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“It’s finding the balance between everything”:
Understanding adolescent perspectives on the
Key Competencies in New Zealand secondary schools

By Tessa Brudevold-Iversen
Abstract

In its new 2007 curriculum, New Zealand introduced key competencies (KCs) that are intended to ensure students’ future participation in both the economy and the community. In addition to core subjects such as mathematics, English, and science, the KCs introduce additional metacognitive and socioemotional dimensions that students are expected to attain before they complete their compulsory time in school. They include 1) Managing Self, 2) Relating to Others, 3) Participating and Contributing, 4) Thinking, and 5) Using Language, Symbols, and Texts. One of the goals of the new curriculum is to help students develop into “confident, connected, actively involved, lifelong learners” (Ministry of Education, 2007b, 2007c), and it is hoped that the KCs will contribute to this goal. The KCs also have important implications for contributing to students’ long-term wellbeing and resilience. However, the KCs are open to interpretation and schools have conceptualised, implemented, and are teaching them in different ways and to varying degrees. This presents challenges across a number of dimensions. In line with suggestions in the literature for KC development, this thesis aimed to investigate students’ views on the KCs. Students from five schools were interviewed in focus groups and individually to explore whether or not they thought they are valuable to learn, and how they thought they might be taught. Thematic analysis was used to analyse the data from ten focus groups and twelve individual interviews that were conducted with students from five schools in the Auckland region. Results show that participants value the KCs and connect them to success in learning and in their future careers. They interpreted the KCs in a variety of ways, though they often failed to discuss the interconnection between the KCs or identify socioemotional aspects of the KCs. Implications for future research and for learning the KCs in school are discussed.

Keywords: Key competencies, socioemotional skills
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Prologue

This research is located within several contexts which are best understood before continuing on to the general literature review and subsequent chapters. Thus, this section will briefly introduce some of the contextual factors relevant to the project. Firstly, the thesis was conceptualised within the broader framework of a study (Elley-Brown, Peterson, & Farrugia, under review) that investigated developing an assessment tool for the key competencies (KCs) in order to aid educators and researchers in assessing the development of these KCs for students. This could then help to determine to what extent students currently meet the vision of the New Zealand curriculum for students who are “confident, connected, actively involved, lifelong learners” (Ministry of Education [MoE], 2007b). The intended goal of this thesis was to add qualitative data to the quantitative data already being collected so as to increase the depth of the knowledge and help facilitate students’ ‘voice’ within research. Specifically, this research will focus on participants’ understanding of and value of the KCs, as well as how they think they could be taught.

Secondly, this thesis, in contrast to the other study (Elley-Brown et al., under review), was informed by a social constructionist epistemological position\(^1\), which posits that knowledge is socially constructed (Edley, 2001; Farvid, 2009; Potter, 1996). A common thread throughout social constructionist research is critical examination of the effects of social change on knowledge and understanding (Dickens & Fontana, 1994). This fit well with the timing of the thesis, in that the KCs are in initial stages of implementation at schools. It also fit well with the goals of the thesis, which sought to explore students’ experiences with the KCs and the meanings they constructed for the KCs. Thematic analysis (Braun & Clarke, 2006) was used to analyse the data.

Third, the place of research, the city of Auckland in Aotearoa\(^2\)/New Zealand, is unique and any attempt to generalise findings from other countries, cities, or even other schools within Auckland, may be problematic. This is especially the case as the KCs may be conceptualised and implemented very differently in each school, and

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\(^1\) See Gergen (1985) for a discussion.

\(^2\) Aotearoa is the indigenous name for New Zealand. From here on, the country will be referred to simply as New Zealand. Maori are the indigenous people of New Zealand.
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consequently students will likely have very diverse experiences of learning and implementing them in their behaviour. Therefore, while the current research may be informed by research from elsewhere, and may also inform knowledge, the results are presented as specific to this place, time, and socio-historical context.

Lastly, it is assumed within much qualitative research that the researcher is never free from bias, and can only conduct research and analyses in the context of that bias (Farvid, 2009; Potter & Edwards, 1999). Thus, in the tradition of reflectivity demanded within qualitative research, it is appropriate for me, the researcher, to disclose my own background and potential biases. I am conducting this research with a personal history of dropping out of school at the age of 15 and later becoming highly re-engaged. I am also currently studying clinical psychology and working in child and adolescent mental health services, so my knowledge is strongly based in clinical psychology rather than in education or educational psychology.

While the KCs have been implemented through education, they have important implications for wellbeing, and although I see education as contributing to wellbeing, I am more concerned with taking a holistic view of mental health and wellbeing than focusing only on academics. Although this likely coloured my critique of the literature and my analyses of the data, I believe it was also a strength in several ways. First, being able to acknowledge the truth and validity in multiple perspectives on education and engagement may have helped in developing rapport with both those young people who have dropped out of school and those who see themselves as engaged. Secondly, having personal experience with those perspectives could offer strength to my analyses as I may have been open to seeing the data from various positions. Third, this thesis is part of my training in clinical psychology. As part of this training, I have specialised in the field of child and adolescent psychology, which has greatly informed my perspective in this research.

My clinical experience and orientation has meant that I have viewed the KCs and the data from the point of mental health, wellbeing, and developing resiliency. This has likely influenced my analyses as I am largely focused on mental health aspects rather than educational aspects of the KCs, which has historically been the domain within which the KCs have been studied. While the KCs demonstrate that these fields are not mutually exclusive, I am limited in my ability to analyse and interpret some of the
educational aspects of the KCs, most notably in curriculum development and pedagogical practices. However, my supervisors (a senior lecturer in psychology with a focus on educational psychology, and clinical psychologist and senior lecturer in the clinical psychology programme) have also viewed the data and my analyses from their own perspectives, and we were able to discuss the data and the analyses together which helped to minimise this limitation. A further strength of this is that it adds to the multidisciplinary research into the KCs, thus adding depth and breadth to the understanding of the KCs.

My own experiences within educational systems have meant that I am interested in the politics of education and pedagogy, which were the factors that initially drew my attention to this project. Secondly, my longstanding interest in developing wellbeing and resilience for young people has led to my work in the field of clinical psychology and my focus on work with adolescents. Thus, I was also interested in the development of socioemotional competencies for young people as a way of facilitating wellbeing and resilience for them. This dual focus on educational content and process as well as the development of competencies that could contribute to wellbeing for young people fit well with my own background and interests.

This prologue has contextualised the current research. The following chapter provides a review of the literature on the KCs. The research reviewed in Chapter Two will explore influential aspects on KC learning, including adolescent socioemotional development and student engagement in learning at school. This will be followed by a chapter on methodological techniques. Chapter Four will present the results of analysis for the first study, which involved focus groups. Chapter Five will present results of the analysis for the second study, in which participants were individually interviewed. The final chapter will discuss these findings and implications for the KCs in schools and for future research.
Chapter One: Key Competencies

Introduction

In its latest curriculum (MoE, 2007b), New Zealand introduced five key competencies (KCs) that were intended to promote students’ future participation in both the economy and community (DeSeCo, 2005; MoE, 2007a). In addition to core subjects such as mathematics, English, and science, the KCs introduce additional metacognitive and socioemotional dimensions that students are expected to attain before they complete their compulsory time in school (MoE, 2007a; 2007b). They include 1) Managing Self, 2) Relating to Others, 3) Participating and Contributing, 4) Thinking, and 5) Using Language, Symbols, and Texts. These were adapted from an original set of KCs developed by a special project of the Organisation for Economic Co-operation and Development (OECD) in order to ensure that they fit the New Zealand context (Norris & Kelly, 2001).

This thesis aimed to investigate students’ value of and interpretation of the KCs, as well as how students thought they might be taught and assessed. The literature review below discusses the original KCs as defined by the OECD’s project, Definition and Selection of Competencies: Theoretical and Conceptual Foundations (DeSeCo) (OECD, 2009a, 2011). Following on from this, New Zealand policy-makers’ interpretation and application of those competencies to the current curriculum will be described. Included in this is a discussion of some critiques of the KCs.

DeSeCo identified three specific KCs including, 1) the ability to use tools (e.g., technology, texts, and symbols) interactively, 2) being able to interact in heterogeneous groups, and 3) being able to act autonomously. There is also a more general competency of being able to think, which is seen as cutting across the other KCs (DeSeCo, 2005). Each country that has incorporated the KCs has done so to varying degrees within their curriculums (Trier, 2001b). These various versions of the KCs, although sometimes named differently, are similar in their conceptualised nature. Table 1, below, illustrates an international comparison of the KCs for select countries (Trier, 2001b).
Table 1. International Comparison of Interpretations of Key Competencies

<table>
<thead>
<tr>
<th>New Zealand*</th>
<th>Australia+</th>
<th>UK§</th>
<th>US‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Collecting, analysing, and organising information</td>
<td>Numeracy</td>
<td>Foundation/basic skills</td>
</tr>
<tr>
<td>Communication</td>
<td>Communicating ideas and information</td>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>Self management</td>
<td>Planning and organising activities</td>
<td>Improving own learning and performance</td>
<td>Personal qualities</td>
</tr>
<tr>
<td>Social skills (relating to others)</td>
<td>Working with others and in teams</td>
<td>Working with Others</td>
<td>Interpersonal skills</td>
</tr>
<tr>
<td>Problem-solving and decision-making (using language, symbols, and texts; thinking)</td>
<td>Using mathematical ideas and techniques</td>
<td>Problem-solving</td>
<td>Thinking skills</td>
</tr>
<tr>
<td>Using technology</td>
<td>Information technology</td>
<td>Technology systems</td>
<td>Resources</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Modern foreign language</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Ministry of Education (2007a); + Clerehan, Chanock, Moore and Prince (2003); § Qualifications and Curriculum Authority (2004); ‡ Trier (2001b)

Competencies involve skills, but are also thought to involve knowledge and attitudes that are grounded in values (MoE, 2007a). The KCs have been incorporated into the school curriculum following an OECD recommendation for KCs to be included in international curriculums in order to ensure “continued economic development” and “social cohesion” (DeSeCo, 2005, p. 4). While a major drive for the KCs has come from the economic sector, there are also wider social implications for the inclusion of KCs in education, which the OECD suggest include increased social cohesion, participation in education, etc.

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Trier (2001b) notes that each curriculum is different in the way they report their particular key competencies. As such, this table was created through reports on the key competencies by contributing countries rather than the actual curriculums. Thus, comparisons are not exact but are estimated using the information provided in the reports.
democratic processes, and reducing inequality and marginalisation (OECD, 2011). Increased equality has been shown to have a positive impact on a number of factors contributing to wellbeing, including mental and physical health, achievement in education, reduced crime, and increased social opportunity (OECD, 2004; Pickett & Wilkinson, 2007; UNICEF Innocenti Research Centre, 2007; Wilkinson & Pickett, 2009). This parallels an increasing emphasis within the education sector on developing wellbeing and resilience through self-awareness, values, goals, and the orientation for personal and social critical reflection (Alexander, 2008; Dinsmore, Alexander, & Loughlin, 2008; Kaplan & Flum, 2012). Focusing on KCs within the school setting can add to students’ wellbeing and resilience by developing an improved awareness of and practice with the competencies (Hipkins, 2006).

The international discussion around the KCs has been ongoing for several decades now. Within New Zealand, the literature on the KCs has been increasing, though this appears to have received little attention outside the educational sector despite the multi-dimensional nature of the KCs. Such collaborative studies are viewed as integral to development of curricular, pedagogical, social, and national goals (Trier, 2001b).

The next section critically explores the development of the original KCs that were formed out of DeSeCo (OECD, 2011). The New Zealand curriculum’s version (MoE, 2007b) are then described.

**The Development and Background of the KCs**

The OECD is an organisation that consists of thirty member countries, all of which share the principles of democracy and capitalism (OECD, 2009a). Its activities involve supporting economic growth and financial stability, raising employment levels, and improving standards of living (OECD, 2009a), which they do through a number of projects such as DeSeCo and the Programme for International Student Assessment (PISA)⁴ (OECD, 2001, 2003). In 1997, the OECD and the Swiss Federal Statistical Office (SFSO) collaborated to form DeSeCo, born from their stated commitment to provide international education indicators of human development and political and

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⁴ PISA is an OECD initiated standardised assessment that tests how much students have acquired curriculum-determined skills (OECD, 2009c). It is administered to 15-year olds in schools.
economic governance (Rychen, 2001). DeSeCo was comprised of ‘experts’ from various
disciplines, who had the task of providing the theoretical and conceptual framework
needed to identify what might be considered ‘key’ competencies, or competencies that
were core to living successful lives (DeSeCo, 2005). Rychen (2001) states that in order
to ease uncertainty in the face of global economic and social changes DeSeCo took on
the task of creating an all-encompassing agenda for schools internationally to try to
ensure continued economic development and social cohesion. The KCs established
through this work were meant to help schools generate citizens who can lead “successful
lives” in a “well-functioning society” (DeSeCo, 2005, p. 4).

One of the motives for change in curriculum focus from facts-based learning to
competency development was the identification of a ‘new economy’ (OECD, 2001),
which has been cited as necessitating a new way of schooling (Kearns, 2001). The ‘new
economy’ was a concept brought about in the 1990’s as a result of increasing use of
technologies and changing patterns of productivity (Godin, 2004). The Scottish
Qualifications Authority (2003) and the OECD (2011) note that the main driving force
behind the development of the KCs has been the business industry’s changing needs in
meeting the demands of this ‘new economy’. Trier (2001b) also comments on the
influence of the economic sector in deciding the importance of particular competencies
as educational outcomes. Trier (2001b) provides a useful table comparing educational
versus economic interpretations of the KC areas. The table has been reproduced with
permission below.
Despite the critique of KCs that follows in this review, it should first be noted that the move toward these somewhat ambiguous yet more socially-oriented curricular goals is a commendable response to previous critiques of curriculums as simply skills- and facts-based at the expense of also including ‘humanitarian’ goals (Elliott, Hufton, Willis, & Illushin, 2005; Freire, 1985). Too often it may seem that critiques of government
policies offered by academic and professional bodies go unanswered, but the KCs show otherwise. Additionally, the combined international effort that has gone into DeSeCo is an admirable achievement, and one that should be encouraged given the success of the collaboration in moving the project forward thus far, as demonstrated by their appearance in curriculum statements in many countries. Trier (2001a) notes the significance of the issues addressed through the KCs,

In addition to protecting the natural environment...societies need to be politically responsible in order to live in peace. The issues at stake are crucial: providing a minimal threshold of welfare for all, promoting an equity-oriented distribution of wealth, safeguarding human rights, fighting violence everywhere and on all levels, assuring the implementation of judicial norms, and securing peace (Trier, 2001a, p. 241).

Thus, according to Trier (2001a), the KCs are a (perhaps idealistic) effort toward social unification, and in today’s world of social, environmental, economic, and political strife this cannot be under-valued. While the KCs might not be the answer to all of these issues, they have the potential to begin to move toward such answers. Additionally, Hipkins (2006) suggests that moving away from content learning as a schooling priority and towards developing learning competencies could both foster a disposition for lifelong learning and overcome many of the limitations of fact-based knowledge (See Hipkins, 2006, section 7 for a discussion about these limitations).

There has been a particularly noticeable trend within education research to recommend the adoption of more ‘higher level’, or ‘meta-level’, curriculum goals and competency-based assessment, in contrast to the common emphasis on ‘basic’ facts-based skills such as mathematics and science (Deakin Crick, 2008). Much of this has been a reaction to findings that (a) employers had changing requirements of employees within the global economy and work environment (Williams, 2005), (b) that students who achieved better were more skilled in areas such as socioemotional abilities (Humphrey, Curran, Morris, Farrell, & Woods, 2007), and (c) the demand for adaptability and creative thinking in today’s social and economic global society (Higgins & Nairn, 2006). The OECD has facilitated international government bodies to respond to this trend with the creation of the KCs (DeSeCo, 2005).

Before DeSeCo could agree on KCs that could be internationally applicable, they had to agree on the term ‘competence’, which they eventually decided to refer to as
involving the ability to meet complex demands in particular contexts using knowledge and skills (DeSeCo, 2005). Despite the eventual perceived agreement on the definition of competency, many of the countries who have supported the move to incorporate KCs in educational curriculums have done so at varying levels. For instance, while some countries might explicitly state the inclusion of KCs in their curriculum, others might suggest it and still others might only hint at it, leaving the reader to guess which, and even if, KCs are included (Trier, 2001b). The translation from curriculum policy to the classroom then likely becomes even more ambiguous and varied.

Weinert’s (2001) chapter in the documented exploratory process of DeSeco (Rychen & Salganik, 2001) demonstrates the complications with the definition of competence and the further selection of KCs, which included such issues as clarifying whether competencies should be practical (e.g., behavioural) or philosophical (Weinert, 2001). Competencies are conceptualised to be more than simply skills, but are thought to involve knowledge, attitudes, and skills embedded in value sets (MoE, 2007b). These are then thought to both be able to lead a person to action within competency areas and allow them to develop the competency further.

After thus defining ‘competence’, DeSeCo then went on to base their selection of ‘key’ competencies in empirically grounded concepts taken from several research programmes designed to assess current skills of 15-year old students, adult life skills, and civic education (Salganik, 2001). While this process is undoubtedly democratic and based in the scientific tradition of empirical research and findings, it is also inevitably anchored by the biases and beliefs of those who contributed to it (OECD, 2001). For instance, while the KCs include references to technology and working with others, there is little mention of economic or political awareness, which might be strongly desired by some communities.

Deakin Crick (2008) cautions that defining competencies is a political and ideological act in its inclusion and exclusion of what is worthwhile, a fact that Trier (2001b) says is inevitable. He comments that the process of defining, assessing, and measuring concepts such as the KCs is a joining of politics and science (Trier, 2001a, 2001b). Deakin Crick (2008) remarks that this in itself will shape the discourse of society in terms of success and values. In other words, the language society uses to define competencies, success, values, and the resulting ‘knowledge’ about these
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concepts, could be changed with the introduction of KCs produced in the business and political arenas versus those produced by others with vested interests in other areas.

Interestingly, the Mayer Committee of Australia (1992) specifically recommended against incorporating intra- and interpersonal competencies into curriculums, due to their position that KCs could only address aspects of abilities that could be developed through learning, not those that may be inherent to an individual’s personality or value set (Mayer Committee, 1992). This viewpoint on learning that involved to such an extent the nature/nurture debate (Williams, 2005) was disregarded and Australia subsequently adopted the KCs (Clerehan et al., 2003; Williams, 2005) due to the shared international belief that incorporation of such competencies results in a more holistic model of meeting students’ developmental needs (Scottish Qualifications Authority, 2003).

Another consideration for the KCs is that they are abstract in nature and able to be interpreted in a wide number of ways and also difficult to assess, as many of the Country Reports to the OECD have noted (Trier, 2001b). Although the KCs are given explicit theoretical attention in many curriculums, the practical application of these KCs has often been left up to individual educators to implement. Moreover, the country report from Germany notes that, “The terminology of key competencies can be used thoughtlessly, and there is, indeed, a danger of overemphasising key competencies and neglecting their close connection to a core of knowledge” (Witt & Lehman, 2001; p. 35, as cited by Trier, 2002). While this can be seen as a benefit in that individual countries can adapt the KCs for their own use, it could also make the intended purposes of the KCs (which includes a world-wide frame of reference for international comparisons) problematic. Autonomy of nations who participate in international bodies is important given differences in culture, values, traditions, and historical contexts (Salganik & Stephens, 2003). Thus the adaptability of the KCs is commendable and makes incorporating them into curriculums more practicable in terms of applying them to the local context. However, this flexibility is also challenging in terms of international implementation, evaluation, and comparison. Additionally, despite the large amount of research generated through and reviewed in the DeSeCo consultations (DeSeCo, 2005; Rychen & Salganik, 2001; Trier, 2001b), much of

5 The OECD held a Country Contribution Process (CCP) phase, in which countries were able to comment on the definitions and selection of KCs. Twelve of the 18 countries participating in the KC project took part in this process (Trier, 2001b).
the theory and practical applications of the KCs remains problematic and requires further exploration.

Trier’s (2001b) review identifies several concerns about implementing and applying the KCs that have been brought to attention through various country’s reports on the KCs. First is the difference in social contexts between the member countries, and how this might influence KC integration. New Zealand is used as a prime example of this in Trier’s report, with its uniquely bicultural focus in many areas of society. In support of this, Hipkins (2006) notes that knowledge is a social justice issue, in that it is culturally-situated and some knowledge can become dominant over others (e.g., the medical model versus social and cultural understandings of mental health in psychology (Read, Bentall, & Fosse, 2009) is a common example of this). In order for education to be equitable, it needs to take into account all learners and differences in how knowledge is constructed.

A second critique noted in the review is the differences between countries in their varying emphases on cognitive, metacognitive, and motivational interpretations of the KCs (Trier, 2001b). This reflects the difficulty in gaining international agreement on the application of the KCs to ‘factual’ knowledge areas versus a pedagogical/philosophical orientation to learning. Such difficulties in understanding the KCs could lead some groups to develop less comprehensive understanding of the KCs, which in turn could impact on the overarching goals of the OECD for creating more equitable societies (DeSeCo, 2005) if students are limited in their learning of the KCs.

Trier (2001b) also presents international expressions of doubt that KCs can be related to anything apart from those areas that can be ‘known’ or measured, such as science. This creates tension with traditional views of knowledge and education as facts-based and requires further exploration and reconciliation. Hipkins (2006) suggests that the emphasis on ‘knowledge’ or facts-based learning will need to be reduced to make way for more “authentic” learning experiences that make use of learning competencies (Hipkins, 2006, p. 67). She argues this could facilitate capacities to think critically and metacognitively about learning and help students develop a disposition for lifelong learning (Hipkins, 2007). While she acknowledges the need for balance with facts-based knowledge, she also notes that the long-term benefits of being a capable learner can be better met by providing students with ‘authentic’ learning opportunities to develop the
KCs (Hipkins, 2006). Reid (2006) also critiques the focus on content-based learning and suggests that the development of competencies is an issue of social justice in helping individuals to more proactively participate in society.

Sweden makes the notable critique that it may not be the schools’ responsibility to cater to the changing demands of business, and that the workplace may instead need to accept what can be offered by the schools (Trier, 2001b). While this certainly highlights the debate regarding the particular role of schools, it also may result in potentially stagnant social change if schools are not responsive to changing trends in society. However, the critique that business should not dictate school or social policy is one that holds validity from a perspective concerned with social justice and power dynamics in society.

Together these critiques and concerns about the implementation of the KCs are important to consider in light of the initial stated purpose of the KCs and their intended applicability across a number of diverse international and cultural contexts.

**Key Competencies and the New Zealand Curriculum**

In their Country Report for the OECD on the applicability of KCs within the New Zealand context, Norris and Kelly (2001) reported the limitations and applicability of the KCs outlined by the OECD within the New Zealand context. New Zealand has modified and integrated the KCs into its curriculum, which now includes broad KCs that students must attain by their completion of compulsory schooling (MoE, 2007b). The Ministry of Education states that the KCs are seen to be reflective of democratic values which can be incorporated into learning areas such as English, science, and mathematics (MoE, 2007b). In addition to ‘fundamental’ skills learned in each subject area, the KCs of Managing Self, Relating to Others, Participating and Contributing, Thinking, and Using Language, Symbols, and Texts have been identified as essential competencies for students to develop (MoE, 2007a). The intended purpose of these KCs is the same as those outlined by the OECD, and include facilitating the abilities to ‘successfully’ and productively live in a globalised and ‘technologised’ world (MoE, 2007a; Salganik & Stephens, 2003). However, like the original OECD KCs, the New Zealand KCs remain abstract in nature and broad in scope, making them difficult to integrate into curriculums.
and implement in teaching practice by educators who must also be responsible for students’ achievement of national standards. Hipkins (2006) identifies the tension between these two learning goals, though the actual outcome of this dilemma will likely take time to reconcile.

In an attempt to clarify the nature of the KCs and explore how integrating them into classroom content and process might be done, Hipkins (2006) outlines the intended meaning of each KC and how students might learn them. As her work is very comprehensive, an analysis will not be reproduced here, but will be briefly presented below in order to more fully orient the reader to the KCs.

**Metacognition**

It is worthwhile initially spending some time discussing the concept of metacognition as “it sits at the heart” of the KCs (Hipkins, 2006, p. 38) and is part of the KC of ‘Thinking’, which has been suggested to be central to all of the other KCs (DeSeCo, 2005; Hipkins, Boyd, & Joyce, 2005). A meta-level understanding of the KCs shows that they are neither discrete nor stand-alone concepts, but are inherently interconnected such that they do not operate in isolation from each other (DeSeCo, 2005; Hipkins, 2006). The KCs have been described as active and intentional (Brewerton, 2004), and thus by their very nature they require some degree of metacognition. Hipkins (2006) also notes that the metacognitive focus of the KCs is important for fostering the ability and inclination to question and critically examine learning experiences, and also for reflectivity about our own knowledge and learning. The potential of the KCs to promote and develop critical thinking and metacognitive abilities is in keeping with theorists such as Freire (1985), who argue that critical thinking and self-reflective skills are essential for learning. It is also indicated within the Ministry of Education’s vision of the KCs as competencies that could promote lifelong learning and active participation in communities (MoE, 2007a, 2007c). The importance of reflection and awareness of the KCs has led some researchers to suggest that being able to reflect on the KCs is an essential part of their assessment (Hipkins, 2006, 2007), which also indicates that an overt knowledge of them might also be important.

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6 National Standards are literacy and numeracy standards that students must achieve in Years 1-8 (MoE, 2009b).
Authentic learning

There is a significant amount of overlap and possibility in how KCs can be learnt, in that there are some general overarching principles that apply to all of them. Therefore, many situations ‘invite’ the development of KCs if students are given the opportunity to explore and practice the KCs. Hipkins (2006) spends a significant amount of time in her review discussing ‘authentic learning’, which, among other features, would allow students experiential learning in ‘real-life’ situations, application of knowledge and innovation, and opportunities to reflect on their learning and competencies. ‘Authentic learning’ should attempt to match potential future scenarios, be interesting and meaningful to students, and have social meaning (Hipkins, 2006). It may be that these multiple goals could be contradictory, and it would be the educator’s challenge to either reconcile or reflect on this.

Hipkins (2006) suggests that competencies and a disposition for self-reflection and lifelong learning can be taught by both integrating KCs into curriculum material and teaching them explicitly. However, she warns that integrating a focus on the KCs, while useful, takes time for students to practice and could result in reduced content of the more overt subject-matter. Reid (2006) wrote on the importance of focusing on competency development rather than attempting to teach content and learning process in parallel, which can result in marginalisation of KCs given the normative emphasis on content. This is likely a difficult view to hold in light of the current requirements for achievement in many schools. Reconciling these positions in an attempt to balance KC and subject learning is part of the challenge of implementing the KCs into schools successfully.

Like other learning, the KCs require teachers to model the competencies (Hipkins, 2006), which would also require ensuring that teachers understand the KCs as intended by the Ministry of Education and, moreover, that they can enact and teach them effectively. Hipkins and colleagues (Hipkins, 2006; Hipkins et al., 2005) suggest that professional development for teachers to understand the complexity of the KCs is a critical part of the development of the KCs within school curriculums. In keeping with some important aspects of the KCs, Timperley has advised that student engagement and promoting metacognitive and self-regulatory processes for learning are important competencies for teachers to develop (Timperley, 2008). She also notes that the context in which teachers work, or the school culture, is important for shaping teachers’
pedagogical practices (Timperley, 2008). Thus, some clear challenges for educators and school communities include, 1) allowing for some reduction in current content teaching to make time and space for both teacher and student competency development and 2) allowing for exploration and acceptance of diversity in how competencies might be developed and expressed by both teachers and students (Hipkins, 2006).

**Thinking**

This KC is perhaps one of the most abstract and difficult to define, teach, and assess. What does it mean to think, and is there a ‘right’ way to think? How does one go about learning to think? Additionally, what must one consider when they think? And how does one know that they do not know something? All of these questions are part of the struggles that both students and teachers face daily, and more so now with the inclusion of this KC in the curriculum.

Hipkins (2006) talks about ‘Thinking’ as inclusive of all the other KCs. She lists several types and ways of thinking, including various analytical, critical, and reflective skills, all of which exemplify how the KCs are interconnected. She stresses the cognitive and metacognitive nature of all the KCs, indicating the overarching nature of ‘Thinking’ as a competency that cuts across the other KCs. However, like the other KCs, one must be willing to engage in this very active process, which Perkins suggests requires a disposition to do so (Perkins, 2003). Fostering this disposition appears to fit well into the value of lifelong learning that is part of the Ministry of Education’s vision (MoE, 2007c).

**Using Language, Symbols, and Texts**

This KC is perhaps initially more difficult to conceptualise in socioemotional ways, except that it involves communicating and is an essential part of ‘performing’ the other KCs. Hipkins suggests that this KC is about knowing that language helps to construct our perceptions of the world and that we use language in various ways to “do different things” (Hipkins, 2006, p. 22), such as relate to others and conceptualise thoughts. Additionally, simply knowing how to read, write, and perform mathematical tasks is not enough for this KC; it also involves being a critical observer and user of language, symbols, and texts.
Hipkins (2006) outlines the terms used in naming the KC. She identifies ‘language’ as an organised tool for communicating and understanding concepts, and encompasses all of the methods we have for this such as dance, drama, body language, and mathematics. ‘Symbols’ include the tools (e.g., words, mathematical symbols, movement) we use to construct language. While meaningless on their own, they acquire shared cultural understanding and they also evolve and meaning changes over time. ‘Texts’ are the end-result of symbols and languages, and can include a variety of modalities (e.g., plays and ICT\(^7\), which both include multiple types of symbols and languages). Gee talks about how simply knowing about something is different from knowing something as an “insider”, and that this “insider” knowledge comes from participating and interacting with the topic, which embeds the knowledge in our understanding through direct experiences with it (Gee, 2008). This has clear links to the KCs of ‘Thinking’ and ‘Participating and Contributing’. Thus, like all KCs, ‘Using Language, Symbols, and Texts’ is inherently inclusive of other KCs.

**Managing Self**

This KC encompasses organisation, self-discipline, and personal health and wellbeing (Hipkins, 2006). Hipkins (2006) notes that it also entails important cognitive and metacognitive components of self-reflection on strengths and weaknesses as both an individual and within one’s various roles (e.g., as an individual, a student, and a friend). As with the other KCs, it is not just enough to know about the KC; one must also be willing to enact it and use it in living ‘strategically’ in all areas of life. Thus, she notes that the other side of this KC is the KC of ‘Participating and Contributing’. Indeed, by its very nature and context in a social world, managing one’s self involves ‘Thinking, ‘Relating to Others’, ‘Participating and Contributing’, and ‘Using Language, Symbols, and Texts’.

Hipkins (2006) suggests that the evidence-base for the effectiveness of self-regulated learning (SRL) as part of effective teaching means that this KC should be explicitly taught in schools. She also notes that SRL overlaps with the concept of cognitive engagement in learning (Fredricks, Blumenfeld, & Paris, 2004), which also

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\(^7\) ICT refers to Information and Communication Technology, which involves technology that can send and receive information electronically and digitally such as computers, television, and robotics.
includes aspects of other KCs, particularly ‘Thinking’ when persistence, managing thoughts and behaviours, and attending to information is required. Additionally, making choices (in learning, emotions, behaviours, relationships, etc.), which is the essence of this KC, requires a level of metacognitive thinking in terms of reflecting on one’s individual needs, goals, and values.

**Relating to Others**

This KC extends beyond simply ‘social skills’, but is intended to have the added outcome of developing one’s theory of mind (Baron-Cohen, 1991), interpersonal and emotion regulation skills (Fonagy & Luyten, 2009), and one’s ability to reflect on their own thoughts, values, and ideas. Knowledge, language, and behaviours are always embedded in cultural contexts and develop socio-political and historical meaning (Lemke, 2002), so links with other KCs of ‘Using Language, Symbols, and Texts’ and ‘Thinking’ can clearly be seen. Additionally, this KC is inherently actively ‘done’ (within both individual and more communal, socio-political, and cultural contexts), further linking it to ‘Participating and Contributing’ and ‘Managing Self’ (Hipkins, 2006; O’Conner & Dunmill, 2005).

Various authors have written of the importance of learning to function in a social world and that this has implications for problem-solving and morality (Gilbert, 2005; O’Conner & Dunmill, 2005). Hipkins (2006) discusses the importance of scaffolding students’ learning in this area through teacher modelling, enabling, and coaching students in the use of KCs. She cites Karmarski (2004) in discussing the significant benefits of explicitly teaching metacognitive aspects of relating to others through group work, which, in addition to enhancing this KC for students, resulted in better outcomes of the learning task involved for the subject (Hipkins, 2006).

In her discussion on ‘Relating to Others’, Hipkins (2006) furthermore discusses how this KC can fit with Maori’s cultural values and can be conceptualised using Maori metaphors. Within the New Zealand historical and bicultural context this is an essential aspect to consider in order to provide learning opportunities that fit within Maori

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8 The indigenous people of New Zealand
epistemology and culture, as required by the Treaty of Waitangi\(^9\) principles of partnership, participation, and protection for Maori (MoE, 2012; Ritchie, 2008).

**Participating and Contributing**

While ‘Thinking’ and metacognition have been talked about as being at the heart of the KCs, ‘Participating and Contributing’ can be thought of as being at the heart of learning and being able to use knowledge. As such, it takes a central place in the development of the KCs (Hipkins, 2006). Hipkins (2006) talks about this competency as involving ‘authentic’ learning in that it should be generalisable to other contexts and those that students might encounter in future contexts such as work. Additionally, participation in activities is important for engagement and fostering this in students could be an important part of encouraging the disposition toward lifelong learning, which is part of the Ministry of Education’s goals (MoE, 2007b, 2007c).

In discussing how to teach this KC, Hipkins (2006) identifies a number of challenges, including reconciling 1) conflicting personal and social outcomes (e.g., the sometimes opposing demands of industry development versus personal development) and 2) various levels and ways of participating and contributing within groups. As is the same for the other KCs, she suggests that content teaching of how to participate and contribute is not sufficient to foster the disposition for this KC, and that continued active practice is necessary.

The preceding sections have discussed the New Zealand KCs and some of the essential features of learning them, including metacognition and ‘authentic learning’. An important part of learning is being able to reflect on one’s knowledge, gaps in this knowledge, and areas for improvement. Assessment of knowledge is a core feature of many schools, and assessment of the KCs is an issue that is burdened by complications.

As noted in the previous section, all of the KCs are open to interpretation by teachers, school boards, parents, and children, and the assessment of the competency is argued to be difficult (Hipkins, 2007). In its Country Report, Sweden argues that

\(^9\) A controversial agreement signed in 1840 between some Maori tribes and colonists. It is intended to ensure that the principles of partnerships, participation, and protection are upheld for Maori across all sectors of society.
measurement of the KCs should be avoided because of this difficulty, and that getting mired in the creation of suitable measures may interfere with developing the KCs themselves (Trier, 2001b). While this may be true, it is also problematic to follow through on initiatives and allocate resources if their effectiveness cannot in some way be assessed. Resolution of these difficulties requires attention by researchers and policy-makers. This thesis, which focuses on students’ understanding of the KCs is an important part of the assessment process as self-reflection by students has been identified as an increasingly essential feature of assessment, as well as a crucial aspect of the KCs (Hipkins, 2006).

The KCs also open the debate on the exact role of the schools; are they meant to convey purely academic information? Are they meant to (and capable of) instilling students with values and ideology? And do they have the capacity to stay true to the idealism of the KCs and create a learning environment that is ‘authentic’ and allows for substantial social change? These questions have wide implications, socially, philosophically, and for policy. While it can hardly be denied that schools often represent social institutions that (re)create dominant social trends and values (Freire, 1985), schools can also challenge dominant knowledge and instil values and skills for critical thinking. The KCs have the potential to do this (Reid, 2006) through critical thinking, metacognition, and self-reflection which could be encouraged for students through a school culture that does the same and thus models the KCs for students.

Furthermore, Trier (2001b) notes that the KCs should not be thought of as stable and constant, but should be conceptualised as dynamic and responsive to the needs of industries and societies. This begs the question, however, of how the KCs might be adapted in timely ways to ever-more rapidly evolving societies. The author notes that changes in society facilitate the introduction and implementation of concepts and practices such as KCs. However, it is likely that continual self-reflection by schools, teachers, students, researchers, and policy-makers about the KCs would be useful in order to help ensure that they remain relevant to evolving social contexts.

The New Zealand curriculum now has increased emphases on “meta” knowing and metacognition, fostering a disposition to learn, cross-contextual learning, and creating

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10 See Freire (1985) for a discussion of power in schools.
learning contexts that offer foreseeable goals for students, such as work experience (Hipkins, 2007; MoE, 2007b). The KCs operate within the context of these emphases, and in the context of values outlined in the curriculum (MoE, 2007b). In particular, the KCs have been redesigned to focus on the ongoing development of a person who can act “in certain ways and who is willing and able to do so” (Hipkins, 2007, p. 9). These skills are fundamentally integrated with values, attitudes, and knowledge (Hipkins, 2007).

While dominant values are inherent in any society, maintaining awareness of this and being open to critique of them is important to ensure that the KCs remain socially relevant and meet their goals of establishing a more equitable society (DeSeCo, 2005; Trier, 2001a). Reflecting on these aspects of the KCs could also be a useful way for students to enact and develop the KCs (Reid, 2006).

Freire (1998) discusses how public education, governed by dominant groups such as business and industry, attempts to (re)produce the dominant ideology which acts to maintain social and economic hierarchies. As a product of both government and industry and as openly based in dominant values and attitudes, the KCs must be evaluated for their applicability to all members of society, especially those who might be more marginalised. While New Zealand has made strides in recognising the positions of non-dominant groups, the difficulties in addressing the needs of minority groups is still evident in many sectors of society, such as those groups accessing mental health services (Ministry of Health, 2009). Additionally, by failing to add attempts to rectify power differentials in schools or communities or even to raise students’ awareness of them, teaching simplified versions of the KCs could act to implicitly (re)create power discrepancies. Thus the need for ongoing research and reflection in a number of areas of New Zealand’s KCs, including teacher and student perceptions of the competencies, their assessment, applications both in the classroom and other contexts, and how to teach them is crucial if they are to meet their potential and be relevant to all groups.

Further difficulties are noted in the comparison of Country Reports (Trier, 2001b), and several are worth mentioning due to their applicability to both the generic KCs proposed by the OECD and those that are specific to New Zealand. First is the question of whether the KCs are seen as specific to a particular area or more general. For instance, do the KCs relate to producing competent workers in the academic sphere, the industrial sphere or both? Second, do these competencies relate to the individual only, or
can they also be applied to industries and organisations. A useful example is the school; in creating a school culture that fosters the competencies, must the school also in some way possess those same competencies?

These are questions that contribute to the critical reflection on the KCs that must take place in order to understand and effectively implement them in schools. The potential benefits of the KCs make this process an important one to continue. Some of these benefits for student wellbeing will be explored next.
Chapter Two: Wellbeing, School Engagement, and the Key Competencies

This chapter provides the contextual importance of studying the New Zealand KCs. In particular, student wellbeing, resilience, school engagement, motivation, and the influences upon these issues will be discussed in relation to the KCs.

While not explicitly stated, embedded within the New Zealand KCs is the idea that KC development will not only improve students’ educational outcomes and facilitate the a disposition for lifelong learning, but will also enhance students’ wellbeing, resilience, school engagement, and motivation to learn.

Wellbeing, Resilience, and the Key Competencies

Adolescence is often described as a time that is both socially and developmentally difficult for young people, with changes in schools, friends, peer pressures (Benner, Graham, & Mistry, 2008), school standards and expectations (Pellerin, 2005), family roles (Carr, 2006; Parish, 1990), increased striving for independence (Pardeck & Pardeck, 1990), and hormonal and physical changes (Andersson & Strander, 2004). These areas of development involve the microcosms of the school, home, and individual that Bronfenbrenner (1992) noted in his work.

Dallaire (2006) contends that a hallmark feature of traditionally successful adolescents is when young people are able to strike a balance between individual autonomy and connectedness to family, peers, and social institutions. However, undoubtedly this balance varies according to the individual and the social and cultural norms to which they adhere.

Unfortunately, adolescence in New Zealand appears to be particularly difficult, with New Zealand ranking amongst the highest in OECD nations for youth suicide and having poor ratings for material wellbeing, health and safety, and risk behaviours (OECD, 2009b). Traditionally research into issues such as antisocial behaviour and suicidal tendencies have tended to adopt a deficits model, focusing on disorders and risk factors for such behaviours. More recently, both research and policy has begun to adopt an increasingly positive psychological approach with a shift towards focusing on
developing resilience and promoting factors that allow individuals to thrive (Sheldon, Frederickson, Rathunde, Csikszentmihalyi, & Haidt, 2000, p. 1). This is done through a focus on strengths, individual and group characteristics, resilience, and what it means to have a pleasurable, engaged, and meaningful life (Hefferon & Boniwell, 2011). This focus on understanding what leads to wellbeing and resilience is much like DeSeCo’s focus on identifying the competencies needed to live a “successful life” in a well-functioning society” (DeSeCo, 2005, p. 4). The identification and implementation of the KCs into the school curriculum could be thought of as the tools that can help this to happen.

While a positive psychology approach seeks to develop resilience and wellbeing, it is important to acknowledge that interpretations of what wellbeing means and ideas about factors that might contribute to it may vary. The Gallup organisation conducted research across more than 150 countries, and found five common elements that contributed to wellbeing, including one’s career, their social lives, financial situation, physical health, and community participation (Rath & Harter, 2010). The authors note that all five are important for individuals to be able to thrive. Within New Zealand one of the best known models of wellbeing is Mason Durie’s Te Whare Tapa Wha model (Durie, 1994), which compares good health to the four walls of a house. It recognises spiritual, physical, mental, and relational wellbeing as all being simultaneously necessary to achieve health and wellbeing. Both the Gallup organisation’s and Durie’s conceptualisations have parallels with the KCs, suggesting that developing the KCs could also improve wellbeing.

Within research focused more specifically on enhancing emotional wellbeing and happiness (Diener, Kahneman, & Helliwell, 2010; Harris, 2008) two ideas have gained particular momentum that are particularly relevant to the New Zealand KCs. These are mindfulness11 and acceptance of experiencing a full variety of emotions, including those that might be thought to be aversive (Fruzzetti & Erikson, 2010; Harris, 2008; Hayes, Follette, & Linehan, 2004; Lynch, Chapman, Rosenthal, Kuo, & Linehan, 2006). Underlying both these ideas is the importance of increased emotional awareness and the

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11 Various definitions of mindfulness have been offered. One of the most commonly accepted is that of Kabat-Zinn’s (1990, 1994), which describes mindfulness as “paying attention in a particular way; on purpose, in the present moment and non-judgementally” (Kabat-Zinn, 1994, p. 4).
development of emotional literacy (Matthews, 2005) or being aware of one’s own thinking (i.e., metacognition) (Harris, 2008). Additionally, reflective practices such as mindfulness and emotional awareness not only help people to manage themselves but also influence what we know about how others might be thinking and feeling (Fonagy, Gergely, Jurist, & Target, 2002), and can have a large impact on one’s relationships with others (Fruzzetti, 2012; Hayes et al., 2004).

Macklem (2011) notes the particular importance of increasing metacognitive skills and emotional awareness and expression for young people’s mental health and wellbeing. For example, research has shown that delivering mindfulness programmes to a universal population within schools has benefits for students’ emotion regulation, self-esteem, and interpersonal skills (Broderick & Metz, 2009; Schonert-Reichl & Lawlor, 2010). Additionally, teachers have reported that mindfulness practices were not difficult to implement into their teaching (Schonert-Reichl & Lawlor, 2010) which suggests that these practices might be both helpful and manageable when it comes to developing students’ KCs.

Further drawing on positive psychological theory and the concept of emotional literacy, the language of the KCs can be used to integrate the various aspects of the competencies into social discourse, (Baumeister & Vohs, 2002; Ciarrochi, Kashdan, Leeson, Heaven, & Jordan, 2011; Linley & Joseph, 2004), thereby potentially increasing students’ wellbeing and resilience through improved awareness and use of the KCs. A social discourse around the KCs would also provide social reinforcement of students’ use of KCs through a communally shared understanding and language about the competencies.

Emotions of emotional awareness and literacy also echo previous research on ‘emotional intelligence’ (EI), which is a concept that, while debated, is typically thought to include individual ability to understand, express, and manage one’s emotions, as well as the ability to recognise others’ emotions (Mavrovelli, Petrides, Rieffe, & Bakker, 2007). Enhancement of these EI factors has been argued to result in higher academic achievement through increased ability to communicate and regulate the self (Tonks, Williams, Frampton, Yates, & Slater, 2007) and better adjustment to new academic situations (Shields et al., 2001). Furthermore, Parker and colleagues (Parker, Summerfeldt, Hogan, & Majeski, 2004) found that youth who had higher levels of EI
factors adjusted better to transitions between schools and managed stress better. They also found that youth who had high levels of socioemotional skills before ‘interventions’ targeting those skills benefited more than those with low levels of socioemotional skills. This suggests that in order to maximise benefits young people may need to develop socioemotional skills before they enter school where more structured or directed learning of the KCs begins.

It is clear that development of socioemotional competencies starts in the earliest stages of life. Research on attachment suggests that insecure attachment styles can result in difficulties with socioemotional skills in terms of relationships and emotion regulation (Bowlby, 1988, 1989; Fonagy & Luyten, 2009). This suggests that learning socioemotional skills early in development through attachment relationships may provide a good basis for developing them throughout life. Continuing this development in school seems to be a natural progression given the OECD’s goals of developing long-term social and individual wellbeing and resilience (Salganik & Rychen, 2003; Trier, 2001a).

**School Engagement and the Key Competencies**

Before schools can set about implementing KCs, students need to be sufficiently engaged with learning. In New Zealand, the disengagement trend mirrors that shown internationally, whereby disengagement rates usually increase in years 7-10 (ages 10-13) (Stock, 2008). This suggests a need for schools to focus on developing the KCs prior to this time to avoid students leaving school without some level of KC development or understanding.

One of the difficulties with studying student engagement at school is defining the concept of engagement. Some authors settle on defining it behaviourally through attendance patterns (TNS & Monarch Consulting, 2006), while others define it as identifying with and valuing school outcomes (Willms, 2003, p. 8). Within this project, engagement will be considered using the definition utilised by Tadich, Deed, Campbell, and Prain (2007) as a multi-dimensional concept comprised of behavioural (e.g., attending school), emotional (e.g., school connectedness), and cognitive (e.g., affinity for lifelong learning) features, all of which interact and overlap.
While there is a general lack of New Zealand-based studies around student engagement, the Youth '07 report on the health and wellbeing of secondary school students in New Zealand did produce some specific data around engagement attitudes (Adolescent Health Research Group, 2008). They found that 93% of students want to be proud of their school work, suggesting a high degree of emotional engagement. Additionally, although their sample was not representative, Elley-Brown, Peterson, and Farruggia (under review) found that 85% of their participants from several New Zealand secondary schools reported a high affinity for lifelong learning, suggesting that many students are cognitively engaged in learning. This figure is also encouraging in that it reflects a value of education, which many authors cite as fundamental to motivation to achieve at school (Burke & Reitzes, 1991; Steinmayr & Spinath, 2009).

Many factors influence student engagement attitudes, cognitions, and behaviours. Alongside individual traits and students’ own competency beliefs (Caprara et al., 2008), factors including teachers (Smyth & Fasoli, 2007), culture of the school (Buxton, 2004), families (Clinton, Hattie, & Dixon, 2007), peers (Hartnett, 2008), cultural issues (Hallett et al., 2008), mental and physical health (Kearney, 2008), and sense of identity (Burke & Reitzes, 1991; Kaplan & Flum, 2012) all contribute to student engagement in schools. Successfully navigating these different environments likely requires the use of all the KCs to varying degrees. This highlights the bi-directional nature of the relationship between the KCs and student engagement: Student engagement is needed to develop the KCs in schools; at the same time, having some level of these competencies seems, to a degree, to be needed for students to be engaged in learning.

One of the main incentives for studying student engagement is that youth who become disengaged and drop out of school are at higher risk for several negative consequences (Kearney, 2008). Researchers have found that these students are more likely to engage in anti-social behaviour (Willms, 2003), become teenage parents (Kearney, 2008), abuse drugs and alcohol (TNS & Monarch Consulting, 2006), have mental health difficulties (Kearney, 2008), and become unemployed (Sigman & Scotchmer, 1994), thus becoming a financial burden on society (Business Council of Australia, 2003). It is clear that these are all factors that could affect one’s wellbeing and resilience, and all are areas where heightened understanding of and integration of KCs into students’ learning could play an important mediating role.
Importantly, behavioural, cognitive and emotional engagement doesn’t just mean engagement in school and classroom-based learning. In their critique of the research on school engagement, Fredricks and her colleagues (Fredricks et al., 2004) note that behavioural engagement has been defined in several ways. Finn’s (1989) four level hierarchical definition of engagement is one of the most comprehensive. The first three levels include classroom conduct, task-related behaviours, and extra-curricular school activities. In the fourth level, Finn distinguishes participation ranging from responding to teachers’ questions to involvement in student governance, the latter of which he believes indicates a greater commitment to school and/or learning. This model of behavioural engagement has clear links to ‘Participating and Contributing’ and ‘Managing Self’.

Emotional engagement is conceptualised as not only including students’ interest in classroom material, boredom, happiness, sadness, and anxiety (Fredricks et al., 2004). It can also involve students’ affective reactions to the teacher and the school environment (Woolley & Bowen, 2007). Finn (1989) identifies emotional engagement as identification, belonging, or connectedness with the school. Previous research has also found this to be strongly linked to friendships within school and a sense of ‘belonging’ to a peer group (Huebner & McCullough, 2001; Smyth & Fasoli, 2007). This further emphasises the interrelated nature of the KCs (in this case, ‘Relating to Others’) and school engagement.

Finally, Fredricks and her co-authors (Fredricks et al., 2004) link cognitive engagement with levels of cognitive energy invested in school-related tasks and self-regulation within those tasks. This presents an overlap with the KCs, most obviously in terms of ‘Managing Self’ and ‘Thinking’, but also potentially ‘Participating and Contributing’. The authors also noted that cognitive engagement is linked to the setting of personal goals which vary in terms of their level of investment (e.g., a motivation to learn something, a general value of lifelong learning, or desire for challenge). Hence this aspect of cognitive engagement involves metacognitive strategies to plan, manage, and monitor one’s self when carrying out tasks to determine whether or not goals have been reached both in and outside of the classroom.

Gonida, Voulala, and Kiosseoglou (2009) found that both behavioural and emotional engagement were predicted by students having particular types of learning goals. The research on motivation and goals for learning will next be outlined.
Motivation and Achievement Goals

The KC of ‘Managing Self’ involves being able to set goals and adapt one’s behaviours in order to successfully meet those goals (Hipkins, 2006). In turn, setting goals requires metacognition and the KC of ‘Thinking’ (Covington, 2000; Hipkins, 2006). These processes presumably involve, to some degree, students’ motivation to meet those goals. Also fitting with the KC of ‘Managing Self’, researchers have suggested that students who are motivated to learn and see themselves as capable of learning are more engaged in school at cognitive, emotional, and behavioural levels than those who are not (Gonida et al., 2009; Tadich et al., 2007).

Motivation has primarily been studied through the concept of achievement goals (Ames, 1992; Dweck & Legget, 1988; Nicholls, 1984). The majority of authors have argued that having mastery goals, or the motivation to learn for the sake of mastering a skill or area of knowledge (Covington, 2000), results in higher academic achievement (Seifert & O'Keefe, 2001; Steinmayr & Spinath, 2009) as well as increased orientation towards lifelong learning (Alexander, 2010). In contrast to this, performance-approach goals involve an aim of academic achievement, and performance-avoidance goals involve avoiding academic failure (Chouinard, Karsenti, & Roy, 2007).

Achievement goals can also be described in terms of the degree to which they involve intrinsic and extrinsic motivation (Deci & Ryan, 2002), in that mastery goals can be thought of as internally motivated, while performance-approach goals can be conceptualised as externally motivated. Therefore, by their nature, achievement goals are aligned with ‘Managing Self’, though fostering internally-motivated mastery goals may be more beneficial for the development of dispositions for lifelong learning. Together these findings suggest that goal-setting and particularly encouraging mastery goals may be important aspects for schools to consider for students’ KC development.

Factors that Influence Student Motivation, Engagement, and Wellbeing

While motivation to learn is an important factor to consider in student engagement and in their learning of the KCs, there are also other important factors that can contribute to motivation, engagement, and socioemotional development for young people. While a full review is beyond the scope of this thesis, some main influences on development of
these factors will be discussed below. These include teachers, the school culture, families, peers, identity, and students’ cultural backgrounds.

**Teachers**

Teachers have been cited as important in modelling and helping to facilitate learning of the KCs (Hipkins, 2006). They can also play a mediating role in student goals, engagement, the school environment, and the school culture (Anderson, Christenson, Sinclair, & Lehr, 2004; Covington, 2000; Hattie, 2008; Rubie-Davies, Hattie, & Hamilton, 2006). In his extensive systematic review, Hattie (2008) also found that, in terms of overall effect size, the student-teacher relationship is the single most important variable in academic success, including being stronger than the influence of family and other contextual factors such as classroom size. While the analysis conducted by Hattie (2008) looked at academic achievement as an outcome, it is likely that teachers could have a similarly strong influence on students’ socioemotional skill development either via explicitly teaching the KCs or by modelling the KCs and integrating them into teaching practices. Integrating the KCs throughout a teachers’ practice requires that teachers fully understand and value the KCs, and that they understand how the KCs can be effectively taught. These are issues for ongoing teacher training (Hipkins, 2006; Timperley, 2008). In support of the idea that teachers are important for KC development Patchen (2006) found that emotionally and academically supportive relationships with teachers helps students see themselves as academically capable students. This is part of the KC of ‘Managing Self’ and likely contributes to facilitating a disposition for lifelong learning. Others also assert that such a relationship results in greater resiliency and competence (Anderson et al., 2004).

Recent New Zealand research with a broadly representative sample of New Zealand youth in the Youth ‘07 study (Adolescent Health Research Group, 2008) reported that New Zealand youth have a strong sense of being acknowledged in school, in that 91% of participants felt that someone at school cared about them. However, under half of all respondents (49%) felt that teachers treat all students fairly, and for neighbourhoods characterised by economic deprivation only 41% of participating students reported fair treatment. This has important implications for teacher modelling of the KCs, as it clearly does not communicate the values of a more equitable society that the OECD had in mind when developing the KCs (DeSeCo, 2005) or desirable ways of
‘Relating to Others’ in equitable and respectful ways. Using professional development to challenge teachers with facts such as these about perceived fairness in New Zealand schools may enable teachers to reflect on how they model the KCs to their students. This may also be an important first step toward reducing inequalities within the classroom.

Culture of School

Research has consistently shown that students’ motivation significantly declines after the transition to secondary school (Eccles & Midgley, 1989). During this time students experience a number of considerable changes in school culture between junior and senior high school (Baker, Dilly, Aupperlee, & Patil, 2003). The culture of the school is defined by Buxton (2004) as being formed by the academic expectations of the staff and students and the disciplinary practices. However, future work may need to expand this definition of school culture as it seems likely that economic, social, and pedagogical features of a school would influence its academic and disciplinary practices.

The influence of both school and community characteristics on the school culture could impact students’ engagement and learning of the KCs in a number of ways. For instance, schools that form strong links with parents and communities would model the KCs of ‘Participating and Contributing’ and ‘Relating to Others’. These links could also help to provide students with ‘authentic learning’ opportunities of these KCs in the community as, through their relationships, the schools could work with communities to develop these opportunities. Additionally, teachers’ attitudes, behaviours, and the relationships they form with students are also an important part of the school culture. As discussed previously, their modelling of KCs is an important feature in students’ learning of KCs such as ‘Relating to Others’ and ‘Using Language, Symbols, and Texts’. Lastly, a school culture that prioritises and promotes student wellbeing through, for instance, a strong school guidance department or mood management programmes would communicate this importance to students and provide more structured and evidence-based opportunities for students to develop socioemotional competencies, promote resilience, and potentially avoid negative outcomes (Dickinson, Coggan, & Bennett, 2003; Merry et al., 2011).
Families

It has long been acknowledged by developmental (Erikson, 1963) and attachment (Ainsworth, 1982; Bowlby, 1973) theorists that early life experiences form the basis of many later human experiences, attitudes, behaviours, and interpersonal and emotional skills (Fonagy & Luyten, 2009). Thus, the development of KCs clearly has its roots in the family context and could foster greater KC development in schools (Parker et al., 2004).

One of the most prevailing influences on mental health and wellbeing is poverty (Pickett & Wilkinson, 2007; Read et al., 2009; Wilkinson & Pickett, 2009). To this end, socio-economic status (SES) has been shown to exert considerable influence on students’ levels of school engagement and achievement (Benner & Mistry, 2007; McNaughton, 1996). Ganzach (2000) states that more educated parents have many resources to create social and physical environments that support and give rise to learning, and that this is among the most significant influences on children’s educational motivation and achievement levels. This has important implications for the KCs in terms of allowing for similar resourcing and support for both parents and communities, particularly in under-resourced areas, to help students develop the KCs in order to meet the OECD and Ministry of Education goals and vision of a more equitable society and for all students to develop into lifelong learners and active members of their communities (DeSeCo, 2005; MoE, 2007a).

Socioemotional learning experiences can also be found within family contexts and relationships, whereby skills such as attitudes, behaviours, and ways of relating are modelled and normalised for children (Bandura, 1986). This then sets a base from which children approach and think about school and other learning experiences and environments. Although there are, of course, cultural and individual variations in parenting practices and family norms, there have been studies relating parenting practices to academic achievement levels. For instance, some authors have found that students whose parents support autonomous development (a form of ‘Managing Self’) within authoritative boundaries have higher achievement levels and stronger mastery goals (Steinberg, Elmen, & Mounts, 1989). These authors have also found that warm parental communication styles, which model ‘Relating to Others’, further contribute positively to student achievement and the adoption of mastery goals, which involves ‘Managing Self’.
**Peers**

As children develop, peers have an increasingly strong influence on young people (Carr, 2006), and have been recognised as contributing to formation of identity, peer groups (Levy, Kaplan, & Patrick, 2004; Sullivan & Schneider, 1987), and behaviour (Andrews & Bonta, 2007; Kearney, 2008). These are all factors that the KCs can also influence. Additionally, it is useful to understand the context in which young people learn the KCs at school as they are not learned in isolation from the environment or community and can be learned across numerous contexts (Hipkins, 2006; Norris & Kelly, 2001). Importantly for school engagement, social factors have also been cited as one of the primary mediators of school enjoyment (Huebner & Gilman, 2006; Huebner & McCullough, 2001), and are also said to often take priority over academic goals (Covington, 2000). Peer relationships are also likely to be a key area of learning for several KCs, including ‘Relating to Others’ and ‘Managing Self’. These KCs would clearly be developed in situations where young people might need to solve peer group difficulties, which can often be a source of distress for youth and negatively affect their wellbeing. Thus, promoting positive peer relationships and effective interpersonal strategies for students has important implications for school engagement, peer relationships, student wellbeing, and for teaching the KCs.

**Identity**

Flum and Kaplan (2012) assert that identities are formed in the interaction between individuals and contexts, and they emphasise the importance of considering the development of identity within the education process. Elliott and his colleagues’ contend that classroom material must have a noticeable relationship to students’ goals if they are to be engaged with the material (Elliott et al., 2005). This has particular relevance for ‘authentic’ learning that was discussed earlier, in that learning of the KCs will be more effective in situations that are ‘authentic’ and relevant to students’ interests, goals, and identities. In her book on Latino students’ identities, Flores-González (2002) argues that if people are committed to school activities and the relationships formed within those activities they will be more likely to remain in school as those aspects make up their understanding of who they are. This can easily be linked to the Ministry of Education’s vision for students who develop into having identities as lifelong learners (MoE, 2007c),
which clearly involves use of KCs such as ‘Managing Self’, ‘Thinking’, and ‘Using Language, Symbols, and Texts’.

**Ethnicity/Culture**

For many people, their identity is partly made up of the cultural group(s) with which they identify. Acknowledgement and inclusion of Maori and Pasifika culture is now meant to be standard in New Zealand schools, as this is recognised as contributing to successful learning for students of Maori and Pasifika descent (e.g., MoE, 2008b, 2009a). However, in many parts of society, including schools, racism and ethnicity (of teachers and students) can shape classroom practices and school culture (Bishop & Berryman, 2006). School culture has already been discussed as important for student engagement and learning of the KCs. Additionally, it is important for students of all cultures to understand that there are various ways of interpreting and enacting the KCs, which might vary by culture. Thus, exploring these issues is important both for teaching and learning of the KCs, as well as for developing an appreciation for different cultures. For instance, it is argued that many Maori appreciate verbally-presented information and the use of humour and stories more than written exercises (Rubie, Townsend, & Moore, 2004). In addition to increasing engagement for students of Maori decent, this could also facilitate learning for all students for the KCs of ‘Using Language, Symbols, and Texts’ and ‘Relating to Others’.

Within New Zealand there has been much emphasis in the last decade to meet the cultural needs of Maori in different aspects of society (Durie, 1999). Russell Bishop’s work has been notably pivotal in this area. His co-authored book with Mere Berryman is an in-depth exploration of Maori students’, teachers’, and parents’ perceptions of school (Bishop & Berryman, 2006). Of particular interest is his examination of engaged and disengaged students’ perceptions of the different aspects of school that they liked or disliked. Both groups of students highlighted the importance of cultural understanding, especially culturally acceptable behaviour, pronunciation of names, and knowledge of history. They also emphasised the impact of stigma and racial profiling on their emotional and cognitive sense of connectedness to school. Additionally, they both revealed the positive impact teachers made when they were interested in Maori culture and were open to interacting with students in casual, supportive ways (Bishop & Berryman, 2006). These student perceptions are important to keep in mind generally, but
also when thinking about teaching the KCs to various cultural groups. Exploring different cultural understandings of and ways of enacting the KCs in school is important for several reasons. Firstly, it would ensure that ways of thinking about and learning the KCs were culturally relevant for students, which would help to engage them in learning the KCs. Additionally, awareness of some of the concerns Maori students raised in Bishop and Berryman’s work would enable teachers to consider more carefully how they model the KCs of ‘Relating to Others’, ‘Using Language, Symbols, and Texts’, and ‘Participating and Contributing’.

Much of the research within New Zealand notes the disadvantages created by the division of languages and values between home and school for Maori children (Bishop & Berryman, 2006). McKinley (2000) notes that for Maori students in English-medium schools their sense of Maori identity was negatively highlighted by the discrepancy in language and culture they faced at school. Attempts to overcome this barrier might be another way teachers and schools could model important parts of the KCs of ‘Relating to Others’ and ‘Using Language, Symbols, and Texts’ to overcome cultural barriers. It could also create ‘authentic’ learning situations with students’ families and communities to facilitate family involvement in students’ education, which could serve to model and encourage the KC of ‘Participating and Contributing’. Exploring the above-discussed aspects in relation to delivery of the KCs within kura kaupapa Maori schools (schools taught in Te Reo, the Maori language, and which incorporate Maori values and worldviews) is an important area for further exploration and development.

**Summary**

This chapter has argued for the importance and value of the KCs for wellbeing and school engagement within the New Zealand context. The literature reviewed has suggested that the development of wellbeing and school engagement will likely be affected by students’ motivation and goals, teachers, school culture, peers, and identity, including ethnic and cultural identity. The current research attempted to explore whether or not students valued the KCs, how they interpreted them, and if they thought they were competencies that could be learned in schools. This is important to do during the initial implementation of the KCs in New Zealand, as students’ value of the KCs would likely
affect their engagement with the topics and concepts. Additionally, several authors have emphasised the importance of gaining understanding of students’ perspectives on the KCs (Hipkins, 2006; MoE, 2010). This thesis was in line with those recommendations. The following chapters will present the research methods and results, and then discuss the results and some of their implications.
Chapter Three: Methodology

This thesis explored adolescents’ views on and value of the KCs. Ten focus groups and 12 interviews were conducted with adolescents enrolled in Years 11 and 12 in five Auckland schools to meet this goal. Thematic analysis was used to analyse this data. This chapter will first discuss the epistemological orientation that underpins this project. Next, the aims and methods of the thesis, including data collection and analysis, will be described.

Epistemological Orientation

This thesis was informed by principles from social constructionism. This is now a well-established epistemological orientation (Edley, 2001), however a brief explanation is necessary in order to orient the reader to the points relevant to the current thesis. Dickens and Fontana (1994) note the common thread in social constructionist discussion within the social sciences to be the questioning of the effects of social change on the nature of knowledge, social interaction, and social identity, all important parts of the KCs. Vivien Burr, one of the primary authors on social constructionism in psychology, notes the four broad tenets of the theory, which include: 1) A critical perspective on knowledge that is taken for granted to be ‘truth’, 2) understanding the historical and cultural specificity of knowledge and discourse, 3) an assertion that knowledge is maintained and negotiated through social processes (such as social policy and education), and 4) knowledge and social action are interrelated (i.e., either one is influenced by and can also change the other) (Burr, 1995).

The essential component of this approach to understanding is that knowledge, thoughts, emotions, and communication are thought to be constructed through social, cultural, political, and individual contexts and resources (Potter, 1996). The emphasis on critically reflecting on social change was a major impetus for the research, as the KCs are a form of social change. Additionally, as schools are now meant to be teaching KCs, the notion that knowledge is socially constructed is a useful way of understanding how students’ think about and learn the KCs.
Qualitative Research

Psychological research has historically been conducted through a positivist paradigm using quantitative methods (Guba & Lincoln, 2005). However, this perspective has been critiqued for its assumptions that human experience is linear in terms of cause and effect, occurs within the realm of a single, objective ‘truth’, and is predictable (Guba & Lincoln, 2005). A number of qualitative approaches have become more common in researching and understanding human experiences and behaviours, and these are underpinned by a range of theoretical orientations (Denzin & Lincoln, 2005). A full description of these approaches is beyond the scope of this thesis, which has been conducted using thematic analysis (Braun & Clarke, 2006). This is described further in the ‘Methods’ section of this chapter.

Qualitative research has historically been critiqued as having an ‘anything goes’ approach (Braun & Clarke, 2006) and for the subjectivity entailed in data analysis (Madill, Jordan, & Shirley, 2000). However, much of this critique originates from the traditionally positivist stance in psychology (Madill et al., 2000) and using criteria that are inappropriate for qualitative research (e.g., power, generalisability), which often has different aims than quantitative. While quantitative methods aim for reproducible results and the identification of ‘objective’ phenomena, qualitative researchers primarily seek to identify and explore people’s experiences of phenomena and the meaning they give to those experiences (Patton, 1990). Rather than attempting to analyse an objective ‘truth’ about human experience, it is often the goal with qualitative research to gain a rich understanding of individual experiences.

Experiences are thought to be uniquely represented through individuals’ expressions (Edley, 2001). For example, each person’s experience of a sunrise would be different depending on such things as location, perspective, vision, past experiences of sunrises and resulting expectations, and background in astronomy. Even two people standing side by side would experience this differently and subsequently remember and describe it differently. The same would apply to experiences such as school, relationships, social life, and identity. Thus, interviewing different people about the same topic (for example, in this thesis, what students are taught in school) can produce very different results, even for students in the same class in the same school. This is because each student would have different memories, experiences, individual traits, and
contexts at the time of the class and the interviews that would impact on the recalling and
telling of their perspectives. Moreover, an individual might be interviewed on several
separate occasions about the same topic and each account might produce different results.
Thus, the data collection is equally as important as the analysis.

One of the difficulties in qualitative research is attempting to understand an
individual’s experiences due to differences in, for example, language, background, and
culture, and then analyse their ‘data’. This means that clarification and probing follow-
up questions are necessary to arrive at an as near as possible shared understanding.
Additionally, it means that analysis is inevitably based in the researcher’s own
background knowledge, personal experiences, and epistemological orientation. While
not an absolute limitation of qualitative research (as any type of research has weaknesses
that must be worked with to overcome), this does lead to criticism from positivist-
oriented theorists. This particular potential weakness of qualitative research can be
addressed through consultation with others, supervision, blind checking of analyses, and
most importantly, researcher reflectivity and openness.

Qualitative analyses entail subjective judgements and the ‘validity’ of this
research is mostly identified through the transparency and reflectivity of the researcher
rather than reproducible results (Yardley, 2008). Additionally, the replicability of results
is rarely a goal for qualitative researchers, as experiences of phenomena are often seen as
specific to the participants at the time of research and within the context of the research
questions, and the interpretation of the data is specific to the researcher. Instead,
exploration of the researcher’s epistemology (i.e., the researcher’s perspective on
knowledge and how knowledge is acquired) and transparency of analysis and methods is
crucial to establishing both the approach to the research and the ‘validity’ of results.
Denzin and Lincoln (2003) argue that interpretation of data is driven by the researcher’s
own values, beliefs, and worldviews. Thus, these need to be acknowledged by the
researcher and taken into account in the analytic process. The resulting variety in
potential analyses of data is a reflection of the variety of meanings that can be made of
experiences and fits well within the aims of qualitative research.

The current research involved interviewing adolescent participants, which
involves a number of factors that are important to consider. These are discussed below.
The Adolescent Perspective

Much research has been conducted on the various factors contributing to student engagement, and within this research questionnaires and interviews with adolescents have been a common method of data collection (see Andersson & Strander, 2004, for an example). However, research on the KCs and their equivalents in the New Zealand curriculum has largely been theoretically-focused and the adolescent perspective has been somewhat neglected. Hipkins states,

If fostering dispositions for lifelong learning is seen as important, and if strengthening key competencies is seen as an important means of achieving this goal of long-term learning, we need to explore ways of including students in making judgements about their learning (Hipkins, 2007, p. 3).

Other authors also note the importance of the individual’s perceptions of their environment on their development, and advocate the use of the adolescent’s ‘voice’ for data collection (Andersson & Strander, 2004; Giota, 2001).

While adolescent participants represent a rich source of data, several limitations may be encountered. These include possible communication barriers between adolescents and potentially much older researchers, developmentally limited insight to their own views and behaviours (Carr, 2006; Lezac, 1995), and lack of time to participate given the notoriously busy school and recreational schedules of many youth. However, these are also barriers that may be faced through research with other population groups and which may be overcome through appropriate and skilful research conduct. Furthermore, they can also be taken into account in the analyses. A further limitation for research with young people is the power indifferences that can occur. This is discussed further below.

Power

Any research, but especially work with young people, involves some issues of power. Youth are a sub-group of society who are often argued to be dispossessed of power, both socially and legally (Ginwright & James, 2002). Brinkmann (2007) notes that the interviewer sets the agenda for the discussion in qualitative research, poses whatever questions they choose, and is often in the position of ‘assumed expertise’ (e.g.,
assumed to hold more knowledge, and thus inherently more power) by the participant. He also argues that power dynamics are inevitable, but suggests that ‘good’ qualitative researchers will allow for the participant to fully express themselves and moreover to object to the researchers’ interpretation of their expressions. Power discrepancies were a concern within the current research and attempts were made to minimise these discrepancies between the researcher and the participants.

Firstly, throughout the focus groups and interviews, it was important to maintain a collaborative style with the participants. This was done through participants choosing the time and place of the interviews, checking with participants that they felt comfortable to take part and contribute, and throughout the focus groups and interviews maintaining rapport with the participants and being respectful of their perspectives. Participants were viewed as ‘experts’ on their experiences, and I took the role of the naïve enquirer, which I believe helped diminish power indifferences encountered through age and role differences. Additionally, throughout the interviews and focus groups I checked meaning and asked clarifying questions so that a shared understanding could be better achieved. Second, the focus groups and interviews were always begun by informing the participants of some of my educational background and how this had informed my interest in the topic. While there is the possibility that this could create some sort of ‘response bias’ for the participants, my background includes many ‘levels’ of school engagement, and it was hoped that by participants being aware of this they would be more likely to share their own experiences. I also believe that since the participants were revealing personal information to me (and others in the focus groups), it may have been important for them to have an idea of who they were talking to and the interest I had in their experiences.

The discussion presented above has described the theoretical orientation for this thesis in some detail. The following sections present the aims of the current thesis project and the data collection and analytic technique that were employed.
Methods

Specific Aims

The current project interviewed students initially enrolled in years eleven and twelve (aged 14-15) at schools from various deciles\textsuperscript{12} in order to investigate their perspectives on the development, attainment, and value of the KCs. Students were interviewed twice, firstly in the context of a focus group and then individually. The second interview took place six months after the first to explore participants’ perspectives in more depth and to see if they had noticed any further development around teaching the KCs in their schools.

Research has shown that classroom material must have a foreseeable relationship to students’ goals and visions for the future if they are to be engaged with the material (Elliott et al., 2005). This also suggests that the KCs need to be important to students on a personal level in order to keep them engaged with the material at school (Rodriguez, Jones, Pang, & Park, 2004). As the KCs are being incorporated into the New Zealand curriculum, it seemed useful to first understand the value youth place on the competencies. Two specific research goals were explored:

1. Participants’ perceptions, understanding, and value of the key competencies
2. Participants’ ideas around teaching and assessing the key competencies

A sub-goal of the focus groups and interviews was to also explore participants’ goals for the future, their likes and dislikes about school, value of school, and sense of engagement/connectedness to school. The results of these parts of the focus groups and interviews are not reported in detail here as they are beyond the scope of the thesis. They will be reported separately. However, aspects of these discussions are commented upon when participants linked these topics to the KCs, when they demonstrated use of or

\textsuperscript{12} Decile rankings are indicative of how much a school’s enrolment is comprised of students from low socio-economic communities. They are separated by 10\textsuperscript{th} percentiles, whereby Decile 10 schools are the 10\% of schools with the highest proportion of students from high socio-economic communities and Decile 1 schools are the 10\% of schools with the highest proportion of students from low socio-economic communities (MoE, 2008a).
understanding of the KCs through their talk about these issues, or when they were judged to be clearly important for contextual understanding of students’ perspectives on the KCs. These instances are clearly identified in the analyses.

In order to meet the research goals, an ethnically heterogeneous group of students attending schools from various deciles were interviewed in order to understand the diverse perspectives of students in the Auckland region. An attempt was made to have similar numbers of male and female participants as gender may play an important role in the formation of the student’s perspective given the differing socio-cultural, developmental, and biological experiences (Marsh, Martin, & Cheng, 2008). Students from a range of reported levels of school connectedness were sampled to attain a variety of perspectives (see Elley-Brown et al., under review, for the scales used to measure this). Details and procedures for sampling are described further later in this chapter. Thematic analysis (Braun & Clarke, 2006) of participants’ responses to the semi-structured interviews was used to identify the common themes participants discuss in response to the research questions. This is discussed in more detail below.

Hypotheses

This project was exploratory in nature and employed a qualitative analytic technique, thus no hypotheses will be generated at the outset of the project (Flick, 2006). Within the field of exploratory qualitative psychology it is often noted that inductive techniques can be used to draw results out of the data, although the position of the researcher must still be identified in order to ascertain preconceived biases and beliefs (Braun & Clarke, 2006). While the focus group and interview protocols (see Appendices A and B) were informed by the research, they were also intended to be flexible and adaptable to address details that students discussed of which the researcher may have been previously unaware (Braun & Clarke, 2006). The technique of thematic analysis that was used to analyse the focus groups and interviews is presented below.

Thematic Analysis

Thematic analysis was chosen to analyse the data both because of the nature of the data (focus groups and interviews) and because it is well-suited to answer the exploratory research goals previously outlined. Thematic analysis involves the creation of themes into which the researcher judges particular extracts of text to fit. These categories, or
themes, are created out of the following: 1) The researcher’s end goal, 2) the available data, 3) the researcher’s own biases, and sometimes 4) the background literature (Braun & Clarke, 2006).

Focus groups and interviews were analysed for common themes relating to students’ understanding and value of the KCs, influences on their development of KCs, and how participants thought learning them in school might be assessed. Braun and Clarke (2006) suggest that thematic analysis can be done using inductive analysis, thus without the presence of pre-existing coding regimes or hypotheses. This potentially reduces the chance that the researcher will be influenced in data analysis by theoretical biases. Thus codes were generated according to what students talked about, rather than informed by the research. Codes were then grouped into more general themes, which are presented in the ‘Results’ chapters.

The themes in the data set were identified according to the recommendations set out by Braun and Clarke (2006). First, transcripts were read once in their entirety. They were then coded for the ways students talked about school engagement, motivation to learn, goals for the future, problem-solving, and the KCs. Next, the coding categories were organised into themes; some themes contained sub-themes that reflected aspects of the overall theme, whereas other themes were collapsed to form a single, over-arching theme. Finally, themes were reviewed by the researcher and the supervisory team and refined. QSR International’s software package NVivo 8 (QSR International Pty Ltd., 2008) was used to organise themes.

Peer Review

In order to validate the results of the analyses and limit personal bias on the part of the researcher, peer reviews were conducted. Initial codes were reviewed by both an independent reviewer and my two supervisors for clarity and to see if the way they were separated and distinguished and made ‘logical sense’ from a naïve readers’ perspective. This aided in avoiding bias and in creating themes that would be useful for later practical application, as those who might be making use of the results would be individuals who were likely ‘naïve’ to the research process.

Once the themes were established, another independent reviewer was given the codes and transcripts and asked to apply the codes to about ten percent of the data set.
(one each of the ten focus groups and twelve interviews). Secondly, a report was generated with the QSR International NVivo 8 software, which showed the extracts that had been coded under the particular themes. This report was given to a second peer reviewer to see if they agreed with the fit of the extracts into the themes. When disagreement occurred in either instance, this was discussed until an agreement was reached. Lastly, themes were also discussed with my two supervisors to review clarity and to see that they made logical sense. When disagreements occurred, these were discussed and themes were sometimes amended.

**Ethical Approval**

This project was under the umbrella of another study (Elley-Brown et al., under review), which already had ethical approval from the University of Auckland Human Participants Ethics Committee (Reference number 2008/107). Thus, ethical approval was sought as amendments to the larger study design. These amendments identified the principle investigator (the author) and detailed the goals of the thesis, the design and protocols for the focus groups and interviews, and the analytic methods. Each amendment was approved by the ethics committee. Additionally, the same information that was provided to the ethics committee was also provided to the University of Auckland Psychology Department Doctorate Review Committee, who approved the project as well.

**Study 1: Focus Groups**

**Participants**

The characteristics of the schools in which participants were enrolled (or had been at the time of recruitment) as well as the characteristics of the focus group participants are presented below in Table 3.

A sample of 49 adolescents (28.6% male; 71.4% female) took part in the focus group study ($M_{age}$=14.3 years, $SD=.51$; range 14-16 years). Participants were sampled from students Years 11 and 12 who attended five state-run schools in the Auckland
region across a range of deciles\(^{13}\). The participants were sampled from those students who had completed a questionnaire in the Elley-Brown, Peterson, and Farruggia study (under review) and had agreed to be contacted for possible follow-up focus groups and interviews. At the time of the questionnaire, all participants except two were enrolled in school. One had left school due to his struggles with anxiety. At the time of the focus group he was starting his own music business. The other participant had left school to begin a travel and tourism course. The characteristics of the schools and the focus group participants are presented in Table 3 below.

Table 3. School and Focus Group Characteristics

<table>
<thead>
<tr>
<th>School</th>
<th>Decile</th>
<th>Gender</th>
<th>No. Enrolled</th>
<th>No. of participants recruited</th>
<th>Ethnicity</th>
<th>M*</th>
<th>F*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>All-girls</td>
<td>1994</td>
<td>8</td>
<td>6 Pakeha(^{14}); 1 Asian; 1 Indian</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>Coed</td>
<td>2021</td>
<td>13</td>
<td>6 Pakeha; 4 Asian; 3 Indian</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Coed</td>
<td>2317</td>
<td>16</td>
<td>6 Pakeha; 5 Indian; 3 Pasifika(^{15}); 2 Asian;</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Coed</td>
<td>682</td>
<td>9</td>
<td>8 Pasifika; 1 Maori</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Coed</td>
<td>1046</td>
<td>3</td>
<td>2 Pasifika; 1 Maori</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^{*}\) M = Male; F = Female

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\(^{13}\) See chapter 1 or the glossary (Appendix G) for a definition.

\(^{14}\) Pakeha is a Te Reo (Maori language) word for those of European descent. It is used here for the sake of simplicity as those participants who identified as New Zealanders being of European origin were collapsed into one group.

\(^{15}\) Pasifika = of Pacific Island descent.
Focus group procedure

In order to select focus group participants, students who responded to the Elley-Brown, Peterson, and Farruggia (under review) questionnaire were first screened on their responses to several items on the questionnaire that reflected behavioural, cognitive, and emotional engagement. The items included: 1) The total number of extra-curricular activities the student was involved in; 2) the amount of time they spent on homework and how much of their homework they completed; 3) their responses to the school connectedness questions; and 4) their sense of academic efficacy. Responses were rated on a scale of 1-3, with 1 representing typically low engagement responses and 3 representing typically high engagement responses. These ratings were then totalled and participants were grouped into high and low engagement focus groups according to their total score. Participants with scores of 4-7 were rated as lower in engagement, and participants with scores of 8-11 were rated as higher in school engagement. This method was used as a rough estimate of engagement in order to group participants into focus groups where their peers might have similar levels of school engagement, which could make sharing viewpoints easier as there was a higher likelihood of other participants in the group being like-minded so that they would all feel comfortable sharing their thoughts with the group. Gender and ethnicity were not considered in selecting participants for the focus groups as it was necessary to have participants who could attend the groups on specific dates and times and there was concern that including these characteristics in the selection of participants would too severely restrict the number of participants who could attend the groups.

Potential participants were contacted by phone and verbally informed about the occurrence of the focus groups, privacy, confidentiality, their right to decide if they wanted to take part, and monetary compensation they would receive (a $20 voucher to a local shopping mall). If they consented to taking part, they were given a participant information sheet (PIS) and consent form at the time of the focus group (see Appendices C and D). Ten focus groups were held at five schools. The groups lasted between one and one-and-a-half hours, and involved between three and ten people. Most groups also included a note-taker who stayed silent and noted the order of speakers and key words which would assist in transcription. All groups took place at the school the participants attended and included only people from the same school. In four of the schools, focus
groups were split into those students who were rated as high in engagement and those rated as low in engagement. Not enough students from School 4 had consented to the groups, so they were merged into one focus group. Some of the participants appeared to know each other, but this was not tracked or noted. Due to a large number of consenting students at School 3 there were two high engagement focus groups and one low engagement focus group for that school. At each of the other schools there was one high engagement and one low engagement focus group. Analysis of the data from the focus groups was not done according to engagement level, as the purpose of the thesis was not to compare views across levels of engagement, but rather to explore the general views of students. Additionally, classrooms are generic and teaching does not focus on high- or low-engaged students.

Focus group consent forms included a space for the participant to state whether or not they consented to being contacted again for an individual interview in six months time. Before signing the consent forms participants were once again verbally informed about confidentiality and their rights as participants. Limitations of privacy and confidentiality were also explained, which involved my responsibility to breach confidentiality if participants revealed that they or others were at risk of harm from themselves or someone else. It was also requested that each participant keep the confidentiality and privacy of the other members. The parents of the participants had already consented to their involvement in the longitudinal study, so parental consent forms were not required.

Participants in the focus groups were interviewed according to a semi-structured protocol that covered the areas of interest. These included liked and disliked aspects of school, problem-solving methods at school, school connectedness, future goals, KC understanding, and thoughts about teaching and assessing the key competencies (see Appendix A for the focus group protocol). KCs were introduced by their names (e.g., ‘Thinking’) and participants were asked to provide their understanding and interpretations of the KC across various settings, such as school, friendships, and work. If students could not offer any interpretation further description would have been offered, but this was not required. Upon completion of the group, each participant was offered a voucher, and they were entered into a draw to win one of three $150 vouchers.
Focus groups were digitally voice-recorded and then transcribed verbatim. Transcription of the focus group recordings was done so that it preserved the flow and meaning of what the participants had said (see Appendix H for transcription notes). Transcriptions were double-checked by a second person for accuracy, and corrected if necessary. Coding was initially completed by the author. Reliability of themes identified within the data was checked through blind coding of 10% of the interviews, as discussed previously. If there was disagreement, the coders discussed the particular extract and came to an agreement.

**Study 2: Individual Interviews**

**Participants**

The participants who took part in the individual interviews were sub-sample of the participants from the focus groups who, through a ticked box on the focus group consent form, had indicated that they would be willing to take part in later individual interviews. As with the focus groups, participants were selected for the interviews based on their responses to a questionnaire containing measures that tapped into KC-related factors, such as self-regulation, community involvement, and engagement in extra-curricular activities (Elley-Brown et al., under review). However, in this study rather than estimate engagement based on responses to a few items on the questionnaire, cluster analysis of the questionnaire factors were used to capture student variation across self-reported behavioural engagement with, and value of, these factors (Elley-Brown et al., under review). Three clusters were identified: The first cluster consisted of students whose responses to the questionnaire were low on all KC-related factors. They were identified as ‘Low KC’. The second cluster contained those whose responses were high on all KC indicators (i.e., High KC), and the third cluster included those whose responses fell in the middle (Middle KC). For the sake of clarity and to achieve a more heterogeneous participant population, only participants who fell in the Low or High KC clusters were chosen.

From the focus groups, 48 of the 49 participants agreed to be contacted for interviews. After initially identifying the clusters in which the focus group participants
fell, candidates for the initial interviews were selected to reflect a variety of ethnicities and similar representation of males and females. Fourteen participants were contacted, and twelve of these people agreed to take part in the interviews. The characteristics of the interview participants are presented in Table 4 below. All but one were enrolled at the five participating schools. There was one participant from School 5 who was no longer in school at the time of the interview, but had applied for a travel and tourism course at a local Polytechnic. In the meantime, she was not engaged in any work or other activities. A sample of 12 adolescents (5 (41.7%) male; 7 (58.3%) female) took part in this study ($M_{\text{age}} = 15$ years, $SD = .47$; range 15-16 years). All participants were from Years 11 and 12.

### Table 4. Characteristics of Individual Interview Participants

<table>
<thead>
<tr>
<th>School</th>
<th>Decile</th>
<th>No. of Low KC participants</th>
<th>No. of High KC participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M*  F*  Ethnicity</td>
<td>M  F  Ethnicity</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>0  1  Pakeha</td>
<td>0  1  Pakeha</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>2  0  2 Pakeha</td>
<td>1  1  1 Indian 1 Pakeha</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>2  0  1 Chinese; 1 Pakeha</td>
<td>0  1  Indian</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>0  1  Pasifika</td>
<td>0  0  0</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0  0  0</td>
<td>0  2  2 Pasifika</td>
</tr>
</tbody>
</table>

* M = Male; F = Female

Two students from the High Engagement focus group in School 3 were in the Low KC cluster, and one student from the Low Engagement focus group at School 5 was in the High KC cluster. This likely reflects the different procedures used to assess engagement. Discussion of this is beyond the scope of this thesis.
**Interview procedure**

Participants were again contacted by telephone and informed about the interview and their rights as participants. If they consented to taking part a date, time, and location that were convenient for the participant was decided upon. Participant information sheets (PIS) and consent forms were once again provided (see Appendices E and F), and participants’ privacy and the confidentiality of the interview (as well as the limitations of this that were described in the ‘Focus Group’ section) were verbally reiterated.

Interviews lasted approximately one hour long, and were digitally voice-recorded and then transcribed verbatim with an attempt to preserve the flow and meaning of the conversation. Like the coding for the focus groups, themes were first reviewed by an independent ‘naïve’ reviewer to check that they made ‘sense’ (as discussed in the ‘peer review’ section). Reliability of themes identified within the data was then checked through blind coding of 10% of the interviews. If a disagreement in coding occurred, the particular extract was discussed and an agreement reached.

Participants were interviewed using a semi-structured format in which the goal was to explore participants’ past and current school engagement, future goals, how they interpreted the KCs, and what they thought about teaching and assessing the KCs (see Appendix B for the full interview protocol). Upon completion of the interview, each participant was given a $20 voucher to a local shopping mall and again entered into a draw to win one of three $150 vouchers to the same mall. The interviews were also analysed thematically according to the method discussed previously.

The next chapter presents the results of the thematic analysis of the focus group data, followed by a chapter with the results of the analysis of the interviews.
Chapter Four: Focus Group Results

This chapter presents the results of the thematic analysis of the data from the focus groups where adolescents discussed their views on and interpretations of the KCs. As discussed in the methods chapter, ten focus groups with 49 participants were conducted in five schools across various deciles.

The results in this chapter will be presented according to the themes of participants’ interpretations and experiences of each KC and their perceptions of how they learned these KCs. It was not always possible to determine the number of participants within each focus group whose discourse related to particular themes. Instead, the numbers discussed here include the number of focus groups where there was talk relating to the themes. Within the groups, usually only a few people would discuss a point in depth, while others would show agreement by nodding or minimal vocal indicators of agreement. Alternative perspectives were often vocalised by one person and then added to by others in the group.

There was variation in how much participants responded to and participated in discussions about particular topics within the focus groups. For instance, when topics came up that appeared to interest participants more, such as fashion, school rules, or relationships with peers and teachers, they talked more and hesitated less in responding. This sometimes led to talk that was off-topic, though it also seemed to reveal aspects of the KCs that were important to participants or demonstrated knowledge that they did not explicitly describe. It also resulted in the data being thinner than the data in the interviews, which may have been more easily focused with only one participant than in the groups where participants could talk together about what interested them. The KC of ‘Managing Self’ will be discussed first in the following section.
Managing Self

<table>
<thead>
<tr>
<th>Ministry of Education Definition(^{16})</th>
<th>Identified Themes</th>
</tr>
</thead>
</table>
| This competency is associated with self-motivation, a “can-do” attitude, and with students seeing themselves as capable learners. It is integral to self-assessment. Students who manage themselves are enterprising, resourceful, reliable, and resilient. They establish personal goals, make plans, manage projects, and set high standards. They have strategies for meeting challenges. They know when to lead, when to follow, and when and how to act independently. | ☐ Accomplishing Goals  
   a. Personal responsibility  
   b. Time management  
   ☐ Managing Wellbeing |

Participants in several focus groups talked about this KC as the most important, saying things such as, “managing yourself is everything”. They also frequently said they thought that achievement and success in life was “all up to you”. There were some contradictions with this, including being limited in success by contextual factors such as teachers they did not like or find interesting, although participants generally acknowledged having to take some personal responsibility for success and achievement. They interpreted this KC mainly as 1) accomplishing goals and 2) maintaining wellbeing. These themes are discussed below.

Accomplishing Goals

Much of participants’ talk about this KC was around accomplishing tasks such as homework assignments or, in the long-term, reaching goals of having a successful career. All focus groups had discussions where participants generally agreed that being able to “achieve your goals” was an important part of managing self. Much of their talk about how to achieve goals involved managing time and commitments, but they also talked about having a “positive attitude”, working hard, being motivated (often helped by friends, teachers, and their own ambition), and having “social skills” and being able to “relate to other people”. These last comments clearly illustrate the cross-over between

\(^{16}\) Quoted from the Ministry of Education (2007a)
this KC and ‘Relating to Others’, and also illustrates how participants saw this KC as both intra- and inter-personally enacted.

Participants in all focus groups talked about trying to achieve short- and long-term goals (“if you have a set goal you can...achieve”). This was often noted to involve academic achievement as part of the pathway to long-term career success, which participants almost always defined as university entrance followed by having a job they both enjoyed and which allowed for financial security. School achievement and career success were each talked about as involving persistence with unpleasant tasks for their long-term benefit, thus perhaps demonstrating some interconnectedness with the KC of ‘Thinking’ in that it involves a way of managing thoughts or learning to think in this way. The following extract is a good example of how participants talked about managing themselves as part of achieving goals,

Extract 1.

L For me it’s like learn to achieve goals you want to have in your life...even if the subject is not enjoyable you still have to learn it to achieve your goals.

Several participants noted how achieving academic success had been difficult for them (“I never managed to reach out to [high grades]”), thus also demonstrating a level of self-reflection. This was often attributed to “laziness” and needing to be “pushed”, often by parents, to complete tasks such as homework and hence, acknowledging a lack of ‘Managing Self’. All focus groups talked about the importance of friends for school engagement and peers were talked about as primarily positive motivators for achievement (“they can help to motivate you”), often through “friendly competition” for high marks. Some participants also later reflected on this in their talk about accomplishing tasks when interpreting ‘Managing Self’.

Participants in all focus groups also talked about needing to be personally responsible for managing their time and for achieving their goals. However, when it came to discussing both their reasons for not liking school and reasons for not succeeding at tasks, participants’ attributed a large part of their difficulty with motivation to teachers, reflecting aspects of both school engagement and the KC of ‘Managing Self’. For example, participants said things such as, “a teacher can really put you off a subject” and “if [it’s] a mean teacher I can’t be bothered”. On the other hand, when they had positive
relationships with teachers, participants also talked of wanting to make them “proud” of them through achievement, and also spoke of being more willing to put in hard work and effort to achieve good results. Participants identified both teachers’ personal characteristics and teaching styles to affect their motivation, as shown in the extract below,

Extract 2

G They have to be enthusiastic about what they’re teaching you...why would I want to do that [if] you’re not making it sound fun?
D And they have to make sure that they explain stuff right...
G I find they have to be tolerant as well...if they do that give up on you kind of thing you don’t get anywhere

Much of the talk in this theme occurred as participants reflected on how they had not taken personal responsibility for their work, instead placing blame on teachers for not motivating or even de-motivating them through personal characteristics they did not like or teaching they did not perceive to be fun or relevant to their personal goals. Thus, through the process of reflecting on attributions for success and failure, participants seemed to find balance in understanding low marks as due to both their own efforts and teachers.

They also talked about achieving success through particular mind-sets (e.g., having the “right attitude” and “commitment” to goals), as well as personal characteristics (e.g., being “hard working”). Thus, while participants spent a lot of time externalising attributions for failure to succeed, they also acknowledged their own responsibility for their actions. The following extract illustrates participants’ talk about both the externalisation of failure and the ultimate responsibility of the student,

Extract 3

M This year I hated going to my English class because I don’t like my teacher and she just gave me ‘Not Achieved’ the whole year so I just gave up going to her class...It’s got a lot to do with the effort we put in. Like I can’t blame everything on the teachers because I mean at the end of the day it’s me who has to do the work and everything

In order to accomplish their goals, participants in seven focus groups talked about needing to “organise yourself” and “time management” as being the primary aspects of
‘Managing Self’ that were taught in schools, most often through diaries or timetables. The following extract is a good example of how participants talked about this,

Extract 4

S And managing self – like our maths teacher like when exams came up would give us like this little timetable like for a whole week. It was kind of like managing your time and how you’re going to revise. That was pretty good and he kind of told us like how to fill it out

The importance of having a “balance” in their schedules between academic and other commitments was also talked about in five focus groups when discussing this KC, and examples were given of balancing time between academic, social, and extra-curricular activities. Deciding on priorities for time management was also talked about, although only very briefly and in only some of the focus groups. Academic achievement was often prioritised in these discussions, for example, “you need to get [assignments] done no matter what”. This seemed to fit with the above-noted focus on achieving goals. The following extract demonstrates participants’ talk about “balance” in their schedules,

Extract 5

S You have to set your priorities straight so if you have to do something else well you have to do that, but you also have to do what you have to do...to hand in tomorrow for example

J It’s like managing the social life and then also having like school and work and finding the balance in between everything

This focus on the practicality of managing time to cope with various commitments and have “balance” leads well into the next theme, in which participants talked about the importance of ‘Managing Self’ to maintain wellbeing.

Managing Wellbeing

An important part of “balance” in ‘Managing Self’ for participants was that in addition to managing their time, they also talked about managing their wellbeing. Participants in all focus groups talked about the importance of managing their attitudes, thoughts, and behaviours, often (as discussed above) in terms of having a positive attitude and doing “what has to be done” and having a “balance” in life to meet personal needs as well as achievement goals. This is related to the KC of ‘Thinking’ and is
discussed more in the section on that KC, but it was also talked about by participants as part of ‘Managing Self’.

Most often cited by participants was balancing academic commitments with socialising or extra-curricular activities. However, only a few participants in some focus groups went on to explicitly talk about the reasons for maintaining “balance”, which mainly included being able to “do your best”. The following extract demonstrates how participants conceptualised this aspect of the KC as being important for their wellbeing, and also demonstrates the relational nature of this KC, in that the KCs are important both personally and within relationships.

Extract 6

A I think managing yourself is really important...It’s like the same for a doctor. If you can’t take care of your own health you can’t take care of other people’s health

Thus, this participant seemed to think of managing one’s self as almost a basic competency, both for individuals themselves and within their relationships.

This KC was often talked about as involving “instinctive” and “natural” abilities or as being part of one’s personal characteristics or attributes. Participants talked about ‘Managing Self’ as being driven by motivation to achieve, which they saw as part of “who you are”. The following extract is an example of how participants talked about the KC as a personality trait, and how they had difficulty conceptualising how it could be taught.

Extract 7

S I think managing yourself is something you do, it’s not something that can be taught...that’s completely down to yourself...how much you want to do it

However parents were often talked about as role models or as having expectations of their children that influenced participants’ attitudes and behaviours, especially in relation to school and longer-term career success and wellbeing. Particularly in the focus groups at one of the Decile 1 schools, time was spent talking about how parents had
expectations that participants would achieve and have more successful careers than they did.

Extract 8

T My parents they seem like when I was younger they always wanted me to go to school and stuff, and I think by them pushing me it made myself want to do it more...We’re not like bad it’s just that we could’ve had more I suppose and we – my mum and dad always emphasise that if I go to school I can get what we didn’t have and I can make sure that my family has it

Thus, while participants viewed this aspect of the KC primarily as a personal characteristic, they also acknowledged the developmental influence of parents and families. This often implicitly involved socio-economic status and community factors, as illustrated in the extract above, whereby participants talked about parents wanting their children to succeed in school so that they could “have more” and “do better” economically.

In summary, participants’ talk about ‘Managing Self’ seemed to match most of the Ministry of Education definition (MoE, 2007a). Hipkins suggests that, “Perhaps the most compelling reason to value this key competency is that it is highly correlated with learning success in school and in tertiary study” (Hipkins, 2006, p. 34). This is certainly highlighted in participants’ focus on achievement and meeting academic goals. Importantly, while participants did externalise attributions for failure, often blaming teachers, they also seemed able to reflect on how they might have failed to enact this KC at times, and the impact that had on their academic achievement. This is illustrative of the important link between the KCs, engagement in learning, and academic achievement.

One important aspect that seems to have been missed out on in participants talk around this KC is in relation to managing themselves in their relationships with others, though this was lightly touched on when participants talked about the reasons for managing themselves and when they talked about the KC of ‘Relating to Others’. Thus, it seems important to consider whether or not students need to be aware of the interconnected nature of the KCs. Hipkins (2006) notes that this KC does not occur in isolation from others, although participants did not talk much about this. For example, in Extract 3, where M talks about the effect her teacher had on her engagement and motivation, this involves her relationship with the teacher and how they interacted,
though M did not identify this aspect of the situation. Thus, while they might not have explicitly talked about in their interpretations of the KCs or been consciously aware of it, they did elude to some socioemotional knowledge as well as the interconnected nature of the KCs, including the following KC of ‘Relating to Others’.

### Relating to Others

<table>
<thead>
<tr>
<th>Ministry of Education Definition</th>
<th>Identified Themes</th>
</tr>
</thead>
</table>
| Relating to others is about interacting effectively with a diverse range of people in a variety of contexts. This competency includes the ability to listen actively, recognise different points of view, negotiate, and share ideas. Students who relate well to others are open to new learning and able to take different roles in different situations. They are aware of how their words and actions affect others. They know when it is appropriate to compete and when it is appropriate to cooperate. By working effectively together, they can come up with new approaches, ideas, and ways of thinking. | ❖ Getting Along  
- a. Co-operation and communication  
- b. Social norms  
- c. Tolerance  
❖ Problem-solving  
- a. Peer support |

Participants had some difficulty conceptualising this KC, and often seemed to have to think about it more than the previous KC before responding. They talked about it in various ways including: 1) Getting along, 2) communication, and 3) problem-solving, and these were discussed in relation to both social and professional settings.

### Getting Along

Participants in all focus groups talked about the importance of being able to “get on” with others. There were a number of dimensions to this, including work, school, and social situations. A large part of participants’ talk was about work situations in terms of “how you communicate and engage with others”, “being able to co-operate with others”, and having “good people skills”. The first comment illustrates the connection to the KC of ‘Using Language, Symbols, and Texts’. The following extract is a good example of all of these points,

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17 Quoted from the Ministry of Education (2007a)
Presumably, co-operating would also involve a degree of ‘Thinking’ as it involves openness to alternative perspectives. It would also likely involve ‘Managing Self’ as there are behavioural and attitudinal elements to co-operating, which participants identified as being part of ‘Managing Self’ as discussed in the previous section on that KC. The following extract illustrates how participants talked about getting along and co-operating in work situations, and also alludes to some of the cross-over with other KCs, including ‘Thinking’, ‘Managing Self’, and perhaps “Using Language, Symbols, and Texts’ in terms of negotiating relationships.

Extract 10
D You’ve got to relate...to make the whole thing come together. If you’re just like “no, I’m just sticking to my opinion and that’s it” it’s just not going to work. So I think you have to give and take

Socially, a large part of getting along for participants in six of the focus groups seemed to involve learning norms and “fitting in with a specific group of people”. This was often talked about initially in the context of barriers to school engagement, though it was also later brought up again by some participants in their talk about ‘Relating to Others’. Fashion seemed particularly noticed as a way to “fit in” and get along with others, perhaps because it is a tangible, observable feature whereas more abstract aspects of relating to others, such as values and personalities may be more difficult to conceptualise and talk about. Additionally, the most talk about these aspects (e.g., fashion and social norms) occurred at the only single-sex, all-girls school involved, which was also the school in the highest decile and thus had the most financial resources.

Extract 11
V Some groups they won’t let you – they kind of won’t accept you if you don’t look a certain way. It’s so annoying.
Interestingly, participants in six of the focus groups also talked about how it was important for them to be tolerant and appreciative of difference. “Fitting in” to social norms and tolerance of difference were both talked about as being important to participants, representing a contradiction in values. The following extract illustrates the expressed value of tolerance and also alludes to some of the above-mentioned difficulties with social norms.

Extract 12

M At the school that I was at it was like everybody was rich and there was me who’s Islander...and then I come here and there’s...really poor people and there’s really rich people and then there’s people in between and heaps of different cultures...people know how to get along with each other way better. They know how to sort their problems out

While group work in classes was identified as developing the ability to cooperate, participants also talked about learning this KC through school environments that had diverse student populations, though they also thought it “develops naturally”. Thus, participants seemed to conceptualise learning this KC through various experiences, each of which might teach different aspects of getting along. For instance, the following extract demonstrates how participants talked about group work in classes teaching how to relate to others.

Extract 13

D If you’re put in groups – teaches you like how to get on with other people...work with other people even if you don’t necessarily get on with them

The next extract again demonstrates the aspect of tolerance in getting along, which applied across work and social contexts. They also spoke of it being learnt mainly from socially and culturally rich and diverse school environment.

Extract 14

S Our school is full of different cultures and everyone’s got different beliefs, you know, and attitudes towards things and you learn to, you know, get a different perspective and not judge people
And finally, this last extract touches on the ‘internal’ aspects of learning how to get along. In other words, participants talked about some people having more or less difficulty with this KC, and identified learning it, perhaps through self-reflection, in various social contexts.

Extract 15

W I reckon some of these are mostly self-learnt. Because relating to others is...like making friends. How you make friends – the schools don’t exactly teach you. You learn by yourself.

The following theme involves participants’ conceptualisation of this KC as involving problem-solving. There was cross-over of coding this with the theme of ‘getting along’ as problem-solving was talked about as an important part of getting along with others. This further illustrates the multi-dimensional nature of the KCs.

**Problem-solving**

While this was explicitly talked about separately from the KCs, participants also commented on various types of problem-solving in their discussions about the KCs of ‘Relating to Others’ and ‘Thinking’. Participants’ ideas about the cognitive nature of problem-solving will be described in the section on the ‘Thinking’ KC. Being able to solve problems with peers was talked about as an important part of being at school in eight focus groups, and this was often talked about again in relation to the KC of ‘Relating to Others’, particularly in relation to potential future work situations. Gossip and bullying were consistently identified in all focus groups’ talk about school engagement factors as the main difficulties encountered in school. Participants talked about dealing with this mostly by ignoring it and sometimes by talking to others, including deans, teachers, and peers. Peer support in problem-solving was identified as important for many participants, though this was often qualified with the necessity of being able to trust those peers who participants relied on for support. Thus, while participants were noticing how friends supported them, they were also implicitly talking about the values and strategies for problem-solving that were important and useful to them.
Commonly identified values of trust and being non-judgemental can be seen from this extract, as well as the strategy of talking to others in order to both process problems and gain peer support. Interestingly, participants spoke of dealing with interpersonal difficulties such as bullying or gossip mainly by “ignoring it” or “deal with it on your own”. So while participants might seek emotional support from peers, they seemed to not engage in behavioural strategies for interpersonal problem-solving and also seemed to see self-reliance as a main strategy for problem-solving.

In summary, much of how participants’ conceptualised ‘Relating to Others’ involved KCs of ‘Managing Self’, ‘Thinking’, and ‘Using Language, Symbols, and Texts’ in terms of communicating, negotiating relationships, and co-operating with others. Additionally, participants talked about it in social contexts as “social skills”, learning norms to “fit in”, and being able to “communicate”. Here again can be detected the interconnection of the three other KCs mentioned above. Fashion and social norms are forms of communication, also involving a particular sort of language and symbolism as representation of social status, beliefs, and values, though this was not identified by the participants. Lastly, participants also talked about ‘Relating to Others’ in terms of relying on peer support for problem-solving, which further involves communication and ‘Using Language, Symbols, and Texts’ and ‘Thinking’. However, as discussed, they did not often identify actually engaging in interpersonal problem-solving, mostly preferring to “deal with it” themselves. Through this theme, a large emphasis on trust within peer relationships was identified as an important part of relying on friends to help with problem-solving.

Participants’ talk fit well with much of the Ministry of Education’s goals for the KC (MoE, 2007a), in terms of relating to diverse groups of people and being able to co-operate effectively with others. However, participants did not always link the knowledge they demonstrated through other topics directly to the KCs. This suggests that they may not have experience thinking about or reflecting on their knowledge about ‘Relating to
Others’ at a metacognitive level. For example, in their talk about the KC of ‘Managing Self’, participants identified competition with friends as a motivating factor for academic achievement. Thus, even though it was not discussed in their talk about ‘Relating to Others’, participants alluded to knowing how to compete effectively, which is part of the description of this KC.

Hipkins (2006) raises the question of whether this KC should be explicitly taught or implicitly taught through learning processes. Participants did not seem to notice much teaching of the KC in the classroom apart from implicit teaching through group work. This raises interesting questions about possibilities for more socioemotionally focused learning or learning that could be embedded within the school system. However, they did note that the school provided a good environment for learning to relate to others. Further exploration on the effectiveness on more explicit teaching of this KC would be useful.

The following section discusses the results of the thematic analysis of participants’ talk about the KC of ‘Participating and Contributing’.

**Participating and Contributing**

<table>
<thead>
<tr>
<th>Ministry of Education Definition¹⁸</th>
<th>Identified Themes</th>
</tr>
</thead>
</table>
| This competency is about being actively involved in communities. Communities include family, whānau, and school and those based, for example, on a common interest or culture. They may be drawn together for purposes such as learning, work, celebration, or recreation. They may be local, national, or global. This competency includes a capacity to contribute appropriately as a group member, to make connections with others, and to create opportunities for others in the group. Students who participate and contribute in communities have a sense of belonging and the confidence to participate within new contexts. They understand the importance of balancing rights, roles, and responsibilities and of contributing to the quality and sustainability of social, cultural, physical, and economic environments. | ❖ School Activities  
   a. Classroom  
   b. Extra-curricular activities  
   ❖ Helping Others |

¹⁸ Quoted from the Ministry of Education (2007a)
School Activities

Talk around this KC produced less response from participants than the previously-discussed KCs, perhaps because they were not used to elaborating on their ideas or were not aware of various ways of participating or contributing. Participants in all focus groups mainly talked about this KC in terms of taking part in school activities, including house competitions\textsuperscript{19}, sports, and classroom discussions. There was often consensus amongst participants that schools taught students to take part in classroom discussions, and that participating in school activities was encouraged by the schools. The following extract provides a good example of how participants interpreted this KC,

Extract 17

M They try and like get you involved in things like...Just like discussions or in a sports team or kind of like when you get involved with like your house and stuff.

In talk about this KC, several focus groups talked about noticing the incorporation of KCs in Physical Education (HPE). The following extract illustrates this well,

Extract 18

A Yeah, I find that most of these things are incorporated in PE. More than other subjects...
S Proper use of language.
A Language that’s very important...That one is kind of like communication
R Yeah communication would be relating to others as well. Like how you communicate and engage with others.
A PE kind of incorporates all of it

This extract demonstrates the interconnected nature of the KCs that participants noticed as occurring in PE. Its multi-faceted nature of involving many areas and ways of functioning may have made it easier for participants to observe the KCs as occurring in tandem in this context.

While participants noted that participation in activities planned by the schools was encouraged, participants in two schools noted that initiatives taken by students that went against the schools’ decisions (e.g., petitions) were met with consequences for student

\textsuperscript{19} In many New Zealand schools, students in year groups are divided into “houses” that sometimes compete against each other.
leaders. Other students then heard about this and apparently viewed the consequences as a deterrent for future dissent. The following extract is a typical example of how these issues were discussed,

Extract 19

M  The DP’s [Deputy Principals] – you can’t speak to them...because they have say, you know, you can’t do this. Like even my older sister was going to do a shoe petition when she was here and she was Deputy Head Girl and they said that if you do it you won’t be Deputy Head Girl any more. And so she was like “well obviously I can’t do it because they’ll take my badge away”. So she couldn’t do it. That’s really stink. You can’t just say because she’s standing up for what the students believe in which is what she got her badge for and then say that.

Thus, participants seemed to have clear ideas about ‘acceptable’ ways of participating in their schools, raising questions about schools’ responsibility to teach students to participate in and contribute to society in various ways, including finding effective ways to voice alternative social opinions. The following section includes some talk on taking responsibility within social settings by helping others.

Helping Others

There was some talk about “helping others” or “pulling your weight” in four focus groups, either in the future through work or through peer interactions. Much of this occurred in relation to group work, though some was about helping peers and problem-solving. The following extract is a good example of how participants talked about “pulling your weight” in group activities,

Extract 20

S  In a team...or a group we have to work to together, contribute. Each person has to participate and contribute that part for the team to go – work properly.

The following extract is one of the few where participants talked about participating within and contributing to the community. This was an exception and most focus groups did not talk about this. Additionally, within the focus groups where talk about this occurred, it was isolated and not expanded upon by other participants. The
talk in the following extract also notes the involvement of ‘Relating to Others’, something that was again not identified or discussed much in the focus groups.

Extract 21
A We all exist in the community so we kind of do – which means that kind of participating and contributing
I Which is like a way of relating I guess

In summary, participants’ talk about this KC was limited and they were not able to expand much on it or offer in-depth understanding of ways it could be done or other skills that might be involved, such as ‘Relating to Others’ or ‘Managing Self’. Although participants were able to offer talk on participating in school activities and contributing to group work, most of them did not seem to have knowledge of how this could be extended to other situations, even with prompting to think about ‘Participating and Contributing’ in the community. It seems unlikely that they are ignorant of this; a more likely explanation is that it is not within their immediate frame of reference and thus they might have had more difficulty accessing this knowledge. For instance, many of them might not be inclined to or regularly take part in more socially proactive activities, such as volunteering. If it is not part of their regular discourse, it is unsurprising that they would have difficulty recalling this information.

Fredricks and colleagues’ (2004) review of school engagement identifies various levels and ways of participating in school activities. Participants in these focus groups discussed both passive and more active ways of participating, ranging from answering teachers’ questions or taking part in extra-curricular activities for which there might be little incentive. It may also be that the students who participated in the focus group may have been biased as they were willing to participate in the focus groups, though they did not seem to be involved in activities outside of school.

Hipkins (2006) talks about this KC as giving students opportunities to enact all of the other KCs. This raises the question of whether or not students are being given the opportunities to do this within the school setting and the community. Are they given the freedom to ‘play’ with knowledge to produce and contribute to innovation? Or are the various ways of participating and contributing (for instance, on various social levels, cognitively, verbally, technologically) given space within classrooms and schools?
Hipkins (2006) talks about learning as “authentic”, which involves learning experiences that have personal meaning and relevance to students. From this it follows that schools must provide a forum for students to experiment with various ways of participating and contributing if they are to have the security to do so beyond their school years. The topic of learning and assimilating and using knowledge leads naturally into the discussion of the analysis of data around the next KC of ‘Thinking’.

**Thinking**

<table>
<thead>
<tr>
<th>Ministry of Education Definition&lt;sup&gt;20&lt;/sup&gt;</th>
<th>Identified Themes</th>
</tr>
</thead>
</table>
| Thinking is about using creative, critical, and metacognitive processes to make sense of information, experiences, and ideas. These processes can be applied to purposes such as developing understanding, making decisions, shaping actions, or constructing knowledge. Intellectual curiosity is at the heart of this competency. Students who are competent thinkers and problem-solvers actively seek, use, and create knowledge. They reflect on their own learning, draw on personal knowledge and intuitions, ask questions, and challenge the basis of assumptions and perceptions. | ❖ Problem-solving                                    
❖ Ways of Thinking                                    
❖ Managing Thoughts                                    
    a. Influencing emotions and behaviour                |

Participants in the focus groups talked about thinking in a variety of ways, including 1) problem-solving, 2) ways of thinking, and 3) managing thoughts. They seemed to struggle to expand on their conceptualisations, and often initially had difficulty offering more than one way of understanding the KC without further probing.

**Problem-solving**

Problem-solving in talk about this KC was differentiated from problem-solving within relationships, as discussed in the section on the KC of ‘Relating to Others’. Participants in five focus groups talked about problem-solving attitudes and behaviours as part of ‘Thinking’. This was usually discussed initially in relation to problems in school work, but was then often connected back to previous discussions around problem-

<sup>20</sup> Quoted from the Ministry of Education (2007a)
solving “in life”. The following extract gives an example of how participants talked generally about thinking as problem-solving and also illustrates how they could talk generally but did not initially expand upon or give more details in their interpretation of this.

Extract 22

S   Thinking is kind of related to like how you figure out stuff...like problems in your work or just like everything really. Like problems in life or whatever.

Though participants talked about learning this through informal situations in which they had to problem-solve, for instance in relationships (involving both ‘Relating to Others’ and ‘Thinking’), they also identified learning problem-solving strategies in classrooms. However, they had difficulty conceptualising this on a broader level. For example, though participants talked about learning to problem-solve in different ways for different subjects (e.g., solving maths problems versus solving questions in literature classes), they did not link this to learning problem-solving strategies that they could apply to work or other situations.

Ways of Thinking

This theme refers to higher-order thinking, such as creative, critical, logical, and innovative thinking. Participants in six focus groups talked about this and how different ways of thinking were taught in different classes. As discussed in the previous section on ‘Participating and Contributing’, innovative thinking was not heavily emphasised by participants, and in fact was only lightly touched on in one focus group. Most participants suggested that different classes taught specific ways of thinking, for instance, “maths is just like remembering”. However, some were able to see how thinking could be applied in different ways within subjects, as the following extract shows,

Extract 23

V   But then for Maths especially I think in year nine and year ten it was kind of more logical but like this year you kind of have to be sort of creative as well. ‘Cause some of the questions like you have to look at them in different ways like to try and figure them out.
This indicates that as students progress through school some critical thinking skills are increasingly taught and encouraged. Extending critical thinking skills and the disposition to think critically is a key feature of the KCs (Hipkins, 2006), and would also indicate increased competency in this area. An important part of critical thinking could also be conceptualised as self-reflection, which was indicated in the following section on ‘managing thoughts’.

**Managing Thoughts**

Participants talked about being able to manage their thoughts as part of problem-solving and in order to cognitively and emotionally manage themselves. It seemed important to participants to talk about having “positive thoughts” and “the right attitude”, as they spent more time and seemed to become more engaged when talking about this. Being able to reflect on mistakes they had made was also tied into this as participants talked about “learning from mistakes”. This was linked with how participants talked about not having managed themselves in the past, as discussed in the section on ‘Managing Self’. This conceptualisation of the KC was discussed in seven focus groups, and was often talked about in terms of how not managing thoughts had negatively affected them. The following extract is a good example of how participants talked about this,

**Extract 24**

H  Thinking I think is like...if you get in trouble you’re going to the DP the first thing the DP says to you is “what the hell were you thinking” or “what was going through your mind when you did that” or something like that and it’s like ‘thinking’ well I don’t seem to do a lot of it.

Participants’ talk about this aspect of ‘Thinking’ indicated a degree of self-reflection and metacognition, as they appeared to have learned from past experiences. Whether or not they apply this learning to future experiences could be an indicator of ‘competency’ in this area.

In summary, participants conceptualised the KC of ‘Thinking’ as involving problem-solving, managing their thoughts in ways that affect their attitudes and behaviours, and more academically-oriented ways of higher-order thinking. Their views on problem-solving and managing their thoughts seemed to involve a degree of
metacognition, which is also classified as higher-order thinking and which both Hipkins (2006) and the MoE (2007a) have identified as an important part of this KC. This has also been recognised as an important part of well-being (Fonagy et al., 2002). It remains unclear if students think they are able to use metacognition and the knowledge they have discussed “in the moment” to problem-solve and manage their thoughts and the strategies they might use to do this. Further exploration around this would be useful, both for general knowledge and perhaps to improve teaching of this KC within schools and communities.

Hipkins (2006) suggests that the KCs include use of all of the other KCs, and participants seemed to imply some involvement of other KCs in their talk about ‘Thinking’, such as ‘Managing Self’, ‘Relating to Others’, and ‘Using Language, Symbols, and Texts’. This was especially apparent in discussions around problem-solving and managing thoughts. However, this was not made explicit by participants, which raises questions including, 1) whether or not they should be more aware of how these KCs are interconnected, 2) whether their knowledge simply might not have been verbalised at the time, and 3) if this knowledge and awareness might develop over time and with experience.

The last KC to be discussed in this chapter is ‘Using Language, Symbols, and Texts’. The analysis of data on this KC is presented below.
Using Language, Symbols, and Texts

<table>
<thead>
<tr>
<th>Ministry of Education Definition</th>
<th>Identified Themes</th>
</tr>
</thead>
</table>
| Using language, symbols, and texts is about working with and making meaning of the codes in which knowledge is expressed. Languages and symbols are systems for representing and communicating information, experiences, and ideas. People use languages and symbols to produce texts of all kinds: written, oral/aural, and visual; informative and imaginative; informal and formal; mathematical, scientific, and technological. Students who are competent users of language, symbols, and texts can interpret and use words, number, images, movement, metaphor, and technologies in a range of contexts. They recognise how choices of language, symbol, or text affect people’s understanding and the ways in which they respond to communications. They confidently use ICT (including, where appropriate, assistive technologies) to access and provide information and to communicate with others. | ❖ Understanding and Communicating Meaning  
❖ Technology |

This KC appeared to be the least well-understood by participants, who tended to say things such as, “it reminds me of English” or “I don’t get that one”. Thus the data on this KC was sparse. However, upon further probing, they were able to offer interpretations of, 1) understanding and communicating meaning, and 2) as involving technology or different modalities. These themes are discussed below.

Understanding and Communicating Meaning

Participants in seven focus groups talked about this KC as communicating meaning, while participants in five of those groups also talked about it involving understanding others’ communication. There was very little talk about connecting this theme to other KCs, despite clear links in participants’ discourse to ‘Relating to Others’ and ‘Thinking’. The following extract is a good example of how participants tended to talk about communicating meaning, with implicit links to ‘Relating to Others’,

Extract 25

J     Being understood as well like being able to voice your opinion and be able to tell whoever you talk to and make sure they understand you.

21 Quoted from the Ministry of Education (2007a)
This extract could also link to ‘Thinking’ in terms of using theory of mind (Baron-Cohen, 1991; Baron-Cohen, Tager-Flusberg, & Cohen, 2000) to be able to see from others’ points of view in order to “make sure they understand”. The following extract further illustrates this link to ‘Thinking’, as well as demonstrating how participants talked about understanding others’ communication. This participant had talked about learning this competency when she was much younger, which several other participants also remembered. However, she goes on to talk about her current learning, which seems to indicate perhaps a more sophisticated or higher level of interpretation.

Extract 26

G You need to be able to interpret things and read them right. Which – you don’t need that now cause you’ve learnt it when you were really little. But like interpreting stuff and things like that...’Cause we look at pictures and it’s like “what does this really mean”? But like that can help when – even just in a conversation it teaches you to like interpret things.

The following section demonstrates how some participants also talked about how this KC could be ‘done’ through technology or various modalities.

Technology

Only a few participants in two focus groups talked about using technology or different modalities to communicate. There were implicit links to the theme of ‘helping others’ in the KC of ‘Participating and Contributing’, though this was not noticed by participants. The following is an example of how participants talked about using technology as part of this KC,

Extract 27

S In all classes we kind of go into the computer rooms sometimes and do some activities on the computer and they try to put in the internet together with – like they’re trying to use wiki space in exams. They do everything on that and PacNet. We’ve got our own little college...forum kind of thing

In summary, participants seemed to have basic understanding that this KC involves active processes of understanding others’ and communicating one’s own meaning, and that this could be done using different modalities. However, as Hipkins states, “This competency is about understanding and knowing how our perceptions of the world are
constructed through language, and how we use language in different ways to do different things. It is important that it is not thought of as just the “literacy and numeracy” competency” (Hipkins, 2006, p. 22). Participants’ talk about communicating and interpreting meaning from language hinted at this, though understanding that language is how we construct perceptions and understandings of the world was not well-demonstrated. They also did not display knowledge of this KC as involving other forms of communication, such as drama, or fashion, or television.

The active use of language in constructing perceptions has clear links to ‘Participating and Contributing’ and ‘Relating to Others’, as language is socially created and socially ‘done’. It also has links to ‘Thinking’, in terms of shaping the way we understand the world us. Hipkins (2006) argues for the importance of a meta-level understanding of these KCs in order to understand how our use of them works within the world. For instance, understanding how communication shapes understanding and others’ perceptions. While participants demonstrated some level of this (“make sure they understand you”), it is not clear if participants fully understood or were able to articulate how they might do this.

**Summary of Results**

There has been little work done on understanding youth perspectives on the KCs. This chapter has presented the results of the thematic analyses of the focus groups conducted in five schools in the Auckland region with 49 participants aged 14-16 years old, at a time when the KCs were beginning to be implemented in New Zealand schools.

Overall, the results suggest that participants were able to interpret the KCs in a variety of ways which were all in line with many of the Ministry of Education’s goals for the KCs (Hipkins, 2006; MoE, 2007b). However, there were also some clear gaps in their interpretations. The overarching themes that were apparent from the analysis of participants’ interpretations are discussed below.
“Managing yourself is everything”

The discussion in several of the focus groups reflected a perspective that ‘Managing Self’ lay at the heart of many of the KCs, and participants also talked about it as the most important KC. Interestingly, this is different from Hipkins’ (2006) assertion that ‘Thinking’ is central to the KCs. It was noticeable that participants failed to recognise the cognitive elements involved in the various aspects of ‘Managing Self’, such as managing negative thinking patterns or emotions. However, they did identify this as part of ‘Thinking’. This suggests that, while they have this knowledge related to thinking, the impact on their behaviour, particularly related to wellbeing, might not be clear to them.

Problem-solving

Participants talked about and demonstrated different aspects of problem-solving knowledge in relation to the KCs of ‘Relating to Others’ and ‘Thinking’. Particularly relevant to the socioemotional focus of the current research, difficulties with peers were identified as one of the main barriers to enjoying school by participants, while friendships were talked about as one of the main aspects of school that they enjoyed. In line with previous research, this demonstrates the importance of friendships for school engagement (Huebner & McCullough, 2001). In terms of ‘Relating to Others’ participants talked about how relying on friendships for emotional support was important for them when difficulties were encountered. This demonstrates an important link between the development of KCs and school engagement. However, they did not identify using interpersonal skills to solve peer problems, thus demonstrating a lack of awareness of an important part of ‘Relating to Others’. Rather, it seemed that participants preferred to behaviourally “ignore” problems with peers, and “deal with it” themselves. Additionally, ‘managing thoughts’ was talked about as part of ‘Thinking’, and this was implied in participants’ talk about problem-solving in terms of “positive thinking” and having a “good attitude”. These methods suggest that participants engage in limited ways of ‘Managing Self’, and ‘Thinking’ for problem-solving emotional and interpersonal difficulties. While ignoring problems and trying to think positively may have short-term effectiveness for reducing distress associated with problems, they do not always have long-term benefits for many situations (Harris, 2008), and sometimes can contribute to negative socioemotional outcomes (Shenk & Fruzzetti, 2011). Thus, these
are important areas to consider in future planning for aspects of the KCs to develop in schools.

**Metacognition**

The important metacognitive aspects for both learning and enacting the KCs has been discussed and identified in other texts (for example, see Hipkins, 2006). Some participants demonstrated a propensity to reflect on their own competencies when they talked about liking being able to think about the KCs, how they applied to them on a personal level, and what learning about the KCs meant to them in their personal and professional lives. They also talked about valuing the KCs and thinking that teaching them should be done more explicitly within the school context. This reinforces the idea that students can, and might even enjoy, reflecting on their own capacities and processes. It also suggests that they would welcome more explicit learning of the KCs, though this would likely be qualified by how relevant students see the KCs to their own lives.

Participants indicated a level of self-reflective and metacognitive ability in their talk across several of the KCs. Firstly, they spoke of learning from their mistakes in order to better manage themselves academically. Additionally, in learning to “get along” with others, their talk about changing themselves to “fit in” suggests a level of reflection. Lastly, they also talked about managing their thoughts, which requires metacognition and some degree of self-reflection.

**Key Competency Interconnectedness**

While KC interconnectedness was rarely commented upon, those who did notice it in their talk seemed to find importance in the interconnected nature of the KCs as they tended to repeat this observation several times throughout the discussions. The interconnected nature of the KCs was more often implicit in how participants’ noted similarities across the KCs. A clear example is Extract 9, where the participants contributed to developing an integrated conceptualisation of how the KCs of ‘Relating to Others’ and ‘Using Language, Symbols, and Texts’ might fit together.

As it appeared to be only a small number of people who contributed to the discussion around this theme, it leads well into the next section, which considers what was missing from participants’ expressed understanding of the KCs.
What Was Missing?

Perhaps the most common theme of what was missing from participants’ talk about the KCs was a socioemotional interpretation of the competencies. While participants were able to verbalise the practical aspects of the KCs with a relative degree of clarity and depth, they struggled to describe some of the intra- and interpersonal aspects of most of the KCs, often despite having noticed many of these aspects in talk about other issues such as problem-solving or school engagement. For example, though they talked about being able to “get on” with others they struggled to describe how this might be done or what skills might be involved.

The implications of this might be seen in participants’ lack of talk about ‘Participating and Contributing’ as applying to the broader community context. This could signify a lack of understanding about ‘Relating to Others’ within the broader community. It could also indicate a lack of social value of community work. As a key goal and motivator for establishing the KCs was to develop citizens who participate in and contribute to the economy and the community, this is an important area to acknowledge and explore further.

Though participants did demonstrate a metacognitive capacity through their talk about reflecting on the KCs, learning from their mistakes, and self-development, the lack of focus on socioemotional aspects of the KCs indicates a lack of familiarity with these issues. It also perhaps suggests a lack of practice in metacognitively reflecting on these competencies for themselves. It seems probable that metacognitive skills and critical thinking skills are strongly linked. Alongside limited metacognitive skills, critical thinking skills and knowledge were also not discussed in-depth by participants. Thus, fostering these for students through ‘authentic learning’ scenarios would be highly recommended, though this likely requires professional development to implement into school systems that are traditionally more classroom-bound and achievement-focused.

Learning the Key Competencies

Much of the literature within New Zealand is not so much on what the KCs are, but rather on how they might be taught in the classroom and assessed (Hipkins, 2007; Hipkins et al., 2005; MoE, 2010). Participants noticed PE to be one class where the KCs all came into effect in their learning. However, they also suggested that the KCs are a
mixture of both ‘teachable’ and ‘unteachable’ competencies. For instance, they saw ‘Relating to Others’ as involving both skills that could be taught (e.g., problem-solving skills) and aspects of personality traits that they did not think could be taught (e.g., having “social skills”). While both literature and clinical practice suggest that social skills can be taught (Sim et al., 2006), the participants’ experiences within school do not seem to include much noticeable teaching of or talk about social skills or emotions. Additionally, the view that some aspects of the KCs are not teachable seems to reflect a lack of awareness of metacognition and the ability to reflect on one’s behaviours and then to change them. This is a very different perspective on learning than that which is promoted through the KCs and the Ministry of Education. It seems possible that, because the more socioemotional aspects of the KCs do not appear to be explicitly discussed in the participants’ schools that they are not viewed as learnable in the same way that more structured topics are.

In this chapter, participants’ views on the KCs were explored in the context of focus groups. While participants were able to interpret the KCs in a wide variety of ways that largely fit with the intended goals of the KCs, there were also some noticeable gaps in their understanding. Individual interviews were conducted with twelve of those participants six months after the focus groups to further explore their understanding of the KCs and to see if they had noticed any perceptible teaching of the KCs since the focus groups. The following chapter presents the results of thematic analysis of interviews with those participants.
Chapter Five: Interview Results

This chapter presents the results of the thematic analysis of participants’ interpretations and value of the key competencies. Twelve interviews were conducted with students who attended schools from various deciles. A range of different interpretations were offered by participants, and these will be presented below. Most of the participants noted enjoying the process of reflecting on the KCs and their own experiences of them.

As in the previous chapter, the results in this chapter will be presented according to the themes and subthemes of participants’ conceptualisations of each KC and their perceptions of how they learned those competencies. Six months after the focus groups, students continued to have difficulty voicing their conceptualisations of the KCs, perhaps reflecting a lack of practice in doing so and perhaps also suggesting that little had changed around the KCs in their schools. Adding support to this is that most students said that they had not noticed any changes in their schools that were related to the KCs. A few students did notice some changes, although these tended to be limited to signs around the school or how pedagogical techniques might facilitate students in learning the KCs, such as groups work. Their interpretations of the KCs were often initially behavioural and task-oriented, though multi-dimensional and socioemotional interpretations were sometimes offered after further probing questions were asked. The first KC to be discussed is ‘Managing Self’, presented below.
Managing Self

<table>
<thead>
<tr>
<th>Ministry of Education Definition</th>
<th>Identified Themes</th>
</tr>
</thead>
</table>
| This competency is associated with self-motivation, a “can-do” attitude, and with students seeing themselves as capable learners. It is integral to self-assessment. Students who manage themselves are enterprising, resourceful, reliable, and resilient. They establish personal goals, make plans, manage projects, and set high standards. They have strategies for meeting challenges. They know when to lead, when to follow, and when and how to act independently. | ➤ Time Management  
 ➤ c. Fitting in activities  
 ➤ d. Accomplishing tasks  
 ➤ e. Balance  
 ➤ Personal Responsibility  
 ➤ Managing Wellbeing |

Consistent with the focus groups, all participants talked about this as being the most important KC because, as one participant put it, “if you can’t manage yourself, you can’t do anything”. Three main themes were identified in talk around this KC: 1) Time management, 2) personal responsibility, and 3) managing wellbeing.

**Time Management**

This theme dominated most participants’ interpretation of ‘Managing Self’, and was usually provided as the first response to the question of their interpretation of the KC. Only two participants explicitly talked about managing their time to achieve a sense of “balance” in their schedules or to “manage your emotions”, though others did talk about managing their physical and emotional wellbeing in other ways (discussed in the following sections). Eleven participants talked about managing their time and they focused on “being organised” so they could fit in all of their activities. Timetabling or scheduling was the predominant way that this KC was talked about as being taught in school, as illustrated in the extract below,

Extract 28.

S Actually one thing I’ve noticed is that teachers constantly reinforce the whole idea of managing your time.

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22 Quoted from the Ministry of Education (2007a)
Seven of the twelve participants talked about managing their time in order to accomplish tasks, often in relation to school assignments or responsibilities.

Extract 29.

A Managing yourself is like I guess remember to do everything. When the bills are due you have to pay them and things like that. So you have to learn to I don’t know make a schedule or something.

This extract demonstrates how participants extended the KC to life beyond school, and were often able to apply it to practical issues, even though many of them had no experience with work or living independently. It also demonstrates how at times their interpretations could be coded across multiple themes. In this case, Extract 28 also applies to the following theme of managing self in terms of ‘personal responsibility’, which is discussed below.

**Personal Responsibility**

Ten participants talked about this KC in terms of taking personal responsibility for one’s actions and decisions. There was some overlap between this KC and managing time, as time management was also talked about as taking on responsibility for getting work done on time. So, while this theme represents an aspect of time management, it is also bigger than that and was interpreted by participants as applying to everything they do. The following extract demonstrates the nature of this theme,

Extract 30.

J I think it applies everywhere. Like everywhere you have to, you know, do things yourself. You aren’t just gonna be...reminded or have it just done for you.

Participants clearly identified the importance of taking on responsibility for themselves for work, school, and extra-curricular activities. Some participants talked about parents as helping to develop this skill when they “tell me I that I have to do something”. Without asking, one participant spontaneously alluded to how her learning this had developed through changing teacher expectations, in that earlier in school students received more structured expectations around deadlines, and later in school they were given more responsibility. Additionally, several participants discussed ‘natural consequences’ (e.g., not getting credit for incomplete assignments) as a motivating factor
for them to take on personal responsibility to “get things done”. The following extract illustrates these points,

Extract 31.

V  I’m not sure if it’s because I’m in Year 12 now or if it’s because of those but it’s kind of like they give us a lot more free reign sort of thing. But then if we screw up like the only people who get impacted are ourselves. But like teachers are never like “you need to do it”.

Thus, participants seemed to have a sense of taking responsibility for their actions and decisions regarding accomplishing tasks. There was also an aspect of morality in this theme, as some participants spoke of responsibility in terms of “making the right decisions” and “doing the right thing”, though this was not commonly discussed or talked about in depth. However, there was overlap between this and the KC of ‘Thinking’, which is discussed more later. The following theme is more socioemotional in nature, and presents how participants talked about ‘Managing Self’ as part of managing their wellbeing.

**Managing Wellbeing**

Eight participants talked about developing and/or maintaining personal awareness in order to manage physical and emotional wellbeing as part of this KC. Most participants did not spend very long talking about this, and were not able to develop their ideas around this in much depth. They made comments such as, “looking after yourself...like your wellbeing and like making good decisions and stuff like that”, but often could not expand on these notions. Two participants also voiced a moral component to this interpretation, such as being “a good person”. Another two participants were able to extend the idea of managing themselves through personal awareness to a more social, interpersonal awareness involving managing wellbeing through relationships with others. Extract 31, below, demonstrates the more generally expressed, personally-specific understanding within this theme,

Extract 32.

H  If you have like issues or if like – say if you’ve got a cold you need to manage yourself before you can manage what’s around you whether it’s studying, sports – you need to put all of that on hold until you can figure out what’s wrong with you so you can make yourself well.
This participant had been involved in the Travellers Programme\textsuperscript{23} (Dickinson et al., 2003), and was one of the two participants who spoke more readily and at length about this theme. She credited this programme with teaching her skills so that she was more socioemotionally competent than her peers, saying that “other people don’t really think about that”. Other participants were unsure as to how they might have learned this, and suggested they might have talked about it briefly in Health classes or that it “develops naturally” through “life experience” and increased knowledge and maturity with age.

In summary, participants’ interpretation of ‘Managing Self’ included talk about managing their time, taking responsibility for their commitments, and managing their physical and emotional wellbeing. They mainly talked about these aspects of the KC as developing through encouragement by parents and teachers and as “developing naturally” through “life experiences” outside of formal learning. These broadly cover much of the intended breadth and depth of this KC, although the socioemotional nature of managing one’s wellbeing was less robustly endorsed or discussed by participants than the more practical theme of managing time. Additionally, participants did not talk about leadership or awareness of taking on different types of roles within groups, which indicates some lack of awareness of ‘Managing Self’ within the KC of ‘Relating to Others’.

In her extensive background paper on the KCs, Hipkins (2006) outlines how the metacognitive and reflective nature of the KCs can influence strategies for “living and learning” (p. 33). Participants tended to talk about how teachers’ feedback and marks were indicators of what they needed to work on, and how they used this feedback to manage themselves academically. However, only a few participants talked about reflecting on inter- or intrapersonal processes. For example, though eight participants talked about managing one’s wellbeing, most did not develop or expand on their around talk about this. Thus, the data suggests that metacognition around socioemotional aspects of ‘Managing Self’ may be missing for these participants. As this is an important part of developing future cognitive and behavioural strategies, which is one of the key

\textsuperscript{23} The Travellers Programme is “an early intervention programme designed to enhance protective factors for young people experiencing change, loss and transition events and early signs of emotional distress” (Dickinson et al., 2003, p. 299).
indicators of ‘competency’ in terms of behaviourally applying knowledge, this is important to address in considering teaching of this KC.

Additionally, the inherently interconnected and metacognitive nature of this KC, in terms of being able to holistically understand and effectively ‘manage’ one’s self through communication, relationships, thinking, and taking part in activities, was not generally discussed by most participants. Hipkins (2006) emphasises the links between this KC and “Participating and Contributing”, “Relating to Others”, and “Thinking”, and while these were implied in participants’ interpretations they generally did not show an explicit understanding of this interconnection.

Learning is largely a social process that is done within the context of relationships and socio-cultural boundaries. The following section focuses on participants’ interpretation of ‘Relating to Others’ and presents the results of the thematic analysis for this KC.

**Relating to Others**

<table>
<thead>
<tr>
<th>Ministry of Education Definition(^{24})</th>
<th>Identified Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relating to others is about interacting effectively with a diverse range of people in a variety of contexts. This competency includes the ability to listen actively, recognise different points of view, negotiate, and share ideas. Students who relate well to others are open to new learning and able to take different roles in different situations. They are aware of how their words and actions affect others. They know when it is appropriate to compete and when it is appropriate to co-operate. By working effectively together, they can come up with new approaches, ideas, and ways of thinking.</td>
<td>☐ Getting Along &lt;br&gt;a. Problem-solving &lt;br&gt;b. Co-operation &lt;br&gt;c. Communication &lt;br&gt;d. Tolerance &lt;br&gt;☐ Awareness of Others’ Emotions &lt;br&gt;a. Emotional support</td>
</tr>
</tbody>
</table>

While participants identified friendships as one of the main influences on their sense of belonging at school, they did not identify this KC as one of the more important ones. This may reflect their perception that it was not a KC that could be “taught” as such. Most participants suggested that although school was a place that facilitated this

\(^{24}\) Quoted from the Ministry of Education (2007a)
KC as there were other students to “relate to”, people develop this skill “naturally”. Two themes were identified in participants’ talk about this KC: 1) Getting along with others and 2) having awareness of others’ emotions.

**Getting Along**

Six participants talked about this KC in terms of “getting along with others” or “making friends”. The theme of “getting along” included important sub-themes of tolerating differences and diversity (2), being able to problem-solve in relationships (4), co-operation (2), and communication (3). There was overlap in participants’ talk between problem-solving and communication in that communication was seen as a general skill involved in ‘Relating to Others’ and was also seen as part of interpersonal problem-solving. Problem-solving was also noted by participants to involve the KC of ‘Thinking’, further exemplifying the interconnected nature of the KCs, though participants did not notice aspects of ‘Managing Self’ when talking about this.

Some participants were able to identify more than one of these skills as involved in getting along with others, though all participants had difficulty expanding on their understanding of this KC. The following two extracts are illustrative of participants’ interpretations within this theme. The brevity of the extracts is also indicative of how participants responded in limited ways to queries about their interpretation of this KC.

Extract 33

T You have stuff that makes you similar. Makes you get along

Extract 34

E It’s like building up positive relationships with each other

Participants talked about learning this KC in a variety of ways. Nine participants talked about learning aspects of this theme through group work in classrooms, while others identified socialising through extra-curricular activities, such as sports or kapa

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25 Numbers in parentheses denotes the number of students who identified this as an important aspect of the KC.
haka\textsuperscript{26}, and school activities, such as house competitions, as facilitating this learning. Seven participants also identified the school environment as teaching this KC, especially in terms of tolerating diversity. One participant said, “just ‘cause school is such a social place...inherently you learn to relate to the other people”, while another said, “having lots of different cultures...makes us not prejudiced”.

Thus it seems that participants generally did not think this was a skill that could be explicitly taught, although they did think that negative ways of interacting, such as fighting and bullying, could be discouraged by schools. They tended to think that schools provided the environment and contexts in which they could learn these skills for themselves, which they thought “develop naturally”.

**Awareness of Others’ Emotions**

Seven of the twelve participants talked about having awareness of emotional states as an important part of being able to relate to others. While this could be conceptualised as part of getting along with others, it was discussed as something more than just getting along; it seemed to be that this was part of maintaining friendships at a deeper level than simply getting along with others. While getting along might require knowledge of general social rules, emotional awareness seemed to require more in-depth personal knowledge and empathy. The following extract illustrates this point,

Extract 35

H Seeing when others are different or not so great or normal as...how they usually are. Like if someone is feeling like slightly glummer on a day. Being able to know that they are slightly glummer is like you notice it more if it’s your friends.

Another participant talked about receiving peer support “through being around other people who are like-minded”. Thus, an important part of relationships for participants, and by extension an important part of their sense of connectedness to school, was through being in reciprocal relationships where they could both offer and receive understanding and support from peers. An important part of talk around these competencies seemed to be about how participants might influence how others felt about

\textsuperscript{26} Traditional Maori performing arts (for more information see Te Matatini, 2012).
them. For instance, one participant talked about “trying to make people like me more” in order to deepen her relationships with others.

Three participants talked about learning the above-discussed aspects of the KC through a number of different avenues. They identified teachers asking about their wellbeing as providing a model of communication with others about wellbeing and acting as a model for a desirable and effective way of ‘Relating to Others’. It was also discussed as an important part of students’ sense of engagement with school as they talked about feeling like teachers cared about them. One participant identified the Travellers Programme (Dickinson et al., 2003) as contributing heavily to her competency in ‘Relating to Others’, and she suggested that it be delivered to all Year 8 or 9 students.

Five participants identified peer relationships and peer support as both enabling learning in this KC and as a way of enacting it. Peer relationships were talked about as part of “life experiences” that contributed to learning in this area. Life experiences tended to be conceptualised as personal experiences students went through outside structured school experiences. For example, one participant talked about the death of her mother and having peer support for this, while another talked about difficulty making friends as factors which contributed to their learning in this area.

In summarising the results of the thematic analysis for this KC, participants saw ‘Relating to Others’ as generally “getting along” with others and developing awareness of and support for others’ emotions. An important part of this seemed to be that participants received a sense of being liked or accepted by friends who supported them, which the literature suggests has strong implications for school engagement (Adolescent Health Research Group, 2008; Smyth & Fasoli, 2007). The participants endorsed this by saying that their friendship groups were a major factor in their sense of belonging in and engagement to school. Participants talked about this KC as developing through classroom and extra-curricular activities, as well as through the school environment, though it was talked about as something that develops “naturally” in these situations and without structured guidance. The school environment was particularly commented upon in terms of facilitating a tolerance and appreciation for ethnic and social diversity.

A number of factors were identified that participants saw as facilitating “getting along”, including problem-solving, co-operation, communication, and tolerant attitudes
and values. These are all factors that tie strongly into this KC, as outlined by Hipkins (2006), though each one is abstract on its own and could be explored in more depth with participants to explore their understanding. Additionally, Hipkins (2006) notes the importance of developing empathy in this KC, which was suggested in the talk of those participants who spoke about emotional awareness and providing emotional support to friends.

Participants did not talk about how their thinking and knowledge might change through the process of ‘Relating to Others’, which is included in the definition of this KC (MoE, 2007b) and clearly demonstrates the overlap between KCs. In fact, participants generally did not identify the incorporation of other KCs in this KC, and also had difficulty expanding on their interpretations. This suggests limited practice engaging metacognitive and reflective skills in this domain. Providing more guided learning at school through ‘authentic learning’ could help to facilitate increased capacity in this area, as suggested by the participant who took part in the Travellers Programme (Dickinson et al., 2003) and identified increased development as a result. Although she may also have been predisposed to increased socioemotional awareness, it is also possible that the programme or one with a similar socioemotional focus could aid in this development for others as well.
Participating and Contributing

<table>
<thead>
<tr>
<th>Ministry of Education Definition[^27]</th>
<th>Identified Themes</th>
</tr>
</thead>
</table>
| This competency is about being actively involved in communities. Communities include family, whānau, and school and those based, for example, on a common interest or culture. They may be drawn together for purposes such as learning, work, celebration, or recreation. They may be local, national, or global. This competency includes a capacity to contribute appropriately as a group member, to make connections with others, and to create opportunities for others in the group. Students who participate and contribute in communities have a sense of belonging and the confidence to participate within new contexts. They understand the importance of balancing rights, roles, and responsibilities and of contributing to the quality and sustainability of social, cultural, physical, and economic environments. | ❖ School  
❖ c. Classroom  
❖ d. Extra-curricular activities  
❖ Helping Others |

This KC was initially interpreted as taking part in classroom discussions, or answering teachers’ questions. Upon further questioning, most participants were able to think beyond the classroom to extra-curricular activities. However, only one participant spontaneously identified the more socioemotional aspect of this KC without prompting. She talked about valuing helping with and contributing to others’ wellbeing. This participant was involved in a Peer Sexuality Support Programme (PSSP)[^28]. She was also the participant who was involved in the Travellers Programme, and she talked about how the programme had resulted in her reflecting more than classmates on socioemotional issues.

Two themes were identified in participants’ talk about this KC: 1) Participating and contributing in school and 2) helping others. These are discussed below.

**Participating and Contributing in School**

Eleven participants talked about participating and contributing within the school setting. A young male participant, who was highly sceptical of the school system’s ability to encourage in-depth learning of the KCs, voiced the exception to this and talked

[^27]: Quoted from the Ministry of Education (2007a)
[^28]: PSSP is a school-based programme that trains students to support other students to make informed decisions about their sexual health. At the time of publication, it was being delivered in 25 schools in the Auckland region (Auckland Sexual Health Service, 2010).
about this KC as being encouraged more outside of school through the political activities in which he engaged. Classroom activities were usually the first ways participants identified engaging in this KC. Although they were able to identify other school-based ways of participating and contributing the majority did not engage in many of those activities. Two participants were involved in community activities, one through politics and one through PSSP. Two others were involved in church groups that likely involved some community participation. One participant was not involved in any activities at all, and most of the rest were involved in school-based extra-curricular activities of sports and performing arts. One of the participants noted that, “you can like contribute to the school...like joining groups that help it”, and so while she knew about the opportunities and voiced positive thoughts about them, she did not engage in them.

Participants generally interpreted this KC as involving class discussions, answering questions, or learning activities, such as science experiments. They mostly talked about it in a way that was passive or did not involve their own initiative, and as being encouraged by teachers. However, most participants identified taking part in class discussions as both helpful for their learning and as facilitating their engagement in the topic. This is illustrated by the extract below,

**Extract 36**

T In class discussions...I find that if I give my opinion and I listen to others opinions it can like make mine more clearer and I can like get a proper definition of what I’m trying to say or write and stuff and a better understanding

This was something all participants said had always been encouraged through school, but was not explicitly taught. The following extract is an example of how most participants first interpreted this KC,

**Extract 37**

V I think that happens like all throughout school. Like just in class like teachers will ask you questions and stuff and you have to participate and give your ideas and everything. But yeah, I think that’s just part of school.

However, as with ‘Relating to Others’, participants saw the school as providing them with the context to enact this KC, specifically in terms of participating socially.
One participant said, “participating is just like socialising”. Social participation also extended to extra-curricular activities and school activities such as house competitions, which participants said were encouraged by their schools. One participant said, “most people that have like heaps of extra-curricular activities like seemed happier in school...Like they had fun in school and were good in class as well”. Thus, not only are schools apparently encouraging this level of participation, but students are also modelling it.

While this KC was primarily talked about in terms of how students participated and contributed, their reasons for engaging in the KC were less readily identified. When asked about what motivated them to engage in school activities, most participants cited egocentric motivations, including improved chances for university entrance or influencing teachers’ opinions of them. For example, one student said “I participate in things if I like what they do...but I wouldn’t otherwise”.

**Helping Others**

Eight participants talked about ‘Participating and Contributing’ as involving various ways of helping others. Talk around this generally developed after further probing questions were asked. The most common way of talking about this was in terms of doing “your fair share of work” and “pulling your weight” in group situations, which six participants discussed. There was some overlap across this theme and ‘Managing Self’, as participants talked about being able to manage their time so that, for example, they could contribute to team sports. The following extract demonstrates this,

> Extract 38
>
> If you join another social group you still need to be able to manage yourself...‘cause you don’t want everything to clash and then you do one thing and you let like five groups down

This has socioemotional implications that participants noted through talk about this KC as influencing workplace environments and relationships with colleagues. Thus, there was overlap between this theme and ‘Relating to Others’, which participants were sometimes able to observe. The following extract is an example of how this was talked about,
Extract 39

T  It’d probably give you a better relationship with your like co-workers and stuff
R  What would it mean to participate and contribute in work?
T  It’d mean to do your fair share of work

Four participants also talked more specifically about helping others. One said, “especially the contributing is more like helping”, which she saw as occurring more in the context of personal relationships than simply within group/team work. Thus, it seemed that some participants were able to discern a collective benefit from this KC. Participants seemed to struggle with identifying how they learned this, however, and talked about various influences, including school, parental, and extra-curricular group encouragement. Additionally, as discussed previously one participant’s identification of the importance of the Travellers Programme (Dickinson et al., 2003) in her learning should not be overlooked. She went on to participate in a peer support group and talked about how the Travellers Programme had influenced her to want to help others.

In summarising the results of the analysis for this KC, participants conceptualised it mainly as participating in and contributing to class, school, and extra-curricular activities. When probing questions were asked, they also talked about doing their “fair share” of work and helping others. However, although some participants were able to identify ways of ‘Participating and Contributing’ in society, none talked about doing this within their own families and only a few were involved in any form of community activity. The majority also did not talk about themselves as contributing to social processes, such as community or economic development, although there was an exception to this represented by the young man involved in politics.

In their talk around class discussions, participants often talked about the usefulness of hearing others’ ideas and being able to share their own thoughts, and that this contributed to their understanding of material and sense of engagement in class. Hipkins (2006) cites this as an integral part of ‘Relating to Others’, and the links with ‘Using Language, Symbols, and Texts’ is also clear. However, the participants did not explicitly make these connections in their talk about this KC. It could also be linked to the KC of ‘Thinking’, which is the next KC to be discussed below.
Thinking

<table>
<thead>
<tr>
<th>Ministry of Education Definition(^\text{29})</th>
<th>Identified Themes</th>
</tr>
</thead>
</table>
| Thinking is about using creative, critical, and metacognitive processes to make sense of information, experiences, and ideas. These processes can be applied to purposes such as developing understanding, making decisions, shaping actions, or constructing knowledge. Intellectual curiosity is at the heart of this competency. Students who are competent thinkers and problem-solvers actively seek, use, and create knowledge. They reflect on their own learning, draw on personal knowledge and intuitions, ask questions, and challenge the basis of assumptions and perceptions. | ❖ Ways of Thinking  
❖ Managing Thoughts  
a. Problem-solving  
b. Positive thinking |

All participants struggled to interpret this KC, and tended to initially say things such as, “thinking is just thinking” or “you can’t not think” when asked how they interpreted this KC. However, upon asking further probing questions, participants began to expand their interpretations. Out of their talk on this KC, two themes were identified: 1) Types of thinking and 2) managing thoughts.

Types of Thinking

Eleven participants talked about various ways of thinking, ranging from “black and white thinking” to being able to “read between the lines” and “expand your horizons”. Participants identified higher-order thinking in terms of logic (2), creativity (1), innovation (3), and critical thinking (8). However, talk about this KC was among the least developed, as participants seemed to have difficulty conceptualising what it meant for them. The extract below illustrates how most participants talked about higher-order thinking,

Extract 40

E Some people think like just the basic answer, just the yes no answers...and then there’s people that wanna know how it does that and why it happens. And it just gets the deeper understandings

All of the eleven participants whose interpretation of ‘Thinking’ fit into this theme identified learning particular ways of thinking through certain subjects. Three of them

\(^{29}\) Quoted from the Ministry of Education (2007a)
compared rote learning and memorisation in maths to learning to “interpret a wide range of things” in English. Six participants also talked about believing that critical and reflective thinking skills and the next theme of ‘managing thoughts’ are skills that “develop naturally” or through “life experiences”.

Managing Thoughts

Nine participants talked about managing their thoughts in order to manage their behaviour and/or their emotions. Several of these participants talked about using this skill for inter- and intra-personal problem-solving. This was different than the focus groups, as participants specifically talked about managing their thoughts for problem-solving, whereas the focus group participants talked about thinking through problem-solving strategies or simply trying to “think positively”. The following extract demonstrates how this was talked about in the interviews,

Extract 41

A It helps when you interact with others. Instead of just being so opinionated. Instead of just saying “I’m right, you’re not”...so that’s kind of like getting along with others as well.

This extract further illustrates the interconnected nature of the KCs in terms of directly linking ‘Thinking’ to ‘Relating to Others’ and ‘Managing Self’. The overlap with ‘Managing Self’ was also seen in some participants’ talk about “making the right choices”, which they then went on to say affected one’s behaviours. Several participants also talked about managing their thoughts to affect their “mindset” or, as occurred in the focus groups, to “think on the positive side of things”, as illustrated below,

Extract 42

H You think too much about things and it’s things you can’t change and you’re like “OK, I’m gonna carry on thinking about this I’m gonna go crazy”. So you put it aside, you just focus on what’s in the moment.

This was the participant who had taken part in the Travellers Programme (Dickinson et al., 2003), and credited the programme with helping her to learn skills related to this KC. Another participant identified how family background could influence thought processes, including propensities to attend more to or interpret some information as negative.
Extract 43

S Well, it’s the whole background thing. If you come from like a family with domestic violence or something you’d view quite a lot of things negatively and you’d be depressed and stuff and you’d always try to find the negative things in other things.

Most participants identified learning this aspect of the KC through their own personal life experiences, including peer conflict, grief, depression, social isolation, and low self-esteem.

Extract 44

H Because...everything wasn’t so great I realised...that life isn’t gonna be perfect. You just have to be able to make the most of it and be able to make it how you want...And I think I’ve just learned...that you can manage bad days and that bad days are always gonna come around for the rest of your life and that “OK, I’m having a bad day, I need to cut myself some slack for it”.

In summarising the results of the analysis on participants’ interpretation of this KC, they seemed to predominantly conceptualise ‘Thinking’ in two ways: 1) Types of thinking, which was mostly related to formal school learning, and 2) managing their thoughts, which was more socioemotional in nature and appeared to be learned primarily through social and emotional “life experiences” rather than structured learning at school.

The participants identified subject-specific and general thinking skills, both of which Perkins (1991) notes to be important. Despite this, however, they struggled to expand on their interpretations and, with a few exceptions, displayed only limited understanding, particularly of the metacognitive nature of this KC. Thus, while these participants seem to have endorsed many of the ways of thinking suggested by these authors and others (Gilbert, 2005; Hipkins, 2006; Perkins, 2003), their ability to use those skills in actual situations remains unknown. This is particularly true for higher order thinking, such as critical and self-reflective thinking, which are suggested to be indicative of increasingly mature learning and development (Freire, 1985; Hipkins, 2006). However, it seems likely that greater opportunities within formal learning contexts to reflect on their knowledge of ‘Thinking’ and other KCs could advance student awareness, metacognitive abilities, and integration of the KCs into their behaviours across various settings.
As initially identified in this section, participants’ interpretations appear to fit with the MoE’s objectives with this KC. However, Perkins (Perkins, 2003) suggests that it is not necessarily the knowledge of how to think that matters, but the disposition to engage in higher-order thinking and the ability to identify situations that invite thinking. Developing the disposition in young people to develop their competencies represents a significant hurdle for educators. Thus, it seems vital to consider ‘authentic learning’ in terms of how young people might have opportunities to practice actively applying thinking skills, both in school and out. This would likely constitute a considerable part of ongoing professional development for teachers and school communities in terms of creating ‘authentic learning’ scenarios and also in creating a school culture that encourages and promotes ‘authentic learning’.

### Using Language, Symbols, and Texts

<table>
<thead>
<tr>
<th>Ministry of Education Definition(^{30})</th>
<th>Identified Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using language, symbols, and texts is about working with and making meaning of the codes in which knowledge is expressed. Languages and symbols are systems for representing and communicating information, experiences, and ideas. People use languages and symbols to produce texts of all kinds: written, oral/aural, and visual; informative and imaginative; informal and formal; mathematical, scientific, and technological. Students who are competent users of language, symbols, and texts can interpret and use words, number, images, movement, metaphor, and technologies in a range of contexts. They recognise how choices of language, symbol, or text affect people’s understanding and the ways in which they respond to communications. They confidently use ICT (including, where appropriate, assistive technologies) to access and provide information and to communicate with others.</td>
<td>❖ Understanding and Communicating Meaning</td>
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</table>

As with the previous KC, this KC was not easily interpreted by participants, and most seemed to think that it did not need explaining. For instance, they would make comments such as, “oh, that’s communication” but then have difficulty expanding on the concept of ‘communication’. With probing, however, participants developed their ideas

\(^{30}\) Quoted from the Ministry of Education (2007a)
around this somewhat more explicitly, and the theme of ‘understanding and communicating meaning’ was identified from the data.

**Understanding and Communicating Meaning**

All twelve participants interpreted this KC as involving communication. Ten participants talked about being able to communicate meaning and “express yourself in words” both orally and in writing. Six of those participants and another participant talked about understanding others’ communication, or being able to “find the deeper knowledge”. Interestingly, participants talked about multi-cultural school environments as giving them opportunities to develop their ability to communicate and understand cross-culturally. They also talked about applying this skill cross-generationally and across various domains where different types of communication might be required, such as communicating at work or with friends. Participants had difficulty expanding on their interpretation of the KC in terms of what it might entail, and it seemed easier for them to talk about ways they thought they might learn the KC as they then spoke more readily.

It was noted by several participants that they thought they learned language early in school, and so there was less of an emphasis on it by the time they got to secondary school. However, participants identified learning this KC through various aspects of their different classes. For instance, when talking about biology, one participant said, “it’s just using different materials to try and make it stick in your brain”. This indicates perhaps a refining of skill or a deepening of knowledge of skills used in this KC (e.g., the specific language used in biology). Most participants talked about English classes, in which they learned to both communicate and interpret meaning, though it was also discussed frequently around media studies.

**Extract 45**

H I see it a lot in English more than anything. When you’re studying text and you’re looking at symbolism or themes and you’ll learn about symbols and then in the end you’ll do static images and you learn to do symbols to get your message across.

Thus, this participant’s extract demonstrates both learning how to interpret communication and how to communicate. Others also talked about learning to use grammar and not “text language”, while others talked about learning to communicate
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across cultures, including sub-cultures such as age in order to improve understanding. One participant said, “it could be the way you talk to different cultures and ages...that could affect the way someone perceives what you’re saying”. Thus, through learning to manage their language, it seems that participants also perceived a degree of ‘Managing Self’ in this KC. This points to the important issue of overlap and interconnectedness in interpretation of the KCs.

In summarising the findings of the analysis of this KC, participants interpreted ‘Using Language, Symbols, and Texts’ as being able to effectively communicate and understand communication. They were also sometimes able to conceptualise it beyond simply ‘words’ to include symbolism, particularly in film and media studies. This initially seems to fit with Hipkins’ (2006) inclusion of conveying and receiving information (including ideas and feelings) “appropriately and effectively” (Hipkins, 2006, p. 22). However, Hipkins (2006) also notes the importance of understanding that this KC is more than simply literacy and numeracy skills, but encompasses the understanding that language helps to construct perceptions of the world around us, make meaning out of experiences, and convey information about ourselves (e.g., in various environments such as home, school, or friendships). She also notes that language is broader than spoken language, but includes physical communication (e.g., body language, dance, sport, etc.). As with the focus groups, participants failed to include any of this in their interpretation of the KC. Additionally, participants’ talk directly around this KC did not indicate that they connected it to the emotional aspects of interpersonal communication, though this was suggested in their talk around the KC of ‘Relating to Others’ as they spoke of communication as parts of ‘problem-solving’ and ‘getting along’.

How individuals might use the KC throughout daily life was also lacking in participants’ talk. For instance, Gilbert (2005) discusses the potential use of ICT in developing students’ awareness and capabilities within this KC. It is interesting to note that participants in the focus groups did include ICT in their conceptualisation of this KC, but in the interviews this failed to emerge. Participants spoke about using different mediums to enhance learning, but given the prominent nature of ICT in students’ lives, the lack of attention given to it is surprising. Furthermore, students use ICT as a way to interact with their worlds, and Hipkins (2006) notes the link between this KC and
‘Participating and Contributing’. Despite the fact that participants’ interpretation of this KC could be linked with other KCs (e.g., ‘Relating to Others’ and ‘Managing Self’), the link with ‘Participating and Contributing’ was not as clearly made. However, participants did talk about learning about the KC through particular subjects which involves at least some level of participating and contributing in class, thus alluding to the link with that KC. However, a broader, more social understanding of this KC was not particularly clearly voiced by participants.

Hipkins (2006) describes an important challenge in facilitating learning of this KC for international students who do not come to school or social situations with the same knowledge of this KC as, for instance, those raised in New Zealand. Given the high proportion of students in New Zealand who do not speak English at home (MoE, 2001) this has implications for equal attainability of educational achievement (Hipkins, 2006; MoE, 2004) and is important to keep in mind when thinking about how all students might learn this KC at cognitive and metacognitive levels (Hipkins, 2006). For example, it would be important to take into account different forms of communication and social norms and expectations across various cultural groups within the classroom and school culture. This would likely also help local students learn more about this KC as well.

**Summary of Results**

This chapter presented the results of the thematic analyses of the interviews conducted with 12 participants aged 15-16 from five schools in the Auckland region. The interviews took place at a time when the KCs had been part of the New Zealand curriculum for several years, though integration of them into teaching was still in process for many schools.

Overall, like the focus groups, the results suggest that participants were able to interpret the KCs in ways that were mostly aligned with the Ministry of Education’s goals for the KCs (Hipkins, 2006; MoE, 2007b). The main themes arising from the results of the analysis of the interviews will be summarised and briefly discussed below. The final chapter will then discuss the results of both the focus groups and the interviews in more depth.
“If you can’t manage yourself you can’t do anything”.

Like the focus groups, ‘Managing Self’ was viewed by most participants as a core KC, without which they did not think they could do the other KCs. This was commonly talked about as involving ‘time management’ in order to fit in all activities and accomplish all tasks. Participants also spoke about taking ‘personal responsibility’ for one’s actions and decisions. There was an aspect of morality in talk about this, as participants spoke of “making the wrong choices”, which overlapped with their talk about the KC of ‘Thinking’. This fits with Hipkins’ (2006) assertion that ‘Thinking’ is central to the other KCs. Additionally, time management involves a degree of planning and prioritising, thus implying the underlying use of ‘Thinking’ to manage one’s self.

Problem-solving

Participants identified problem-solving as involving several of the KCs, including ‘Thinking’ and ‘Relating to Others’, though they usually talked about this in relation to each specific KC rather than making the connection between KCs. Interestingly, they did not talk about this in relation to ‘Managing Self’, though ‘managing thoughts’ was a common theme in participants’ discourse about ‘Thinking’. They also discussed ‘managing thoughts’ as being involved in intra- and interpersonal problem-solving. As in the focus groups, participants identified the importance of providing and receiving peer support for problems, and also talked about how this required trust between friends. Thus, participants may experience peer support in problem-solving as an important part of developing meaningful relationships with others. However, it was interesting to note that participants’ talk about the KC of ‘Managing Self’ continued from the focus groups to not include talk about intrapersonal aspects of ‘Managing Self’ within relationships with others when faced with problems. Rather, they spoke to this point in their conceptualisation of ‘Relating to Others’, suggesting that they did not initially think about ‘Managing Self’ as a social competency but in more individualistic terms that seemed somewhat divorced from social interactions.

Metacognition

The process of the focus groups and interviews demanded some level of metacognition and self-reflection. Although this seemed difficult for participants as they needed prompting and probing questions to develop their thoughts, they also expressed
willingness and said they enjoyed the process. They further demonstrated reflectivity when they talked about learning from mistakes and “life experiences”. However, participants also demonstrated limited reflectivity. This is shown, for example, in their difficulty interpreting the KC of ‘Thinking’, which is clearly an essential component of metacognition and self-reflection. As applying this learning has been identified as an important part of ‘competence’ (DeSeCo, 2005), it would be interesting for future research to explore metacognition with students. From participants’ stated enjoyment and willingness to engage in the interview process of reflective thinking, it may be that they are able to engage in situations that invite metacognition. However, helping students develop the disposition to think critically without prompting remains a priority for educators (Perkins, 2003). Metacognition has been discussed throughout this research and in other literature as an important part of the KCs (Hipkins, 2006). It has also been discussed as an important part of emotional wellbeing and relationships, particularly in terms of recognising emotions in one’s self and others (Fonagy et al., 2002; Wells, 1995). Thus, enhancing metacognitive skills appears to be an important part of cognitive and emotional development that could be fostered through the school context. It seems likely that many students might welcome this type of addition to pedagogical processes given the value of self-reflection that several of the participants noticed.

KC Interconnectedness

The interconnected nature of the KCs was not explicitly noted by most participants, though it was implied throughout much of their interpretations of each KC. Only three participants spoke directly about this. An example of this can be seen in Extract 40, where the participant talks specifically about how ‘Thinking’ applies to ‘Relating to Others’. Presumably, identifying the interconnected nature of the KCs first requires some ability to think critically and reflectively, as well as understanding of the KCs. It would be interesting for future research to consider how student understanding of the KCs develops alongside their metacognitive capacities with continued integration of the KCs into school programmes.
What Was Missing?

This section will explore the main themes that were missing from participants’ interpretations of each KC when the interviews were explored alongside Ministry of Education definitions (MoE, 2007b) and the explanations provided by Hipkins (2006). It was clear that there were many aspects of the KCs that were not immediately apparent to the students and even with further probing questions, some concepts were entirely missed.

With respect to the KC of ‘Managing Self’, and similar to the focus groups, one of the most common themes across the interviews was that participants spoke readily about the practical aspects of managing wellbeing, such as “looking after yourself”. However, they seemed to struggle to expand on initial interpretations and had difficulty conceptualising the socioemotional nature of what it meant to do this. For instance, most participants struggled to explain how to manage their emotional wellbeing or how to manage themselves within relationships, indicating a lack of metacognition or knowledge about these socioemotional factors.

This was similarly the case for ‘Relating to Others’. Although participants seemed more reflective about the socioemotional nature of this KC, they generally did not incorporate the other KCs into their understanding of it despite clear links with ‘Managing Self’ and ‘Using Language, Symbols, and Texts’ in the sub-themes of ‘problem-solving’ and ‘communication’ under the general theme of ‘getting along’. Thus, their understanding of the interconnected nature of the KCs and their ability to think critically and reflect on this may be still developing. However, if thinking critically and metacognitively is not part of their regular academic practice, participants may have been unfamiliar with these processes. Additionally, though participants spoke about sharing ideas through class discussions in their talk about ‘Participating and Contributing’, they did not include this in their talk on ‘Relating to Others’. They also did not talk about taking on different roles within groups, such as leadership roles, though they did talk about co-operation. Furthermore, while they talked about friendly competition with friends to achieve high marks, this was not part of their interpretations of this KC. Thus again, the participants did not connect the various aspects of the KCs. However, as many of these aspects were present in other areas of their talk, this indicates that they do possess some knowledge about these aspects of the KC.
Although participants were able to identify ways of ‘Participating and Contributing’ and talked about how their schools encouraged them in this KC through a number of avenues, it seemed that a disposition to engage in this KC was lacking. This appeared to be particularly so if participants’ did not discern immediate benefit or enjoyment out of them. This is not surprising given that most students have a number of commitments, though the fact that both on the original longitudinal questionnaire and in the interviews only a few of the participants expressed any interest in altruistic activities that might benefit the community is concerning. Given that one of the primary aims of the KCs is to develop citizens who participate in the economy and the community, this is an important area to address. While participants expressed commitment to career goals through achieving marks and university entrance, their future participation in the economy does not seem to be lacking as much as community participation.

Though participants were able to identify critical thinking skills as part of the ‘Thinking’ KC, the depth of their understanding of this remains to be explored. For instance, while they discussed it in terms of “finding the deeper meaning” in literature, they did not talk about it in relation to social norms, dominant discourses, or metacognition. They also did not recognise it as underlying many of the KCs, although they often talked about the thought processes that might go on while they were ‘doing’ the other KCs. As “Thinking’ is a KC that has been identified as part of the core of the other KCs and critical thinking skills are important for innovation and change, this is a crucial aspect of the KC to develop for students.

The theme of ‘communication’ for ‘Using Language, Symbols, and Texts’ was also limited in participants’ interpretation. They tended to interpret it mainly verbally, and also did not voice any understanding of how language contributes to the formation of social and individual perceptions. This is a complex concept, however, that may not be part of the majority of people’s understanding. Like the other KCs, developing this concept in depth will likely require professional development for teachers, as well as a school culture that encourages reflection on this concept. Of course, this requires critical thinking skills, and as discussed above, this too would need to be part of students’ educational repertoire.

This limited understanding is further reflected in the lack of noticing the interconnected nature of the KCs. This may be due to the fact that participants were not
used to reflecting on the KCs or using metacognitive and critical thinking skills to make links between different concepts. However, these are important skills to develop if students are to have a comprehensive understanding of the KCs, including their interconnectedness, and how they might use them.

It may be that creating more ‘authentic learning’ scenarios in school and the community could be a way to develop these areas that appeared to be lacking for participants. As participants viewed most socioemotional learning as occurring through “life experiences” that were outside of structured learning, ‘authentic learning’ situations could attempt to mirror these experiences or at least reflect upon them.

**Teaching and Learning the Key Competencies**

Several common influences on KC learning were identified by participants. The school context in general was talked about as facilitating learning across the KCs of ‘Relating to Others’ and ‘Participating and Contributing’, while classes were also talked about as teaching these as well as the other KCs. Participants also placed emphasis on “life experiences” outside of school as teaching them many aspects of the KCs. Parents were identified as teaching, modelling, or encouraging some of these KCs. This diversity in learning fits with the suggestion that the KCs are learned in multiple domains of life (Norris & Kelly, 2001). While some participants expressed doubt that all KCs could be ‘learned’, it could be that offering ‘authentic learning’ situations that attempt to mimic “life experiences” could make up for this. Additionally, authenticity in learning scenarios implies some level of personal relevance and, by default, emotional involvement in the learning process. Both the research and the participants from this study suggest that personal relevance is important for engaging students in learning (Fredricks et al., 2004). It seems reasonable to assume that students would be more likely to engage in self-reflective practice if they find the topic to be personally relevant to them.

All participants also expressed uncertainty about assessing the KCs, most often saying, “that would be hard”. A number of strategies are being trialled in different schools currently, including self-reflection, three-way discussions between students, teachers, and parents, peer discussions, rating scales, and descriptive paragraphs in reports. Others are also attempting to operationalise the KCs. Given how diverse
teaching of the KCs can be, it is likely that assessment processes will also be varied and individually tailored to schools and teachers. However, this is an important area to continue to explore in order to monitor success, both for schools and as part of a larger international community committed to the concept of the KCs.

The previous two chapters have presented the results of the thematic analyses of the focus groups and interviews that were conducted in order to explore young people’s views on the KCs. The next chapter will discuss these findings, the limitations of the research, and the implications for both future research and for school practice.
Chapter Six: Discussion

The results presented in the preceding two chapters provide insight into the wide range of ways that adolescents interpreted and gave meaning to the KCs, both within the school context and also in their personal and future professional lives. This chapter will first identify the limitations of the current research. Following this, the main overall results will be discussed within the context of previous literature. Next, implications of the themes that were identified for learning the KCs, how they relate to the Ministry of Education’s and the OECD’s goals will be discussed. Areas of potential future research will then be explored. As this thesis was part of a degree in clinical psychology, this discussion is not presented from an educational perspective, but is rather informed by positive psychology (Hefferon & Boniwell, 2011) and the concepts of resilience and wellbeing (Friedli, 2009; OECD, 2009b).

Limitations

There were several caveats to consider for this study. Firstly, the participants appeared to be mostly relatively highly engaged students, as indicated by the way they described wanting and trying to achieve high marks as well as by their ongoing participation in this study. As such their views and socioemotional competencies might not be representative of the larger student population, particularly the population that is more at risk of disengagement and thus potentially more in need of KC development. Having a more diverse sample population would have added richness, depth, and more information to the data that was acquired. However, the goal of the research was not to generalise, as such, but rather to explore some youth perspectives on the KCs in order to inform future research and practice. The themes that were generated from this research can help to guide future development of KCs within schools that could apply across different engagement levels, particularly if ‘authentic learning’ becomes prioritised in schools so as to increase student engagement.

Furthermore, the language used to talk about the KCs within schools might have varied across schools. This could have impacted the data collection as participants might
not have recognised the topics, thus potentially limiting discussion. However, if teachers had been talking about KC topics in school, participants may have still been able to reflect on and add to the discussions within the research despite not having a shared language.

Lastly, within all qualitative research the researcher is the primary tool for data collection. Thus, there is a degree of subjectivity in the analyses that must be acknowledged. While not an absolute limitation, as this adds richness to the understanding gained through research, it is important to recognise. Additionally, peer review of the coding and identification of themes was carried out to limit the influence of the primary researcher’s personal biases on the analyses.

Below is a discussion of the results in the context of previous research. Firstly, a discussion about academic engagement and the KCs will be presented. While the analyses of the discussions about academic engagement are not presented here, some information about engagement was contained within students’ talk about the KCs and is relevant to students’ learning of the KCs. Thus, it is important to consider this information in order to inform future research and teaching of the KCs. This will be followed by a discussion of the findings regarding the KCs. Finally, implications of the results for future research and practical work with the KCs will be described.

**Academic Engagement**

The results of the focus groups and interviews suggest that performance-approach goals and achieving high marks, rather than mastery goals, (as defined by Deci & Ryan, 2002) were dominant for many of the participants, though this may be specific to the context of gaining university entrance. Participants talked about wanting to achieve well at school, liking challenge themselves, and valuing school achievement as a means to tertiary entrance and a “successful” career. This fits with Alexander’s critique of facts-based educational systems as moving students away from mastery goals and towards a focus on performance (Alexander, 2010). It also suggests that the initial drives for the KCs of competency development and moving away from facts-based learning (Hipkins, 2006) has not yet eventuated. The dominant paradigm within education of achievement
(Alexander, 2010) indicates that this is likely a difficult shift for some policy-makers and schools. Rather than a ‘top-down’ approach whereby policy-makers influence education, it may be that a ‘bottom-up’ approach is more immediately beneficial, whereby communities, including students, have input into educational processes. This fits with ‘student voice’ initiatives that are emerging in New Zealand schools (Hipkins, Cowie, Boyd, Keown, & McGee, 2011, p. 18), which aim to increase student participation and leadership in schools. It also fits well with pedagogy that makes use of ‘authentic learning’ (Hipkins, 2006) as it engages the community in students learning and provides community resources for their learning (Hipkins et al., 2011).

Participants’ focus on performance-approach goals (Deci & Ryan, 2002) likely has positive implications for future career wellbeing (Rath & Harter, 2010), in terms of achieving careers through university entrance which is dictated through academic achievement. However, this focus, which is likely reinforced within the school culture and by National Standards and NCEA\(^\text{31}\) (Hipkins et al., 2011), seems to come at the expense of being able to focus on mastery goals or on socioemotional competencies within school. These competencies are an essential part of wellbeing (Rath & Harter, 2010) and part of the KCs. While schools and teachers likely value this, it may be that continued professional development is needed in order to better communicate this to students, perhaps through ‘authentic learning’ situations. Participants indicated knowledge of the importance of socioemotional aspects of the KCs for wellbeing when they spoke of the importance of having a “balance” in their commitments to academic, social, and extra-curricular activities. In addition, their acknowledgement of the interconnectedness of several KCs, including ‘Managing Self’, ‘Participating and Contributing’, and ‘Relating to Others’ also suggests a need for “balance” and a range of skills to achieve this. While most participants acknowledged the importance of ‘managing time’ so that they could accomplish tasks and maintain “balance”, the reason given for managing time was the need to accomplish tasks, rather than maintain physical, emotional, or psychological wellbeing (Hefferon & Boniwell, 2011). Given participants’ focus on achievement goals, it may be that they connected achievement to long-term wellbeing, while potentially missing out on other factors that contribute to wellbeing.

\(^{31}\) National Standards are literacy and numeracy standards that students must achieve in Years 1-8. National Certificate of Educational Achievement (NCEA) are national qualifications for secondary school students.
(Rath & Harter, 2010). Their knowledge of this could be developed through a more overt focus on the KCs.

However, while these factors may not have taken priority over academics, in line with Rath and Harter’s (2010) findings on wellbeing, participants recognised the importance of social connectedness, and talked about friends and teachers as main parts of their sense of connectedness to school. This fits with other findings on adolescents’ school engagement (Adolescent Health Research Group, 2008; Bowen, Rose, Powers, & Glennie, 2008; Wentzel, 1999). It also ties in with ideas about school contexts and cultures facilitating school engagement (Willms, 2003). For instance, Buxton suggests that students’ identities as learners can be shaped through a school that is committed to academic success, makes pedagogical ‘space’ for rigorous learning, and creates norms around success. This has implications for creating school cultures that value and promote the KCs by providing ‘space’ to learn about them. While participants generally seemed to think that they were successful in developing friendships at school, it seems important to explore how students who are not successful in this domain experience their school context. It would also be interesting to explore how an increased focus on KCs and creating school environments that facilitate KC development might influence the ability to make successful friendships for those students.

It appears to be important to consider how to apply ‘authentic learning’ within classrooms and the school context so that students see their learning, both of subjects and the KCs, as personally relevant rather than abstract and disconnected from their goals. Participants talked about wanting their learning to be applicable to the “real world” and they differentiated “life lessons” from academic learning. This seems to indicate a value of ‘authentic learning’ (Hipkins, 2006; Tadich et al., 2007), whereby students see learning as applicable to “real life” situations. Authentic learning likely happens to some extent within the school environment, for example in problem-solving relationship difficulties with peers wherein students might learn how to negotiate problems, communicate, and understand their own and others’ emotions. However, it may not happen with some aspects of wellbeing, such as managing one’s emotions which is often an internal process. Additionally, teaching the KCs explicitly could enhance students’ understanding of and ability to use socioemotional competencies. As the results suggest that students already value the KCs, and teachers have reported being able to easily
incorporate emotion-focused practice within classrooms (Schonert-Reichl & Lawlor, 2010), development of this within classrooms could be further explored. Patricia Alexander has written extensively on reframing education as ‘academic development’ so as to promote the development of competencies, mastery goals, and an orientation towards lifelong learning (Alexander, 2010). She argues that education reform needs to include a consideration of the interaction between cognitive and socioemotional competencies and a holistic consideration of wellbeing for all students (Alexander, 2010). Creating a school and political culture that is able to do this seems an important first step (Candela, 2005; Fox & Prilleltensky, 1996). However, the practical difficulties in implementing this have been ongoing for many years (Alexander, 2010; Harris & Alexander, 1998). For instance, lack of time, the focus on achievement standards, and perhaps limited confidence in teaching socioemotional skills versus subject content may have been obstacles to establishing a more inclusive and holistic curriculum. These may continue to present as challenges to educators and researchers unless they are supported in and given the ‘space’ to develop effective teaching practices.

This section has reviewed general results about participants’ value of and interpretation of the KCs as competencies to be taught in schools. It has also described how school engagement and learning the KCs are strongly linked. The following section will consider the results of participants’ conceptualisation of each KC in more specific detail.

**Key Competency Results**

Results of the focus groups and interviews suggest several things about the KCs. Participants talked about thinking that the KCs were important things to learn about because they are “basic skills that you need to succeed in life”. This fits with the general view on KCs as essential competencies (Hipkins, 2006; MoE, 2007a; Salganik & Rychen, 2003) for living “successful lives” (DeSeCo, 2005, p. 4). This suggests that students might be intrinsically motivated and engaged in learning the KCs. If students recognise personal relevance of the KCs for themselves, this could result in increased intrinsic motivation and potentially the adoption of a mastery approach to learning the
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This might in turn contribute to a lifelong learning orientation for learning these (Alexander, 2010; Deci & Ryan, 2002; Murphy & Alexander, 2002).

The majority of participants did not notice any changes in their learning at school following the introduction of KCs to the curriculum, suggesting that either actual school practices had not changed with this, or that they were implicitly incorporated into classroom material. However, given the results discussed above, an increasingly explicit focus would be well-received by students. Additionally, previous research indicates that incorporating socioemotional competencies into the classroom can be a positive experience for teachers as well (Schonert-Reichl & Lawlor, 2010). In their talk about the KCs, participants generally expressed uncertainty about how the KCs might be taught and assessed in schools, with most participants saying that some could be taught and others would be more difficult to teach. This suggests that either, 1) schools were subtly and implicitly including the KCs in their curriculums and participants were either unaware of how the KCs were being taught, or 2) the schools were not focusing on the KCs. It seems highly unlikely that schools have simply ignored the KCs given that they are part of the curriculum. Cowie and colleagues identified a “knowing/doing gap” (Cowie, Hipkins, Keown, & Boyd, 2011, p. 9), whereby integrating the KCs into the curriculum appears to be “easier said than done” (Hipkins & Boyd, 2011, p. 80). The Ministry of Education has provided ‘discussion tools’ for schools to consider how they might integrate the KCs into subjects (MoE, 2010). This includes ideas for creating ‘authentic learning’ situations, including places in the community, roles students might take on, events, and activities. While many of these already take place in schools, for instance sport and cultural groups, the emphasis appears to be on encouraging teachers to think about how the KCs apply to and can improve student learning in these areas, rather than on how to further develop the KCs in their teaching practices. There also appear to be some areas of school where it is easier to implement the KCs than others, and Physical Education (PE) in particular seems to be one of these areas.

PE appears to hold much potential for teaching the KCs for a number of reasons, not least of which is that participants noticed learning many aspects of the KCs through this class. PE uses ‘authentic learning’ through activities to provide opportunities to learn and practice the multi-dimensional aspects of the KCs (Gillespie, 2008). ‘Authentic learning’ is meant to mirror situations students might encounter (Hipkins,
2006), thus the personal relevance might be more immediately obvious to students in PE. PE is also participatory and involves activities students enjoy, which would also contribute to engagement and relevance for students. It involves both social and individual activities and provides learning across a number of intra- and interpersonal dimensions for students (e.g., physical, spiritual, social, and mental), so also provides various holistic learning contexts for students (Burrows, 2005; Gillespie, 2008). Lastly, rather than achievement of a mark, PE is often more focused on mastery of skills (Burrows, 2005). This is important for ongoing engagement and an orientation to lifelong learning (Alexander, 2010). While Burrows (2005) cautions against PE trying to “do too much” and “fix...individual and social problems of the day” (Burrows, 2005, pp. 2-3), this is clearly an area that has much potential for KC development and which can inform other curriculum areas. Unfortunately, it is also an area that is often the first to have funding cut because it is not directly linked to academic performance.

The results of both the focus groups and interviews suggest that, overall, the socioemotional aspects of the KCs are not part of the academic or social discourse for teenagers. However, there are clear benefits for increasing students’ discursive abilities around these issues. Increasing ‘emotional literacy’ has been identified as an important factor for emotional awareness and emotion regulation (Beck, Kumschick, Eid, & Klann-Delius, 2011; Matthews, 2005; Webster-Stratton, Reid, & Beauchaine, 2011). Language also shapes how we think and what we notice (Baumeister & Vohs, 2002; Gergen, 1985; Linley & Joseph, 2004). Metacognitive awareness also affects relationships with others through an increased knowledge and awareness of emotions and emotional processing (Fonagy et al., 2002). Both one’s own emotional state and relationships with others are important for wellbeing and resilience (Heffron & Boniwell, 2011). Facilitating socioemotional and metacognitive practice and language could work to increase students’ awareness of socioemotional aspects of the KCs. This purpose of the KCs would also suggest that this works the other way around as well, whereby reflecting on KCs improves students’ socioemotional and metacognitive competencies.

While participants did offer some socioemotional interpretations of the KCs, these were limited and their conceptualisations were mainly practical. They demonstrated limited familiarity with socioemotional topics by hesitating before offering their interpretations and noticing difficulty or inability to talk in-depth about them.
However, participants demonstrated some level of socioemotional understanding even though this did not appear to be part of the students’ explicit learning or curriculum content. Furthermore, the participants were often able to overcome their initial difficulty with interpreting the socioemotional aspects of the KCs and engage in critical, creative, and innovative thinking to generate new ideas about the KCs. While participants seemed to initially struggle to voice understanding of the KCs, they generally seemed reflective and able to interpret each KC in a variety of ways, even if the depth of this was limited. Additionally, comments about learning from their “life experiences” indicates that participants were reflecting on their experiences and had some metacognitive awareness of their own and others’ cognitive, behavioural, and emotional processes. Thus, it may be that developing a more comprehensive language to talk about the KCs through more explicit teaching will develop a better understanding of and ability to articulate the complex nature of the KCs and ultimately better meet the socioemotional developmental needs of students, which are important for ‘success’ in life and wellbeing (Rath & Harter, 2010).

The importance of creating a school culture that facilitates learning of the KCs was suggested by much of the participants’ talk. In both the focus groups and interviews participants talked about learning the KCs in a variety of settings, including school and throughout their “life experiences”, which they differentiated from the learning they achieved at school. The contextual factors of school can also be considered “life experiences”, and they did notice some of these including problem-solving with peers and learning “tolerance” through a diverse student population. Literature supports this in suggesting that the school context is important for how students’ conceptualise learning and achievement and also for learning that occurs outside of the classroom (Aviles, Anderson, & Davila, 2006; Bowen et al., 2008; Hipkins, 2006; Hipkins et al., 2011).

Together, these results reinforce research that suggests that explicit teaching of socioemotional skills and/or increased socioemotional learning of skills and vocabulary can have a positive impact on adolescents’ socioemotional development (Baumeister & Vohs, 2002; Beck et al., 2011; Dickinson et al., 2003; Sim et al., 2006). In support of this, the participant who had been through the Travellers Programme spoke in depth and at more length than other participants about socioemotional aspects of the KCs, perhaps demonstrating increased socioemotional awareness and emotional literacy. It may be
that this participant was already particularly socioemotionally sensitive and vulnerable and that is why she was in the Travellers Programme. However, the benefits she identified from her participation in the programme could also apply to other students. Additionally, other participants also suggested that they valued the KCs and that they thought explicitly teaching them would be useful. There is a growing body of research that suggests that if students can talk about their emotions and have the language to be more descriptive of their emotions they may be more resilient (Ciarrochi et al., 2011), which would reduce their vulnerability to adverse outcomes. These findings then suggest that explicit teaching of the KCs could have benefits across a number of domains for students.

**Managing Self**

An important area to develop for this KC appears to be cognitive and emotional understanding of and strategies for how to manage one’s self. While this KC was identified as the most important KC across both focus groups and interviews, participants’ expressed understanding of this was largely limited to behavioural or practical aspects. Particularly important were participants’ apparent lack of awareness of ‘Managing Self’ in terms of their intra- and interpersonal socioemotional issues when difficulties were encountered, such as problems in relationships. This is a central feature of wellbeing and resiliency in terms of reducing vulnerability to emotional dysregulation and effectively regulating emotions. Hipkins (2006) identified a wide range of meanings for this KC, which are linked both to concepts of wellbeing (Rath & Harter, 2010) and lifelong learning.

Hipkins (2006) also identifies the metacognitive aspects involved in ‘Managing Self’ as essential components of learning and developing an identity as a lifelong learner. Additionally, Claxton (2000) discusses the emotional nature of learning, clearly making the socioemotional aspects of ‘Managing Self’ relevant to schools. There are thus clear benefits for schools in helping students develop this KC, and the gaps in participants’ understanding of the KCs signifies the need for further development.

**Relating to Others**

This KC is central to learning and knowledge, which are often embedded within sociocultural contexts (Candela, 2005). Given the value participants placed on
relationships, increasing student understanding of learning and knowledge as social processes may help to facilitate engagement and a disposition towards lifelong learning as they might see the process of learning to be more personally relevant and meaningful if it is situated within their social worlds (Flum & Kaplan, 2012). Group work was identified by participants in the study as useful for both facts-based learning and KC learning, and participants talked about enjoying sharing ideas and learning in group discussions. This could also provide some momentum for increasing students’ awareness of how knowledge can be socially constructed, which was missing from their conceptualisation of this KC. Participants described engaging in group learning in ways that fit with the behavioural, cognitive, and emotional types of engagement described by Fredricks and colleagues (2004), which has positive implications for the KCs of ‘Participating and Contributing’ and ‘Relating to Others’.

Additionally, teaching socioemotional skills in school could facilitate friendships which is likely to be beneficial for students’ wellbeing, academic engagement, and achievement (Rath & Harter, 2010; Sellars, 2006). It could also help to improve students’ interpersonal problem-solving skills, which appeared to be limited as many participants talked about “ignoring” peer difficulties. However, although participants seemed to struggle somewhat to talk about socioemotional processes, they were able to identify having emotional awareness as an important part of friendships, particularly when things are “not so good”. This suggests that although emotions may not be part of the regular discourse for teenagers or within their immediate environments, they still have some understanding of the importance of emotions and are able to reflect on this. As discussed previously, this could be enhanced through more explicit teaching of socioemotional competencies, which would likely improve students’ metacognitive abilities (Fonagy et al., 2002), emotional awareness and regulation (Macklem, 2011), relationships (Gumley, 2011), and wellbeing (Hefferon & Boniwell, 2011).

**Participating and Contributing**

This KC has been talked about as allowing people to enact all the other KCs (Hipkins, 2006). The lack of participants’ expansion upon ideas for this KC is both curious and concerning. If one of the primary aims of the KCs is to facilitate active participation and contribution to society, this KC is then an integral part of that vision. At the same time, within the context of students’ very busy lives and pressures to achieve
in multiple domains, it is hardly surprising that there is a lack of involvement in communities. However, given participants’ emphasis on the importance of relationships and their talk around ‘helping others’, it seems that there is potential to build upon these values through ‘authentic learning’ situations (Hipkins, 2006). Additionally, Gumley (2011) suggests that metacognition can prompt individuals to support others through increased insight into others’ experiences. This suggests that developing metacognitive abilities through authentic learning within communities could increase students’ enactment of ‘Participating and Contributing’ and ‘Relating to Others’. It would likely be important to ensure that students’ community involvement is personally relevant given participants’ comments about the necessity of this for engagement. Flum and Kaplan further argue that “active participation” is more likely to facilitate learning when school and community issues are personally relevant to students (Flum & Kaplan, 2012, p. 8). Thus, the connection between students’ identities as members of the community may be an important pathway to promote their use of this KC as it would then seem more personally relevant and meaningful to them.

**Thinking**

The KC of ‘Thinking’ is one that invites the interpretation of self-reflection and metacognition, and results suggest that this is an area for development for students. While participants’ talk about learning from “life experiences” suggests that they do engage in some self-reflection, they largely missed out on metacognitive aspects of ‘Thinking’ in their interpretation. There are a number of reasons why it may be helpful for them to be more aware of this process. Firstly, self-reflection has been suggested to be one way learning of the KCs could be assessed (Hipkins, 2006). Secondly, self-reflection and metacognition involve some degree of critical thinking, which are important for the formation and maintenance of a disposition for lifelong learning (Alexander, 2010). Metacognition could also facilitate increased awareness and achievement of the other KCs as students may be more able to critically self-reflect on their competencies.

Additionally, it may be that more explicit teaching of socioemotional skills could result in increasingly mature cognitively-based emotion regulation strategies (Macklem, 2011; McKay, Wood, & Brantley, 2007). While not offered as their first way of understanding ‘Thinking’, participants voiced some socioemotionally oriented
interpretations around ‘managing thoughts’ to influence emotions and behaviours. Some strategies for this included ‘thinking positively’ and ‘problem-solving’. While this demonstrates some insight into maintaining emotional wellbeing, it also represents some limitations as ‘thinking positively’ is not always realistic or enough to maintain emotional wellbeing. Programmes that could be tried in schools could include both universal and targeted approaches (Merry et al., 2011), and could be similar to the Travellers Programme (Dickinson et al., 2003), e-therapy (Whittaker et al., 2012), or integrated into classrooms (Schonert-Reichl & Lawlor, 2010).

Using Language, Symbols, and Texts

Participants’ limited conceptualisation of this KC suggests that their understanding of it might be an area for future development. Part of the importance of this KC is understanding how communication is socially influenced and also affects individuals’ understanding and perceptions, which was missed out on in participants’ interpretations. The socially constructed nature of language, symbols, and texts may not be part of the discourse within schools or communities, as it was entirely missed by participants. While it is a very complex notion, adolescents likely have the cognitive capacities to understand it or to at least begin to reflect on it. Additionally, including this and the other KCs within the language and practice of schools will add depth to their understanding and ability to reflect on, talk about, and learn about the KCs. This improved ‘KC vocabulary’ would likely increase students’ familiarity and competence with the KCs, as has been shown to be the case with improved emotional vocabulary, awareness, and regulation (Matthews, 2005).

Students’ understanding of this KC could also be enhanced by facilitating their understanding of communication as more than simply verbalisation, but also including other modalities (Hipkins, 2006). For the most part, participants identified linguistic communication for this KC and neglected other modalities. It was interesting to note that participants in the focus groups talked about using technology to communicate, while interview participants did not. It may be that the focus group discussions helped to generate ideas more, whereas the interviews required participants to think critically on their own, which may have limited their conceptualisations at the time. This fits with what students talked about, in terms of being intellectually stimulated by group
discussions. It also fits with the Ministry of Education’s conceptualisation of ‘Thinking’ in terms of working together to produce new ideas (MoE, 2007b).

Implications of the Research

This research has explored students’ views on the KCs and has thus contributed novel information to a developing area of both work and research within education and, by extension, communities. This section will first present the implications of the current project for future research. Following this, the practical implications will be discussed.

Future Research

As the KCs are increasingly implemented into New Zealand school practices, further exploration of students’ developing views on the KCs would be highly useful as this could help to identify ‘what works’ in teaching and engaging students with the concepts of the KCs. This would also tie in well with the KC of ‘Participating and Contributing’ as students would continue to be involved in the evaluation of and implementation of KC development in schools.

The results in the current research suggested that friendships were an important part of school engagement. As both school engagement and relationships have been found to be important parts of wellbeing (Carter, McGee, Taylor, & Williams, 2007; Rath & Harter, 2010; Willms, 2003) it would be valuable to explore any links between increased socioemotional competencies, school engagement, wellbeing, and resilience. Following from this, looking particularly at disengaged adolescents’ views on socioemotional competencies would be especially useful, given that they are at increased risk for potentially negative outcomes (Balfanz, Herzog, & Mac Iver, 2007). Though this might be the most difficult student population to engage in research, the benefits would likely be both interesting and useful.

Lastly, exploring how culture, in its many forms, might influence KC interpretation and enactment would also be an interesting and important avenue for future research. This could also be part of classroom discussions, as considering various cultural meanings and interpretations could add insight and learning opportunities across
a number of the KCs. Rather than limit ‘culture’ to ethnicity, it would be beneficial for these discussions to also include, for instance, sub-cultures and school cultures.

**Practical Implications**

The current research also has implications for schools and communities. After gaining understanding of the KCs, many schools have already started to explore teaching methods for the KCs (Hipkins et al., 2011; MoE, 2010). Continued professional development and multi-disciplinary consultation would be helpful to evaluate and build upon these methods. For instance, including academics, psychologists, and students themselves in consultation would ensure that the most recent research findings across both academic and resiliency/wellbeing domains inform teaching methods and future research and evaluation of the effectiveness of those methods for youth development. Overall, the current results contribute to this by offering findings on several aspects of the KCs that would be useful to consider when developing plans to implement the KCs.

The most obvious, but perhaps the most difficult to do, is that students thought they learned many of the socioemotional aspects of the KCs through “life experiences” outside of formal school learning. They also expressed increased engagement with material when they thought it was personally relevant and interesting. This provides support for the notion that ‘authentic learning’ situations could be useful for both teaching the KCs and for student engagement with the material, which would likely involve the community so as to provide students with ‘real world’ learning situations.

One way to do this might be to involve students in school and curriculum development. The current research has added to the evidence that young people are able to reflect on and contribute constructively to debate and discussion around issues that are important and relevant to them. Involving students at this level of school is both a positive indicator of school engagement (Fredricks et al., 2004) and also provides ‘real world’ opportunities to enact and develop the KCs for young people, particularly ‘Participating and Contributing’ within their communities. As this was shown to be lacking for participants, this is especially important to consider in KC curriculum development.

The results also suggest that it is important to create school cultures where the KCs are realised through school norms and culture, expectations, discourse, and allowing
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for ‘space’ for the KCs to be critically explored by students. As much of students’ socioemotional learning appears to take place within the school culture, for instance problem-solving with friends, having a school culture that models and enacts the KCs would likely be beneficial. This would likely involve teachers as well, which, as noted above, would require ongoing professional development. In order for teachers to effectively model and teach the KCs, they first need to recognise the value of the KCs. This initially requires schools to value the KCs so that they can create a school culture that supports teachers in developing the KCs for themselves and adopting effective teaching practices.

Participants also talked about both integrating KCs into ‘regular’ teaching in classes and offering specific KC learning opportunities. Both would be viable options for schools. PE in particular was talked about as a class that attends to holistic student development, though the Ministry of Education (MoE, 2010) and Hipkins (2006) argue that the KCs can be learned in all subjects. Again, professional development and collaboration, which can be seen in the Ministry of Education’s ‘Discussion Tools’ website (MoE, 2010), is a useful way for schools and teachers to develop teaching practices that are relevant to the KCs.

Additionally, participants talked about and discussed the value in learning the KCs both implicitly and explicitly. This fits with literature suggesting that learning the KCs can be achieved on both overt and covert levels (Hipkins, 2006). However, the importance of metacognitive abilities across a number of domains, including learning (Elliot, McGregor, & Gable, 1999; Hipkins, 2006) and wellbeing (Fonagy et al., 2002; Gumley, 2011) suggests that at least some level of awareness and self-reflection on the KCs is important for development. Thus, explicitly integrating the KCs into subject classes and delivering specific socioemotional programmes to universal populations could be beneficial. Within subject classes, however, care would need to be taken to ensure that teachers are familiar with and model the KCs themselves, that teaching is delivered in an ‘authentic’ way and not simply tacked on to subject content, and that depth and breadth of both the KCs and the subject is not sacrificed. While this seems like a large task, there are some indications that it can be done in ways that are not overly burdensome for teachers (Schonert-Reichl & Lawlor, 2010). Specifically attending to and developing students’ metacognitive skills would likely be an important component in
students’ overall KC development, and this could be more easily implemented into classroom practices. This could also be incorporated in assessment processes, which could additionally benefit further KC development through self-reflection.

There are likely countless strategies that schools could use to help students develop the KCs, and each community, school, teacher, and student will be different in what works for them. It seems helpful to think of an overarching strategy of considering the school culture, as discussed above. If the school has a culture of constructive, critical self-reflection and openness to change and development it seems that this would create an environment where the KCs can stay ‘relevant’ to the current context and teaching can be adapted to suit the needs of students and communities.

**Conclusions**

The KCs have been part of the New Zealand curriculum since 2007 (MoE, 2007b). Five years later, both previous literature and the current research suggests that they continue to occupy uncertain space within schools (Carne, Hamilton, Farruggia, & Peterson, in preparation; Hipkins & Boyd, 2011). Changes in educational concepts and structures from facts-based learning to competency development have been encouraged within the international literature, but actual changes have been slow to develop (Alexander, 2010; Harris & Alexander, 1998). The KCs represent a paradigmatic shift in the conceptualisation and value of learning goals and strategies, from facts-based and achievement-oriented outcomes to an increased focus on developing broad ‘competencies’ (Deakin Crick, 2008; Hipkins, 2006; OECD, 2001). This is potentially challenging for some schools, who must now meet the traditional demands of both achievement standards and the new competency development, which is comparatively less clear and prescribed. Given participants’ emphasis on performance-approach goals in this study, it is also possible that students and parents might also need to realign their understanding of learning and achievement from simply attaining marks to a broader, more holistic notion of developing ‘competencies’.

Additionally, the KCs are vague and embedded in social concepts and values, which makes consistent conceptualisation and integration difficult for schools. While
this is an accepted aspect of the KCs within the New Zealand curriculum, and also removes other potential difficulties, such as dictation of locally-influenced curriculum from centralised bureaucracy, there are implications that are important to consider in ongoing research and assessment of the KCs within schools. One of the most important of these is how schools develop a ‘culture’ that models the KCs and how students might understand the KCs differently, particularly across schools that have varying levels of resources. This is particularly relevant given the OECD and DeSeCo’s goals of increasing social equanimity (DeSeCo, 2005) and the implications for wellbeing.

The KCs have the potential to contribute to a number of important outcomes for individuals and communities, including reduced inequality and marginalisation, increased participation in community processes, and increased social cohesion (OECD, 2011; Trier, 2001a). Any efforts towards realising this potential should be encouraged, as equalisation of society has been show to result in increased ratings of wellbeing across a number of dimensions, including happiness, physical and mental health, school achievement, and reduced crime (Friedli, 2009; OECD, 2004; Pickett & Wilkinson, 2007; Wilkinson & Pickett, 2007, 2009). Additionally, it is important to examine any changes that result from the implementation of new ideas and initiatives in order to determine where efforts and resources should be directed in order to achieve the most success. This research contributes to this goal by exploring youth understanding of the KCs and their thoughts on learning the KCs in order to indicate successes of implementation thus far and possible future directions for KC implementation.

There are several important features of both the teaching of KCs and social values that are reflected in results discussed above. Firstly, ‘knowledge’ is indicative of social values and what is included in formal education (both in content and pedagogy) has significance for how individuals’ and social knowledge and values are shaped. The KCs have the potential to contribute to enhanced social equanimity and wellbeing as long as they are valued by teachers, schools, and policy-makers and given the ‘space’ they need in schools and learning. Teachers have a multitude of tasks and prioritizing these tasks is in part decided by those social values and priorities for achievement or mastery. For instance, currently in New Zealand, achievement standards are prioritised because they dictate university entrance. Additionally, reporting these results to parents is often compulsory, which communicates a value of these standards to parents. Although the
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KCIs are a vision of ideal ways of being that may be difficult to develop, there are a number of factors that make their inclusion in schools important. Firstly, given their place in the curriculum, schools are required to incorporate effective teaching practices for the KCs. Secondly, as part of the OECD, New Zealand has agreed to, and indeed contributed to, the development of the KCs. Thus, we have a commitment to both students and the international community to do this successfully. Lastly, and perhaps most important to consider, are the benefits they can contribute to wellbeing. The KCs have the potential to add depth to students’ knowledge, increase academic engagement, facilitate a disposition to lifelong learning, and contribute to their individual and community wellbeing and resilience. These are arguably equally as important to develop as academic knowledge, and in fact, could contribute to enhanced achievement for students. The potential and implications of the KCs across so many domains thus indicates the importance of further developing these competencies.

“We do not have to live in an idealised world to still reach for those ideals that will make it a better place” (Barrack Obama, 2010).
Appendix A. Focus Group Interview Protocol

Open with introductions. Ask students to introduce themselves and say what they like best and least about school.

**Orientation toward school** (attitudes to learning, critical thinking)

- What school work do you like? What school work do you not like?

- Follow-up discussion topics
  
  o What is it about that that you enjoy/don’t enjoy?
  
  o What kinds of things do you like to learn about?
    
    ▪ New stuff or stuff you are already interested in?
    
    ▪ What makes that stuff interesting to you?
  
  o What topics do you wish they teach in school?
    
    ▪ Do you learn that in school or other places?
  
  o How important are marks to you? What motivates you to achieve those marks?
  
  o What qualities do you think you need to be successful at school?
    
    - Do you think you have those qualities? Why? Why not?
  
  o What about at work? Do you need the same qualities or different ones? If different, what kinds?

**Problem solving**

Brainstorm types of problems they may have in school – academic and non-academic

- What do they do when they have a problem?
  
  o What kinds of things do you do to try to solve problems?
  
  o What helps? What doesn’t help? Examples?

- Who do you talk to when you have problems? Anyone at the school? Are there particular teachers you want to talk to? **Or** – (If dropped-out of school) Do you have friends you can call on?
  
  o What is it about those people that makes you want to talk with them?
  
  o Can those people talk to you about stuff that’s going on for them?
Orientation to the future

- What do you want to do when you finish school?
  - What would be good about that kind of job (as answered to question above)?
  - What skills or attributes do you need to get that job? (probe for beyond “qualifications”)?
  - What makes a good ____?
  - How do you think you would get that sort of job?
  - How will what you are doing now help you reach your future goals?
  - How is your schooling helping you get there (if it is)?

School Connectedness

- Do you feel like you’re a part of your school/like you belong/fit it there?
  - What about your school makes you feel like that?
  - How do your parents feel about your school? School in general?

Key Competencies

- Do you know about these key competencies in schools? (Show cards with the KCs written on them)
  - Do your teachers teach them?
  - What do you think about them?
    - Are they important to you? Why?
    - Do you think you need/use them? Examples?
Appendix B. Individual Interview Protocol

Identity, Values, and Engagement Section

1) If you think back to yourself at primary school, how would you describe yourself?
   - How did you get on with teachers? Friends? Learning?
   - Did you always like/dislike school / Think it was important? What changed?

2) Thinking back again to how you described yourself in primary school, how do you think this has changed over time? (Prompt to get description of self at secondary too)
   - How are you now with teachers? Friends? Learning?
   - If your friends/parents/someone you knew well could describe you, what do you think they’d say about you? (Ask for different social groups)
     - How much do you agree? How do you feel about that?

3) How do you feel about your school now?
   - Do you think it’s important?
     - What are the things that might be important about it?
     - What aspects might not be so important?
   - Do you feel like you’re a part of your school?
     - What about your school makes you feel like that?
     - If school was a great place to be, what would it be like?

4) How do your parents feel about school?
   - Do they think it’s important for you to go to school and do really well there?
   - Why? Why not?
   - How do they communicate this to you?

5) Do you have friends at this school? How do they feel about school? What do you think about this?

Key Competencies Section

6) The new school curriculum says that schools are meant to be now teaching you some new things now, called Key Competencies. These include...(Explain)
   - Have you heard about any of these KCs? If so, which ones?
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- What do you think about them? (Ask about each one – get interpretations of what each KC means)
- Do you think they’re skills you use? (How? Get examples)
- How important do you think they are?
- Do you use them or think about them in your daily life in any way?
- How much do you think they might help in the sort of work you might want to do in the future? How?

7) Looking back throughout your life, do you think you were taught these things?

- Through primary school? Secondary school?
- Outside of school?
- Do you think that learning about them in those areas helped you

8) How do you think the teachers try to teach that stuff? (Ask for examples)

- Do you think that works for you?
- How do you think teachers can measure your key competency skills?
- Do you think they should measure them? If so, why?
- Are there other ways they could be taught? (E.g., home, work)

9) Do you think you learn these outside of the school classroom? (Get examples)

- How is this compared to the way you might learn them through school?

10) Do you think it is the schools’ responsibility to teach key competencies?

- Why? Why not?
- How could other agencies/people/groups help with responsibility or share responsibility for this?

11) Where do you see yourself in five years time? (If they don’t know – can ask where they would like to be? Then, where realistically you think you will be?)

- If you think about your future, do you think the Key competencies are relevant/important? If so, why?
PARTICIPANT INFORMATION SHEET

Dear _________

You recently completed a survey on your beliefs about learning and your future aspirations. As part of that survey you indicated that you might be interested in participating in a follow up discussion. I am writing to you now to tell you some more information about that discussion, to see if you are still interested in taking part.

The follow up discussion will take place in the form of a focus group (sometimes called a group interview). If you agree to participate, the focus group facilitator will ask for more information on the questions you answered in the questionnaire. For example we would like to know more about your school experiences, how you feel about school and what you think you will do in the future. To help keep track of ideas that the group comes up with, we might write things down on a board. We would like to voice-record the focus group so that we can remember what you tell us. We would also like to take a photo of the board so we remember what was written there. No photos will be taken of you or anyone else in the group. We will keep the information you give us for six years in a locked file cabinet, and then destroy it.

We hope that you can continue to help us with our research and spare about an hour and a half for the focus group. If you agree to the focus group, the facilitator will ring you to let you know what times are available.

If you would like to be in the focus group, you will receive a $20 food or Westfield voucher at the end of the interview to thank you for your time. You will also be put in the draw to win one of three $150 Westfield vouchers.

You do not have to do this focus group – it is entirely your choice. We would also like to remind you that you can leave the group at any time that you want. There will be no negative consequences for you if you decide to do any of those.

With your permission, I would like to contact you again approximately six months to a year after we first meet to interview you about how things are going for you and whether your views or opinions have changed from when we first met. You will again receive a $20 food or Westfield voucher as a thank you for your time. Please note participation in the focus group does not mean you have to participate in the second interview: at all times your participation is entirely voluntary.

If you have any questions, please feel free to contact me (the principle investigator) or any one of the other investigators listed below,

Thanks in advance for your participation

Tessa Brudevold-Iversen, Susan Farruggia, Liz Peterson, and Richard Hamilton
For any enquiries regarding ethical concerns please contact: The Chair, University of Auckland Human Participants Ethics Committee, The University of Auckland, Research Office – Office of the Vice Chancellor, Private Bag, 92019, Auckland. Tel (09) 373 – 7599 extn 87830


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Appendix D. Focus Group Consent Form

Participant Consent Form

(This Consent Form will be held for a period of six years)

TITLE: “Lifelong Learners: Students’ views on International Key Competencies and Engagement in School”

RESEARCHER: Tessa Brudevold-Iversen and/or Melanie Beres

I have been given and have understood an explanation of this research project. I have had an opportunity to ask questions and to have them answered.

I understand that I may withdraw from the study by leaving the focus group while it is in session, but that my answers up to that point cannot be withdrawn.

I understand that the focus group will be recorded and that photos may be taken of anything that may be written on the board. No photos will be taken of me or any other focus group members.

I understand that if I decide not to participate there will be no negative consequences for me.

I understand that all collected data will be stored securely for six years in the Psychology Department and then destroyed.

I am aware that the findings of the study may be published in research journals and presented at conferences and I understand that my name will not be used in any of these reports.

- I agree / do not agree to participate in this research study (please circle one)

- I agree to maintain the confidentiality of the topics and issues discussed in this group.

- I would / would not like to be approached at a later date regarding participating in a possible follow-up interview (please circle one).

Signed: __________________________________________________________

Name: ___________________________________________________________

Appendix E. Interview Participant Information Sheet

PARTICIPANT INFORMATION SHEET

Dear __________

You recently completed a survey on your beliefs about learning and your future aspirations. As part of that survey you indicated that you might be interested in participating in a follow up 30 minute interview. I am writing to you know to tell you some more information about that interview, to see if you are still interested in taking part.

If you agree to participate, the interview will ask you for more detail about some of the questions in the survey you answered. For example we would like to know more about your school experiences, how you feel about school and what you think you will do in the future. We would like to voice-record the interview so that we can remember what you tell us. You can ask for the tape recorder to be turned off at any time, or if you prefer we can just take notes on what you say. Either way, your identity will remain anonymous, so no one will be able to know that you have taken part. We will keep the information you give us for six years in a locked file cabinet, and then destroy it.

We hope that you can continue to help us with our research and spare about an hour for the interview. If you agree to the interview, the interviewer will ring you to arrange a time and place that is best for you to meet.

If you would like to be interviewed, you will receive a $20 food or Westfield voucher at the end of the interview to thank you for your time. You will also be put in the draw to win one of three $150 Westfield vouchers.

You do not have to do this interview – it is entirely your choice. We would also like to remind you that you can stop the interview at any time that you want, and you can also remove any information you tell us before the study is finished. There will be no negative consequences for you if you decide to do any of those.

With your permission, I would like to contact you again approximately six months to a year after we first meet to have another chat about how things are going for you and whether your views or opinions have changed from when we first met. You will again receive a $20 food or Westfield voucher as a thank you for your time. Please note participation in the first interview does not mean you have to participate in the second interview: at all times your participation is entirely voluntary.

If you have any questions, please feel free to contact me (the principal investigator) or any one of the other investigators listed below,

Thanks in advance for your participation

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Appendix F. Interview Participant Consent Form

Participant Consent Form

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I understand that all collected data will be stored securely for six years in the Psychology Department and then destroyed.

I am aware that the findings of the study may be published in research journals and presented at conferences and I understand that my name will not be used in any of these reports.

• I agree / do not agree to participate in this research study (please circle one)

• I agree to maintain the confidentiality of the topics and issues discussed in this group.

• I would / would not like to be approached at a later date regarding participating in a possible follow-up interview (please circle one).

Signed:_______________________________________________________________

Name:_______________________________________________________________

Appendix G. Glossary of Terms

**Decile**: Decile rankings are indicative of how much a school’s enrolment is comprised of students from low socio-economic communities. They are separated by 10th percentiles, whereby Decile 10 schools are the 10% of schools with the highest proportion of students from high socio-economic communities and Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities (MoE, 2008a).

**DeSeCo**: Definition and Selection of Competencies: Theoretical and Conceptual Foundations. The group was formed in 1997 by the OECD and the Swiss Federal Statistical Office (SFSO). DeSeCo was comprised of ‘experts’ from various disciplines, who had the task of providing the theoretical and conceptual framework for the KCs.

**Key competencies (KCs)**: In its new 2007 Curriculum, New Zealand introduced KCs that are intended to ensure students’ future participation in both the economy and the community (MoE, 2007a; OECD, 2005). In addition to core subjects such as mathematics, English and science, the key competencies introduce additional metacognitive and socioemotional dimensions that students are expected to attain before they complete their compulsory time in school (MoE, 2007a). The New Zealand KCs include *Managing Self, Relating to Others, Participating and Contributing, Thinking,* and *Using Language, Symbols and Texts* (MoE, 2007a).

*Managing Self*: Involves self-motivation, an innovative attitude, a sense of self-efficacy, and the ability to self-assess. Students who can manage themselves are seen as “enterprising, resourceful, reliable, and resilient. They establish personal goals, make plans, manage projects, and set high standards. They have strategies for meeting challenges. They know when to lead, when to follow, and when and how to act independently” (MoE, 2007b, p. 12).

*Participating and Contributing*: This area involves being involved in a variety of sorts of communities (e.g., families, schools, or those with common interests, both locally and internationally). It “includes a capacity to contribute appropriately as a group member, to make connections with others, and to create opportunities for others in the group. Students who participate and contribute in communities have a sense of belonging and the confidence to participate within new contexts. They understand the importance of
balancing rights, roles, and responsibilities and of contributing to the quality and sustainability of social, cultural, physical, and economic environments” (MoE, 2007b, p. 13).

Relating to Others: This area involves being able to interact ‘effectively’ with diverse people in a range of contexts. ‘Effective’ interaction involves “the ability to listen actively, recognise different points of view, negotiate, and share ideas” (MoE, 2007b, p. 12). Students who are competent in this area are thought to be open to new learning and able to take different roles in different situations. They are aware of how their words and actions affect others. They know when it is appropriate to compete and when it is appropriate to co-operate. By working effectively together, they can come up with new approaches, ideas, and ways of thinking” (MoE, 2007b, p. 12)

Thinking: “Thinking is about using creative, critical, and metacognitive processes to make sense of information, experiences, and ideas. Intellectual curiosity is at the heart of this competency...Students who are competent thinkers and problem-solvers actively seek, use, and create knowledge. They reflect on their own learning, draw on personal knowledge and intuitions, ask questions, and challenge the basis of assumptions and perceptions” (MoE, 2007b, p. 12).

Using Language, Symbols, and Texts: This competency involves being able to use and understand “codes in which knowledge is expressed” (MoE, 2007b, p. 12), and students with this competency can “recognise how choices of language, symbol, or text affect people’s understanding and the ways in which they respond to communications” (MoE, 2007b, p. 12). Students will also be competent in the use of technology.


National Standards: Literacy and numeracy standards that students must achieve in Years 1-8.

OECD: Organisation for Economic Co-operation and Development; an organisation that consists of thirty member countries, all of which share the principles of democracy and capitalism. Its activities involve supporting economic growth and financial stability, raising employment levels, and improving standards of living.
## Appendix H. Transcription Notes

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalised letter (e.g., ‘A’)</td>
<td>Indicates speaker’s initial</td>
</tr>
<tr>
<td>Full stop (.)</td>
<td>Indicates a noticeable pause in the speaker’s discourse, suggesting the end of one sentence and the beginning of another</td>
</tr>
<tr>
<td>Underline</td>
<td>Indicates speaker emphasising a word or part of a word</td>
</tr>
<tr>
<td>Quotation marks (“ ”)</td>
<td>Indicates where the speaker is quoting someone or imitating someone else speaking</td>
</tr>
<tr>
<td>Brackets ([ ])</td>
<td>Indicates words that have been added for the sake of readability or to aid in understanding, for example when participants have used abbreviations in their talk</td>
</tr>
<tr>
<td>Three full stops (...)</td>
<td>Indicates where words have been omitted for the sake of readability</td>
</tr>
<tr>
<td>Dash (–)</td>
<td>Indicates interruption in speech</td>
</tr>
</tbody>
</table>
Appendix I. Permission to Use Copyright Material

Uri Peter Trier October 14, 2009

Tessa Brudevold-Iversen

- DeSeCo Key Competencies

Hello, Mr. Trier,

I am writing my doctorate at the University of Auckland in New Zealand, and my thesis involves an analysis of the DeSeCo-initiated key competencies within the New Zealand curriculum. I apologise for writing to you on Facebook, but have been unable to find other contact information for you.

I have read your contribution to the second DeSeCo symposium, and am wondering if I could please reproduce your table (printed on page 38) comparing education and economic emphases of the key competencies. I would, of course, give you full credit for the table.

I appreciate you taking the time to read and respond to this request.

Kind regards,
Tessa Brudevold-Iversen
DClinPsy candidate, University of Auckland

October 14, 2009

Uri Peter Trier

- Dear Tessa nice to receive a message from so far in the south. My Mailaddress is trieruri@bluewin.ch No problem in reproducing my table. Best regards Uri
References


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