “case” in case study represents an object or phenomenon being studied. Objects or phenomenon, comprise of just one individual or group of individuals, classroom, school, or programme, or can be an event or activity (Frankel & Wallen, 2006). The researchers may also agree that a case study should be a complex functioning unit, be explored in its natural setting, use a range of different methods, and be contemporary (Frankel & Wallen, 2006).

However, other researchers (Stake, 1998, Creswell, 2005 & Merriam, 1998) emphasise different features of a case study. For example, Cresswell (2003) defines a case study as “an in depth exploration of a bounded system (e.g., an activity, event, process, or individuals) based on extensive data collection (p. 485). The term ‘bounded’ means that the case is “separated out for research in terms of time, place, or some physical boundaries” (2003, p. 485). Limits therefore can be created around the object being studied (2003). Stake (1995) on the other hand identifies the ‘case’ as the object to be studied, while Merriam (1998) views it as more of an inquiry. Merriam (1998) points out that the “interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation” (p.19). Cresswell’s definition encompasses both these definitions (Dunn, 2011).

This study lends itself to a case study design because it is a “bounded system, it is contextual, and it is a study of process” (Merriam, 1998 as cited in Tinkler, 2004, p. Chapter 3, p.1).
I chose a case study design because it involves “detailed, in-depth data collection involving multiple sources of information rich in context” (Creswell, 1998, p. 61). Context is an important factor. When the focus in a case study is on the phenomenon, it is impossible to separate from its context (Merriam, 1998). In this study, the context is understood as part of the process. As Yin (2003) says, “you would use the case study method because you deliberately wanted to cover contextual conditions believing that they might be highly pertinent to your phenomenon of study” (p. 13). In this study, the case is a group of practitioners exploring Greene’s CPS model through identifying aspects of the CPS programme that could add to and/or are incongruent with New Zealand Ministry of Education practice guidelines and the cultural context of Waikato.

**Role of the researcher.** My role as a researcher in this study was to work with the participants, who were also my colleagues, in a process of collaboration rather than in a directive way. It was a “doing with” rather than a “doing to” piece of research. Data was collected in a forum of familiarity where relationships had already been established. This supportive environment provided opportunities for me to engage with the group in sharing, learning and building on our knowledge base. Goss and Leinback (1996) state that the opportunity to be involved in decision making, “to be valued as experts, and to be given the chance to work collaboratively with researchers can be empowering for many participants” (p.115).

**Focus group.** The method used to collect data in the present study was a focus group. A focus group is a method used to collect data from a group of participants who discuss a particular topic. More specifically, a focus group is defined by Marczak and Sewell (2007) as a “group of interacting individuals having some common interest or characteristics, brought together by a moderator, who uses the group and its interaction as a way to gain information about a specific or focused issue” (p.1).
In the present study, a focus group was used to explore the participants’ views in response to the research questions. One of the advantages of using the focus group was that it provided a forum for generating data through the interaction of the participants in a group context (Finch & Lewis, 2003). Another advantage of using the focus group was the amount of information that was able to be collected over a short period of time. This process was responsive to the needs of the participants as they could be accommodated in relation to their work commitments.

In the context of the focus group, I undertook a procedural role where I was involved in facilitating the process through generating discussion that reflected the diverse views of the group. This was achieved by keeping the group on task, collating thoughts and views, and reproducing them. The group would review the shared ideas, and make necessary refinements to reflect authenticity. The focus group wasn’t designed to be generalised to other contexts as it is very context specific.

Participants and setting. Five of the six behaviour service team members from the Waikato office of the Ministry of Education (MOE) made up a volunteer focus group. The group included two Educational Psychologists, a Kaitakawaenga Special Education Adviser, representing a Maori cultural perspective and experience, and two Special Education Advisers.

The purpose of including a Kaitakawaenga Special Education Adviser was to contribute expertise, knowledge and experience of culturally appropriate services for Maori children, young people, their whanau and educators.

Educational Psychologists and Special Education Advisers were included to provide research derived knowledge and evidence-base practice, and professional practitioner skills and expertise.
Recruitment of participants. Participants were recruited during a regular Review and Intake meeting as part of the introductory session. Team Behaviour Review and Intake meetings are compulsory meetings held every Monday. Support for the research to be conducted in this context was obtained from the Service Manager and District Manager prior to the study (see Appendix A and B).

The recruitment/introductory session occurred prior to the regular meeting so that normal agenda was covered. The potential participants were given an information sheet (see Appendix C) inviting them to take part in the study as well as outlining the research description, the procedures involved in the study, the distribution of the findings, and participant confidentiality and rights. The potential participants were assured that involvement in the research was voluntary and that they had the right to withdraw from the study at any time from the date informed consent was signed. They were also informed that if they chose not to take part in the study, this would not affect any existing working relationship between me and the potential participant. Non participants were requested to maintain confidentiality.

I read through the consent form with the potential participants and answered questions addressing content, terminology and instructions in filling out the form. The potential participants were assured that all information obtained in the research would be treated with confidence and all audio recording would be erased after the information had been transcribed by myself and authenticated by all members of the group. The potential participants were given a time frame for the return of the consent forms and information on the mode of delivery.

Pre reading material on the CPS model and a copy of session one questions was provided at the conclusion of the session. Pre reading material included reference to Greene’s three books, the “Think Kids” CPS website, reviews and articles of the CPS literature, a copy of the introduction CPS power point, and copies of published research on CPS. The participants were instructed that 30 minutes pre reading time was allocated within the
three sessions to familiarize themselves with the content of the CPS resources. However, I explained that the participants may read the material prior to the sessions. For those who chose to participate, they completed consent and returned within a week.

**Setting.** The research took place in meeting rooms at the Ministry of Education Special Education office (MOE SE) in the Waikato district of New Zealand between 10 May 2013 and 10 June 2013.

**Procedures and Sequence of Focus Group Activities**
Data for the research was gathered during three focus sessions. The sessions included a 2 hour 30 minute information session followed by two, 2 hour 30 minute focus group discussion sessions. The sessions were held on alternate weeks and followed on from the Intake section of the regular review meeting.

**Session one – information session.**
The session opened with a karakia to welcome all members and a karakia to bless the food and beverages. Using a power point, I went over the session agenda (see Appendix D), the aim and purpose of the meeting, and presented detailed information on the CPS model. Time was scheduled in the session for pre reading; participant questions and clarification of information, and discussion relating to key factors emerging from the questions (see Appendix E for session details).

The first session began with a review of the group confidentiality agreement (see Appendix F), the discussion protocol (see Appendix G), and my role and responsibilities as the facilitator (see Appendix H). This material was issued to participants a week prior to the session. Time was allocated for the participants to question and clarify the information for further understanding, and to add to the protocol where required.
The group was involved in a brainstorming activity to explore their understanding of the CPS model, while using information from the power point and the CPS information handouts as points of reference. To further consolidate their understanding, the group was involved in the development of a visual representation of the CPS model.

During the session, I summarised key points from the discussion onto a smart board, which the participants authenticated at the conclusion of each of the main questions.

During the summary section of the session, I invited the participants to record on paper any concerns or issues that emerged after each step of the process so that they felt their contributions were not limited and they were able to safely share their true insights. Following this, I briefly summarised the session and we discussed whether we thought the aim and purpose of the session had been achieved. The participants were directed to record any additional information they thought might be relevant and important to the discussion such as clarification of ideas and views shared or information they had not had the opportunity to share within the allocated time frame. A date, time and meeting place for session two was scheduled before the session concluded with a closing karakia.

**Session two.**

The session introduction followed the general format as session one i.e., karakia, and session agenda, but with a different aim and purpose (See Appendix I).

This was followed by a review of session one where the participants shared what they had learned and areas they would like to develop further understanding. I then played back the sections of the digital recording for participants to clarify information from the previous session. The group then revisited the visual presentation of the CPS model and made adjustments as they developed a more comprehensive understanding.
The participants provided consensus statements of the model’s strengths and cultural relevance in relation to the Ministry of Education practice guidelines, and created a partial list of concerns with the CPS model identified during the course of the session.

These concerns formed the basis of the activities in session three. The session concluded following the same process used in session one above (see Appendix J for details of session two).

**Session three.**
The session introduction followed the general format as session two i.e., karakia, and session agenda, but with a different aim and purpose (Appendix K).

During session three, the participants reviewed the CPS model’s previously identified strengths, shortcomings, and cultural appropriateness in the New Zealand context from the preceding session. Consensus statements were made regarding the model’s potential value to contribute to effective and culturally responsive education psychology practice in New Zealand. The group provided a summary and recommendations of the CPS model in relation to adopting aspects of the practice (see Appendix L) for details of session three).

**Data Collection**
Data collected during the focus group discussions was used to explore the varied sources of knowledge, views, experiences and perceptions of the participants in answering the research questions. Mack, Woodsong, Mac Queen, Guest and Namey (2005) state that focus group data collection consists of audio recordings, and transcripts of the recordings, discussion notes taken by the moderator during group discussion and summary or debriefing notes recorded at the end of the session.

Data in the present study was collected at the three sessions and included a) the session minutes digitally recorded and as hand written notes, b) participant notes, c) artifacts
emerging from the discussion and participant responses to the researcher’s questions, d) Participants pictorial/visual representations of the CPS model from session one, e) role of the researcher.

**Recording the data - using pseudonyms.**

At the beginning of each session, the participants were assigned a pseudonym in the form of a lettered name tag and a numbered seating plan (see Appendix M). The numbers were used to identify which participant responded to each of the questions. The name tag contained the letter ‘S’ representing the person as a speaker and a number, which corresponded with their seating plan (e.g. S1 or S4). For example, S1 represented the speaker who was seated in position one on the table plan. By having a seating arrangement in this format I was able to take notes during the session that identified each of the participant’s contributions and responses (Mack, Woodson, MacQueen, Guest & Namey, 2005).

**Meeting minutes.**

The major source of data was collected as meeting minutes. The minutes, which imply a brief summary of meeting information, were actually detailed responses to questions and included participant knowledge, expertise and experience. Along with hand written notes, I digitally recorded information captured during the discussion that was not able to be written down or missed during the exchange of information. Using the interactive smart board, I typed up the notes following discussion of each of the questions. The authenticated notes was saved and sent out to the participants following the meeting.
Participant’s recorded notes.

During the sessions, some of the participants recorded notes and drafted drawings of their visual representation. I collected this data at the end of each of the sessions. This information was useful in capturing the participants’ perspective and understanding.

Artifacts emerging from the discussion and participant responses to the researcher’s questions.

During all three sessions, the diverse views of participant responses to the questions (see Appendix N) provided rich discussion around queries, concerns, strengths, professional knowledge and experiences, and suggested modifications to the CPS programme.

Newly acquired information was collected in the following three ways.

1. The participants were directed back to the text to clarify Greene’s point of view of his practice.
2. A set of questions was developed by the group and sent to Greene following session one and responses to the questions were discussed during session two (see Appendix O)
3. I provided responses to participant’s questions in session two

During the course of questioning unexpected linguistic features became present which were used as a basis for new questions that linked to the possibility of further research.

Participant’s visual representation.

To further consolidate the participant’s understanding of the CPS model, I provided the group with a variety of resources such as, charts of paper, coloured recording markers, and assorted art materials so that they were able to develop a visual representation of what the programme looked like to implement in practice. At the conclusion of the session, the participants presented an outline of the CPS model.
Recording tables – Session two and session three.

Recording tables 3 and 4 (see Appendix P, Appendix Q) were used in session two and table 5 (see Appendix R) was used in session three to record participant’s responses, experiences and knowledge to the questions. In session two, table 3 (see Appendix P) contained three main headings that corresponded with the session questions and a column was developed for the participants to provide reasons and examples for the response.

The headings included:

- What do you like about the CPS programme that fits within the ministry practice guidelines?
- What do you see in this programme that is congruent with Ministry practices?
- Does the CPS model have the potential to add value to the current MOE model of professional practice?

In table 4 (see Appendix Q) the headings included:

- What do you think is problematic of this model in a New Zealand setting working within Ministry practice guidelines?
- Can you identify any aspects of the CPS programme that are absent or incongruent with the New Zealand Ministry of Education (MOE) practice guidelines?
- What are the model’s critical features?
- Is the CPS model culturally relevant, given New Zealand’s bi-cultural constitutional framework and multicultural society?

Table 5 (see Appendix R) in session three included the headings

- Are procedures in the CPS model clear? Is enough information provided about practices so that professionals can implement it?
- What if any, adaptations would you propose if the CPS model was to be adopted by the Ministry of Education (MOE) as evidence-based practice?
- Reasons why you would not choose to adapt the CPS programme
Can you share what would be your reasons for the adaptations?

What aspects of the model do you think needs to be adjusted to reflect what work best for Māori/Pasifika children and their families?

Data Analysis

The data was considered in accordance with the participants’ evaluation of whether aspects of the CPS model fit within or are incongruent with the New Zealand Ministry of Education (MOE) practice guidelines, and whether adaptations to the CPS model was required if the ministry was to adopt the programme.

For each of the three sessions, data was organised and analysed in relation to the anticipated outcomes. Anticipated outcomes for each of the sessions are outlined below:

Session one:
- Consensus statements representing summary of the CPS model with its critical features, practices, and procedures and a visual outline of the CPS model

Session two:
- Consensus statements of the model’s strengths and cultural relevance and partial list of concerns identified during the course of session activities. These concerns became the basis of activities in session three.

Session three:
- Consensus statements of the model’s shortcomings. Consensus statements regarding the model’s potential value to effective and culturally responsive education psychology practice in New Zealand and recommendations.

Transcribed data from digital recordings.

Following each of the sessions, data I collected from the digital recordings was transcribed and colour coded to represent each of the participants’ responses i.e., S1 responses were coded in green and S4 responses were coded in red. This information was then transferred onto a table.
Data table.

For all three sessions data from the digital recording, authenticated meeting minutes and participants’ hand written data was separated out into three columns. The first column contained the colour code used to identify each participant and the second column set out their response or points of view. The third column contained my responses to the information shared. For session one, the third column was used to identify information the participants’ still required to consolidate understanding and for session two, I noted participant responses that required clarification. Information attained from the transcribed data for session two, supported information collected from the recording tables.

Session one outline.

Information recorded on the digital recorder in relation to the outline in session one was added to the table along with my responses.

Session two outline.

In session two, the participants adapted their outline in relation to new knowledge and understanding of the CPS model. The information from the adaptations was digitally recorded and authenticated by the group.

Session two recording tables.

Session two data collected from the two recording tables (see Appendix P and Appendix Q) was organised into two steps. The data, including the participant responses, digital recording, meeting minutes and hand written notes was then transferred onto table 6 (see Appendix S) under the following headings:

- In agreement with CPS
- Not in agreement with CPS
- Congruent with Ministry Practices
- Incongruent with Ministry Practice
The data from the table was then further sorted into a Venn diagram (see Appendix T) to identify inconsistencies between ‘agreement for’ and ‘against’ the CPS model. For example, although the group identified relationship building in the ‘empathy’ step of Plan B as a contributing factor in the success of the intervention, it was agreed that relationship development needs to occur well before incidences are reported and include engagement with family/whanau.

**Data table session three.**

Information collected from the recording tables and Venn diagram in sessions one and two, and responses generated through discussion in session three was transferred onto table 7 (see Appendix U) and authenticated by the group. Consensus statements representing the group’s summary of findings, proposed recommendations and concluding outcomes of the CPS evaluation were provided as a result of the analysis. The results of the findings are discussed in chapter four.

**Ethical Considerations**

The process for assessing ethical issues for the present study was completed as a series of four stages. Each stage was conducted in reference to appropriate ethical and professional codes. The first stage involved familiarization of the *Code of Ethical Conduct for Research, Teaching, and Evaluations involving Human Participants* (2013). The codes intent is to “provide protection for all participants in research and certain teaching and evaluation programmes as well as to protect researches and institutions” (2013, p. 3)

During the second stage, the *Screening Questionnaire to Determine the Approval Procedure* (2013) was completed to determine the level of risk of the project in relation to physical and psychological harm to participants. I completed the questionnaire with support from my supervisors. It was determined that the research posed a low risk to participants but required a full ethical application to be submitted to the Ethics Committee.
In the third stage of the process I was involved in gaining verbal and written consent from the District and Line Manager at the New Zealand Ministry of Education Hamilton office as I planned to conduct my research at the place of my work and involve my colleagues as participants in the study. Furthermore, as an employee at the Ministry of Education, any research undertaken at the ministry was subject to ethical advice from the Ethics Advisory Panel. I completed a *Request for Ethics Advice* form (see Appendix V) regarding a query identified in the screening process as ‘conflict of interest’ and attached the research proposal, and participant consent and research information forms to the Ministry of Education Ethics Advisory Panel. Following a response from the panel, I made the required adaptations to the application along with the support of my supervisors.

In the fourth stage of the process I was involved in familiarizing myself with the *New Zealand Psychologist’s Code of Ethics* (2002). Consideration was given to areas of the code which pertained to the research and as a direct relation to requirements for Educational Psychology Practice.

In the final stage of the process, I completed the Massey University *Human Ethics Application* (2012). This was received by my supervisor. Following some adaptations, the application was sent to the Massey University Ethics Committee.

Ethics approval from Massey University Human Ethics Committee was received on 1 May 2013 (see Appendix W).
Chapter Four
Findings and Discussion

In this chapter, the findings and discussion are presented in four sections. In the first section, a discussion is presented illustrating the practitioners’ views concerning the efficacy of the CPS model in relation to evidence based practice. The second and third section considers the practitioners’ opinions in relation to the research questions which identify congruent and incongruent aspects of the CPS model with Ministry of Education principles and practices. In the last section, practitioner viewpoints and recommendations are discussed.

As the participants in the study included two Educational Psychologists, a Kaitakawaenga Special Education Adviser, and two Special Education Advisers, discussion generated reflected individual differences in opinion, views, experiences, perceptions and knowledge. This information was obtained through the interaction of the participants in a focus group, which I facilitated. Through this forum, the group was able to develop a broader understanding of the CPS model and reflect on this in the light of Ministry practices.

For the purpose of this study I have used the term ‘speaker’ to represent individual participants. Contributions shared by different speakers are identified by a number, for example, speaker one or speaker four.

Participants Conceptualisation
The participants’ understanding of the CPS model in this study was necessary to enable them to ascertain whether the programme could contribute to current Ministry collaborative problem solving practice. The process of learning about the CPS model occurred in sessions one and two where the participants shared what they had learned and identified areas they would like to develop further understanding. In session one, the participants were involved in a group brainstorming activity, and a review of a power point on the CPS model. They were also provided with reading material on the CPS
model such as research articles and studies, and information from Greene’s books, ‘Lost at School’ (2009), and ‘The Explosive Child’ (2010). To support the participants to become more familiar with the CPS material I redirected them back to the texts so that they were able to provide examples of information relating to the research questions. The participants developed further questions as they emerged during this phase of the research and identified information still requiring clarification. Questions developed by the participants were sent electronically to Greene.

In session two, Greene’s response to the participants’ questions were reviewed and discussed by the participants. The participants then used the information to construct an outline, which illustrates their view of what the CPS model looks like in practice. The outline is divided up into sections to represent the different elements of the CPS process and is illustrated with an example.

**Outline of the CPS Model**

**The Incident or problem** - A child has a small damaged net which returns little or no fish

“The child with the smallest net catches fewer or no fish”

**Assessment of Lagging Skills and Unsolved Problems (ALSUP)**

Why the child was unable to catch fish

**Lagging Skills** - The width and length of the net and size of the gaps represents the lagging skills, for example, the ability to cope with ‘transitions’ and the ability to ‘regulate emotions.’ The fish represents the knowledge, skills, and the ability to apply the skills.

“If the net is too small and the gaps are too wide the fish will swim through”

**Plan B**

**Collaborative Problem Solving (CPS)** – How the child went about solving the problem so they were able to catch more fish.

“Fishing alone solves fewer problems than fishing with others”
The Three Steps in the Plan B Process

1) The Empathy Step – ‘Gathering information’
The net was not attached to all the buoys and sinkers, which caused it to sag leaving wide gaps in the net.

2) Define the Problem Step – ‘Putting concerns on the table’
The child shared with an adult that their net was not functioning as it should to be able to catch fish. The adult shared that when the child becomes frustrated at not being able to catch fish they give up and refuse to take part in the fishing with the adult.

3) Invitation Step - Brainstorming potential solutions
The child suggested making the net wider and gaps smaller by adding and aligning the buoys and sinkers and attaching these to the net

“The child with the largest net catches the most fish”

Review
The process in which the child took to check if the net was effective in catching more fish
The child tries out some of the ideas. He/she throws out the net again and reassesses the situation based on how many fish he/she captures.

The process used in developing the outline not only supported the participants to establish a broader understanding of the CPS model but it enabled them to engage in critical discussion, which is evidence-based practice in action. This process corroborates the Ministry of Education current research on the purpose of evidence based practice to guide MOE practitioners in identifying and acknowledging “what works” for New Zealand children and families when drawing on worldwide research (Alton-Lee, 2012).
Efficacy

As well as understanding Greene’s model, the participants were interested in reviewing efficacy research on CPS conducted in educational settings. The participants questioned the development of the CPS model with a clinic-based intervention context in mind. For example practitioners supporting parents and children learn new skills. Some of the questions participants raised included the delivery of the intervention i.e., interdisciplinary teams working together to complete the assessment process; how are teachers and school psychologists and other practitioners involved in the process and do interventions target children’s as well as parent and teacher skill development? These questions were also collated and e-mailed to Greene.

In response to the questions, Greene (2013) explained that the CPS model had been implemented in quite a few school settings “with rather dramatic effect.” He reported that “papers describing our findings are in preparation” (R.W. Greene, personal communication, 7 June, 2013). Greene went on to say, Training usually begins with a core group of six to ten staff who become proficient in completing the ALSUP and in using Plan B first. Proficiency is greatly facilitated by having core group members record their work and then play the recordings for the core group, which usually meets weekly for feedback. The focal point of the model is on solving problems and most of the skills are taught indirectly.

(R.W. Greene, personal communication, 7 June, 2013)

Further, the participants posed some questions regarding the efficacy of the CPS model and Greene’s role in the research. Questions related to how much of the research was conducted by Greene and his colleagues in relation to other researchers and whether outcomes were consistent with his research. Speaker one explained that it appeared that Greene had a better understanding of the process used in his studies, which others were trying to replicate. Speaker three added that Greene has the advantage of practitioners experienced in the management of children with challenging behaviour over educators
and parents who have little or no background experience in handling extremely difficult behaviour.

Following an examination of Greene’s research and studies conducted by other researchers, and a follow up e-mail from Greene regarding the questions, it was concluded that the criteria used to measure treatment fidelity was reliant on Greene’s trained staff listening to recordings of people using the Assessment of Lagging Skills and Unsolved Problems (ALSUP) and Plan B. Greene shared, “While it wouldn’t be difficult to create criteria for assessing proficiency, I would still rely on my trained staff to assess whether the criteria are being met” (R.W. Greene, personal communication, June 7, 2013). The participants agreed that although there is an attempt on a valid measure of fidelity, staff training in the CPS intervention varied across studies. For example, a study conducted in Sweden (Johnson, et al., 2011) to evaluate the effectiveness of CPS on children with attention-deficit hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD) demonstrated that only fourteen of the original seventeen children and their families completed all ten of the CPS intervention training sessions. Three of the families felt confident to continue practicing the model independent of the group. The study concluded that the lack of CPS efficacy could reflect the difficulties parents experienced in learning the CPS model.

The participants raised some concerns regarding the efficacy of the criteria/questions used in Assessment of Lagging Skills and Unsolved Problems checklist. Speaker three inquired “Is it possible that people could look at the same question and think about the same behaviour and give a different response? For example, “are we not putting the answer into someone’s head by setting out the questions in this way? You could ask, how a particular child handles transitions rather than ‘Does he have difficulties with transitions?’” In response to this question, Greene (2013) shared that people often answer ‘no’ to various lagging skills and he had “Not noticed that the item wording pulls for a yes.”
Although the participants felt further research into the efficacy of the CPS approach was warranted, and in particular in school settings, they did share that CPS appeared to be evidence-based. Speaker one expressed, “I guess it is outcome focused. It does identify what you want to get to so you know when you’ve got there because you have acquired the skills.”

An important finding in the above discussion on efficacy is the link between the participants’ appraisal of the CPS model as evidence-based and Greene’s research on its effectiveness. As illustrated in the literature review and expressed earlier in the critique of the CPS model, this is evidence-based practice at work. At the New Zealand Ministry of Education, behaviour practitioners, and their colleagues and managers are ultimately responsible for evidence-based behaviour practice. Practitioners have a responsibility to reflect on any practice issues and consult with colleagues in the form of supervision, reviews, case presentations and attendance at ministry service meetings to problem solve and improve practice (Ministry of Education, 2012).

The review also demonstrated that practitioners need to be making the best use of research to inform decisions as professional judgement is linked to evidence-based practice (Sackett, Rosenberg, Gray, Haynes & Richardson, 1996). The participants argued that although the CPS model is presented as evidence-based practice, there were aspects of the research that demanded further investigation. The participants were concerned about whose evidence counts.

**Congruent Practices**

This section reports on the participants’ discussion of the research question relating to aspects of the CPS programme that are congruent with New Zealand Ministry of Education (MOE) practice guidelines and/or the cultural context in Waikato.
**Theory of behaviour.** Greene’s (2010) theory of the function of behaviour is that it is determined by the “degree of fit or compatibility between characteristics of the child and characteristics of the child’s environment” (p. 193). These characteristics are identified as undeveloped cognitive skills. Speaker two identified congruence between Greene’s theory of behaviour with New Zealand Ministry of Education principles and practices and shared, “It identifies that there are reasons for a child’s behaviour and that they are not just being naughty.” Speaker one added, “If children had a more socially appropriate skill they would approach problems in a different way.”

Greene (2010) states that the aim of the CPS model is for adults and children to identify undeveloped cognitive skills, and through collaborative problem solving, learn to solve the problems precipitating challenging behaviour, while simultaneously learning new skills. The participants identified congruence between the New Zealand Ministry of Education principles and practices and Greene’s approach in identifying undeveloped skills and teaching replacement skills. Speaker two added that the CPS model supports adults to view children’s behaviour in a different way and to use a different approach. Speaker four concluded that the CPS approach involved a mind shift for the professional, the teacher and parents in understanding the needs beneath the behaviour.

**Collaborative and coordinated.** The participants identified that the CPS model is well coordinated and collaborative. Speaker one shared that it does have the child participating in the process along with the teacher and/or the parent. The coordinated and collaborative aspect of the CPS model is congruent with one of the ten key service principles at the New Zealand Ministry of Education (MOE). These ten key principles underpin successful learning outcomes that are 1) outcome focused, 2) evidence-based, 3) include active participant of children and young people, 4) engage families and whanau, 5) are inclusive, 6) focus on an ecological approach, 7) are culturally affirming, 8) preventative, 9) well-coordinated and collaborative, and 10) consistent with government strategies. Well-coordinated and collaborative service at the New Zealand Ministry of Education, “Are well aligned and based on a shared understanding of a child or young
person’s educational needs and rights. Special Education staff work together with families and whanau, educators, iwi, Maori providers, community and voluntary groups, and with other agencies, including local government, to promote wellbeing of children and young people with special education needs” (Ministry of Education, 2005, p. 11).

The discussion of theory of behaviour above reflects the practitioners’ practice in working collaboratively with families and schools in identifying skills requiring further development. The collaborative consultative approach is consistent with the Ministry’s ecological approach. Working ecologically takes into consideration the broader contexts of a child’s life and endorses the “establishment of partnerships with families and relevant agencies” (Annan & Priestley, 2011). In the literature review, collaboration has been recognised as occurring between the parents, the school and the practitioner in identifying a child’s undeveloped cognitive skills and antecedents (triggers to the behaviour), and the adult and child working together to gather information, share their concerns, and brainstorm potential solutions.

**Assessment.** The practitioners were in two minds when discussing Greene’s assessment approach to CPS as they recognised both congruence and incongruent aspects. The practitioners identified congruence with the process of recognising undeveloped skills in an attempt to teach specific replacement skills, although the method of using the Lagging Skills and Unsolved Problems (ALSUP) checklist to attain information was incongruent with Ministry practices. Further discussion on this point is included in the section on incongruent aspects of CPS.

Although the usefulness of ALSUP was challenged by the participants, speaker four argued that for Maori, the process of identifying skill deficits was an accepted part of the assessment process.
The literature review suggests that the process of identifying undeveloped cognitive skills and unsolved problems (antecedents) supports adults understanding of the child’s behaviour and recognises skills requiring development. In the discussion above, the participants identified congruence with this process as it reflects one of the elements of the Ministry’s Professional Practice Standards for assessment and analysis. However, the discussion also highlighted incongruence with the mechanism (ALSUP) used to identify undeveloped skills as the practice of assessment at the Ministry reflects an ecological practice.

**MOE principles and service pathway.** The participants stated that CPS reflected parts of the Ministry of Education service practice in that it does have an engagement, assessment, planning, implementation and review and monitoring phase. Speaker one shared, “It reflects some bits of our service pathway but direction of the service appears unclear.” The participants identified parallels between the CPS and MOE practices. For example speaker five shared, “There are lots of things in the CPS model that reflect different models of practice we use in our service such as ‘empathy.’ This is (also) consistent with Werry’s (2003) work we were doing a few years ago at a conference and Goldstein’s (1999) restorative practice.”

As mentioned in the literature review, behaviour service at the Ministry is guided by the Service Pathway or ‘Poutama’ which consists of a series of eight steps each representing a service expectation. The current study found that the CPS model shared similar service guidelines and models of practice with the Ministry service practices (National Service Description, 2005).

**Inclusion.** At the Ministry of Education, “Inclusive education is about the full participation and achievement of all learners” (Ministry of Education, 2012, p.1). Participants in the study discussed CPS in relation to inclusion and all agreed that it is an inclusive practice. Speaker three shared that the CPS model is inclusive because it
identifies lagging skills and provides an intervention to develop these skills. Speaker five added, “It’s one tool in tool box that can be used to broaden inclusion.”

In the current study the participants acknowledged that the CPS model is inclusive and congruent with the core principles for delivering evidenced-based practices at the Ministry. The findings support previous Ministry research on delivering evidenced-based practices that are inclusive, and engage families and active participation of children and young people (Ministry of Education, 2012).

**Relationships.** From a scripted example of the CPS service process, provided in Greene’s book “Lost at School” (2009), the participants were able to recognise that there were levels of engagement taking place at different points in the service. For example, speaker one identified relationships occurring between the school psychologist and the mother and student, between the teacher, team leader and psychologist, and between the student and teacher, particularly during the ‘empathy’ step of Plan B.

This finding seems to be consistent with other research noted in the literature review, which found that home school partnerships are fundamental to the operation of the school (Bull, Brooking & Campbell, 2008). The review also found that successful outcomes for students can result when effective partnerships develop between schools and parents, whanau and communities (Education Review Office, 2008).

**Treatment integrity.** Greene (2009) states that the effectiveness of the CPS model is attributed to factors relating to its implementation. He further added that “Often Plan B goes awry because the adult has ‘skipped’ one of the three steps of Plan B” (Greene, 2009, p.119). He emphasises the importance of implementing Plan B correctly otherwise it becomes ineffective. Speaker five identified congruence with Greene’s statement by commenting that “Yes, for an intervention to be successful you actually
have to do it. The whole team supporting the child needs to be following the same plan, direction and implementation so that successful outcomes can be achieved. This finding is congruent with the Ministry of Education (2008) research which shows that positive behaviour support involves all stakeholders working collaboratively together with the case worker in implementing an intervention throughout the whole process.

**Diagnosis.** Greene reports that the CPS model can be used with any child exhibiting challenging behaviour and is not restricted to children with a diagnosis. Speaker three commented that this is consistent with New Zealand Ministry of Education services as, “We don’t base our service on specific diagnoses. The behaviours fit within generalised criteria for support.”

As mentioned in the literature review, behaviour services at the New Zealand Ministry of Education are individualized and “tailor made to meet the specific needs of the child, family and the educational and cultural context” (Behaviour Practice Framework, 2012, p.17). Individualised programme development does not require a diagnosis and “attention is given to the child’s developmental level as well as the contextual fit of an intervention with the child’s environment and culture” (Behaviour Practice Framework, 2012, p. 14). This finding is consistent with Ministry practice and supports Greene’s view that diagnosis is not required for service.

**Incongruent with MOE Practices**

In the third phase of the research, the participants identified some aspects of the CPS model that were incongruent with the New Zealand Ministry of Education principles and practices.

**Use of the term collaborative.** The participants agreed that the CPS model aims to be collaborative, however there were concerns raised regarding Greene’s use of the term ‘collaborative.’ Speaker three commented, “The CPS model follows a specific process of delivery and if you have to follow the three steps in Plan B then it’s not collaborative from Greene’s perspective unless you use his structure.” Speaker two
added, “The power is in the facilitator’s hands so you’ve got no flexibility in how it is implemented.” The participants all agreed that the term ‘collaborative’ implies solving problems together but the prescriptive nature of the CPS model demonstrates that it has to be done in a particular way for it to be effective. Speaker one argued that, “This does not demonstrate collaboration as there is an element of control by the adult as to what direction it is implemented. It tries to be collaborative but it kind of comes from an expert position.” Further, the Ministry of Education (2011) initiative, ‘Collaboration for Success,’ empowers the team, (people involved in supporting the child), to bring their skills and knowledge to the table. I accept that the CPS model does this to some extent but it still seems a bit power heavy.”

The participants shared that although the CPS model presents aspects of collaboration, (the student and teacher engaging in the process of problem solving); the inflexible implementation of Plan B is incongruent with the use of the term collaborative practice at the Ministry.

This finding supports previous research on the term ‘collaborative’ depicted in contemporary New Zealand based models such as Durie’s (2004) Te Whare Tapa Wha model, which espouses an ecological view of problem solving taking into account the wider social and cultural context. Durie’s model has been adopted by the Ministry as it provides a bicultural approach to service through incorporating Māori and Western concepts and values. This is achieved through collaborative consultation with whanau, family and community (Bevan-Brown, 2001, 2003 & Macfarlane, 2005).

**Criteria for MOE Behaviour Service.**

The practitioners perceive Greene’s definition of ‘explosive’ kids as being moderate in comparison to behaviours exhibited by children referred for severe behaviour service at the New Zealand Ministry of Education. Speaker four explained, “It’s very loose this definition of ‘explosive’ child. The behaviours seem more consistent with students referred for support from the Resource Teachers for Learning and Behaviour (RTLB).
If that is the case students displaying moderate behaviours might be more receptive to taking part in the CPS intervention.” Speaker one added, “We are working with that severe end (the top 1% of the most severely challenged students), the ones that do need individual support. We are guided by the needs of the child.” The group agreed that the types of cases they are receiving are extremely complex and require a team of supportive individuals working with the child in providing a range of interventions. Speaker four commented, “Many of the kids we work with have had so many interventions in the past and so many different people have been involved.”

Challenging behaviour defined as ‘explosive’ by Greene has been perceived by the participants as moderate and therefore incongruent with Ministry criteria for severe behaviour support. The participants suggest that these behaviours (explosive) are consistent with criteria identified for Resource Teacher Learning and Behaviour (RTLB) support. RTLB are specialist teachers who support schools in providing learning and behaviour support for children identified as exhibiting moderate behaviours (Resource Teacher Learning and Behaviour, n. d).

This finding is in agreement with Church’s (2003) research which showed that the Ministry’s severe behaviour services support children whose behavioural needs are the “most challenging and severe” (Behaviour Practice Framework, p. 12), and children with moderate behaviours are referred for Resource Teacher Learning and Behaviour (RTLB) support.

**Definition of Doing Well.**

Greene’s philosophy is, “Kids do well if they can” (2010, p.15). Generally, the participants in the study agreed with this statement, however two points were raised by the group in regards to the definition of ‘doing well’ and the ‘pay off’ for doing well. Speaker five, for example argued that Greene’s perception of ‘doing well’ raises the question as to what constitutes ‘doing well?’ In Greene’s philosophy ‘doing well’ refers to a child’s ability to manage the demands of the environment based on “the skills to do
well in the first place” (Greene, 2009, p.11). In other words, “If a kid could do well he would do well” (2009, p. 11). Within the context of the behaviour services at the Ministry of Education students referred for service have different experiences of ‘doing well.’ For example, speaker five shared that for a child living in a low socio economic area of New Zealand where financial constraints challenge the parents/caregivers to feed and care for their family ‘doing well’ might include receiving breakfast and a packed school lunch.

With regards to the second point, Speaker two stated, “Greene said that if children had the skills they would behave. However, I disagree with this as there may not be any pay off for doing it. For example, a child who has proven ability in maths is not going to give up their lunch time to do extra maths in class if the payoff for doing it is less motivating than playing outside with friends. Regardless of ability, children also require motivation (payoff) for changing behaviour.” Greene shared, “this is not an uncommon initial response to the model, especially when the respondent has a motivational background.” He added that “kids and adults do things all the time without a clear payoff” (R.W. Greene, personal communication, 7 June, 2013).

The participants shared that although they acknowledge that a child’s ‘lagging’ skills challenged their ability to manage the demands of the environment, Greene’s definition of ‘doing well’ is incongruent with the different experiences of ‘doing well’ for children referred to the Ministry for behaviour support.

The discussion above produced an unanticipated outcome with regards to the term ‘doing well.’ Although a definition of ‘doing well’ in the context of the CPS model has been provided in the literature review, the participants view of ‘doing well’ in their experience is not well represented in the literature. This unexpected finding suggests that there is incongruence with the interpretation of this term between Greene and Ministry practices.
Theory of behaviour

Greene’s theory of behaviour is that it is biological in nature and that it is inherent in children and not the product of environment or experience (Diller, 2001).

Rennicke (2008) states that Greene and Ablon (2006) reject the assumption that explosive behaviour can be taught. Speaker one queried this assumption directly with Greene stating, “I still think explosive behaviour can be learned. For example if you think back to some of the history of some of the kids we work with where domestic violence features prominently in their early lives, being explosive is a way of getting your needs met and so from that you also have the lagging skills as they don’t have an appropriate alternative.” Greene’s response was, You’ve mixed in a few different theoretical orientations here but there are many kids who have been exposed to domestic violence who aren’t violent even though the violent behaviour they’ve observed is (because of observational learning) in their behavioural repertoire. I don’t subscribe to the belief that explosive behaviour is a way of getting needs met but if I did, I’d assume that if a kid had the skills to get his or her needs met in a more adaptive manner, he or she would

(R.W. Greene, personal communication, June 7, 2013).

Although the participants’ concurred with Greene’s theory that behaviour is biological in nature, they argued that challenging behaviour can also be learned and is influenced by environment and experience. The participants’ asserted that Greene’s theory of behaviour is incongruent with the Ministry’s ecological principle for practice, which “takes into account the range of interacting factors impacting on a child or young person. Factors include aspects of home, educational, cultural and community settings, as well as a child or young person’s strengths and personal characteristics” (Ministry of Education, 2005).

The participants’ findings support previous research in the area of theory of behaviour. In particular those of Meyer and Evans (2006) who found that multiple theories of child and
human development explain how severe and challenging behaviour develops over time
and that, “challenging behaviour will typically have a number of causes or sources of
influence” (p. 14). Consistent with this research is Bronfenbrenner’s (1979) ecological
systems theory, which espouses the view that, “In order to understand human
development, one must consider the entire ecological system in which growth occurs”
(p. 37). Bronfenbrenner’s ecological theory has been adopted as a principle for practice at
the Ministry.

Referral and informed consent
As noted earlier, there are aspects of the CPS model that reflect the New Zealand
Ministry of Education service standards and practices, however, the participants
recognised that there were also aspects of incongruence with the referral process and
informed consent. In the CPS model, the referral process is initiated in two ways 1) a
student can be referred to the school psychologist following an incident and 2) teachers
team up and identify children whose behaviour has the potential to become challenging.
Speaker one commented, “The process of a student being referred to the school
psychologist as shared by Greene in his book ‘Lost at School’ is incongruent with
ministry practices as there is no mention of informed consent from the parents. In
Greene’s example, the psychologist received the student’s file from the school and then
the parent was contacted. The response the parent gave the psychologist in Greene’s
example was, “Oh great another shrink” (Greene, 2009, p. 45). Speaker one added, “The
mother was not informed by the school that they were referring her child to the school
psychologist or what service she could expect to receive. The mother also appeared to be
unaware of the process following the school suspension.” Speaker three added, “The
school gave the psychologist the student’s file without the parent’s consent and the
information in the file was erroneously shared with the mother on the phone.” For
example, “The mother was clearly annoyed with the psychologist as he pronounced her
name incorrectly and assumed that her surname was her husband’s name.”
At the New Zealand Ministry of Education, informed consent and initial service negotiation occurs at the beginning of the service pathway in the ‘access’ phase of the process. The participants explained that during this phase, a child/young person, their family, whanau, and educators and community are informed as to what special education services and eligibility they can expect from the Ministry. Procedures used in the process of referral are “family, whanau, facility and community friendly.” This ensures “equity, quality, client and staff safety, and timeliness of response” (Ministry of Education, 2005, p. 12).

The discussion above illustrates the participants’ practice in attaining informed consent from children/young people, families, whanau and educators. The Ministry of Education informed consent process is consistent with the legal and ethical requirements of various professional bodies such as the New Zealand Psychologists Board (2012), the Health and Disability Commissioner Act (1994), and Code of Health and Disability Services Consumers Rights (1996). As mentioned in the literature review, “No health or disability service can be provided without informed consent” (Ministry of Education, 2007, p. 2). The participants in this study concluded that the practice of informed consent at the Ministry is incongruent with the corresponding practice in the CPS model.

Assessment. Although participants recognised some elements of assessment as congruent they also identified that the Assessment of Lagging Skills and Unsolved Problems (ASLUP) method of assessment by the CPS model does not reflect an ecological approach. For example, Speaker two shared, “It’s not getting information from different sources and finding consistencies and it doesn’t include historical information on the child and family, the child’s previous learning and experiences and what is contributing to the present behaviour.” Speaker one added, “It does not include information beyond the child and parent so it is difficult to attain a full and true picture.” Speaker two went on to say that, “An ecological approach enables us to access this kind of information and places behaviour in perspective and context.” Speaker five explained that the way in which the ALSUP checklist is used to assess a child’s ‘lagging’ skills is
subjective as the individuals involved in assessing the child, such as educators and parents provide only information pertaining to the checklist. This is irrespective of information wider than the school setting.

The participants raised two further points of interest, one regarding the language used in the ALSUP checklist, and the second point related to the focus of ALSUP on deficit skills. The participants claimed that ALSUP can be difficult to understand. For example, Speaker two asked, “What is chronic inability?” Other speakers shared that ALSUP was not clear for parents, teachers and some professionals. For instance, Speaker one commented, “You would have to have an understanding of what some of the words mean and most parents would not understand it. The language used may make parents feel they have nothing to offer as they don’t understand what everyone is saying or terms they are referring to. It essentially works against our families rather than embracing what they already know and the ways in which they express it. Speaker four added, “It excludes them.”

Speaker three and Speaker five commented on the second point regarding the deficit focus of the language used in ALSUP. Speaker three argued, “If you look at the exception of two of the criteria/questions on the checklist, they all start with ‘difficulty,’ other words end with ‘difficulties’ and some start with the word ‘inflexibilities.’” Speaker five added, “ALSUP focuses on the negative aspects of the child. This can be unhelpful as it sets the direction of service that concentrates on what can be fixed rather than what skills and strengths the child already has that can be utilised to promote a positive direction for change.” Speaker two went on to say, “The supportive elements of the family and school are also not included in the assessment process. It’s important that these elements are included as this supports positive relationships and focuses on solutions that are driven by the contributions of all stakeholders in supporting the child.”

The practitioners identified some incongruence with Greene’s espoused theory of ALSUP as to its use as a discussion guide and its purpose as a functional analysis. For example,
Greene (2010) states that the unsolved problems aspect of ALSUP is the functional analysis, whereas the participants contended that their understanding of how a functional analysis is used contrasts with Greene’s perception of its purpose. The participants agreed that ALSUP represents a guideline rather than an assessment or functional analysis.

Speaker five concluded, “I wouldn’t grab it because it’s not an assessment for me it’s a pointer that there needs to be a formal assessment in this area.” In the discussion on assessment, the participants identified four features of Greene’s practice that are incongruent with Ministry practices. The first feature relates to ecological assessment. In the literature review, an ecological approach to assessment at the Ministry is identified as reflecting the core principles of inclusive practice, engaged families and active participation of the child or young person (Ministry of Education, 2012). Information is gathered from a range of sources and includes the child or young person’s history, observations of the child or young person in different settings and is, “culturally and developmentally appropriate, and guided by current research and evidence-based practice” (National Service Description for Special Education Services, 2005). Whereas in the CPS model, the practice of assessment takes place within the school environment and involves input from the educators, parent/s and practitioner.

Another important finding the participants identified as being incongruent with Ministry practices related to the deficit language used in ALSUP, which identifies undeveloped skills and unsolved problems. In the literature review, Diller (2001) states that by focusing only on skills deficits all aspects of experience are narrowly viewed. The focus needs to be on “seeing the ‘big picture’ of what a student is able to accomplish” (Fraser, Moltzen & Ryba, 1995, p.141) so that a greater sense of achievement is maintained. These findings are consistent with those of Annan and Priestley (2011) who state that by broadening the view of the positive aspects of an individual’s experience, problems can be viewed in relation to the ‘supports of people’s lives.’
An unanticipated finding of this study was participants’ concerns for parents and educators and some practitioners in understanding some of the words used in the ALSUP checklist. Particular concerns related to the effect this may have on the contributions of the parents, educators and practitioners. Although Ministry core principles for practice have been identified in the literature review as providing opportunities for families and educators to feel valued for their contributions, the influence that language may have on stakeholder contributions is not well represented in the literature.

In concluding the discussion on assessment, the participants recognised incongruence with the function of ALSUP in relation to Functional Behaviour Analysis (FBA) used by practitioners in practice at the Ministry. In the literature review, Horner, Carr, Strain, Todd, and Reed, (2002), Scotti, Evans, Meyer and Walker (1991), and Scottie, Ujcich, Weigle, Holland and Kirk (1996) argue, “For any intervention to be effective, it must be based on information gathered through a functional assessment to determine the purposes of challenging behaviour and the antecedents predicating its occurrence” (p. 72). At the Ministry, “Functional assessment is the preferred diagnostic procedure for children with severe behaviour difficulties” (Church, 2003).

**Cultural relevance.** The participants stated that the CPS model is incongruent with New Zealand cultural models of practice such as Durie’s (1994) Te Whare Tapa Wha and Te Wheke models. Both models represent Māori holistic wellbeing (Macfarlane, 2005) “linking the mind, the spirit, the human connection with whanau, and the physical world in a way that is seamless and uncontrived” (Ministry of Health, 2013, p.1). Speaker four stated, “It’s important for whanau to have a ‘whanau voice’ and ‘cruise control (relationships with whanau and service of care should not be based on a time frame). Working with Māori families requires lots of flexibility. Hui can be changed to fit the needs of the whanau. This is important for service providers to understand.”
Greene shared that he is not familiar with New Zealand cultural models of practice. However, he stated, “I haven’t come across a culture yet that the CPS model couldn’t accommodate” (Greene, 2013). The participants shared that Greene’s misplaced comment disregards the contributions of culture. Speaker four argued, “Greene’s use of the term, ‘accommodate’ is offensive as it implies culture has nothing to contribute but everything to gain from implementing CPS.” Speaker one added, “It suggests that ‘one size fits all’ (CPS works for everyone and every culture) and this contradicts with Greene’s comment in his book, “No intervention works for everyone and everything.” Speaker five went on to say, “Greene’s comment regarding culture is ambiguous as the Native American culture is similar to Māori culture in terms of structure. For example, you’ve got the whanau (family and wider family) in the center and the kaumatua (Māori leaders) who provide the tribal knowledge, genealogy and traditions and who act as guardians of tikanga (Māori customs) providing support from the outside.”

The literature review suggests that effective programmes for Aotearoa New Zealand are culturally appropriate for different groups and demonstrate “contextual fit” with Maori culture as well as specific communities (Bishop, Berryman, Tiakiwai, & Richardson, 2003; Glynn and Berryman, 2005; Wearmouth, Glynn & Berryman, 2005). Although the discussion on cultural relevance produced findings that were consistent with previous New Zealand research on cultural models of practice an unexpected finding indicated that the definition of ‘evidence-based practice’ continues to hold different meanings for different people. For example, in the literature review, Bateman (2006) argues that uncertainty surrounding a clear definition of the term ‘evidence’ suggests risks in the application of evidence based practice, particularly in the appropriateness of assessment and planning for New Zealand’s indigenous (Māori) children and their whanau.
Relationships

Greene (2009) states that “If you want to help a kid, you’re going to need a helping relationship to accomplish the mission” (p. 54). He believes that research and practical knowledge have shown that, “the most reliable factor leading people to change by far, is the relationship they have with the person helping them change” (2009, p. 54). In the CPS model, the ‘helping’ relationship occurs during the ‘empathy’ step of Plan B. The participants shared that although collaborative relationship building is congruent with the collaborative aspect of the Ministry principles and practices, they also identified incongruence with elements of Greene’s process of relationship development. For example, Speaker one shared that in Greene’s ‘real life’ example scripted in his book ‘Lost at School’ (2009), relationships are divided well before the intervention takes place. Speaker one went on to say, “The school clearly doesn’t share a supportive relationship with Joey’s mother as the focus is on what is ‘best’ for the school. For instance, the principal exclaimed, “We will not tolerate this sort of thing in our school. Joey’s classmates have a right to a safe learning environment and that right was violated today. When a student assaults a teacher in this school system and threatens to kill people, our school discipline code says we need to notify the police.” The mother’s response was that she had, “heard enough” (Greene, 2009, p. 4-5). She left the office with her son, got into her car and drove off.

Speaker three added that there are also displaced relationships between the teachers and the mother, and the principal and the psychologist. She shared that in Greene’s ‘real life’ example the child’s teacher is involved in a conversation with another teacher who asked, “Did Joey’s mother behave herself?” The conversation went on, “Poor kid, can you imagine going home to that every day and we are supposed to pick up the pieces when the kid comes to school” (Greene, 2009, p.64). In a further example, the principal expressed, “Dr Bridgman, I don’t really know very much about you. I don’t even know where you worked before you came to our school system this year. Have you ever worked with kids like Joey?” (Greene, 2009, p. 101).
Further, the participants noted that relationships did not appear to occur between the school, parent, child, school psychologist and outside support. For example, speaker five shared, "In the script (Greene’s) there isn’t any relationship with outside agencies, community or extended family so information is limited to those who know the student. In this example, there doesn’t appear to be anybody who really knows this student and the ones who think they do only have negative things to say about him and his mother.” At the New Zealand Ministry of Education a wealth of information can be acquired from working with people from diverse ethnic communities and utilizing knowledge from community resources (Ministry of Education, 2005). At the Ministry it is important to work in collaboration with the wider range of community organizations as their skills, expertise and knowledge can lead to better outcomes (Ministry of Education, 2005).

Speaker four further raised the point that, “The empathy step involves the teacher in changing their approach toward the child and the teacher may find they don’t want to make any changes to the relationship that they have already with the child. There are teachers who believe that it isn’t their job to ‘fix’ up children’s problems as they are there to teach.” Speaker five added, “In terms of responses back from the child if the teacher doesn’t have a relationship with the child or even the family you can get a ‘yep, nah nah’ just so the child can get out the door as soon as they can. Children and families will tell you anything and everything just as long as they can get out of the door. So in terms of the variables, you can get a wide range of answers back and potentially none of them are going to be of any help to you in your assessment. However, if you are ‘front loading’ in terms of building relationships, you would get better information back.” The participants shared that the relationship between the student and teacher needs to occur prior to an incident taking place rather than as part of the intervention. Speaker four shared, “Relationships that are developed early on in the school year helps to establish a stronger more positive foundation for problem solving when issues arise.” Speaker two added, “In the ‘empathy’ step of the CPS model a lot of time is taken up in developing this relationship when this could have been achieved well before.” Speaker one went on to
say that “Establishing relationships earlier on in the school year is even more important for teachers who are resistant to adapting their approach to managing children with challenging behaviour.”

The participants noted that relationships appeared to develop as the process went along rather than at the beginning of the service and as part of the engagement phase. At the New Zealand Ministry of Education, relationship development occurs in the engagement phase, and is held at the beginning of the service pathway. The ‘engagement’ process involves a meeting/hui between the child or young person, their families, whanau and educators. Engagement is the building of relationships. The Maori term for ‘engagement’ is ‘Whakawhanungatanga.’ This is the process in which relationships are developed (Macfarlane, 2004 as cited in MacFarlane, Glynn, Cavanagh & Bateman, 2007). Speaker four continued, “This (relationship) has to be the foundation for everything else to build upon.”

Speaker four highlights the importance of engagement and relationship building in providing effective practice by sharing a personal example. “We were working in a Kohanga, (a total immersion Maori language family programme for young children from birth to six years of age), and there were a couple of new faces who attended the hui (social gathering or assembly) for a young boy referred for behaviour support. The educational psychologist did not allow time for them to say who they were and she did not allow them to know why they were there for the day. One of the new faces was the young boy’s grandfather. The grandfather did not identify with the new face in the building, the psychologist. All he heard throughout the hui was negative things about his moko (mokopuna or grandchild) so you can imagine how he started to feel. Connecting with who we are with each other and our purpose for being here is the first step in developing relationships and partnerships with others.” Speaker four explained that in a school context the teacher is responsible for building relationships with children and their families/whanau at the beginning of the school year. Speaker one shared, “Relationships are important motivators for change.”
Participants shared that relationships developed early on in the school year, and which include the child, the teacher and all those involved in supporting the child is consistent with Ministry service provision. Established relationships are essential (Ministry of Education, 2005). Adequate time “is required to develop relationships, to follow through on agreements, to work through barriers and differences and to ensure that meeting places and processes are appropriate” (2005, p. 11). Early intervention is therefore essential to prevent problems and to provide support as soon as it is required.

As mentioned in the literature review, successful outcomes for students can result when effective relationships and partnerships between schools and parents, whanau and communities are developed (Education Review Office, 2008). The participants in the current study found that, although relationships occur in the CPS model, (e.g., the adult empathizing with the child in the empathy step of Plan B) relationships between the child and school management team, the school and the psychologist and the parent and the school appeared divided as reported earlier. The practice of engagement (development of relationships) in the CPS model is incongruent with Ministry practices where engagement is woven throughout the service delivery pathway and where “children and young people, their families and whanau are welcomed and empowered as partners in their relationships with special education specialists” (Behaviour Practice Framework, 2012, p. 18).

The results of this study also showed that interactions in the CPS model occurred within the school environment irrespective of community and social support agencies. In the literature review, Paquette and Ryan (2001) state that by including the wider system of relationships outside the environment in which children and their families reside, all aspects of a child’s surroundings is included. The participants’ acknowledged that Greene’s approach is incongruent with the Ministry’s practice of engagement and inclusive and ecological principles for practice, which are incorporated throughout the Ministry’s service pathway.
Prescriptive nature of Plan B

The participants further shared their concerns with the prescriptive nature of Plan B. Speaker one for example argued, “The prescriptive style in which Plan B is implemented implies you have to follow each of the steps, which means you can’t adapt it. This is incongruent with our practice guidelines where there is greater flexibility in how the service is delivered. In our service pathway, flexibility allows us to meet the individual needs of the family and school as they arise.”

The New Zealand Ministry of Education (2005) states, “A child or young person’s journey through our service is rarely a one way process. They may return to a specific phase in the process as new information becomes available or as their circumstances change” (p.12).

Speaker five expressed that for Māori the prescriptive nature of the plan is incongruent with Māori principles and cultural practices. Speaker four commented, “The language used in the script reflects an American culture, which is incongruent with New Zealand (kiwiana) and the bi cultural context in which we use language in our country. At the Ministry, one of the underlying practices (core practices that occur throughout the service pathway) is communication. The New Zealand Ministry of Education states, “The communication processes we use are tailored to suit a particular purpose and we ensure they are clearly understood by the people we work with. Where possible, our information is provided to families and whanau in their first or preferred language” (National Service Description, 2005, p. 11).

Speaker five went on to say, “The prescribed intervention process and way in which the practitioner went about implementing the plan without input from the team does not reflect cultural practices at the Ministry. My view is that Māori would find this process culturally insensitive and not considerate of a Maori worldwide view.” Intervention planning for Māori needs to involve collaboration with whanau and be respectful of the contributions of the Māori community (Meyer and Evans, 2006). Speaker five concluded the discussion, “For Māori programme planning and decisions on what interventions to
use with our tamariki (children) need to be developed in consultation with the school, community, practitioner and whanau and include all aspects of the child’s experiences.”

As reported in the literature review, the Ministry’s service pathway follows a linear approach to service delivery that accommodates the “needs of the children and families and to the needs of evidenced-based practice” (Behaviour Practice Framework, p.17, 2012). In other words, a child or young person’s journey through the service pathway may move fluently back and forth through the steps as new information is presented.

In reference to the adaptable process of service delivery for Māori, Paenga (2013) states, “Working with Māori families requires lots of flexibility. The protocols and structure Kaitakawaenga (Special Education Māori Advisors) work to stay the same but they meet them in different ways depending on the families they work with. Being rigid doesn’t always work for everyone” (T. Paenga, personal communication, April 12, 2013). The current study found that the CPS model’s prescriptive implementation of the programme plan is incongruent with Ministry service delivery principles and practices.

In this study, the participants identified incongruence with the language used in the CPS model’s Plan B script as it contrasts with the New Zealand’s bicultural context. For Māori, in particular, language represents their cultural heritage as New Zealanders. The language, “supports the development and celebration of our national identity” (Ka Hikitia, 2011, p. 24). As mentioned in the literature review, along with identity and culture, language is a crucial ingredient for success (Ministry of Education, 2008). Service delivery at the Ministry is provided, where possible, to families and whanau in their first or preferred language” (Ministry of Education, 2005, p. 11).

The results of this study also indicate incongruence with the CPS model’s prescribed intervention process in relation to cultural practices at the Ministry and in particular, the cultural practices for Māori. In reviewing the literature, Meyer and Evans (2006) state
that intervention planning for Māori needs to involve collaboration with whanau and be respectful of the contributions of the Māori community. For Māori, best practice supports a Māori worldview (Berryman & Glynn, 2004). At the New Zealand Ministry of Education, culturally appropriate practices for working with Māori are based on Hei Awhina Matua, which emphasises the importance of assessing behaviour in a social and physical context.

Adaptation and Recommendations
In the previous sections, the participants identified aspects of the CPS programme that were congruent and incongruent with current New Zealand MOE practice guidelines and/or the cultural context of Waikato. In this section, the participants provided recommendations for how CPS practices might inform or strengthen the Ministry of Education’s (MOE) current model of collaborative problem solving practice.

Opportunities to strengthen MOE practices
The participants shared that the CPS model would be a useful addition to individual case work, particularly as it involves collaboration between the teacher and student in learning new skills. Speaker four shared, “I like that the student and teacher are able to share their concerns as this provides an equitable foundation for building solutions rather than focusing on how the student’s behaviour affected the teacher and everyone else.” Speaker three further added, “I like the ‘empathy’ step as it empowers both parties to be able to have their concerns validated and valued. This is a strong position for both parties to hold when seeking solutions to problems.” The participants acknowledged that although these are strengths identified in Plan B, the process would need to align with Ministry service standards. Speaker four commented that the prescriptive nature of Plan B would need to be more flexible and reflect a New Zealand cultural context such as language, and cultural principles and practices.
Assessment. At the New Zealand Ministry of Education, assessment is accomplished within an ecological framework. An ecological framework “means all aspects of the child should be considered” (Meisels, 1996, p.1) and should occur in the child’s natural settings i.e., home, playground, school (Hobart & Frankel, 1994). At the Ministry, assessment purpose, and information gathering and analysis is carried out by the family, whanau, and educators (Ministry of Education, 2005). The child is assessed in a ‘familiar’ setting and includes information “about the child or young person’s ongoing opportunities to respond in a range of environments. Assessment is culturally and developmentally appropriate and guided by current research and evidence-based practice” (Ministry of Education, 2005, p. 12). Assessment is collective, and includes obtaining information from a range of sources including the child and young person. Through a collaborative approach the child’s strengths are identified along with the needs of the child’s family and whanau. Analysis of the cumulative information identifies, “current skills, key strengths, concerns and variations in home and school philosophies. The analysis leads to a shared working hypotheses and identifiable and achievable goals for learning” (Ministry of Education, 2005, p. 13).

The participants shared that the CPS Assessment of Lagging Skills and Unsolved Problems (ALSUP) checklist needs to reflect an ecological approach rather than as a stand-alone assessment tool. Speaker two commented, “You would use it as a pointer then identify some areas that need some formal assessment. I would be more likely to use an adapted version of the ALSUP although I probably wouldn’t run through it quite like this one. Speaker five went on to say, “I do think there can be a place for ALSUP in our service, particularly when working with Māori students and families as long as it’s explained in the right way.” Speaker four added, “I wouldn’t grab it because it’s not an assessment for me it’s a pointer that there needs to be an assessment. I’d do something like that and think right there needs to be a formal assessment in this area. Speaker one went further to say that it could be a useful tool to use in conversation with others supporting the child rather than as a checklist. Speaker two shared, “I would use it as a discussion point with the team and talk about each individual point. Speaker three added,
“If I was to adapt this version of ALSUP I would reframe some of the questions.” For example, instead of the question, “does the student experience difficulties with transitions?” I would ask them how they move from Physical Education back into Maths.” Speaker one concluded, “I would prefer to use other forms of assessment to gain information on the student. Why would we develop a whole new tool when there are a whole lot of other tools out there that can be used as part of our tool box and that are probably more useful in locating information?”

**Adapting the CPS process to reflect a New Zealand context.**

In this section, the participants’ provide some suggestions for what an adapted version of the CPS model would look like in a Waikato context along with recommendations and preferences for service practice at the Ministry. The participants conclude the study with a summary statement.

Speaker five commented, “To encompass something like this into a New Zealand context you would be looking at doing a whole lot of pre work like relationship building, understanding, and gathering this information before we even apply something like this. It’s the tail end of a whole lot of work.” Speaker four went on to say, “Our approach and way in which we ask questions when working with Māori is so important for being able to build relationships and draw out useful and relevant information that is respectful of the culture and for providing cultural safety. Speaker four went on to say, “If the relationship building occurred at the beginning of the CPS service and included the family, student, and school the model can be useful.” However, Speaker one argued, “I think we could sit here all day and give bits and pieces of what an adapted version would look like in a Waikato context instead every now and then we could use it as a tool. Speaker one continued, “I wouldn’t want this model to be built into what we had to practice. It’s a tool in a tool box. It’s not the only way. I think this is something you would add to what we are already doing in our service rather than trying to adapt it. What we are doing already is working and if we adapt the CPS model to align with our practice
then it would look very similar to what we do now and it would alter its effectiveness as evidence-based practice.”

**Use of the CPS model as a tool in a toolbox.**

In concluding the evaluation, the participants acknowledged the strengths of the CPS model but shared that they would not use the programme as it stands. Speaker one went on to explain, “I wouldn’t find useful in my day to day work. The components that I do like would not be used as I have other tools in my toolbox that I use that work perfectly well so why would I try something new that I don’t think has anything more to add.” Speaker three added, “I would use aspects of the CPS model, such as ALSUP, as it is a useful tool for identifying areas requiring further assessment.” Speaker four also shared, “I would use ALSUP as an assessment tool but I would change the approach in how I used it with families and whanau. The participants all shared similar views that aspects of the CPS model can be useful as tools for practice rather than as a stand-alone intervention.

**Preference for restorative practice.**

Some of the participants in the group expressed that the CPS model shares similarities with the Restorative Practice approach to problem solving. Speaker one shared, “restorative practice is about building and re-establishing relationships.” Restorative practice has been described as “doing things with people rather than to them or for them” (Greg & Rick, 2009, p. 1). In New Zealand, restorative practice is supported by research and evaluation and includes aspects of Māori knowledge and practice-based evidence (Drewery & Kecskemeti, 2010).

Speaker one went on to say, “I think that rather than using the CPS model, I would probably lean more to restorative practice. I think that there is more flexibility in the restorative practice than the CPS model.” Speaker three added, “Restorative practice is more culturally appropriate to a New Zealand context than the CPS model. For instance,
the practice is conducted in a context of a culture of care where ‘mana’ (status, prestige, dignity, pride, confidence, resilience, self-respect, identity, leadership and self-esteem) is respected. Speaker two continued, “Restorative practice is different to CPS in that it is solution focused throughout the process, whereas the assessment phase of the CPS model is deficit focused.” Speaker five also added, “It (restorative practice) also focuses on the strength and support of interpersonal connections with community, family/whanau, the child, school and other support agencies.” Speaker one went on to say, “Through the restorative chat you do things quite briefly that are recorded in the moment right through to the whole meeting and then come out with an outcome. The process is not as drawn out as the CPS model and is more flexible in its approach.

Adapted version of the CPS model.

Throughout the discussions it was clear a pattern was emerging in the data relating to the contextual fit of the CPS model with New Zealand Ministry of Education practice guidelines and the cultural context of Waikato. Although the participants identified congruence with some aspects of the CPS model (e.g. collaborative and coordinated, theory of behaviour, assessment, inclusive practice and relationships), the context in which the intervention was implemented was incongruent with Ministry principles and specialist service practices.

The outcomes of this programme evaluation supported the participants’ recommendations for employing components of the CPS in their practice at the Ministry (e.g. using the ALSUP as a tool for identifying areas requiring more comprehensive assessment). Participants also suggested that ALSUP could be used as a tool to engage families and educators in conversation and as discussion points and, for Maori in particular, a tool for identifying a child’s undeveloped cognitive skills that require further development. The participants suggested that any adaptations to ALSUP would need to meet Ministry principles and specialist service guidelines for practice.
Summary

This section summarises this chapter and links findings and discussion to the research questions, which were as follows.

1. What aspects of the CPS programme is congruent with New Zealand Ministry of Education (MOE) practice guidelines and/or the cultural context in the Waikato?
2. What aspects of the CPS programme are incongruent with Ministry of Education (MOE) practice guidelines and/or the cultural context of Waikato
3. What adaptations, if any, could be proposed if the CPS programme was to be adopted by the Ministry of Education as evidence-based practice?

The findings in this study have been obtained as a result of the participants’ thorough understanding of the CPS model and its contributions to providing new information to research. This was achieved by the participants engaging in collaborative discussion where they were able to share their varied opinions, views, experiences, perceptions and knowledge. The interactions of the participants and their contributions to this study reflect the process of evidence-based practice in action.

Summary of congruent aspects of the CPS model with MOE principles and practices.

Throughout the discussions it was clear there was a pattern emerging in the data relating to contextual fit of the CPS model with New Zealand Ministry of Education practice guidelines and the cultural context of Waikato. Although incongruent aspects of the CPS model have been identified and summarised below, the study has shown that some aspects of the CPS model are congruent with Ministry practices (e.g. theory of behaviour, collaborative and coordinated, assessment, delivery of the service, inclusive practice, building relationships, integrity, and diagnosis). Although these aspects of the CPS model presented as congruent with Ministry practices, assessment was identified as the only element of the programme that had potential to contribute to service delivery at the Ministry.
Summary of incongruent aspects of the CPS model with MOE principles and practices.

This study has also identified incongruent aspects of the CPS model with Ministry practices as well as one unexpected finding. Incongruent aspects of the CPS model include the use of the term collaborative, criteria for Ministry behaviour service, Greene’s philosophy, theory of behaviour, and the referral and informed consent process.

In addition, assessment practice, cultural relevance, relationship building, and the prescriptive nature of the CPS intervention were also found to be incongruent. The unexpected finding related to Greene’s definition of ‘doing well’ as stated in his philosophy in relation to the definition of ‘doing well’ for children referred to the Ministry for behaviour support.

Recommendations.

The outcomes of this programme evaluation supported the participants’ recommendations for employing components of the CPS in their practice at the Ministry (e.g. using the ALSUP as a tool for identifying areas requiring more comprehensive assessment, and the collaborative process of developing solutions to problems between the student and teacher).

Participants also suggested that ALSUP could be used as a tool to use in conversation with others supporting the child and for Māori in particular, as a method of identifying deficit skills requiring further development. Other recommendations included a more ecological approach to assessment, the development of relationships early on in the process rather than throughout the service, and adapting the intervention to accommodate cultural context. The participants suggested that if any adaptations were to be made to the CPS model, they would need to meet Ministry principles and specialist service guidelines.
In conclusion to the study, the participants agreed that as the CPS model stands, they would not adapt it as other models of practice such as Restorative Practice (RP) best fit a New Zealand context (e.g. conducted in a cultural context of care, solution focused throughout the process, and focuses on the strength, and support of interpersonal connections with community, family/whanau, child, school and other support agencies). In addition, RP is straightforward to implement and accommodates teacher’s time. The participants’ also concluded that any adaptations to the CPS model would alter its effectiveness as an evidence-based practice.
Chapter Five
Strengths Limitations and Implications

This chapter explores the strengths and limitations of the study and implications for further research. The strengths section explores the evaluative process in relation to the participant’s understanding of the CPS model, the varied cultural contributions of the participants, and the participants’ direct communication with Greene.

The limitation section is divided into four parts. In the first segment, the participants’ understanding of the CPS model is explored, followed by a discussion on the impact of experience of the facilitator. The third and fourth sections conclude with a review of some of the challenges relating to the methods used in the study and ambiguity relating to communication. The final section of this chapter concludes with a discussion of the implications for further research.

Strengths of the Study

Evaluative process of the study. The evaluative process in examining the CPS model has been useful in providing the knowledge, skills and experiences of the participants who are Ministry practitioners in the field of behaviour. Goss and Leinback (1996) state, “The opportunity to be involved in decision making processes, to be valued as experts, and to be given the chance to work collaboratively with researchers can be empowering for many participants” (as cited in Sagoe, 2012, p. 5).

The evaluative process used in this study was consistent with the Ministry’s practice principle for an evidence based practice approach where practice knowledge is shared (Ministry of Education, 2005). Through validation and support of this knowledge, the participants can be encouraged to further develop effective practices. The practitioners shared that one of the strengths of the study was the opportunity to have an individual as well as collective voice in the decision making process. Speaker three commented, “I have enjoyed the opportunity to share my experiences and knowledge of work in this field with my colleagues as it is satisfying knowing that I have made a valuable
contribution to Ministry practice.” Speaker five added, “For me, this study has highlighted the fact that we probably need to be more involved here at the Ministry in evaluating evidence-based practice.” Speaker one also shared, “I’ve learned so much from my colleagues through this process. Through listening to their personal experiences, I learned what our service looks like through different lenses and in many instances this was quite different to mine.”

**Varied cultural contributions.** The participants in the study represented different cultural groups,’ which provided varied ethnic experiences. For example, cultures represented in the group were New Zealand Maori, South African, British and European New Zealand. Some of the participants shared that they had learned something about their colleagues’ culture that they did not know before they had started the study. For example, Speaker two shared, “I didn’t realise that the types of questions I asked Māori students limited the amount of information I was able to access.” Speaker five went on to say, “I work with my colleagues every day so thought I knew them really well until I took part in this study. I learned so much more about them and their approach to working with children and families. I feel humbled by the experience.” Speaker one concluded, “I realised through this experience that there is more to culture than someone’s language, customs, values and beliefs. I learned that it is the unspoken culture (relationships and sense of belonging within a culturally diverse group of people) that connects people and this is what I experienced from this study.” Durie (2001) states, “Relationships are a source of learning, empowerment, and identity for all of us. This is reflected in the concept of Whanaungatanga” (p. 200). Whanaungatanga is about, “taking the time to listen and respond, rather than persuade and coerce others to see things in the same way as we do” (Durie, 2001, p. 200).

The varied cultural experiences and perspectives of the participants in the group added an element of strength to this study in that the participants were able to contribute new information to research, and learn from each other in the process. The effect of greater
understanding or Maramatanga, “enables a person to develop new beliefs about one’s self plus their ability to effect change within the self and within their relationship with others” (Te Raki Pae Whanau Support and Counselling Centre, p.1, 1999).

**Communication with Greene.** A further strength of this study was the direct communication the participants shared with Greene. Speaker two expressed, “By directly contacting Greene, it reduced the erroneous perception we could have taken from his studies and his books.” Speaker four added, “It was great to get some clarity around some of the questions we put to Greene and I appreciated his feedback on some of our views. He didn’t just answer the questions, he responded to what we had to say as well and this enabled me to make a connection with him albeit from a distance.” Speaker one concluded, “Once I had made this connection with Greene, I found myself more interested in delving further into the CPS material. My view of the CPS model then changed from one of instant critique to viewing it from a position of greater understanding.”

The strength of conversing with Greene in this study provided rigor and trustworthiness in the data collected. Mishler (2002, as cited in Golafshani, 2003, p. 602) states, “Measures of reliability and validity is replaced by the ideas of trustworthiness, which is “defensible” (Johnson 1997, p. 282) and “establishing confidence in the findings” (Lincoln & Guba, 1985, as cited in Golafshani, 2003, p. 602). Further, interaction with Greene motivated participants to explore the CPS model for a more comprehensive understanding and increased the amount of information participants contributed.

**Limitations**

**The participants’ conceptualisation of the CPS model.** It was clear early on in the study that the participant’s conceptualisation of the CPS model was an important factor in the evaluation of the programme. One of the participants in the study acknowledged
that the group needed to have a thorough understanding of the CPS model in order to
evaluate whether it could contribute and enhance Ministry practice. To achieve this, the
participants were involved in familiarizing themselves with the CPS material. However,
one of the limitations of the study was the minimal amount of control I had over how
much participants delved into the CPS material in their own time. This meant that some
of the participants were able to develop a deeper understanding of the CPS material than
others. Contributions to discussion, therefore was dominated by participants more
cognisant in the material, which may have compromised the effectiveness of the
evaluation.

**Learning to facilitate.** One of the limitations of this study was learning to
facilitate a focus group. Although familiarity of the participants as colleagues was a
supportive aspect of the process, maintaining participant focus on the topic and variance
in participant contributions sometimes limited the amount of relevant data I was able to
collect.

To minimize the impact of this (participant focus), I facilitated the group discussion in a
number of ways. Firstly, to achieve a more proportionate discussion, I acknowledged the
contributions of the main contributors and communicated an interest in hearing from a
variety of people in the group. This encouraged participants to open up the discussion and
speak more freely. To maintain the flow of discussion throughout the sessions, I would
sometimes divide the main group into pairs, which enabled less involved contributors to
share their views and ideas. Kaner, Lind, Toldi, Fisk and Berger (2007) state that small
group interactions support ‘shy’ members to communicate without feeling pressured to
compete for ‘airtime.’

To encourage all participants to actively engage and attend to the focus of discussion, I
called for a quick break and refocused them back to the group discussion protocol i.e.,
one speaker communicating at a time. Kaner et al (2007) maintain that often participants
become “undisciplined when they are overloaded or worn out.” Following the
break, I summarised the key themes discussed and asked some of the participants to link their ideas to the central issue. This prompted the participants to enter into further discussion.

Although limited experience as a facilitator may have been a limitation of this study, the process yielded good quality information. This was achieved through preparation and organisation of the resources and session plans. In addition, following each session, I was involved in a self-evaluation of my role as facilitator and brief feedback from the participants in the summary section of the sessions provided further evaluation on my role. As the participants in the study were also my colleagues, this provided a strong foundation for accessing information relating to the research questions.

Methods of data collection. One of the challenges of this study was featured in some of the methods used to collect and clarify data. For instance, it was difficult to ascertain what was communicated by the participants on the digital recording due to poor clarity of the recording device, and environmental background noise such as chairs scraping on the floor, and participants partaking of refreshments. In addition, the different tones of voices i.e., high and low, and participants talking over each other and engaging in separate conversations at the same time as the speaker made it difficult to decipher or hear some of the information. A higher quality digital recording system would have captured more detailed sound and filtered out environmental noise so that participants’ contributions was better able to be understood. Despite these difficulties I was able to obtain relevant information through other means of data collection i.e., meeting notes, summary of discussion, and review and clarification of previous session data.

Difficulties also occurred in acquiring validation and clarification of some of the participants’ information from the digital recording due to the length of time between sessions. The participants shared that they had difficulty clarifying the information from a week earlier because they could not remember what they were referring to in the
discussion. To accommodate for these difficulties, I saved participant responses from the recording that required clarification onto my laptop. I then played it back to the participants for clarification in the following session.

**Communication ambiguity.** Difficulties were also noted in the ambiguity of the terms some of the participants’ used when communicating information. For example, utterances such as “yep” and “narp,” and minimal expressions, i.e., “Mmm”, and “um”, and the use of vernacular conversational language such as, “You’re leading the kid down the path,” and “Yeah its funny cos…” Bucholtz (2000) states that dialogue is made up of more than just the exchange of ideas. Natural conversation can be flooded with verbal and non-verbal signals each conveying a different meaning based on the context in which it is communicated.

Difficulties also featured in the participants’ use of incomplete sentences. Often sentences would start out with a clear direction but then either discontinue part way through, as a result of someone entering the conversation, or the sentence would move in another direction. This would often make it difficult to attain a comprehensive understanding. Bucholtz (2000) states that transcriptions can be loaded with representational difficulties making it difficult to interpret the information.

The limitations of some of the data collection methods outlined above are a feature of qualitative research. Velez (2013) states that the qualitative method of data gathering, “involves many opportunities for human error” (p.1) due to its narrative aspect. For instance, language is a fundamental aspect of qualitative research so a term or phrase can be perceived or interpreted in different ways by different people. In a study a statement might mean one thing to one participant but mean another thing to other participants. The statement could also mean something completely different to the researcher (Gall, Gall & Borg, 2003).
Although the qualitative approach to data gathering was at times a limitation in this study, it was also effective. For example, by using varied measures to collect the data i.e., recording, authenticating data with the group, questioning, and recording minutes this enabled me to clarify my understanding of the participants’ information. Further, group discussion generated new questions and information, which provided an element of flexibility within the study for participants to explore areas that required further investigation.

**Implications for Further Research**

This study provided an opportunity for a select group of practitioners working at the New Zealand Ministry of Education to evaluate evidence-based practice within a Waikato context. This study was situated at the Ministry of Education Waikato office so was culturally specific to the participants and to the Waikato district. My intention was not to look broader than the area of Waikato but as the study was conducted in this region it is highly relevant to this context. There may be similarities to other cultural or geographical groups within New Zealand. A variety of cultural perspectives, knowledge and experiences would have been a valuable contribution to this study. Future investigation may therefore involve a similar study being carried out in different regions throughout New Zealand and/or with a different ethnic group.

**Child / Young Person and family EBP practice contributions.** Based on the evidence-based practice Venn diagram (see Figure 1 below) illustrated in the literature review, this research sits in the overlap between practitioner knowledge and research.
However, evidence-based practice is considered to be derived from the integration of research, practitioner knowledge, and the life experiences of the family, whanau, child and young person. Although only the two elements of evidence-based practice, practitioner knowledge and research are represented in this study; the findings are grounded in the field. A more complete evaluation would need to include parents, child and teacher perspectives outside the scope of this study.

Although the study recognised some limitations it also acknowledged various strengths. This has given me the opportunity to make a contribution to practice and build new knowledge, which has expanded possibilities for further research.
References


Huang, L. N., Hepburn, M. S., & Espiritu, R. C. (2003). To be or not to be…evidence based? Data Matters, 6, 1-3.


Reed, G. (2013). Clinical Expertise. Evidence Based Practice in Mental Health


T. Paenga (personal communication, March, 2013)


Appendix A and Appendix B
District and Service Manager Consent to Participate Letters
Appendix C: Participants’ Information Sheet

February 2013

RESEARCH PROJECT INFORMATION SHEET

The appraisal of Collaborative Problem Solving (CPS) within a context of current New Zealand practices and policies

Researcher: Carol Dickinson
Supervisors: Hal Jackson and Jayne Jackson

This research is being carried out by Carol Dickinson to fulfill the requirements of a Masters degree in Education (Educational Psychology) at Massey University, Albany Auckland.

Research Project
I am conducting a study to evaluate the Collaborative Problem Solving (CPS) model (Greene, 1998) through the lens of Ministry of Education (MOE) principles and practices, and professional expertise of a group of special education practitioners working in the Waikato area of New Zealand. If necessary, suitable adaptations to the programme will be developed.

I invite you to participate in the research. Information outlining the research procedures is presented below.

Procedures
The study will include a focus group made up of five to eight participants employed at the Ministry of Education and may include a Psychologist/s, a Special Education Advisor/s, and a Kaitakawaenga and a Pourarahi Takiwa Pasifika Special Education Adviser/s. In addition to an introductory session designed to invite participation, the participants will be involved in a series of three sessions, which will be tabled at Regular review and intake meetings. The three research sessions, therefore will not be held as additions to participants work so will not affect case loads and the Ministry of Education supports participants’ engagement in these activities during Ministry scheduled meetings.

Introductory session (1 hour 30 minutes) is an introduction to the research and will include the aim and purpose of the study and information about the procedures and consent.

Session one (2 hours 30 minutes) is an information session

Session two (2 hours 30 minutes) will involve identifying aspects of Greene’s CPS programme that are consistent and inconsistent with current Ministry of Education (MOE) practice guidelines.
Session three (2 hours 30 minutes) will include making proposed adjustments, if any to the CPS programme, if the practice was to be adopted by the Ministry of Education (MOE) as evidence based practice.

Confidentiality
The names of participants will be kept confidential. No names or positions will be used in the report of the research unless express permission is given.

Data will be authenticated by the group during the discussion to reflect the purpose of the study.

All participants will have access to a summary of the report following the three sessions. Information recorded during the project will be kept in a locked filing cabinet and stored as a data file on the researcher’s computer for a period of five years following completion of the research and then destroyed. The sessions will include audio recording and this conversation erased after it has been transcribed.

Distribution of Reconceptualised CPS Programme and Findings
The research will be submitted for examination and lodged as a thesis at Massey University, Albany Auckland. A summary report on the findings of the research and a copy of the adapted CPS programme will be sent to all the research participants. The complete report will be available to all participants on completion of the project.

Participation in this Research
Participation in this research is voluntary. All participants have the right to withdraw from the research at any stage. If you choose not to take part in the study, this will not compromise any working relationship between me, the researcher, and you, the participant/colleague.

Consent Form
If you choose to take part in the research study, please complete the consent form attached.

Further Information
If you require further information about this research, please contact either:
The researcher: Carol Dickinson
Mobile: 022 0661983
E-mail: Carol.dickinson@minedu.govt.nz

The Supervisors:
Hal Jackson
Institute of Education
Private Bag 11 222
Palmerston North, 4442
Appendix D: Session One Agenda

Agenda outline – The researcher will briefly go over the session agenda. This will include the following:

Introduction - The session/hui will open with a karakia and a welcome to all participants. Food and hot/cold beverages will be provided and blessed before the meeting takes place.

Agenda outline – The researcher will read through the session agenda. This will include:

- A review of the group confidentiality agreement
- A review of the Group discussion protocol
- Information shared on the role and responsibilities of the researcher
- Aim and purpose of the session. The aim and purpose of the session is for the group to:
  1. Produce consensus statements representing a summary of the CPS model with its practices, and procedures.
  2. Present a visual representation of the CPS model
- Participants provided with an opportunity to pre-read CPS information, session questions and to ask questions following reading.
- Researcher shares background information on the CPS model (Power point presentation)
- Focus Group Brainstorm (Group disassembling and familiarizing what the CPS model of practice is)
- Focus Group Visual Representation of the CPS model (Group produce a visual representation of what the CPS model of practice looks like to them in practice)
- Session summary and time allocated for recording any issues raised
- Collection of all recorded data and any left-over handouts
- Karakia to close session
Appendix E: Information Session One

Research Information Session

Time allocated: 2 hours 30 minutes

Meeting Room Setup prior to commencement of Session One – Resources required to be set up prior to the session includes:

- Previously booked meeting room with ‘Smart Board’ and/or overhead projector for power point presentation
- A “Private Session” sign for the outside of the discussion room door
- Lap top and presentation saved on two memory sticks
- Two digital recording devices as to ensure one are functioning. Digital recording devices will be checked for working order prior to the session.
- Refreshments set up
- Large sheets of paper, pens, blue tac, scissors, glue sticks, assorted coloured paper, whiteboard markers, highlighters, and coloured vivid markers provided for recording notes and questions
- Lettered name tags corresponding to participant names and numbered seating plan
- Copy of the researcher’s roles and responsibilities (see Appendix H)
- Copy of the discussion protocol (see Appendix G)
- Copy of the group’s confidentiality agreement (see Appendix F)
- Questions (see Appendix N)
- Ministry of Education (MOE) Service Standards Practice Guidelines booklets
- Extra batteries for recording devices
- Copy of power point presentation
- Copy of Greene’s CPS practice model
- Large envelope to collect up all data notes
- Data labels
- Purpose and aim of the session displayed on the white board and projected on interactive board from the lap top.
- Interactive white board designed to print off a copy of text scribed
**Introduction to Session One (5 minutes)** – The participants will be issued with their name tag as participants enter the room and directed to their seat as indicated on the seating plan.

**Karakia (5 minutes)** - The meeting/hui will open with a karakia and a welcome to all members.

**Food and beverages (5 minutes)**
Food and hot/cold beverages will be provided and blessed before the meeting takes place. Time allocated to make a hot drink

**Digital recording** – The researcher starts the recording devices

**Introduction (1 minute)**
The researcher briefly runs through the session agenda

**Confidentiality Agreement (5 - 10 minutes)**
The researcher reads through the details of the focus group confidentiality agreement with the participants, while providing time for the participants to question and clarify the information for further understanding.

**Group Discussion Protocol (5 -10 minutes)**
The researcher reads through the group discussion protocol. The discussion protocol applies to all participants and the researcher. The participants are invited to ask questions for clarification and/or add to the protocol.

**Role of the Researcher (5 minutes)**
The role and responsibilities of the researcher are shared by the researcher (see Appendix H). Participants are invited to ask any questions to clarify understanding.
**Introducing the purpose and aim of the session (2 minutes)**

The researcher will share the purpose and aim of the session to the group. This will be visually displayed on the white board for the group to refer to throughout the session.

**Aim and Purpose of the Session**

The aim and purpose of the session is for the participants to:

3. **Produce consensus statements representing a summary of the CPS model with its practices, and procedures.**

4. **Present a visual representation of the CPS model**

**Pre-reading of CPS information, session questions and to answer any questions following reading (30 minutes)**

The participants are provided with an opportunity to pre-read CPS information, session questions and to ask questions following pre reading.

**Background information on the CPS model (10 minutes)**

The researcher presents a more detailed view of the CPS model as a power point presentation previously viewed in the introduction session. During this time, the participants are invited to ask questions to clarify their understanding of the framework and implementation of the CPS practice.

**Questions (5 minutes)**

Following the power point, the researcher uses questions to direct the group in an exploration of the CPS model of practice (see Appendix N)

**Handouts and reading of the CPS practice model and questions – 30 minutes**

Participants read some of the information from the handouts about the CPS practice model and questions to familiarize themselves with the content. Participants take handouts with them following the session should they choose to use it for follow up reading.
Focus Group Brainstorm (15 - 20 minutes)
Using the CPS model of practice handout, the participants in the group disassemble, and discuss what the practice is. Depending on how many participants take part in the session, the group could be further divided up into two groups of three or four. Views from the participants may vary based on how each participant understands the concept of the model. The group is encouraged to use the large sheets of paper to record any thoughts, views, and or queries.

Focus Group Visual Representation of the CPS model (15-20 minutes)
To further consolidate the groups understanding of the CPS model and what it looks like in practice, the whole group will develop and present a visual representation of the model. The group can use any of the resources made available to them to create the model. Resources include large sheets of paper, a variety of coloured markers, a lap top computer, coloured paper, glue sticks, and scissors. Following the construction of the model, the group explains how their visual representation reflects how they see the CPS model in practice.

Authenticating the Data (10 minutes)
While the participants are sharing their understanding of the model, the researcher types in their views onto the Interactive Smart board and added to the participant’s table of information. A copy of the authenticated notes is printed off for the participants. At the conclusion of the presentation, the researcher will ask the participants whether they agree with what has been recorded. If required, the researcher will make group suggested changes or additions to the data.

Session Summary (15 minutes)
During the first part of the summary section the researcher will invite the participants to record on paper any concerns or issues that emerged after each step of the process so they feel their contributions are not limited and they are able to safely share their true insights. During the second part of the summary section, the researcher will briefly summarize the session and whether the aim and purpose of the session was achieved. In addition the researcher will:
• Direct participants to record any additional information they feel is relevant and important to the discussion such as clarification of ideas and views shared or information they have not had the opportunity to share within the allocated time frame.

• A date, time and meeting place for session two is scheduled

*Collection of Data* – All hand written and recorded data will be collected up at the end of the session, labeled and placed in a large envelope by the researcher.

*Collection of Handouts* – All handouts that need to be returned to the researcher will be collected before the closing karakia.

*Session Closure* – Researcher thanks the participants

*Karakia - (5 minutes)*
Appendix F: Group Confidentiality

- Only participants who have provided written consent to take part in the study can attend the focus group discussions.

- Participation in the focus group is voluntary. If for any reason a participant chooses to leave the discussion group, the researcher will escort them from the room, thank them for their contribution and remind them of the confidentiality agreement.

- The researcher will remind all participants at the beginning of each of the sessions that if they choose to leave the room for any reason throughout the discussion time period, they will be reminded of the confidentiality agreement.

- To protect the confidentiality of participants from any interruptions from non-participants outside of the discussion room, the researcher will place a “Private Session” sign on the front of the discussion room door. The sign will indicate the session start and conclusion time and inform the non-participant to knock and wait for the researcher to leave the room if the interruption is unavoidable.

- Prior to the sessions, participants will need to make arrangements with their Supervisor or Service Manager for them to be available on session days and during session times. This is to support participants if they require any emotional support as a result of information shared during any of the discussion sessions or as a result of personal grievance.

- If participants should become distressed during any of the sessions, the researcher will escort them from the room and thank them for their contribution. The participant/s will be reminded of their options to seek out their supervisor or Service Manager for support. Supervisors and Service Managers are bound to confidentiality as part of their roles at the Ministry of Education (MOE).
• If there are any disruptions to the focus group by a non-participant, the researcher will attend to the non-participant outside of the discussion room to protect the confidentiality of the participants.

• Differences of opinion expressed by participants in the sessions will be summarised in the report in such a way that it does not identify individuals’ opinions or their professional roles.

• The researcher will inform the participants that any e-mails they receive from the researcher regarding the project can be stored in a folder on their computer using a pseudonym so as to protect the information from being read by non-participants. At the conclusion of the three sessions all information sent to the participants via e-mail will be deleted.
Appendix G: Group Discussion Protocol

Group Discussion Protocol
A group discussion protocol has been provided so that all participants and the researcher have a clear idea of what is expected during the discussion process. The discussion protocol provides participants with a safe forum to share their ideas and to meet the outcomes of the session within the allocated time frame.

The group discussion protocol is sent out to the participants a week before session one so that the participants are able to familiarize themselves with the content and so that they are able to highlight areas they would like clarified. The discussion protocol is:

- Confidentiality of discussion information. Discussion content remains in the meeting room.
- Being respectful of not divulging information other participants have shared during the discussion or the identity of any participant on leaving the session.
- The sessions will start and end with a karakia
- Food and beverages will be blessed with a karakia before consumption in all sessions
- Being aware of time restraints on discussing and sharing views and ideas. Sharing one point at a time
- One person speaking at a time. Refraining from interrupting other people.
- Disagree with the idea not the person as varied perspectives and points of disagreement, controversy, or debate can arise rather than consensus.
- During the hui we need to be engaging and communicating with the group in appropriate ways. This is known by Maori as Rangatiratanga or Protection and applies to Article Two of the Treaty of Waitangi.
- To manage any issues raised during the discussion sessions, the researcher will allocate some time during the summary section of the session for participants to record their concerns. The researcher will collect up the recorded concerns and follow them up with the participant in private or offer the participant the
opportunity to discuss the concern with their supervisor or Service Manager if they feel this is the option they would prefer.

- Respecting the treatment of other participants i.e., doing anything that could cause someone else to feel emotionally harmed, uncomfortable, put down or made to feel inferior.
- Encouragement of participation from all participants in attendance
- If time is limited during discussion time participants record questions for clarification on paper and share during the debriefing and data authentication section of the discussion
Appendix H: Role and Responsibility of the Researcher

The role of the researcher prior to and during the sessions is to:

Prior to sessions:

- Make sure all information is sent out to participants prior to the meeting
- Prepare the discussion room and organise the food and beverages for the sessions
- Bring copies of all the information sent to the participants prior to the sessions to the session
- Make sure all equipment is in working order and back up equipment is made available

During sessions

- Clearly define the focus of the research at the beginning of the session and throughout the session.
- Be responsible for moving the discussion of the focus group along so that all discussion points are fully addressed. The researcher has provided approximate time frames on each of sections of the agenda as a guide.
- Stress the value of the participant’s contributions
- Clearly state to the participants that the researcher’s role is as a learner. To avoid researcher bias, the researcher will use neutral comments during discussion such as “I see” and “Any other thoughts about this?” Further, discussion prompts may be used such as, “What do you as the group think about what (name of participant) just said?” (p.63)
- Be familiar with how to conduct a focus group and the content of the sessions. For example the confidentiality agreement.
- Clearly state that confidentiality also applies to the researcher and that any information shared by the group inside the session rooms will remain within the privacy of the rooms.
- Any issues recorded from the participants during the sessions will be discussed with the participant in a private room following the session and information shared will be kept confidential by the researcher.
- Encourage participation from all participants in the focus group
• Build rapport with participants and respect cultural diversity within the group. For example Maori participants have different views on how to conduct a meeting in relation to New Zealand European and Pacific Island participants.

• Create a hui that is restorative and collaborative in approach so as to promote discussion and achieve desirable outcomes. In Maori this is known as “Whakarongo,” or actively listening to others in the group.

• Provide a meeting protocol that provides clear expectations for a productive discussion

• To direct the discussion in a more productive direction if the focus of the discussion is challenged by individual participants.

• Respect the rights of all participants to feel safe expressing their professional opinion without repercussions from the researcher and/or the other members of the focus group.

• The researcher will refer the participants to the focus of the session if the conversation has deviated from the discussion point.

• Respect the rights of all participants to decline from answering particular questions or to share particular views.

• Collect up all recorded data, label and place in large envelope. Data stored in a safe and secure place.
Appendix I: Session Two Agenda

Agenda outline – The researcher will briefly go over the session agenda. This will include:

- Introduction to Session Two – Participants issued with name tags and seating plan
- Karakia/Welcome - The session/hui will open with a karakia and a welcome to all participants. Food and hot/cold beverages will be provided and blessed before the meeting takes place.
- Introduction – The researcher will briefly go over the session agenda, including the allocated session time frame
- Discussion handouts - The researcher will refer participants to the handouts
- Focus Group Confidentiality – A brief review of the contents of the confidentiality agreement
- Group Discussion Protocol – A brief review of the contents of the group discussion protocol
- Aim and Purpose of the session – The aim and purpose of the session is for the group to:
  1. Review of the participants’ visual representation of the CPS model of practice and if required adaptations are made to reflect an agreed understanding of the model.
  2. Identify strengths, shortcomings and cultural relevance of the CPS programme
  3. Provide a partial list of concerns identified during the course of session activities. These concerns will become the basis of activities in Session 3.
- Authentication of Data – The researcher will explain how and when the data will be authenticated.
- Review of Session one process
- View and discuss responses to session one questions
- Researcher to clarify participant statements from session one
- Review of the CPS Practice Model - A review of the participants’ visual representation of the CPS model of practice previously developed in session one.
- If necessary, adaptations are made to the visual representation based on new knowledge
- Recording Table - Using the recording table and questions from the researcher, participants explore and record aspects of the CPS programme identified as consistent and inconsistent with Ministry practice as set out in the New Zealand Ministry of Education (MOE) practice guidelines
- Session summary – The researcher summarises the session and allocates time for participants to record any issues raised
- Collection of all recorded data and any left-over handouts
- Karakia to close session
Appendix J: Session Two

Resources set out by the researcher prior to commencement of session two

Resources required to be set up prior to the session include:

- Previously booked meeting room with ‘Smart Board’ and/or overhead projector for power point presentation
- A “Private Session” sign for the outside of the discussion room door
- Laptop projector and presentation set up
- Two digital recording devices as to ensure one are functioning. Digital recording devices will be checked for working order prior to the session.
- Refreshments set up
- Paper, pens, whiteboard markers, highlighters and vivid markers provided for recording notes and discussion points
- Lettered name tags corresponding to participant names and numbered seating plan
- Questions for Session 2 (see Appendix N)
- Copies of the participant’s outline of Greene’s CPS practice model
- A copy of the researcher’s responses to participants questions in session one
- Request for clarification of participant’s statements from session one
- Extra batteries for recording devices
- Recording Tables (see Appendix P and Appendix Q)
- Ministry of Education Service Standards Guidelines booklets
- Copy of the focus group’s visual representation of Greene’s CPS practice model
- Large envelope to collect up all data notes
- Data labels
- Copy of the Focus Group Discussion Protocol (see Appendix G)
- Purpose and aim of the session displayed on the white board and projected on Interactive Smart board from the lap top.
- Interactive Smart board
Session Two

Settling in time (5 minutes) – The participants will be issued with their name tag as participants enter the room and directed to their seat as indicated on the seating plan.

Karakia (5 minutes) - The meeting/hui will open with a karakia and a welcome to all members.

Food and beverages (5 minutes)
Food and hot/cold beverages will be provided and blessed before the meeting takes place.
Time allocated to make a hot drink

Digital recording – The researcher starts the recording devices

Introduction (10 minutes)
The researcher briefly runs through the session agenda which includes the following:

Session Time Frame – The time frame allocated to the session is two hours 30 minutes.
To achieve the outcomes of the session within this time frame and to keep the discussion moving along, while including the contributions of all participants, the researcher has included approximate set times as a guide.

Session Handouts
The session resources/handouts are set out on the discussion table prior to the session.
Copies of the handouts are sent out to the participants prior to session two

Focus Group Confidentiality (5 minutes)
The researcher refers to the focus group confidentiality agreement previously discussed in detail in session one as a reminder to the participants of the need to be aware of confidentiality during and following the discussion group session (see Appendix F).
Focus Group Protocol (5 minutes)
The researcher refers the participants to the focus group protocol handout (see Appendix G) previously discussed in detail in session one. The researcher briefly reviews the protocol with the group.

Review of aim and purpose of the session (2 minutes)
The researcher refers the participants to the aim and purpose of the session which has been recorded on the white board. The visual representation of the aim and purpose will be used as a point of reference for the participants throughout the discussion.

Aim and Purpose of the session is for the participants to:
1. Review of the participants’ visual representation of the CPS model of practice and if required adaptations are made to reflect an agreed understanding of the model.
2. Identify strengths, shortcomings and cultural relevance of the CPS programme
3. Provide a partial list of concerns identified during the course of session activities. These concerns will become the basis of activities in Session 3.

Review of Session one process
The participants share what they learned from session one and areas they would like to develop further understanding (10 minutes)

View and discuss responses to session one questions (10 minutes)
The participants are given time to pre-read through the responses to session one questions and asked to record any questions they may like further clarification and note any changes they would like to make to their visual representation of the CPS model previously developed in session one.
Clarification of participant statements from Session one (5 minutes)
The researcher asks particular participants to clarify statements they made from session one for further understanding.

Review of the group’s representation of the CPS Programme (10 minutes)
The group uses the visual representation they constructed in the previous session to review and share their understanding of the CPS programme and what this looks like to implement in practice. Any adaptations to the CPS model can be made during this time.

Questions
The researcher will use questions (see Appendix N) to promote discussion throughout the session and to explore the ideas, knowledge and experience of the participants in the group as part of the review and critique of the CPS model.

Identifying consistent aspect/strengths of the CPS model (10 minutes)
The group discusses shares and identifies consistent aspects of the CPS practice that fit within the ministry practice guidelines. The group record their responses onto a recording table or on a large sheet of paper.

Authentication of Data (10 minutes)
The group will authenticate the data following each question. For example, after the researcher has scribed the participants’ views on consistent aspects of the CPS model onto the whiteboard, the participants will be asked whether they agree with what has been recorded. Any changes or clarification of data will be made before the researcher moves onto the next set of questions.

Potential Value of the CPS model (10 minutes)
The group shares and discusses their views on whether the CPS model has the potential to add value to the current Ministry of Education (MOE) model of professional practice. Their responses are recorded onto the recording table or on a large sheet of paper. Data is authenticated by the group and scribed by the researcher.
Identifying absent or incongruent aspects of the CPS model (15 minutes)
The participants review the CPS model to see if they are able to identify any absent or incongruent aspects of the practice with the New Zealand Ministry of Education (MOE) practice guidelines. Aspects identified by the group are discussed, shared and recorded onto the recording table or on a large sheet of paper. Data is authenticated by the group and scribed by the researcher.

Session Summary (10 minutes)
During the first part of the summary section the researcher will invite the participants to record on paper any concerns or issues that emerged after each step of the process so they feel their contributions are not limited and they are able to safely share their true insights. During the second part of the summary section, the researcher will briefly summarize the content of the discussion using the recording table as a guide. In addition the researcher will:

- Direct participants to record any additional information they feel is relevant and important to the discussion such as clarification of ideas and views shared or information they have not had the opportunity to share within the allocated time frame.
- Invite participants to discuss issues or comments that need clarification or to clarify their own views and ideas.
- Ask participants if there is any information missing that needs to be further explored
- A date, time and meeting place for session three is scheduled

Collection of Data – All hand written and recorded data will be collected up at the end of the session, labeled and placed in a large envelope by the researcher.

Collection of Handouts – All handouts that need to be returned to the researcher will be collected before the closing karakia.
Session Conclusion (5 minutes) – The researcher thanks the participants

Karakia (5 minutes) - The session is concluded with a karakia.
Appendix K: Session Three Agenda

Introduction - The session/hui will open with a karakia and a welcome to all participants. Food and hot/cold beverages will be provided and blessed before the meeting takes place.

Agenda outline – The researcher will read through the session agenda. This will include:

- Aim and purpose of the session
  1. Review the authenticated data from session two
  2. To provide consensus statements of the CPS model’s shortcomings
  3. To provide consensus statement regarding the CPS model’s potential value to effective and culturally responsive education psychology practice in New Zealand
  4. To provide a summary and recommendations.

- Review of the previous session- Participants review the visual representation and flow diagram of the CPS model. Concerns are clarified and, if required, further adjustments are made. Data is authenticated.

- Review of handouts on Te Whare Tapa Wha, Meihana, Te Wheke and the Treaty of Waitangi - To provide further responses to Session two questions 7 and 8.
  - Question 7: Is the CPS model culturally relevant, given New Zealand’s bi-cultural constitutional framework and multicultural society?
  - Question 8: Are the CPS model’s critical features, procedures, and practices likely to be perceived as appropriate and match New Zealand’s Maori or Pacific Island people values and cultural perspectives?

- Review of Table 5 and Table 6 from Session Two – Participants discuss areas of the contents of the tables that require further clarification, or understanding. The data is then authenticated if any changes are made

- A recording table (see Table U) is distributed to participants for recording responses
• Discussion on whether any adaptations to the CPS programme are required to reflect approaches applicable to local area practice. Data is authenticated.
• Collection of all recorded data
• Session Summary and Thank you
• Karakia to close session
Appendix L: Session Three

Resources set out by the researcher prior to commencement of session three

Resources required to be set up prior to the session include:

- Previously booked meeting room
- A “Private Session” sign for the outside of the discussion room door
- Two digital recording devices as to ensure one are functioning. Digital recording devices will be checked for working order prior to the session.
- Food and beverages
- Paper, pens, whiteboard markers, highlighters and vivid markers provided for recording notes and discussion points
- Lettered name tags corresponding to participant names and numbered seating plan (see Appendix M)
- Extra batteries for recording devices
- Researcher discussion prompts
- Session handouts
- Ministry of Education Service Standards Guidelines booklets
- Food and beverages
- Large envelope to collect up all data notes
- Data labels
- Copy of the Focus Group Discussion Protocol (see Appendix G)
- An agenda outlining information on the aim/purpose and plan for session three (see Appendix K)
- A copy of the recording table with the authenticated data from session two
- Session three recording table (see Appendix U)
- Copies of the focus group confidentiality agreement (see Appendix F)
- Copies of Elements of Greene’s CPS practice framework i.e., Plan A, and Plan B and Plan C
- A copy of the Role of the Researcher in the study (see Appendix H)
Session Three

Settling in time (5 minutes) – The participants will be issued with their name tag as participants enter the room and directed to their seat as indicated on the seating plan.

Karakia (5-10 minutes) - The meeting/hui will open with a karakia and a welcome to all members.

Food and beverages (5 minutes)
Food and hot/cold beverages will be provided and blessed before the meeting takes place. Time allocated to make a hot drink

Digital recording – The researcher starts the recording devices

Introduction (10 minutes)
The researcher briefly runs through the session agenda which includes the following:

Session Handouts
The session resources/handouts are set out on the discussion table prior to the session. Copies of the handouts are sent out to the participants prior to session three.

Focus Group Confidentiality
The researcher refers to the focus group confidentiality agreement previously discussed in detail in session one as a reminder to the participants of the need to be aware of confidentiality during and following the discussion group session.

Focus Group Protocol
The researcher refers the participants to the focus group protocol handout (see Appendix G) previously discussed in detail in session one and session two. The researcher briefly reviews the protocol with the group.
**Aim and Purpose of Session Three**

The researcher refers the participants to the aim and purpose of the session which has been recorded on the white board. The visual representation of the aim and purpose will be used as a point of reference for the participants throughout the discussion.

Aim and Purpose of session three is for the group to:

1. **Review the authenticated data from session two**
2. **To provide consensus statements of the CPS model’s shortcomings**
3. **To provide consensus statement regarding the CPS model’s potential value to effective and culturally responsive education psychology practice in New Zealand**
4. **To provide a summary and recommendations.**

**Review of the Previous Session Recording Table** – The participants review the authenticated data presented on the recording table from the previous session to identify areas of the CPS model that could be adapted to fit within Ministry practices.

**Proposing adaptations** – If the group identifies areas of the CPS model that could be adapted, their proposed ideas and suggested modifications to the model are recorded on the review recording table (see Appendix U) and/or a large sheet of paper.

**Authentication of the data** – The researcher scribes on the whiteboard the suggested modifications to the CPS model and the reasons why the group are making the suggestions. The researcher will ask the participants whether they agree with what has been recorded. Any changes or clarification of data will be made before the researcher moves onto the next discussion prompt. Authentication of data will occur within the session following the conclusion of each discussion point.

**Adapted version of the CPS Model of Practice**

The participants use their proposed ideas from the discussion to formulate and produce an adapted version of the CPS model. The participants are invited to present their adapted version using any of the resources made available to them and in any form. For example, the group may choose to present the adapted version in the form of a table and on a large
sheet of paper. The adapted version will demonstrate the group’s view of what the model of practice would look like if the Ministry of Education was to adopt the practice. The group present and share the adapted version of the CPS model, while explaining the reasoning behind the adaptations.

**Session Summary** – During the first part of the summary section the researcher will invite the participants to record on paper any concerns or issues that emerged after each step of the process as in previous sessions.

In the second part of the summary, the researcher will summarize the content of the discussion using the authenticated data as a guide. If modifications have been suggested by the participants, the researcher will seek clarification of the changes and then provide a summary based on the changes recorded on the table. If the participants have agreed that no modifications are required to the CPS programme, the researcher will summarize the reasons and justification of the group’s decision as tabled in the discussion.

**Collection of data** – The researcher will collect up all recorded data

**Session Conclusion** – To conclude the session, the researcher will thank the participants for their contributions to the project of study and explain that a summary report on the findings of the research and a copy of the adapted CPS model will be sent to all the research participants. The complete report will be available to all participants on completion of the project.

**Session closure** – The session is closed with a karakia.
Appendix M: Seating Plan

Key: Numbers represent participants seating positions
Letters are pseudonyms representing the participants

Interactive white board
Researcher standing here when recording information

Smart board

Discussion Table

Researcher seated here when showing presentation
Appendix N: Session Questions

Session One Questions

1. As a group, discuss and share your understanding of what the CPS practice model looks like.
   a. Identify and describe procedures (e.g., phases and steps of the process of implementing CPS) used to engage children, family members, and/or teachers in the problem solving process.
   b. Identify and describe the practices associated with the CPS model

2. Are there elements of the CPS programme you may have omitted or could elaborate further in providing your understanding of how the programme is implemented?

3. Using a large sheet of paper produce a visual representation of how you as a group view the CPS model.

4. Using the visual representation of the CPS, can you explain what the model looks like from the group’s perspective?

Anticipated Outcomes

- Consensus statements representing summary of CPS model with its practices, and procedures.
- A visual representation of the CPS model

Questions Session Two

Session 2 – Identifying Strengths, Shortcomings and Cultural Relevance of the CPS Programme

Questions for Session 2

1. Having had the time to review Greene’s CPS programme, what do you think
about his approach?

2. What do you like about the CPS programme that fits within the ministry practice guidelines? Can you share some examples?

3. Does the CPS model have the potential to add value to the current MoE model of professional practice?

4. What are the model’s critical features?

5. Can you identify any aspects of the CPS programme that are absent or incongruent with the New Zealand Ministry of Education (MOE) practice guidelines?

6. Professional practice at the Ministry of Education (MOE) is aimed to provide a “fully inclusive education system.” With this in mind, what aspects of the CPS programme contradict achieving this aim?

7. Is the CPS model culturally relevant, given New Zealand’s bi-cultural constitutional framework and multicultural society?

8. Are the CPS model’s critical features, procedures, and practices likely to be perceived as appropriate and match New Zealand’s Maori or Pacific Island people values and cultural perspectives?

**Anticipated Outcomes:**

- Consensus statements of the model’s strengths, critical features and cultural relevance.
- Partial list of concerns identified during the course of session activities. These concerns will become the basis of activities in Session 3.

**Session 2 - Backup questions**

1. How does the CPS programme fits within the Ministry’s aim for “Inclusive Practice?”

2. Can you identify where the CPS programme aligns with other ministry practices? Can you share some examples?

3. Can you explain further how the CPS programme can add value to the current MOE model of practice?
4. If you propose that the CPS model has the potential to add to the current ministry model of practice where do you see it fit within professional practice guidelines?

5. If you have identified that the CPS model is not culturally relevant to a New Zealand bi-cultural framework or multicultural society, can you explain why and provide some examples?

6. Can you share some specific examples of critical features, procedures, and practices from Greene’s CPS model that you perceive are appropriate and/or inappropriate, and match and/or are different to New Zealand Maori or Pacific Island people values and cultural perspectives?

Questions Session Three

Session 3 – Clarifying CPS strengths, shortcoming, and cultural appropriateness in the New Zealand context: Summary and recommendations.

1. Are procedures in the CPS model clear? Is enough information provided about practices so that professionals can implement it?

2. If you have identified any aspects of the CPS programme that are absent or incongruent with the New Zealand Ministry of Education (MOE) practice guidelines, what if any, adaptations would you propose if the CPS model was to be adopted by the Ministry of Education (MOE) as evidence based practice?

3. Can you share what would be your reasons for the adaptations?

4. What aspects of the model do you think needs to be adjusted to reflect what work best for Maori/Pasifika?

Anticipated Outcomes:

- Consensus statements of the model’s shortcoming
- Consensus statements regarding the model’s potential value to effective and culturally responsive education psychology practice in New Zealand
- Recommendations
Session 3 - Backup questions

1. What clarification, if any, do you require about the procedures of the CPS model? What information about the CPS practice do you see is required for professionals be able to implement it?
2. What would adaptations to the CPS model look like in practice in relation to Ministry practice?
3. How do you think the adaptations will add to Ministry practices?
4. If aspects of the CPS model need to be adjusted to reflect what works best for Maori/Pasifika, what would the model look like in practice and how does this reflect current Ministry Maori/Pasifika initiatives and policy and service practices for Maori?
Appendix O: Participants questions to Greene

1. The CPS model seems to have been developed with a clinic-based intervention context in mind (therapists helping parents and children learn new skills). Are there examples of the CPS model being adapted for school-based settings (efficacy research)?

2. How have interventions been delivered (i.e., do interdisciplinary teams work together to complete the assessment process; how are teachers versus school psychologists versus other specialists involved and do interventions target children’s as well as parents’ skill development?

3. Do teachers need to learn new ways of interacting with children and/or need to learn to implement some components of the intervention?

4. What key features of the CPS model characterize efficacious implementation of the practice (i.e., critical features or key components of the assessment process, as well as intervention procedures without which CPS would not be implemented with fidelity?

5. Has your research team developed a framework for measuring treatment fidelity?

6. What do you think about the portability of the model to a unique cultural context?

7. In New Zealand the assessment and practice framework for Maori is based on their values of ‘relationships and partnerships,’ alongside their beliefs, and experiences, which guides the assessment and intervention. We are interested to know whether the delivery of Plan B is too prescriptive for children and families from other cultures who problem solve in ways that are culturally relevant to them. If so, would adapting the process affect the success of the intervention as you have stated that the success of CPS lies in its implementation?

8. Based on your philosophy, “Kids do well if they can” and on the subject of ‘motivation,’ one of my colleagues responded, “if they had (the children) the skills they would behave but not necessarily as there may not be any pay off for doing it.” Further
another colleague added, “Even though a child is able to do something well, they can still be unmotivated as they may be bored or not challenged enough or if something else is more interesting they may prefer to do this instead. In addition, a child may know what to do but can be unmotivated if the activity is presented to them in a way that does not appeal to their learning style or preferred way of learning. One colleague shared, “I just don’t see that a lot of the children will be motivated enough to change their behaviour because they want to succeed at school?” We would be interested to hear your thoughts.

9. My colleagues believe that explosive behaviour can be learned. For example some of the children we work with come from homes where domestic violence features prominently in their early lives. Their explosive behaviour is a way of them getting their needs met and so from that you also have the lagging skills as they don’t have an appropriate alternative. Would you agree with this?

10. My colleagues shared that he focus of ALSUP is to identify skill deficits, which is reflected in the language i.e., “difficulties,” and inflexibilities.” Is it possible that people could look at the same questions and think about the same behaviour and give a different response? Are we not putting the answer into someone’s head by setting out the questions in this way? One of my colleagues shared, “You could ask, how David handle transitions does” rather than does he have difficulties with transitions.” We would be keen to hear your thoughts.
Appendix P: Session Two Recording Table

<table>
<thead>
<tr>
<th>What do you like about the CPS programme that first within the Ministry practice guidelines?</th>
<th>What do you see in this programme that is congruent with Ministry practices?</th>
<th>Does the CPS model have the potential to add value to the current MOE model of professional practice?</th>
<th>Reason for response/example</th>
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Appendix Q: Session Two Recording Table

Table 4

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<tr>
<th>What do you think is problematic of this model in a New Zealand setting working within Ministry practice guidelines?</th>
<th>Can you identify any aspects of the CPS programme that are absent or incongruent with the New Zealand Ministry of Education (MOE) practice guidelines?</th>
<th>What are the model’s critical features?</th>
<th>Is the CPS model culturally relevant, given New Zealand’s bi-cultural constitutional framework and multicultural society?</th>
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Appendix R: Session Three Recording Table

Table 5

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<th>Are procedures in The CPS model clear? Is enough information provided about practices so that professionals can implement it?</th>
<th>What if any, adaptations would you propose if the CPS model was to be adopted by the MOE as evidence based practice?</th>
<th>Reasons why you would not choose to adapt the CPS programme.</th>
<th>Can you share what would be your reasons for the adaptations?</th>
<th>What aspects of the model do you think needs to be adjusted to reflect what work best for Maori/Pasifika children and families?</th>
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## Appendix S: Session Two Recording Table

### Table 6

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<thead>
<tr>
<th>In agreement with CPS</th>
<th>Not in agreement with CPS</th>
<th>Congruent with Ministry Practices</th>
<th>Incongruent with Ministry Practice</th>
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APPENDIX T: Session Two Venn Diagram

Aspects of the CPS model the group are in agreement with

- The CPS supports adults to view children’s behaviour in a different way and to use a different approach.
- Success of the intervention lies in its full implementation.
- Plan B is used as a preventative and used interchangeably with Plan A and Plan C.
- Identifying undeveloped skills.
- Skill development and replacement skills.
- The CPS model does not require a specific diagnosis.
- Evidence based and outcome focused.
- How outcomes are measured.

Inconsistencies identified

- Greene’s philosophy.
- Definition of “doing well”.
- Teacher expectation of “doing well”.
- Collaborative.
- Inflexibility within the intervention process.
- Inclusive.
- Challenging behaviour can be the result of lagging skills.
- Steps used in Plan B process.
- Engagement phase/Relationships.
- Service process.

Areas of the CPS model and some of Greene’s theories the group is not in total agreement with

- Deficit use of language in ALSUP/not clear for adults/some professionals to understand/subjective/validity/reliability of questions/Target audience/not contextual or culturally relevant to some cultures/practices/Where does assessment fit in the process/Does not account for individual differences.
- Assessment/Functional Analysis.
- The referral process.
- Not culturally responsive or reflect cultural models of practice/delivery/approach.
- Prescriptive Nature.
- Challenging behaviour is not the result of learned behaviour but lagging skills.
- Criteria for behaviour/service/Definition of explosive behaviour/precipitating behaviours for service.
- Plan B is over prepared/difficult to learn and time consuming/implementation across settings.
- Child is not using the behaviour to achieve an outcome, the behaviour occurs because of lagging skills.
### Table 7

<table>
<thead>
<tr>
<th>What proposed adaptations, if any, would you make to the CPS model?</th>
<th>Reason for response/example</th>
<th>What would the adapted version of the CPS model look like in practice?</th>
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Appendix V

Request for Ethics Advice Form
Appendix W
Massey University Human Ethics Committee Approval Letter.