# Shifting the frame: Exploring integration of the Key Competencies at six Normal Schools

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## 1. The research

### Introduction to the research

In 2005, the Normal Schools Association (NSA) approached the Ministry of Education (MOE) for funding to assist with a planned exploration of the implications of the proposed Key Competencies (KCs) framework for teaching and learning. The proposed framework is located alongside the learning areas at the centre of the new draft curriculum (Ministry of Education, 2006). This positioning of the proposed KCs as integral to the overall curriculum suggested to the NSA that they might be a useful focus for professional discussion and learning.

In late 2005, the NSA approached the New Zealand Council for Educational Research (NZCER) to provide research support as they explored the implications of the KCs framework for teaching and learning. This research support took two main forms. NZCER staff contributed to workshops for Normal Schools staff that provided a forum for the sharing of insights about the KCs from teacher practice and from research literature. The aim of these workshops was to support the schools to work together as a community, and facilitate discussions that assisted staff to reflect on their experiences and shape future directions for their professional learning.

A second facet of NZCER's work centred on developing case studies of the experiences of six schools. These case studies examined the change process the schools undertook as they interpreted the KCs framework and incorporated it into their school context and programmes.

This report summarises the findings from this research. It contains three main sections. The first section describes the design of the research, the second section summarises common themes across the six schools, and the third section provides case studies of each school.

## Background to the development of the KCs framework

In 2005, as part of the current revision of the New Zealand curriculum, the MOE proposed five KCs for the New Zealand compulsory school sector. They are:

- Relating to others (*RO*);
- Managing self (*MS*);
- Participating and contributing (*PC*);
- Thinking (*T*); and
- Using language, symbols, and texts (*ULST*).

The New Zealand KCs framework was informed by international work conduced by the Organisation for Economic Cooperation and Development (OECD), as part of the DeSeCo<sup>1</sup> project (OECD, 2005). The OECD sought to identify and describe, across its member nations, what people should know and be able to do in order to lead a "successful life" in a "well-functioning society". Writing about the OECD work, Rychen and Salganik (2003) stress that competencies labelled "key" must be universally relevant, and that the KCs:

- integrate knowledge, skills, attitudes, and values;
- are holistic (at any one time a learner might draw on two or more KCs); and
- are demonstrated in real contexts and in interaction with others.

Rychen and Salganik (2003) note that the OECD definition of competence places the:

...complex demands and challenges that individuals encounter in the context of work and in everyday life at the forefront of the concept... (p. 43)

The KCs developed by the OECD provided the foundation for the proposed New Zealand KCs. These KCs were debated and discussed by MOE staff, practitioners, and researchers (see papers by Barker, Hipkins, & Bartholomew, 2004; Brewerton, 2004; Burrows, 2005; Carr, 2004a, b, c; Carr & Wylie, 2004; Hipkins, Boyd, & Joyce, 2005; O'Connor & Dunmill, 2005).<sup>2</sup> From these discussions and consultations, the KCs framework for the compulsory schools' sector in New Zealand was developed. This KCs framework aligns with the dispositions that underpin *Te Whäriki* — the early childhood curriculum, and a set of similar KCs that have been developed for the tertiary sector.

As shown in Figure 1 below, taken from the draft revised curriculum (Ministry of Education, 2006, p. 7), the KCs are intended to be a central and embedded part of the curriculum (note that the multi-coloured band running around the KCs represents the eight essential learning areas).

<sup>&</sup>lt;sup>1</sup> Definition and Selection of Key Competencies (DeSeCo).

<sup>&</sup>lt;sup>2</sup> Many of these papers are located on the TKI website at: http://www.tki.org.nz/r/nzcurriculum/draft-curriculum/key\_background\_read\_e.php

#### Figure 1 Curriculum overview



The KCs framework represents a revision and development from the Essential Skills. A key driver for this revision was the need to ensure that students learn the skills at school that enable them to function in the fast-changing world of the knowledge society. A MOE pamphlet states that "the suggested framework of key competencies promotes a *lifelong learning* model" (Ministry of Education, 2005, p. 2), and the diagram above also includes the term "lifelong learners". Commentators suggest that in order for learners to develop the lifelong learning skills or KCs necessary to function in the knowledge society, teaching practice needs to shift towards approaches that could be broadly defined as constructivist or student-centred (Boyd et al., 2005; Bryce & Withers, 2003; Hipkins, 2006b; Hipkins et al., 2005).

It is in this context of change that the Normal Schools started their exploration of the proposed KCs framework. The case studies in this report discuss how these "early adopter" schools interpreted the framework and approached some of the shifts in thinking about curriculum and pedagogy that are implied by the lifelong learning focus that underpins the KCs.

### The research design

As the Normal Schools in this study were "early adopters" of the KCs framework, a case study design was selected as a way of exploring their varied approaches and experiences. The case studies were designed to fulfil a number of purposes. At the school level, one purpose was to provide feedback to assist school staff to reflect on their journey and further develop their teaching and learning programmes. At the national level, the case studies were designed to inform

understandings about school change, and to provide information about the potential professional development (PD) or support needs of schools as the new KCs framework is implemented.

#### **Research questions**

To frame the case study data collection, an overarching question examined the change process across schools. This question was: How do school staff interpret and action the new KCs framework?

A series of sub-questions further focused the data collection on three levels of the school system: school-wide practice and culture; teacher practice; and students' classroom experiences. These questions were:

- 1. How do schools manage the change process?
- 2. What changes in whole-school practices and school culture are anticipated or evident as a result of the change process, and how did these changes come about?
- 3. What changes to teachers' professional knowledge and practice are anticipated or evident as a result of the change process, and how did these changes come about?
- 4. What changes to classroom environments and students' learning opportunities are anticipated or evident as a result of the change process, and how did these changes come about?

#### The schools in the study

At a NSA forum, schools were invited to submit a proposal to be part of the research. In these proposals schools detailed their plans for integrating the KCs into school-wide practice. Six schools volunteered to be part of the case studies:

- Central Normal School (CNS), Palmerston North;
- Hillcrest Normal School (HNS), Hamilton;
- Karori Normal School (KaNS), Wellington;
- Kelburn Normal School (KeNS), Wellington;
- North East Valley Normal School (NEVNS), Dunedin; and
- Takapuna Normal Intermediate School (TNIS), Auckland.

## Nature of the data collection

To enable information to be collected across schools the case studies included common data. To allow factors unique to each school to be explored, data individual to each school was also collected. A multi-method approach was used to gather data that incorporated information from teacher and student surveys, interviews with teachers and school leaders, student focus groups, observations, and school documents and data.

The design of the case studies and the case study instruments was informed by national and international school change literature and the methodology of, and findings from, a number of recent NZCER evaluations and case studies that examined innovation and change in the primary and secondary school environment (Boyd et al., 2005; Boyd, with McDowall, & Ferral, 2006; Hipkins & Vaughan, 2002; Mitchell, Cameron, & Wylie, 2002).

### Reporting

A number of different strategies were used to report back to schools about the findings of the research so that these could inform developments. Reporting methods included presentations and discussions about the survey findings at each school, presentations and discussions at NSA forums about emerging themes, a presentation at the NSA conference, and the writing of this final report and case studies.

Table 1 provides an overview of the research and reporting activities completed as part of this research.

Time frame	Main task	Activities
28 Oct 2005	Contribute to NSA forum	<ul> <li>Presentations to the NSA forum:</li> <li>about the KCs;</li> <li>about managing change; and</li> <li>giving an introduction to the research and calling for volunteer schools.</li> </ul>
Term 1, 2006	Survey data collection	Survey forms sent to students and teachers at the six case study schools.
31 Mar 2006	Contribute to NSA forum	Update on the research presented to a NSA forum.
June 2006	Case study data collection and school presentations	<ul> <li>Case study data collection at each school:</li> <li>teacher and leader interviews;</li> <li>student focus groups;</li> <li>classroom observations; and</li> <li>collection of curriculum plans, lesson plans, and assessments.</li> </ul>
11 Aug 2006	Contribute to NSA forum	Presentation to staff of survey findings during case study visit. Emerging themes from the case studies presented to a NSA forum.
19 Oct 2006	Contribute to NSA annual conference	Findings from the case studies presented to the NSA annual conference.
Dec 2006	Final report	Final report to the Ministry of Education and schools.

#### Table 1 Research and reporting activities

## **Data collection methods**

Two main data methods were used to collect data for this study: a teacher and student survey and the collection of information for school case studies. These two approaches are described below.

### Teacher and student survey

In order to collect data on current school culture and classroom practices that could potentially relate to the proposed KCs, all the teachers and a sample of the senior students at each school completed a survey in Term 1, 2006. Students in the oldest year group at each school were asked to complete the survey. They were Year 6 students in contributing schools and Year 8 at full primary and intermediate schools. At one school a particular group of students who were involved in the school's KC initiative completed the survey.

Both the student and teacher surveys contained four main generic sections which asked:

- for background information about the respondents;
- about the occurrence of classroom practices related to the KCs;
- about school culture and environment (and for teachers, about managing change); and
- summary questions about learning at the school and potential improvements.

#### Classroom practices related to the Key Competencies

The student and teacher surveys included parallel sections which examined classroom practices potentially related to the KCs. These sections were developed from a review of research studies and tools that explored good practice and lifelong learning pedagogies. In particular, these sections were adapted from the tools used as part of the evaluation of the Curriculum Innovation Projects (Boyd et al., 2005), and a review of information from the following papers, studies, and instruments:

- the descriptions of the proposed KCs from the draft New Zealand Curriculum (Ministry of Education, 2006);
- the information from background papers and articles about the KCs (Hipkins, 2005, 2006b; Hipkins et al., 2005);
- the descriptions of the revised Essential Skills in the *Curriculum Stocktake Report* (Ministry of Education, 2002), and the descriptions of the initial Essential Skills from the *New Zealand Curriculum Framework* (Learning Media, 1993);
- the findings, and the measures used to assess the use of productive pedagogies, from the *Queensland School Reform Longitudinal Study (QSRLS)* (School of Education: The University of Queensland, 2001a, b);
- the tools used in the *International Network of Innovative School Systems* (INIS) (Bertelsmann Stiftung, 2003);
- the findings and the tools from the Middle Years Research and Development project (MYRAD) (Russell, 2003);
- the findings, and the school self-evaluation tools, from the Engaging Secondary School Students in Lifelong Learning project (Bryce & Withers, 2003);

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• the Competent Learners at 14 research instruments (Wylie, 2003);

- the findings from the Sustaining School Improvement study (Mitchell et al., 2002) and the instruments used in this study from the Improving School Effectiveness project (Smith, Stoll, McCall, & MacGilchrist, 1998); and
- the instruments used in the evaluation of the ICTPD clusters (Ham et al., 2003).

From the review of all these studies, a list of classroom practices potentially related to each KC was developed. The teacher survey included a section in which teachers were asked to rate how often each practice occurred in their classroom, and how important they considered each practice to be. The student survey also included a parallel section in which students were asked to rate how often they thought each practice occurred in their classes.

#### Managing change and school culture and environment

The teacher survey also included questions about key areas related to school change such as: leadership; the development of a shared vision and learning community; collaboration; access to PD; resourcing; and teachers' expectations of students.

The student survey included questions on key areas such as: students' perceptions of the school culture and environment; their views about teachers; their enjoyment of learning; the relevance of their learning; and their ability to participate in school decision making.

A copy of the teacher survey is included in Appendix A, and a copy of the student survey is included in Appendix B.

### Survey piloting

The initial teacher survey was piloted by five teachers. The student survey was piloted and reviewed twice, first by eight students, and after modification, by 11 students. These students were of different ages, ethnicity, and gender, and attended schools of different character.

### **Case studies**

Each school was visited for one to two days in June 2006, by one or two researchers, to collect data for the case studies. Each case study included information collected from a range of different sources. The main methods of data collection for the case studies are described below.

#### Interviews with school staff

Each case study included structured interviews with all, or a sample, of the key people involved in the exploration of the KCs at each school. This sample included principals, other school or syndicate leaders, and classroom teachers.

If the number of people involved at each school was relatively small, all were interviewed. In cases where the whole school was involved, a sample of teachers and school leaders from different year levels or syndicates were interviewed.

The interviews with school staff focused on their interpretation of the proposed KCs framework, their thoughts on the changes this framework might lead to, the processes they were using to introduce the KCs to staff and students, and their access to PD and support.

A copy of the school leader interview is included in Appendix C, and a copy of the teacher interview is included in Appendix D.

#### Student focus group interviews

During the case study visits, we conducted a focus group with 6–10 students at each school. We asked teachers to seek volunteers by approaching a range of students who were from different classes, genders, and ethnicities, and who would be comfortable in a group interview situation. At most schools, we talked to students who had some form of leadership responsibility in their class or in the school. These students were in Years 5 to 8.

The focus groups aimed to provide insights into students' interpretation of the KCs, their perceptions of teacher practice in regard to the KCs, and the opportunities presented to students that were likely to support them to develop the KCs.

A copy of the student focus group interview is included in Appendix E.

#### Observations and collection of school documents

During the case study visits, informal observations were conducted at some of the schools. The nature of these observations depended on the school's approach to the KCs. For example, student presentations about the KCs were observed at TNIS, and time was spent in classrooms at other schools. School planning overviews and timelines, teaching plans, student assessments, and other school documents were used to inform the case studies.

#### Ethics and informed consent

To support the sharing of practice between schools, principals were asked for permission for their school to be named as part of the research. The students, school leaders, and teachers who took part in interviews for this research were provided with an information sheet about the research and asked to complete a consent form. Parents of the students who participated in the focus groups were also provided with an information sheet and asked for consent for their child to participate. Teachers who completed the survey were provided with an information sheet. Students who completed the survey were informed about the research by their teachers and asked for their participation.

A copy of a student information sheet and consent form are included in Appendix F, and a teacher information sheet and consent form in Appendix G.

The staff interviewed at each school were sent a copy of the interview questions before each interview. To ensure that the information collected fairly represented the experiences of school staff, each school was sent a draft of their case study for staff to review and suggest amendments.

## Data analysis

Information gained from the methods outlined above has been included in the case studies. During the interviews, notes were taken and/or the interviews were recorded. These notes or tapes were qualitatively analysed for themes related to the research questions. Using a similar process, the notes or tapes from the student focus groups were analysed for themes. The insights gained from the school observations were also used to inform the case studies.

The student and teacher survey data was analysed for patterns within and between schools. Each school was provided with an analysis of their school data. A combined analysis across schools of the KCs section of the teacher and student survey data is presented in this report. We used frequency data to study the patterns of responses to items, and we compared teachers' and students' perceptions of the frequency of each practice, and used t-tests to establish statistically significant differences in mean perception. These are reported in the text of this document. We also used frequency data to rank the teacher data in order of the importance attached to each item.

## **Research team**

This project was co-ordinated by Sally Boyd. The research team also included Verena Watson who led the data collection and write-up for some of the case studies, Rose Hipkins who presented at the NSA forums, and Hilary Ferral who managed and analysed the data.

## 2. Cross-school themes

This section of the report discusses the main cross-school themes that emerged from this research. These themes are also related to insights from relevant literature. Details about the approaches used at each school are provided in the individual school case studies that follow this section.

## Managing change: Commonalties in schools' approaches

#### Reviewing the big picture: What were the drivers?

School leaders saw the KCs framework to be a timely development as it offered them a lens through which they could view and evaluate school practices. These schools were engaged in a period of reviewing their practice in respect to curriculum delivery and pedagogy. One key driver of this review process was a desire to reduce what many perceived to be "curriculum clutter", with the overall aim of increasing the coherence of school programmes. A second driver was an interest in further exploring approaches such as curriculum integration. Recent national and school PD (such as AtoL, and literacy and numeracy contracts) emphasised whole-school approaches, reflective practice, and student-centred pedagogies such as formative assessment. For these school leaders, greater curriculum integration was seen as a way of achieving this wider set of reforms. Related to this was a desire to further develop pedagogy and practices that were unique to their school environment to create a strong school identity.

School leaders noted that a focus on the KCs supported the foregrounding of a "hidden curriculum" of attitudes, values, and social skills. They saw the framework to be aligned with the student-centred practices they were currently developing. The NSA also saw the trialling of approaches to the KCs as an opportunity for the schools to become more involved in or take a leading role in national education initiatives.

#### Professional leadership

At all six case study schools the principals and/or the senior management team were involved in setting the direction for the exploration of the KCs. These leaders worked collaboratively with staff, but also saw their role as a key learner and professional leader. The school change literature notes that focused leadership is central to developing, nurturing, and sustaining change (Fullan, 2005; Hargreaves & Fink, 2004; Harris, 2002). This literature emphasises professional and pedagogical leadership as a key support for change (Sammons, Hillman, & Mortimore, 1995; School of Education: The University of Queensland, 2001a; Stoll & Fink, 1996). School leaders

were enthusiastic about this opportunity to develop their role as a professional educator rather than as an administrator. The NSA forums provided a valuable place for them to engage in professional discussion with their peers. These meetings supported those involved to develop a shared understanding of the KCs framework across schools and build on each other's ideas and experiences.

School leaders also used this opportunity to develop leadership capabilities in their staff. At all schools, a range of staff were encouraged to take on leadership roles in developing school approaches to the KCs.

#### Developing processes for unpacking the KCs

At the case study schools, a variety of models were used to introduce the KCs to staff and students. These models are described in each school case study. School leaders were aware of the importance of using processes that developed a collective view and that ensured that all staff were aware of, and had ownership over, new initiatives such as the KCs framework. As one school leader said, it was important that all staff were "singing from the same song sheet". To this end, all of the schools had initiated some form of ongoing, in-house, whole-school PD about the KCs. Processes such as these, which enable a shared vision to be developed, are noted in the school change literature as facilitating change (Russell, 2003; Sammons et al., 1995; Stoll & Fink, 1996).

At some schools, an in-depth exploration of the KCs was undertaken by the whole staff; at other schools, teams of "early adopters" trialled ideas that could then be shared with others. The whole-school or team PD organised at the schools had a number of features in common. These are described below.

#### Providing information

To start the PD, school leaders provided staff with information about the KCs. This included summaries from presentations delivered as part of Curriculum Stocktake meetings or at NSA forums. School leaders also provided staff with relevant readings about the KCs or curriculum approaches. Some staff visited other schools to hear about their approaches.

School leaders also attempted to connect the KCs with ideas about lifelong learning. Some presented staff with information about the knowledge society and the need to prepare students for this future. Others linked teacher brainstorming about the KCs to ideas about lifelong learning.

Staff noted that, given the newness of the KCs framework, there was a dearth of resources available for them to use. They identified a need for support materials and background reading to assist staff at other schools to go through this process.

#### Connecting the KCs to the known

To avoid staff feeling overloaded with "another add on", school leaders took care to link the KCs with aspects of existing school practice. During PD sessions, teachers completed tasks that supported them to examine how the KCs aligned with current practice. For example, some staff brainstormed the sorts of student outcomes they were expecting by exploring questions such as: What skills do we want a school leaver to have? What does an effective learner look like? The responses to these brainstorms were compared to the KCs and a close fit was found in most cases. School leaders noted that these exercises were important as they gave staff a sense there were aspects of the KCs they were "already doing".

As part of their PD school staff also explored the fit between the KCs and the existing tools and strategies they were using. Common strategies included approaches to using thinking skills (such as Thinking Hats/Bloom's Taxonomy), Learning Styles, the Habits of Mind, and co-operative learning strategies.

#### Locating an exploration of the KCs within an integrated or inquiry learning framework

The schools in this study were all in the process of organising curriculum delivery around schoolwide themes, or examining curriculum coverage. They were interested in using the KCs framework as a tool to support this reorganisation. Because integrated or inquiry learning programmes were centred around "big ideas", staff considered they had the potential to provide rich learning opportunities that were likely to support students to develop the KCs. They therefore started to incorporate the KCs into current thematic integrated/inquiry units.

This was another way the KCs framework was connected with existing school practices. Some of the schools were redesigning their planning to foreground the KCs. Others added the KCs into existing planning templates. At most of the schools a school planning overview or teachers' different ways of including the KCs into planning were discussed during PD.

Whilst acknowledging the KCs are intertwined, most schools selected one or two KCs, that were most relevant to the current theme, to focus on in each term. Staff reported that this approach had supported both themselves and students to deepen their understanding about each KC, but in some cases, it had also resulted in the "teaching" of the KCs separate from the curriculum. In the future, once a shared understanding had been developed about all the KCs, staff realised they would have to find ways to address the complexity of the KCs in their planning.

#### Developing a shared language

#### Developing a shared language between staff

Staff used the information they had collected and staff brainstorms to assist them to unpack the varied aspects of each KC and develop a description about what this looked like in their environment. At some schools this work was undertaken in syndicate groups and then compared. These processes supported staff to develop a shared language to talk about the KCs across different year levels. Across the schools, the development of this shared language stood out as

being a key aspect of the exploration of the KCs. These conversations supported staff to interpret the KCs and develop a deeper understanding of the framework.

#### Getting the KCs into "kids' talk"

The schools in this study were also interested in using the KCs framework as a tool to support an examination of pedagogy. At most of the schools teachers individually or jointly devised learning activities to support students to unpack the KCs and to work with teachers to develop school views about the KCs. The successes and challenges of these experiences were then discussed at PD sessions. This co-construction of the KCs was a key shift in practice that was commented on by many staff. They noted that this contrasted to their prior approaches to the Essential Skills which were, on the whole, completely invisible to students.

Staff found that a student-centred pedagogical base was necessary to co-construct the KCs with students. For many teachers, co-construction was a next step from the AtoL, formative assessment, literacy, or numeracy PD they had recently attended. These PD contracts had all emphasised making the processes and outcomes of learning more "explicit" to students.

The learning activities teachers devised for students were designed to promote student ownership of the KCs and the development of a shared language to talk about the KCs:

The most essential component is kids unpacking it as well—because they have to buy into it and see the relevance of what they are doing... (Teacher)

Staff considered that the development of a shared language supported students to develop an understanding of the KCs, increased students' awareness of the need to consider the process of learning and not just content outcomes, and assisted students and teachers to set learning goals and success criteria for the KCs. All of these supported students to self-assess and recognise their strengths and weaknesses.

Teachers found that students responded very well to discussions about the KCs. These discussions allowed teachers and students to talk about individual differences and needs and therefore to recognise their diversity:

The kids are finding it quite exciting... It's about them and who they are... They have to think more about themselves in a focused way... (Teacher)

Teachers were surprised at how well students were able to unpack the essential elements of each KC and how they responded to conferencing about the KCs, including discussions about what they could do next.

#### Incorporating the Key Competencies into formative assessment procedures

Whether and how to assess the KCs was a subject of debate. At most schools, teachers were using their knowledge of formative assessment practices to informally assess the KCs. Again, for many teachers this was a natural next step from recent PD that emphasised the importance of formative assessment.

The most commonly used forms of assessment were very similar to those suggested in the new draft curriculum (Ministry of Education, 2006). These included:

- student goal setting;
- the co-construction of KC success criteria with students;
- self or peer assessment;
- conferencing with students about their development of the KCs;
- the use of reflections or reflective diaries; and
- portfolios.

One school had developed KC exemplars as a tool for teachers. These drew on the learning stories approach used in early childhood settings (Carr, 2001), and other schools were developing matrices of progression in the KCs. Discussions about assessment were part of the PD process at the schools. At some schools, teachers shared the approaches they had developed with their colleagues. At other schools, these approaches were developed collectively as part of the PD process.

The task of formally assessing the KCs was seen as an area of complexity. Staff were approaching this task more cautiously (see Challenge 4: Whether and how to assess the KCs, p. 32).

#### Developing a professional community

Ongoing, iterative conversations that included many opportunities for professional discussion, experimentation with ideas, and time for reflection were key features of the PD organised by the schools. These processes increased staff ownership over the KCs framework. The professional communities developed by teachers had many of the hallmarks of a professional learning community. Timperley (2003) identifies the main characteristics of these communities as having:

- shared norms and values and collectively agreed on professional beliefs;
- a clear focus on student learning;
- processes which support collaboration between teachers;
- processes that support teachers to engage in reflective dialogue in relation to student achievement; and
- an emphasis on deprivatisation of practice (through some form of sharing such as discussion of information about progress or through observation of practice).

Timperley and Parr (2004) note that "evidence-based learning conversations are at the heart of professional *learning* communities" (p. 127, emphasis added). Timperley and Parr's work explores literacy—an area in which "achievement" can be clearly defined and where standardised and individual student data about this achievement is available to be scrutinised. Data in this form is not available for the KCs. Therefore the communities that developed could not be as "evidence-based" as those suggested by Timperley and Parr (2004).

At this stage, the teachers in this study were still developing their ideas of what the KCs looked like and were using a range of formative assessment practices to explore student achievement. A

future step could be some form of sharing and discussion between teachers. Conversations could focus on using joint student-teacher assessments or student self-assessments or reflections as evidence for students' development of the KCs. This would more closely align the work these teachers were doing with Timperley's (2003) definition of a learning community. This form of sharing of practice was occurring at some of the schools.

#### Interpreting the KCs: KCs versus Essential Skills

The teachers, school leaders, and students in this study were almost unanimous in their enthusiasm for the proposed KCs framework. For school staff, this was a marked contrast to their views on the Essential Skills. Many teachers talked about the difficulties with the implementation of the Essential Skills that had resulted in them being sidelined. For example:

- no theoretical background to the Essential Skills framework had been presented;
- the Essential Skills had been introduced to teachers but not explored; and
- there were too many Essential Skills for teachers to cover in a meaningful way.

These difficulties resulted in the Essential Skills being approached as discrete skills that could be "ticked off" on a checklist. A number of teachers noted that they had not felt passionate about the Essential Skills, perceiving them as an "add-on".

The majority of teachers perceived the KCs to be different from the Essential Skills as they were linked to ideas of lifelong learning and were about the "whole child" and their disposition. The nature of the KCs framework, with its smaller number of areas that teachers perceived to be highly relevant, and the in-depth exploration of the KCs undertaken at the schools in this study, supported staff to develop an enthusiasm for the KCs and integrate them into their practice.

#### Bringing all staff on board

All schools had put in place PD and support for staff as they attempted to integrate the KCs into their practice. After some initial discomfort with the newness of the KCs framework and the lack of resources to support them, teachers were becoming increasingly comfortable with developing their ideas about the KCs and incorporating the framework in their planning and classroom practice. Many valued the opportunity to be at the forefront of curriculum change.

Although all staff had been introduced to the KCs, at the larger schools it was the early adopters who were adapting their programmes to align with the KCs. Some teachers were not sure about what they should do next. A future challenge for the schools was bringing these teachers on board, and spreading new practices or planning methods to all staff.

## Exploring pedagogy and opportunities to learn

## What is "authentic" learning and how do we do it?

The OECD developers of the international KCs model note that their definition of competence places:

...the complex demands and challenges that individuals encounter in the context of work and in everyday life at the forefront of the concept... (Rychen & Salganik, 2003, p. 43)

Hipkins (2005) suggests that this statement indicates that the KCs are intended to be developed in contexts that are challenging, have personal relevance to students, and require them to actively engage with problems. This implies some key shifts in practice, for example, an increasing use of student-centred practices to source contexts that are authentic for learners, and an emphasis on the idea of "using" rather than "covering" curriculum content.<sup>3</sup>

When we visited the schools, and as part of the surveys, we looked for examples of how schools and teachers were framing and creating these challenging, complex, and real learning opportunities. We called this "authentic learning" and we looked for learning situations which:

- enabled students to take action on real projects of concern to themselves or society;
- gave opportunities for student choice;
- gave opportunities for challenge or risk taking;
- were fun, relevant, and engaging; and
- related to students' needs and level (were differentiated).

We found that staff had varying views as to what constituted a rich or authentic learning situation. Most staff cited inquiry or integrated projects, school productions and camps, and other learning experiences outside the classroom as situations that were likely to provide students with rich experiences that would enable them to develop the KCs.

In general, teachers considered it was easiest for students to recognise the KCs in the context of "learning by doing". This perception was confirmed during the student focus groups. Students were most likely to talk about how they had demonstrated the KCs in the context of "big" learning events such as stage performances or school camps, in-depth inquiry projects, and teamwork such as school sports. Students and teachers also discussed the three more familiar and socially-orientated KCs (*Managing self, Relating to others, Participating and contributing*) in relation to everyday interactions in the classroom, the playground, and at home.

The authentic learning situations described by teachers included visits to local museums or inquiry projects enabled students to "learn about" or "learn in" real contexts outside school. Many of these situations were created "for" but not "by" students.

<sup>&</sup>lt;sup>3</sup> This shift in practice is suggested by Weimer (2002) as a change that needs to occur to support students to become independent rather than dependent learners.

An alternative view of authentic learning was offered by some staff. This view aligned with the ideas about action competence<sup>4</sup> that underpin models of environmental education (Ministry of Education, 1999a), the Health and Physical Education curriculum (Ministry of Education, 1999b), and the likely intent of Rychen and Salganik (2003). These staff considered that authentic learning involved students working on projects to research, design, plan, and create solutions to real-life problems. These teachers reframed the experiences listed above or created new ways of giving students these opportunities. Examples of this included:

- students planning healthy food menus, budgeting, or designing games for a school camp;
- students designing and performing a school production and organising marketing for this production;
- students exploring new options for their overcrowded school bus service, and working with the local council to develop solutions;
- junior students researching local playgrounds and presenting a submission on improvements to the local council;
- students writing, designing, and making books to be transported to an overseas school that lacked resources;
- students engaging in science fair projects; and
- students engaging in environmental projects such as designing areas of the school grounds to make them more appealing.

This reframing necessitates a shift in teachers' roles. Although scaffolding is important, these situations require teachers to be less in the driving seat in regard to decision making.

#### Integrated approaches to learning

All of the schools were experimenting with curriculum integration models. There appeared to be two main drivers for this. On a pragmatic level, integration was a response to curriculum overcrowding. To deal with the number of learning areas they had to cover, and to do justice to the National Administration Guidelines (NAGs), many schools had evolved an approach that ensured students had strong foundations in literacy and numeracy. This was achieved by offering standalone literacy and numeracy in the morning and "integrating" other subjects in the afternoon (such as science, social studies, arts, and technology).

Another driver for curriculum integration was philosophical. There was a desire to provide rich and authentic learning opportunities and co-construction of the curriculum as suggested by James Beane (1997), a researcher and programme developer widely recognised as one of the architects of the current curriculum integration movement.

<sup>&</sup>lt;sup>4</sup> "Action competence" means having the skills and understandings to take critical action on issues of concern (see http://www.tki.org.nz/r/health/cia/make\_meaning/teach\_learnappr\_proc\_e.php).

The models used at the schools can be seen to form a continuum of curriculum integration, as shown in Table 2. At one end is a traditional teaching programme. At the other end is the studentdriven exploration of problems pertinent to society as suggested by Beane (1997).

		Type of integration	
Aspect	Traditional (no integration)	Topic connection (partial integration)	Full integration
Place of curriculum	Separate curriculum areas	Partial integration of content or curriculum areas (e.g., literacy and numeracy activities connected to social studies science, drama, or sports events)	Integration of those aspects of subjects that are necessary to the learning context
Programme driver	Coverage-driven programmes (contexts stem from the curriculum)	Mix of coverage- and context-driven programmes (contexts stem from the curriculum and teacher interests)	Context-driven programmes (contexts are problems relevant to students and society)
Opportunities for Student-choice	No student choice	Limited student choice	Issues decided by co- construction (many opportunities for student choice)

Table 2 A continuum of curriculum integr	ration
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Examples of all three types of integration co-existed in schools. Approaches that fell into the "topic-connection" category were most common. Examples included students writing reports about their experiences in other curriculum areas rather than utilising the opportunities for literacy instruction that might arise within the learning context. "Topic connection" often occurred when students participated in a drama production or school camp and then later engaged in literacy, visual art, or drama work that documented their experiences. Students did not perceive these opportunities to be co-constructed—rather, they were organised for them by teachers.

This research suggests there is potential for these experiences to be reframed so that they offer more opportunities for co-construction and fuller integration. This reframing would increase the potential to provide students with ownership over their learning and opportunities to develop and demonstrate the KCs. For example, students could explore their peers' concerns about bullying through a survey, then design a way of sharing information about strategies to deal with bullying such as writing, advertising, and performing a drama production, or the development of a peer mediation programme.

#### Inquiry models

Inquiry learning was also seen as a vehicle to provide authenticity. Most schools were using inquiry-learning models within an integrated framework. Schools varied as to how inquiry learning was conceptualised. In most cases an inquiry approach was described as a tool to teach students a research process, that is to "*learn about* doing" and in some cases by "*learning in*" a particular environment. Visiting the school library, a local museum, or a website to gather information was a common example of this. In some cases inquiry processes were being used as a tool to support students to develop action competence as they "*learnt by doing*". As for approaches to integrated learning, it appears that the potential for inquiry approaches to provide rich opportunities for students to develop and demonstrate the KCs could be further tapped.

### Exploring the survey data related to opportunities for authentic learning

This section of the report examines some of the combined student and teacher data from the survey of classroom practices relating to the KCs. This data is explored to ascertain current practice in the schools, including the frequency of practices connected to the ideas about authentic learning described above.

Overall, a similar pattern emerges across each KC, with some practices being rated by both students and teachers from all schools as occurring more frequently than others.<sup>5</sup> Across schools students show fairly similar responses and teachers display more variability. In some cases teacher and student perceptions as to the frequency of practices are similar. In other cases (marked with \*\* on each graph) there are significant differences between teacher and student views.

<sup>&</sup>lt;sup>5</sup> Each graph represents a separate KC. The lines represent the **range** of school means on the frequency of each practice. For each KC the practices are ordered by student response with the most frequent being at the top of the graph. Each line is marked by a circle (for students) or a triangle (for teachers). These symbols represent the overall mean frequency for that practice. Where the circle or triangle is non-central, it indicates the school-level means are skewed. For example, in the student data, the school mean for the item "I am given the time to think or talk about how I have learnt something" is on the left of the line. For this item, most students from five schools thought that this practice happened sometimes-to-often, but one school's mean was "often".

#### Managing self

Figure 2 shows teacher and student views on the frequency of practices connected to the KC: *Managing self*. This data shows that teachers' priorities were centred around creating a positive classroom climate in which high expectations and constructive feedback were the norm. Teachers were more likely than students to think that this environment was in place. Practices that gave students autonomy over their learning or which involved explicit teaching about meta-cognition were less frequent.



#### Figure 2 Frequency of practices linked to Managing self

\*\* indicates a significant difference of  $p < 10^{-5}$ 

#### Relating to others

Figure 3 shows teacher and student views on the frequency of practices connected to the KC: *Relating to others*. Again, teachers' priorities centred around creating a climate in which positive behaviours were modelled and encouraged. This data shows that the explicit teaching of group work or communication strategies were less of a focus. There were more differences between student and teacher views on the frequency of practices connected to *Relating to others* than for the other KCs. Teachers tended to view these practices as happening more often than students.

#### Figure 3 Frequency of practices linked to Relating to others



\*\* indicates a significant difference of  $p < 10^{-5}$ 

#### Participating and contributing

Figure 4 shows teacher and student views on the frequency of practices connected to the KC: *Participating and contributing.* We explored two main aspects of *Participating and contributing:* within the classroom; and making connections outside the school environment. This data showed that participation within the classroom was a priority. Practices that related to participation in learning situations in a broader range of social and cultural contexts were less frequent, and overall were the lowest rated practices from all of the five KCs. The data showed a greater variability between schools for this KC compared to the others, with some schools being more likely than others to include contexts that enabled students to take action on issues of concern to themselves or that incorporated Mäori or Pacific ways of doing things. Participating in a broad range of contexts outside of the classroom, and taking action on issues of concern are practices that are linked to the idea of authentic learning discussed earlier. This data suggests that students may not have frequent access to these opportunities.



#### Figure 4 Frequency of practices linked to Participating and contributing

\*\* indicates a significant difference of  $p < 10^{-5}$ 

#### Thinking

Figure 5 shows teacher and student views on the frequency of practices connected to the KC: *Thinking*. Overall teachers and students considered practices relating to this KC occurred relatively frequently.



Figure 5 Frequency of practices linked to Thinking

\*\* indicates a significant difference of  $p < 10^{-5}$ 

### Using language, symbols, and texts

Figure 6 shows teacher and student views on the frequency of practices connected to the KC: *Using language, symbols, and texts.* Less complex practices, such as gathering information, tended to be rated as happening the most frequently, and more complex practices, such as understanding subject conventions, less frequently. Teachers rated the more complex practices as occurring less frequently than students. This may well reflect teachers' more complex understanding about what these practices entail. Teachers showed greater variability between schools than students. It is possible that this variation reflects varied interpretations of the meaning of *ULST*, and/or teachers' level of comfort with practices relating to *ULST*.




\*\* indicates a significant difference of  $p < 10^{-5}$ 

#### Exploring patterns in the survey data

As well as asking teachers to rate how often each practice occurred in their classrooms we also asked them to indicate, using a 5-point scale, how important they considered each practice to be. Overall, teachers considered most practices to be "very important" or "important", and those practices that were rated as the most important tended also to be rated as happening frequently. Table 3 shows the 15 items teachers most often rated as "very important".

Survey item*	KC	Rating
eachers encourage students to take responsibility for their actions RO		Most important
Teachers model the behaviours, skills, and attitudes they would like students to develop		
Students are encouraged to respect and help each other	RO	
Students are supported to feel safe asking questions	PC	-
Teachers spend time helping students to learn	MS	-
All student groups are actively supported to join in lessons	PC	-
Students and teachers are encouraged to respect and help each other	RO	-
Teachers have high expectations for all students	MS	-
Teachers help students feel confident about learning	MS	-
Students have the opportunity to make mistakes, and learn from them without penalty	Т	-
Teachers give students feedback about areas for improvement, and assist students to work out their next learning steps	MS	_
Students are supported to feel safe when giving views that are different from other students	PC	_
Teachers give students feedback about their strengths	MS	-
Students' existing knowledge and experiences are used in teaching	PC	- ↓
Students have the opportunity to identify and discuss new ideas and problems, and don't just learn "facts"	Т	- •

#### Table 3 Top 15 teacher items in order of importance

\* This table shows each practice using the language from the teacher survey. In some cases the wording used in the student survey was slightly different.

A thematic clustering of items is evident in this list. Most of the top 15 items are connected to the three most familiar and socially-orientated KCs, that is, *Managing self, Relating to others,* and *Participating and contributing*. Furthermore, the *Participating and contributing* items relate to aspects of this KC that are demonstrated within classroom interactions. This clustering shows that teachers' priorities were centred around creating safe learning environments in which students felt comfortable about learning and expressing themselves, and in which students were offered constructive feedback about their learning. It appears that teachers' priorities were on creating better conditions for learning rather than "better learners".

Table 4 shows the 15 items teachers rated as being the least important.

Survey item	КС	Rating
Teachers support students to take action on issues of concern to themselves	PC	
Learning activities enable students to participate in a range of social and cultural settings	PC	-
Students set their own learning goals	MS	
Knowledge and texts are presented to students as having different interpretations rather than as given "facts"	ULST	
Students are taught how to analyse different types of information to look for patterns and trends	ULST	-
Students are given time to explore and clarify their own values	PC	-
Students are given choices in learning activities or contexts	MS	
Classroom contexts include Mäori points of view and ways of doing things	PC	
Students are taught ways to manage group dynamics	RO	
Students are supported to assess their peers' work and give feedback	MS	
Students take part in discussions about meta-cognition and how they learn	MS	
Students have the opportunity to learn about the conventions of different subjects	ULST	▼
Students plan how they will work, and organise their time	MS	Least
Classroom contexts include Pacific peoples' points of view and ways of doing things	PC	importan
Teachers spend time telling students how to behave	MS	-

Table 4 Lowest 15 teacher items in order of importance

Different patterns are evident in the items in Table 4, compared with Table 3. The items that were rated as less important (and usually as occurring less frequently) are pedagogies that are more unfamiliar, and therefore likely to be more challenging, than the practices in Table 3.<sup>6</sup> The practices that fall into this category are the aspects of:

- *Managing self* that relate to student autonomy over learning and meta-cognition;
- *Participating and contributing* that relate to action competence and learning in environments that are socially and culturally diverse; and
- *ULST* that relate to understanding about different subject conventions and critical literacy.

This data gives an indication of the aspects of the KCs that teachers were finding more difficult to incorporate into their practice, and the newer and more complex territories that an exploration of the KCs could be leading schools towards.

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<sup>&</sup>lt;sup>6</sup> With the exception of the least important item "Teachers spend time telling students how to behave". This item was concerned with behaviour control.

# Challenges

This next section of the report discusses some of the challenges and debates that came to the surface as the schools focused on the KCs.

# Challenge 1: Utilising the potential of the KCs to support transformative learning

The initial exploration of the KCs framework described in this report alerts us to a risk that the KCs will stay within the realm of the known and familiar. Hipkins (2006a) comments on this risk in her paper about the challenges of implementing new curriculum models such as the KCs. She calls this the "We are already doing that" challenge.

There is a risk that educators may not see the full potential of the KCs to support change towards pedagogies that are transformative and student-driven, and which result in students having increased access to opportunities for authentic learning. In this current study, students thought these sorts of experiences assisted their learning and they wanted more of them. Our data showed that some of the practices related to these more complex pedagogies were relatively less valued by staff and were happening less frequently. Staff who perceived the curriculum to be overcrowded found it hard to find time to integrate the KCs, explore these new pedagogies, or create authentic learning opportunities.

The data we collected in this study suggests that the potential of integrated and inquiry approaches to provide authentic learning experiences could be further tapped. Gilbert (2005) discusses the need for new frameworks and approaches to curriculum and pedagogy that enable all students to have opportunities to take action on real-world problems. She frames this shift as a necessity for preparing students for the demands of the knowledge society. A different but connected frame is suggested by some environmental educators. They see the development of action competence as a necessity for young people to ensure that society is ecologically, socially, and economically sustainable (Jensen & Schnack, 1997; Ministry of Education, 1999a).

School leaders noted that they wanted teachers to take advantage of authentic learning opportunities and further explore the potential of integrated and inquiry approaches. But schools and teachers found themselves operating within a climate of mixed messages. This acted against them being able to take advantage of the opportunities that did present themselves.

This study indicates a need for further national exploration of the "big picture" and ways to downsize curriculum clutter. The current revised curriculum clearly provides schools with the mandate to adopt local school-based curriculum solutions. But will schools feel able to take up this challenge? To a large extent the old curriculum also provided schools with this mandate. Over time it appears that the system became cluttered and overcrowded as curriculum messages were re-interpreted and accountability requirements came to the fore.

To increase the depth of learning experiences, school staff needed to feel that they were not making decisions that were in tension with national accountability requirements such as the NAGs (that require schools to have focused literacy, numeracy, and physical activity programmes) and the Planning and Reporting framework. This is not a new tension. In the 1960s Elwyn Richardson, the author of *In the Early World* (Richardson, 2001), was vilified for his departure from the norm of curriculum delivery, and then later lauded as being an exemplary teacher!

Schools were finding ways to deal with the tension between coverage of Achievement Objectives (AOs) and initiating student-driven projects in which various AOs could be addressed depending on the interests of students. Most of the case study schools had resolved this tension by setting overall themes to ensure certain AOs were covered, then allowing some flexibility for both syndicate and student-led interests to be followed. The impact of this was to place most schools in the middle of the continuum of student-centred practice in relation to approaches to integrated learning and to remove the potential for greater student input into the decision-making process. It appears that the multiple drivers for curriculum integration (both pragmatic and philosophical) have resulted in a tendency for the intent of curriculum integration to be watered down.

For the full potential of inquiry and integrated models to be utilised to provide authentic learning opportunities, it appears that further shifts towards student-centred practices are required. Central to the model of integration suggested by Beane (1997) are increased opportunities for coconstruction of the curriculum by students. Moving away from a teacher-directed approach towards increasing student decision making can be daunting for teachers. However, it seems to be a practice with which the teachers and school leaders in this study were becoming more comfortable. Beane (2006) suggests there are many different ways to incorporate the student voice into classroom programmes. These can be small-scale, for example, students deciding on what resources to use, or assisting in the design of formative assessments. Or they can be large-scale, for example, co-construction of the central theme of a study. Many of the small-scale ideas suggested by Beane were the types of approaches used in the case study schools. Beane considers that starting with these smaller-scale approaches is one way of encouraging staff to increase student involvement.

For teachers to truly be able to take advantage of the authentic learning opportunities that present themselves, and co-construct the curriculum or classroom practice with students, they need support at the school level. It is also important that accountability structures at the national level do not prohibit them from responding to student interests or just-in-time learning opportunities. At the school level, this support could be a planning structure that allows for depth of learning, flexibility, and co-construction, and does not require all planning overviews for the next year to be developed in advance. At the national level, support could take the form of NAGs that are not tightly prescribed, or Education Review Office (ERO) reviews that do not look for all aspects of planning to be completed in advance but instead explore school practice for examples of action competence, co-construction, or ways of responding to student interests.

This study suggests there are two questions that could be further explored: "Is the education system coherent at the national level?" and "Do schools have the 'big picture' or programme coherence at a local level?"

Newmann, Smith, Allensworth, and Bryk (2001) assert that ideas about "coherence" are helpful in assisting us to reflect on the educational "big picture". Newmann et al. discuss the importance of programme coherence in underpinning school improvement attempts and improving student achievement. They define programme coherence as:

a set of inter-related programs for students and staff that are guided by a common framework for curriculum, instruction, assessment, and learning climate and that are pursued over a sustained period of time (p. 297)

Newmann et al. contrast this model of coherence to the adoption of a wide range of programmes, or non-connected programmes for different types of learners. One example of non-coherence they describe is various forms of PD or facilitators working in schools in ways that do not connect with each other. A challenge for the New Zealand system is that, although the various forms of PD currently available are aligned philosophically, it is up to teachers and schools to make explicit connections between the different PD contracts. A further exploration of the idea of national and local coherence has the potential to assist with planning and dealing with some of the concerns about "clutter" in the system.

There is of course a tension in the views of Newmann et al. If programmes are too coherent there is a risk that planning could become too tightly prescribed and not allow space for individual expression by schools, teachers, or students. This returns us to the planning dilemma discussed above.

In this section of the report we have explored some of the more challenging aspects of creating rich learning opportunities for students. There is a caveat to this discussion. It is important to acknowledge that aspects of the KCs can be infused within all learning situations and therefore it is vital not to ignore the significance of smaller-scale opportunities, for students to develop the KCs and for teachers and students to discuss the KCs, that present themselves in the context of everyday interactions and activities in and outside of the classroom.

#### Challenge 2: Process and strategy cluttering

Along with debates about curriculum coverage and overcrowding, another concern expressed by staff at some of the schools was about "process" overcrowding. Many staff noted that their school "did" the Habits of Mind and used a variety of tools and strategies such as de Bono's Thinking Hats, graphic organisers, Bloom's taxonomy, learning styles, the Virtues Project, and various approaches to critical thinking. Many of these tools and strategies were used as a way to make the process, and the desired outcomes, of learning more explicit to students. Most thought that developing a shared KCs language with students also supported them to make this process more explicit. Some suggested that the KCs, therefore, fitted well with the existing tools and strategies

that had this focus. Other teachers talked about the fads that swept through the system and "process overcrowding". They expressed concerns about the overlap between some of these approaches, and whether they could "fit them all in".

One common example was the overlap between the Habits of Mind and the KCs. Some staff had done matching exercises to examine how these two frameworks were inter-related, or had used Habits of Mind terminology in their exploration of the KCs. Other teachers thought the KCs framework could replace their school's focus on the Habits of Mind.

Newmann et al.'s (2001) argument about programme coherence can be applied to reviewing the purpose of the range of tools and strategies available for schools to use. The situation described above points to a need for schools to have "process" coherence so that teachers are clear about how the tools and strategies used at their school fit into the bigger picture of curriculum delivery and pedagogy. Using the KCs framework as a starting point, and selecting a few key tools and strategies that complement this framework, could be one way of achieving process coherence. Another approach is suggested by Beane (2006). He described how staff and students at a school he worked with used the Habits of Mind framework to develop a smaller number of dispositions that connected with their overall vision.

#### Challenge 3: Interpreting the KCs framework

#### Interpreting ULST

- Across and between schools there was variation in how staff interpreted the five KCs. Teachers found the KC: *Thinking* relatively easy to interpret. This KC was viewed as relating to existing approaches to critical thinking and the various thinking tools and strategies already used in the schools. Teachers and students also found the three most socially-orientated KCs (*Managing self, Relating to others,* and *Participating and contributing*) more familiar and therefore easier to interpret and recognise than the KC: *Using language, symbols, and texts*.
- Hipkins' (2006a) challenge that "We are already doing that" or that the KCs are "Business as usual" is particularly relevant to *Using language, symbols, and texts*. Hipkins (2006a, b) suggests that this KC is potentially the most different from the Essential Skills, and therefore may need more "unpacking" than the other KCs. The findings from this study support Hipkins' view. Some saw this KC as an "outcome" that was assessed via existing literacy and numeracy programmes. Others considered that it could potentially support them to be more aware of literacy across the curriculum, but had yet to devise ways this could be achieved. At the stage we visited the schools, most had started to add the three more socially-orientated KCs into their planning, but had yet to fully engage with *ULST*. This suggests that more support is needed to assist teachers to interpret and integrate this KC.

#### Moving beyond social skills

Teachers acknowledged the importance of the social skills embedded within the three more familiar competencies: *Relating to others, Managing self,* and *Participating and contributing.* However, the meta-cognitive aspects of these competencies are not clearly apparent. This alerts us to a trap for schools. In the original OECD (2005) framework, reflectiveness is at the "heart of the KCs". This framework explicitly weaves thinking (meta-cognition, reflection, and critical and creative thinking) through three competencies. This suggests that without this interweaving, prominence needs to be given to the meta-cognitive and reflective aspects of the KCs to ensure that they are not viewed solely as a set of social skills or as a behaviour management tool. Hipkins (2006a) notes that it is important that the complexity of each competency is not lost. For example, she suggests that there is a risk that *Managing self* could be interpreted as students behaving well and being ready to learn, and that the thread about identity (knowing who you are and how to "be") that runs through this competency could be downplayed. An associated risk is that this competency could be framed in the classroom as a tool for behaviour management rather than for student empowerment.

If teachers are to move towards a deeper exploration of the KCs, there is a need for a shared language for this exploration. The schools in this study had started to develop this shared language. A next step could be reviewing this language to ensure that it allows both students and teachers to explore the full complexity of the KCs including the meta-cognitive aspects.

#### Challenge 4: Whether and how to assess the KCs

At most of the schools, teachers were informally assessing students' development of the KCs using formative assessment procedures. Some teachers found this was leading them in new directions and talked about the dilemmas they initially experienced as a result. Some expressed discomfort as they felt they were assessing "dispositions" or "personality". These teachers were unsure about what to do if students did not have a realistic idea about how they had performed and consistently rated themselves in a higher position than teachers, or their peers, did on self and peer assessments. Some teachers negotiated with students using evidence (such as peer and teacher ratings, and students' performance on recent tasks). They found that students responded well to this, and they were surprised at students' frankness and willingness to discuss their KCs development. Other teachers felt uncomfortable about suggesting to students that they were not performing as well as they thought. These teachers were concerned about the potential impact of these discussions on students' self-esteem. Consequently they tended to leave students to decide how they had performed.

The experiences of these teachers show that they were at different places in regard to their comfort with, and knowledge about, offering students direct feedback about their performance. Following from recent PD in literacy, numeracy, or formative assessment, this area of practice was being developed at the schools. The focus on the KCs had brought a need for a shift in practice into sharper relief.

School staff were debating the more formal aspects of assessing the KCs. Most were approaching this task cautiously to avoid the "tick box" approach that had occurred with the Essential Skills. Staff were also concerned that ERO and the MOE would expect assessment of the KCs, given the appearance of the following statement in the draft curriculum:

The competencies should be assessed in the context of tasks that require students to use their knowledge and skills in new ways (Ministry of Education, 2006, p. 29).

Staff were debating whether there was a need to summatively assess the KCs, and how to formally report on the KCs. Some staff considered the KCs should not be formally assessed. Others considered this to be vital, otherwise there was a risk that the KCs would be sidelined. This is discussed by Hipkins (2006a) as the "If they're not assessed, we'll just ignore them" challenge.

At the case study schools, most staff were planning to use their shared KCs language at three-way conferences to introduce parents to the KCs, and were also planning to replace the Essential Skills and behaviour sections of school reports with comments on students' performance in relation to aspects of the KCs. Teachers were less sure about whether they would make a global judgement to inform these comments or have a more formalised system of assessing student progress. Some schools had developed rubrics to chart progression in the KCs within and across year levels. They were planning to use these rubrics to "level" students and report to parents. In general, school leaders and teachers considered that expectations surrounding assessment needed to be clarified at a national level.

#### Next steps for KC assessment

International literature supports teachers' use of formative assessment strategies to assess the KCs and suggests that new assessment models are needed that move us away from the types of standardised testing that is often used for assessing progress in literacy and numeracy. From a review of issues surrounding the implementation of the KCs, Hipkins, Boyd, and Joyce (2005) found considerable overlap in approaches used to assess similar concepts to the KCs. In their paper, Hipkins et al. drew on Delandshere and Petrosky's (1998) work to develop the idea of the KCs as a "complex performance". Delandshere and Petrosky note that complex performances integrate many components. As the KCs are an integration of knowledge, skills, attitudes, and values, this suggests that they need to be viewed and assessed as "complex performances".

Delandshere and Petrosky suggest that there are differences between models that underpin the assessment of academic achievement and complex performances. For example, the measurement theory on which standardised tests rest assumes that attributes such as numeracy skills are in a relatively steady state. Any variations between assessments could be described as the result of error, not a unique response to a specific context. In contrast, the KCs are context-bound. For example, how a learner demonstrates *Relating to others* could vary substantially depending on their level of comfort in different situations. Delandshere and Petrosky (1998) suggest that different assessment models are needed to capture this complexity.

This suggests that the KCs have the potential to lead us towards new assessment territories. Hipkins et al. (2005) found that there was considerable agreement among commentators and researchers about the purpose and types of assessment best suited to the evaluation of complex performances like the KCs. Most suggest that:

- a key purpose of the assessment is to empower students to become lifelong learners rather than for accountability purposes (although assessments can fulfil both these functions);
- new forms of assessment are needed to assess complex performances. These forms of assessment move us away from standardised testing towards forms that promote coconstructed formative assessment;
- the learner should be involved in discussion about progress or in making decisions about selecting the evidence. Some suggest that the learner should be involved in decisions about judging the evidence;
- more than one form of assessment is needed to adequately deal with issues of reliability and validity;
- more than one task is needed to adequately deal with issues of reliability and to give learners the opportunity to show how they have adapted the complex performance for use in another setting; and
- portfolio-type self-assessments or observations of complex performances grounded within authentic learning situations are suggested as methods that are well suited to supporting learners to demonstrate complex performances and for validly assessing these performances.

Commentators and researchers also agree that complex performances are performed holistically (for example, more than one KC is drawn on in any given situation) but have less agreement about whether aspects of this performance should be assessed holistically or discretely. Most propose assessment and reporting systems that are standards-based. Some comment that charting progression in complex performances can be a complex endeavour.

This summary of the international literature supports the current direction the case study schools are taking with assessment and also suggests a need to progress cautiously with the more formal aspects of assessing the KCs. This study points to the need for a process that supports the development of system-wide understandings about this area. For example, practitioners, MOE personnel, and assessment specialists could work together to further develop ideas about how assessment of the KCs could be achieved.

#### Where to next?

The schools in this study were at the start of a journey to incorporate the KCs framework into their teaching and learning programmes. Almost without exception, all of the staff and students we interviewed found exploring the KCs a fascinating and positive experience. The in-depth discussions in which staff and students engaged as part of this process were supporting schools to review curriculum delivery, further develop leadership capabilities in a range of staff, develop a whole-school language to talk about the KCs, and further develop whole-school pedagogies and assessment practices.

Some of the key writers in the area of school change (for example, Stoll et al., 2001) discuss how school improvement initiatives have traditionally focused on assessing achievement in areas such as literacy and numeracy. They suggest that the challenge for this millennium is to shift the focus to understand more about how individuals learn and to find tools that give information about deep learning in relation to the competencies required of the knowledge society.

The unpacking of the KCs in these schools is a step towards addressing this challenge. The schools' experiences have shown that the current educational environment, which is characterised by curriculum as well as tool and strategy overcrowding, and national accountability directives (NAGs, the Planning and Reporting framework, and ERO reviews), poses some challenges for schools as they attempt to make this shift.

The draft revised curriculum explicitly gives the mandate to schools for school-based curriculum development (Ministry of Education, 2006). The schools in this study welcomed this flexibility as a way to move away from the current cluttered system. This study identified a number of challenges for schools in clarifying a "big picture" for themselves within the current environment. These were the need to:

- find ways to fully utilise the potential of integrated and inquiry approaches to provide space for rich and authentic learning opportunities and support teachers to move towards unfamiliar pedagogies;
- review the use of various tools and strategies to ensure that they fit with the "big picture";
- develop processes that ensured that the language used to talk about the KCs captures their complexity;
- develop processes that support teachers to interpret ULST; and
- develop new models of assessment for the KCs.

These schools were at various stages of a journey towards this clarification. Having time to debate the challenges that arose during the course of their exploration of the KCs, both within and between schools, was assisting staff to address some of the complexities of the new environment they were entering. This study suggests that if teachers are to take further advantage of the opportunities the KCs framework presents they will need ongoing support at the school level as well as national messages that align with the framework.

#### Managing change

A comparison of the experiences of the schools in this study to the school change literature reveals that many of the supports that are likely to support positive change were in place. The following list of conditions for change was developed from an overview of the school change literature and the experiences of the schools in the Curriculum Innovations Projects (Boyd et al., 2005). Most of these conditions were evident in the schools in this current study:

- There is strong leadership.
- A shared vision is developed.
- Change is planned for and the plan considers the interplay between curriculum, pedagogy, and assessment.
- Good practice pedagogy is used to support students to become lifelong learners.
- New forms of teacher communities are developed (such as learning communities).
- Varied types of professional development are offered.
- External collaborations are developed.
- Students are involved.
- Goals are monitored.
- Alignment with school structures is considered.
- Extra funding and resourcing are provided to seed the initiative.

This report concludes with a series of suggestions about how to manage change at a national and local level. These suggestions stem from an amalgam of the study findings, the ideas suggested by school staff during interviews, and the literature.

#### Managing change and promoting coherence at a national level

One way of managing the risks associated with curriculum change is to ensure that new models are presented in ways that support their uptake. Hipkins el al. (2005) note that if models of competencies are to be appropriately used by the wider education community they need to be framed in a way that is coherent with the pedagogy and assessment purposes they promote, and presented in a manner that is easily understood and interpreted, and that supports a shared understanding of the conceptual underpinnings of the model to be developed.

Internationally, a lack of conceptual clarity, resulting in inconsistent understanding of generic skills or competency models similar to the KCs framework, has been suggested as a main reason for the variable uptake of these models (Blom & Clayton, 2003; Kearns, 2001). To ensure conceptual clarity, Oates (2001) suggests that carefully planned PD is needed to sit alongside the introduction of new models. The school leaders and teachers in this study also held this view. Staff also noted that clear messages at the national level were very important, for example, clear implementation time frames and expectations.

To support staff to take on board the KCs framework, school leaders considered that staff needed to have access to PD or material that outlined the conceptual framework of the KCs. This included the rationale underpinning the framework and how this connected with ideas about the knowledge society and lifelong learning. School leaders also noted that staff needed practical ideas about what each KC looked like and how this linked to classroom practice. This would ensure that each KC was fully explored and would support the development of a shared language about the KCs.

Senior staff in the case study schools had attended background sessions, such as a MOE briefing about the revised curriculum including background on the KCs framework, principals'

conferences, or the overviews about the KCs provided at NSA forums. They felt less in need of PD than those who did not have this big picture.

However, many teachers also wanted information about the background to the KCs. As one said, "as a teacher we deserve to know the [underpinning] thinking". School staff also noted that School Support Services and other teacher providers needed to be on board so they could offer PD to schools.

Suggestions as to the future format of KCs information included DVDs, accessible readings, educational TV programmes, education community debates, presentations, and information resource packs on the new curriculum in print or located on a website.

One particular concern was a lack of clarity about national expectations for assessing the KCs. From their experiences, school staff suggested that it was vital to give teachers time to experiment with integrating the KCs into teaching and learning and not mandate forms of assessment too soon. But they also wanted clarity about whether they would eventually be required to assess the KCs and, if so, when and how.

School leaders suggested that more debate about national directions was required at a regional and school level. They considered that opportunities for clustering and sharing of ideas between schools was necessary to support schools to explore changes that might result from the curriculum revision, and the new KCs framework. School leaders and teachers considered release time for PD and time for "teachers to talk to teachers" was vital. Teachers wanted time to share practical ideas with other teachers, either in cluster groups, or through visits between schools.

#### Managing change at the local level

Although the school staff in this study would have welcomed more resources about the KCs framework, on the whole they found the mostly in-house PD processes they designed to introduce the KCs to be an effective way of exploring this framework. The following is a summary of ideas suggested by school staff and this research about introducing the KCs framework within a school environment:

- Ensure the foundations are in place. (Do current school curriculum, pedagogy, assessment, and planning practices align with approaches likely to support students to develop the KCs? Do changes to the "big picture" need to be made?)
- Provide teachers with information about the background to the KCs framework including information about learning for the knowledge society.
- Make the KCs a whole-school focus (with not too much other PD).
- Unpack the KCs with staff first before going to students.
- Connect the KCs with the known so that staff do not see the KCs as "another added extra".
- Make connections with other schools to hear about their approaches.
- Find ways to give ownership over the process to teachers.

- Give teachers time to work as a team, develop a shared language about the KCs, trial ideas about how to integrate the KCs into planning and classroom practice, and reflect.
- Develop a shared language with students by involving students in the process.
- Make the KCs real for students by connecting them with their in- and out-of-school lives.
- Give teachers time to experiment before formally assessing the KCs.
- Take time to explore the unknown. (This study suggests that the KCs framework has the potential to lead schools towards new curriculum, pedagogical, and assessment territories.)

# 3. School case studies

The next section of this report includes the six school case studies. These cases studies are all located within the context of a desire by the schools to review curriculum and pedagogy and to continue shifting practice towards student-centred approaches.

The first case study describes a student-centred model of exploring the KCs adopted by a team at Takapuna Normal Intermediate School. The next two case studies describe whole-school planning models: the development of an umbrella approach to curriculum planning at Karori Normal School; and the approach taken towards increasing the authenticity of learning experiences at North East Valley Normal School. The next three case studies focus on how whole-school PD was organised to support teachers to develop an understanding of the KCs. The Hillcrest Normal School case study describes how action learning cycles were used to develop KC exemplars. The final two case studies of Central Normal School and Kelburn Normal School focus on the PD processes used to develop a shared view of the KCs and ideas about assessing the KCs. Table 5 presents an overview of the approaches used at each school.

School	Main emphasis	Main focuses for integrating the KCs
Takapuna Normal	<ul> <li>Development of a shared language through</li> </ul>	<ul> <li>Inquiry and integrated learning</li> </ul>
Intermediate School	student construction of the KCs	<ul> <li>Formative assessment</li> </ul>
	Development of student self-assessments	<ul> <li>Thinking skills toolbox and ICT</li> </ul>
Karori Normal School	<ul> <li>School-wide curriculum planning</li> </ul>	<ul> <li>Integrated learning</li> </ul>
	Development of a shared teacher and student	
	language through co-construction	
North East Valley	School-wide curriculum planning	<ul> <li>Inquiry and integrated learning</li> </ul>
Normal School	<ul> <li>Increasing curriculum authenticity</li> </ul>	
	• Development of a shared teacher and student	
	language through co-construction	
Hillcrest Normal	<ul> <li>Development of a shared teacher KCs</li> </ul>	<ul> <li>Rich tasks (integrated learning)</li> </ul>
School	language through teacher exemplars	<ul> <li>Environmental education</li> </ul>
	<ul> <li>Increasing curriculum authenticity</li> </ul>	
Central Normal	<ul> <li>School-wide curriculum planning</li> </ul>	<ul> <li>Integrated learning</li> </ul>
School	Development of a shared teacher and student	<ul> <li>Formative and summative</li> </ul>
	language through co-construction	assessment
	<ul> <li>Development of a matrix of progression</li> </ul>	
Kelburn Normal	• Development of a shared teacher and student	<ul> <li>Inquiry and integrated learning</li> </ul>
School	language through co-construction	<ul> <li>Formative assessment</li> </ul>
	<ul> <li>Development of a matrix of progression and</li> </ul>	
	student self-assessments	
	School-wide curriculum planning	

Table 5 The focus of KC integration at the case study schools

# Supporting students to unpack the KCs at TNIS

### Introducing Takapuna Normal Intermediate School (TNIS)

TNIS is a decile 10 intermediate school on the North Shore of Auckland that serves a community with high educational expectations for their children. The school has a roll of approximately 600 students, with about 35 different nationalities represented. Approximately one-third of students are Asian and the rest are mostly NZ European. Around 40 percent of students come from homes where English is a second language. The school has about 24 classroom teachers, six specialist technology, drama, and science teachers, and a teacher-librarian who works with staff and students to develop a school-wide approach to inquiry skills. The school is run on a six-day timetable, and when students are with specialist teachers staff have release time for planning and professional development (PD).

# The fit between existing school practices and the KCs

Over the last five years staff have been involved in a range of forms of PD that have contributed to shaping current school-wide practices. This PD included contracts with external providers on:

- inquiry learning;
- catering for the emotional, social, and learning needs of emerging adolescents (including a focus on integrated learning);
- literacy;
- formative assessment;
- ICTPD (this included the development of the award winning student learning system website called KnowledgeNET<sup>7</sup>, which students and parents can access from home); and
- numeracy.

In addition to these contracts, staff have a history of improving teaching and learning practices through involvement in action research projects. Areas in which staff have conducted classroom research include the development of higher-order thinking skills, differentiated learning, questioning techniques, integrated learning, and transition.

<sup>&</sup>lt;sup>7</sup> http://www.tnis.schoolsonline.co.nz/index.php?page=home

This ongoing PD has supported staff to shift their practice towards increasingly designing programmes that are student-centred and meet the needs of emerging adolescents. Staff saw the integration of the KCs as part of an ongoing review of the curriculum, and the principal viewed the KCs as a vehicle that could further support staff to increase their use of student-centred pedagogies and find increasingly authentic contexts for learning. Staff considered that a number of aspects of the teaching and learning programme at TNIS fitted with approaches that could potentially support students to develop the KCs. These are outlined below.

#### Self-reflection skills

Staff considered that a school-wide emphasis on developing students' reflection skills could support students to develop the KCs. At TNIS, self- and peer-assessment strategies were an integral part of learning. Staff viewed the KCs as skills for everyday life and noted that the KCs gave them "a framework to develop the whole person". They saw this framework as supporting moves to make the process of learning more explicit and to transfer ownership over learning to students as they became increasing able to self-assess and recognise their skills and weaknesses.

#### Higher-order thinking

Another school emphasis that staff considered was connected to the KCs was the school focus on thinking skills and higher-order thinking. Staff used a number of thinking tools and strategies to plan learning activities, and had introduced these to students. These included Bloom's Taxonomy, Thinking Hats, Habits of Mind, Learning Styles, and graphic organisers. To support students to understand and use these, staff had developed a "Thinking Skills Toolbox" which contained information about each tool or strategy. It was hoped that scaffolding of these skills, and students' increased awareness of them, would support students to intuitively use the relevant skills. Staff saw these tools and strategies to be connected with the KCs and in particular, *Thinking*, in that they focused students on the process of learning.

#### Integrated and inquiry learning

Staff also considered that a whole-school focus on integrated learning could potentially support students to develop the KCs. The teaching and learning programme at TNIS is structured around overarching themes that students have some say in deciding. In 2006, students were asked to vote on an area from a choice of three. They selected the theme: "Unknown Destinations" which involves exploring aspects of tourism, visiting the community, and the completion of inquiry projects. In past years, some students had used their inquiry learning projects to research and take action on problems of concern to themselves, for example, overcrowding on local buses and bullying. Therefore it was envisioned that students' inquiry projects, and the authentic learning experiences they might offer, could be one starting point for teachers to integrate teaching and learning about the KCs into their practice.

# The process: Developing an understanding of the KCs by staff and students

#### Developing a team approach

As TNIS is a large school, school leaders decided to use a model of embedding the KCs into school practice that had proven to be successful in the past. A team of "risk-takers" was selected to develop and trial processes for integrating the KCs into teaching and learning, which would then be shared with the whole school. An existing team of teachers was approached to do this initial exploration. This team comprised five Years 7 and 8 teachers who had differing levels of prior teaching experience and lengths of service at the school.

In Term 1, with the support of a facilitator who visited about once a month, the KC team started developing, trialling, and refining approaches. The facilitator supported staff to define their goals in relation to the KCs. Supporting students to develop lifelong learning skills and attributes was developed as a key goal. To develop understandings about the KCs, the team started to collect and share readings on the KCs. To explore school-based models of curriculum review, the team leaders visited Mt Eden Normal School to hear about their approach to school change.

Teachers in the KC team considered that the process of unpacking the KCs needed to reflect the school's student-centred philosophies. Accordingly, the team decided to approach the task of deepening staff and student understanding of the KCs by setting up a programme that supported students to develop an understanding of the KCs and explain them to staff and their parents. Each teacher initially introduced the KCs to students in a slightly different way. The commonalities in the approach used across the team are described in Diagram 1.

#### Diagram 1 Unpacking the KCs with students at TNIS

#### STEP 1: Introducing the KCs to students

Each teacher in the KC team introduced the key concepts underpinning the five KCs to their class and initiated discussions and brainstorming about the KCs.

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#### **STEP 2: Developing reflective diaries**

Students were asked to develop reflective diaries about the KCs (either hardcopy or digital). The diaries could include text provided by the teacher about what each KC looked like, students' text about the key aspects of each KC from their perspective, a drawing of an aspect of each KC, and students' descriptions of instances when they had displayed this KC. Students added to these descriptions once a month.

### STEP 3: Seeing the future relevance of the KCs To encourage students to see the KCs in the context of lifelong learning, and to introduce the KCs to

parents, teachers developed a KC homework exercise that was also posted on KnowledgeNET. Students were asked to describe the KCs to their parents and interview them about how they used the KCs at home, at work, and during their leisure time.

#### STEP 4: Using a jigsaw approach to developing a shared understanding within the KC team

With the facilitator, teachers designed a series of five lessons to assist students to further develop a shared understanding of the KCs. Each teacher in the KC team was designated an expert on one KC. The students in each of the five classes were split into five groups and sent to one teacher. Each group contained a mix of boys and girls and students of differing abilities. With this teacher, each class group used a number of strategies such as group exercises and brainstorming to develop and refine a set of criteria for one KC. In small groups, students then developed a presentation about this KC in a format of their choice, e.g., posters, drama, PowerPoint, or oral presentation. All groups then returned to their original class to do their presentation. This approach resulted in each class having a group of students who were an expert on each KC. After this exercise students completed a self-assessment sheet about how they had developed their presentation and used feedback to improve it.

#### STEP 5: Developing a shared school-wide understanding

In order to support a shared understanding of the KCs to develop across the school, some students presented about the KCs to a staff meeting. Students' presentations were also videoed so that they could be shown to other students and teachers.

Teachers considered that the approaches outlined above had been very successful. They were impressed with the criteria students developed for the KC they were working on. An example of the criteria developed by one group of students for *Managing self* is shown below.

Key Competencies – Managing Self (What we think it means)	
Act appropriately	
I will be able to:	
Think before Lact	
Treat people the way I want to be treated	
Be sensible and responsible	
Prioritising and self-monitoring (Time management)	
I will be able to:	
Make a list and prioritise talks in order of importance	
Manage my time	
Taking responsibility for myself	
I will be able to:	
Know my boundaries and consider consequences	
Reflect on my actions	
Planning and goal setting	
I will be able to:	
Write and use SMART goals	
Plan ahead	
Making appropriate choices	
I will be able to:	
Make decisions I will not regret	
Ask for advice or help	
Being responsible for your learning	
I will be able to:	
Listen and accept new ideas	
Stay on track	
Use my initiative	

Teachers were also impressed by the quality of many of the students' presentations. An example of one of the slides from a group of students who developed an oral presentation and PowerPoint about the KC: *Participating and contributing* is shown below.



Staff noted that they and students now had a shared language to talk about the KCs. At the point we visited the school, teachers were "quietly embedding" the KC language into their practice and

conversations with students. One teacher had developed a *Managing self* poster to assist this process:

I look at the section on the poster and link it into the current activity...I use the poster to give feedback each day.

Other teachers were using the KC language to support students to finalise their inquiry projects as they held discussions about how to plan, and manage time and behaviour. Teachers also reported hearing students using the KC language with each other in the playground and in classroom contexts.

The KC: *Using language, symbols, and texts* appeared to be the most difficult for both staff and students to interpret. Discussing this KC in relation to students' interests such as txting and chatroom communications had assisted in deepening understandings about this KC.

#### Exploring the KCs with the whole staff

To ensure that all the staff were aware of the new KCs framework, they were introduced to the KCs at a teacher-only day at the start of 2006. Staff examined the KCs in small groups and used a jigsaw approach to collect all the groups' ideas together. Further staff meetings were held during the year as staff and students from the KC team updated their colleagues about the approaches they and students were using to develop an understanding of the KCs. It was envisioned that all staff would eventually use these approaches. School leaders considered that a whole-school approach to the KCs would be best initiated at the start of 2007 with a new intake of Year 7 students. These students would get an initial introduction to the KCs, which could then be built on in their two years at the school.

#### Integrating the KCs within teaching and learning programmes

#### Planning

Staff in the KC team had discussed where the KCs fitted within their team philosophy and how the KCs integrated with the values and ideas within this philosophy. The KC team had also started to integrate the KCs into their term plan. For example, in the unit "Unknown Destinations" students were asked to reflect on what KCs would be used by people planning a trip. Staff considered that incorporating the KCs into the term plan went smoothly as they already had a similar structure for integrating one or two relevant Habits of Mind. Staff and school leaders noted that they would need to locate the KCs within the school's two-year overview.

#### Assessing the KCs

#### Classroom assessment

Staff in the KC team were in the process of developing ways to assess the KCs. They primarily saw assessment as being located within the school's existing formative assessment procedures. Staff in the KC team were adding the KCs into these procedures, that is, setting learning intentions for the KCs, giving feedback and feedforward about students' development of the KCs, and adding sections about the KCs into self- and peer-assessment sheets and plenary reflection questions. For example, students were asked to reflect on how they had displayed the KCs during learning activities such as their cycle tour of Waiheke Island or their work on the integrated unit on "Unknown Destinations".

A number of teachers commented that the shared language they had developed with students supported them to give feedback about the process of learning. One teacher made a comment that summed up others' views: "I like to think that I was doing that anyway, but it probably makes me more aware of it."... Another stated "It makes it easier for us to talk to kids about what they need to do to succeed."

Staff would like to work towards students setting personal goals for themselves in relation to the KCs. Some suggested that students could use their KC diaries to self-assess their ability to demonstrate the KCs and to identify next steps.

#### Reporting

TNIS already had a strong self-assessments system in place for more formal reporting. For example, students, staff, and a peer completed assessment sheets about particular aspects of work for inclusion in students' portfolios. Staff were in the process of considering how the KCs could be incorporated into students' portfolios.

Staff also noted that they would have to consider how to replace the current Essential Skills section on self-management and social skills in written reports to parents. Teachers thought it is important for parents to know about their child's development of the KCs in the context of school, and were starting to informally use the shared KC language with parents. Staff were planning to use this shared language during student-led three-way conferences. Staff were less sure about if, or how, to approach summatively assessing the KCs and whether they should use more than a global judgement as evidence for reporting to parents. Some staff were concerned that they did not want to see the KCs over-assessed or "rubricised", as the school already had 12 schoolwide assessment rubrics. One teacher commented:

I can see it as being another assessment to be perfectly honest—which is a shame...it takes the gloss off it.

Others noted that getting this balance right required more exploration and national direction. Like their colleagues, these teachers were also concerned that the KCs were not over-assessed, but considered the potential of the KCs would be lost if they were not emphasised enough (as had occurred with the Essential Skills).

### Making the KCs visible in school life

#### Presenting and displaying: Using ICT to explore the KCs

Along with students' digital diaries, teachers also planned to use the school's KnowledgeNET website discussion forum pages to engage students in debates about the KCs. School leaders also planned to develop a series of posters for the KCs that were similar to existing posters for the Habits of Mind.

#### Sharing the KCs with parents

To introduce parents to the KCs, students completed the homework exercise outlined in Diagram 1. This homework exercise and an information page about the KCs had been posted on the parent section of KnowledgeNET. Parents were also told about the KCs at a meet-the-teachers session held in early 2006.

#### Connecting with pre-service trainees

To introduce the KCs to the school's current group of trainee teachers, school leaders ran an introductory session on the KCs and trainees were invited to the students' presentations about the KCs at a staff meeting. If these trainee teachers were working with a member of the KC team they participated in the school's work on the KCs. These teachers informally discussed the KCs with trainees.

#### Student perspectives on the KCs and schooling

#### Learning about and demonstrating the KCs

The students in the focus group at TNIS were very positive about their school experiences in general and about the school's initial approach to the KCs. They had enjoyed learning about the KCs for three main reasons. Firstly, they could see the relevance of the KCs to their current situation and future:

The Key Competencies touch so many aspects of your life: yourself, community, your thinking...

They also liked to mix with other students who were not in their class as this gave them opportunities to develop new relationships and self-confidence. The third reason related to the indepth nature of the KCs exploration designed by teachers. Students noted that they had covered some similar ground when they learnt about the Habits of Mind, but more superficially.

When asked to describe times they had demonstrated the KCs, a number of students talked about how they drew on more than one KC at a time. Certain types of learning experiences seemed easier for students to recognise as times they were demonstrating the KCs. One was Learning Experiences Outside The Classroom (LEOTC); with many students talking about how they had demonstrating the KCs while on the school cycle tour of Waiheke Island:

[I used *Using language, symbols, and texts*] when I was riding. You have to know what the road signs and symbols mean so you understand who gives way to who etc...

The KCs were also easy to recognise in the context of sports activities:

I showed *Relating to others* during my inline hockey match by knowing how my team members play to set up the best strategy.

A number of students talked about how they demonstrated *Managing self* when organising their time, competing priorities, or homework. Students also mentioned the KCs in relation to in-depth studies:

[In our study on tourism I] had many activities to complete. I used *Managing self* to ensure I had completed them all.

Fewer described how they demonstrated a KC when they were studying particular curriculum areas:

[I used *Using language, symbols, and texts*] in mathematics. We have to know what the signs and symbols mean to complete the questions.

#### The wider learning environment at TNIS

At TNIS, students considered that overall, they tended to learn more from work that was in-depth and cited the exploration of the KCs, inquiry projects, and various forms of formative assessment (self-assessment and teacher feedback) as the main aspects of their school programme that assisted them to learn. Students were able to use the language of self-directed learning and formative assessment. They found the use of learning intentions, goal setting, and success criteria helped to focus their learning. Formative assessment strategies such as reflections, feedforward, and plenary questions (What went well? What do you need more help with? What was difficult?) increased their understanding about what and how they were learning. Students also thought the various tools and strategies used at the school supported them to understand the process of learning (for example: Habits of Mind, Bloom's Taxonomy, and Learning Styles). They could see the value of learning about the sorts of processes, such as how to plan and how to think critically, that are an integral part of the KCs. In terms of the general learning programme at TNIS, information from the focus group interview and surveys indicated that students liked the variety of activities on offer at the school and most enjoyed sports or music electives, technology, trips, and the school's use of ICT for learning. Students enjoyed their specialist classes because of the hands-on subject content of many of them and because they "got to experience different teachers' ways of teaching". Students perceived most of the learning they were doing as relevant to themselves but noted that their programme was mostly teacher-driven: "it's all what the teacher says—except for electives". Students considered their learning and the teaching programme would be improved if:

- they were offered more choice over both curricula and co-curricula options;
- learning was differentiated more (especially in maths to avoid repeating already covered content);
- class sizes were smaller and more specific one-on-one feedback was offered. (Students
  wanted more encouragement from teachers and more explanation of exactly what they were
  doing well or not so well. For example, Why was their work not marked highly? and, What
  could they do to make it better?); and
- they were given more opportunities to work with their peers. (Students noted that they did a
  lot of individual work in English, maths, and social studies. They would like group work to
  be arranged in different ways. For example, sometimes with their friends, and sometimes in
  ability, cross-ability, or cross-class groups. Students thought they needed more strategies for
  managing group work and peers who did not want to cooperate.)

Students comments about what they liked about the learning environment at TNIS and what they thought could be improved aligned with the school's shift towards increasing the use of studentcentred practices and with pedagogical approaches that are likely to support students to develop the KCs. These approaches include the use of formative assessment strategies and offering students increased ownership over their learning.

#### Where to next?

The initial unpacking of the KCs had been a highly successful and enjoyable experience for both staff and students at TNIS. The school's existing focus on increasing the use of student-centred practices had supported staff to design a student-centred method of co-constructing the KCs.

A future challenge for staff was embedding the KCs throughout the school programme. Staff talked about a number of tensions they would have to manage as they continued their focus on the KCs. One was curriculum overcrowding: "We do a lot, but how well do we do it?" Teachers considered that TNIS had a busy curriculum, and accountability requirements took a lot of time. The school had been through a number of cycles of separating, and then integrating, science and social studies in an endeavour to manage coverage concerns.

Another challenge was the overlap of the KCs with existing tools and strategies and the associated challenge of overcrowding students with too much "process". An overlap between the Habits of Mind and the KCs was identified by some. The KC team decided that they would need to work on paring down their planning to make the KCs the key approach while also incorporating aspects of the Habits of Mind. An associated tension was the holistic nature of the KCs. Both staff and students noticed that students tended to draw on more than one KC in any given situation. This caused staff to query whether they should focus on all the KCs or select one or two to have a key focus on each term. The latter was the preferred option for manageability purposes and to ensure that the focus was in-depth.

Once students and staff had continued this initial work to deepen their understanding of the KCs, it was planned that a curriculum team that included student representatives would explore whether aspects of whole-school practice needed to be further changed to provide learning experiences that supported students to develop the KCs.

# Integrating the KCs into curriculum planning at Karori Normal School

#### Introducing Karori Normal School (KaNS)

Karori Normal School (KaNS) is a large decile 10 full primary school located in a Wellington suburb next to Victoria University College of Education. The school has a roll of approximately 750 students. Most students are NZ European, but students from 39 different nationalities also attend the school. The school serves a community which has high educational expectations for its children, and which is actively involved in the range of opportunities the school organises to share student learning. The school has 34 classroom teachers, and two specialist positions: curriculum leader and teacher–librarian.

### The fit between existing school practices and the KCs

Teachers saw the KCs framework as centred around ideas of lifelong learning and "aims for the sort of person we want our students to turn into". In contrast to the Essential Skills, which had been approached as discrete skills in a way that was invisible to students, teachers viewed the KCs as holistic, and as something they would embed within the curriculum and be "explicit" about introducing to students.

School leaders at KaNS viewed the KCs framework to be a timely development that could run alongside a review of curriculum and pedagogy and a related programme of whole-school professional development (PD) that started its current focus in 2002. The aims of the review were to create more consistency across year levels in approaches to literacy and numeracy, to examine the balance between curriculum coverage and depth following staff concerns about curriculum overcrowding, and to explore ways to shift pedagogy towards lifelong learning and student-centred approaches. Staff considered that a number of recent and current initiatives and PD opportunities related to this refocusing could potentially provide avenues for exploring and integrating the KCs into teaching and learning. These are described below.

#### Developing a framework for integrated learning

To support whole-school consistency, whilst also giving staff scope to target the needs of syndicates and students, KaNS had started to base planning around integrated, rather than

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discrete, topics. This approach was viewed as a vehicle to support an increase in student-centred practices at the school as it represented a change from a prior more directive approach to planning discrete topics. Staff considered that past approaches had not empowered them to have ownership over classroom programmes, or tailor them to students' needs and interests.

At the end of 2005, staff decided on a whole-school umbrella theme for the first three terms of 2006: "Past, Present, Future". To provide support and guidance for staff to use this new approach to planning, the school had created a specialist curriculum leader position. With a curriculum team, the curriculum leader developed a whole-school curriculum-planning framework.

Using the planning framework, each syndicate selected areas to cover within each term theme. To support the integration of the KCs into teaching and learning, one or two KCs that were most suited to each theme were incorporated into school-wide plans.

In Term 1 *Participating and contributing* was selected as the focus KC. In Term 2 as part of the "present" theme, learning activities were structured around the development of scientific knowledge via fair testing. *Managing self* was selected as the focus KC. Literacy activities centred on the procedural and explanation reading and writing skills needed to understand and conduct science investigations. The Term 2 plan for the Years 5/6 syndicate is shown in Diagram 2.

Image: Window Stress     Image: Window Stress       Term 2 2006 Planning Overview					
Key Competency Managing self Learning intention: The students will: - use a rubric to identify their competency.	Past Present Futur Fair testing – Physical and Mat Achievement Objective: Investigat Extends experiences and personal explan- and physical world through exploration, in investigation.	<ul> <li>Learning Intention: The students will:</li> <li>be able to work out whether a or not a test is fair, and explain why</li> <li>plan and conduct a simple fair test (small groups or independently)</li> <li>use data and observations to construct a reasonable written explanation</li> <li>generate questions that can be answered through scientific inquiry.</li> </ul>			
Habits of Mind Questioning and Problem Solving – Having a questioning attitude. Developing strategies to produce needed data. Finding problems to solve. How do you know?	<b>Deep Understanding:</b> Scientists develop explanations using obs and what they already know (scientific known is one method scientists use during their i Fair testing finds relationships between fa single variable is changed while keeping of same. Any differences are said to be the re variable.				
<ul> <li>Graphic Organisers</li> <li>Information webs.</li> <li>Circle maps.</li> <li>Tree diagrams         <ul> <li>(which can be used to organise information from circle maps).</li> </ul> </li> <li>Inquiry focus         <ul> <li>Introduce aspects from KaNS research model as appropriate.</li> </ul> </li> </ul>	Literacy Writing Procedural and Explanation writing. Literacy Reading Reading To: picture books with themes which support the Managing Self KC. Non-fiction reading to support fair testing focus and the development of scientific knowledge. Reading Skills: skim, scan, note-taking and forming questions.	Representations Science fair displays: parents will have an opportunity to visit classrooms with their children and view their work.	<ul> <li>Assessment</li> <li>Student, peer and teacher review of KC using the Managing Self rubric.</li> <li>Explanation writing – AsTTle sample.</li> <li>Teacher observations.</li> </ul>		

#### Diagram 2 KaNS Term 2 Years 5/6 Syndicate Curriculum Plan

### Lifelong learning

Another school-wide emphasis viewed as related to the KCs was a focus on lifelong learning. In 2005, staff attended a teacher-only day designed to support the school's curriculum review process. To develop a shared sense of the student and teacher outcomes they were working towards, they brainstormed the attributes students and teachers would need for the future using the headings: "The Karori Kid" and "The Karori Teacher". This exercise was also repeated with students. These attributes were then integrated into PD, planning, and formative assessment procedures. A number of other approaches, designed to support students to develop lifelong learning approaches, were also part of classroom practice; for example, a focus on one or two of Costa and Kallick's Habits of Mind<sup>8</sup> relevant to each unit of work.

<sup>&</sup>lt;sup>8</sup> http://www.habits-of-mind.net

#### Making the process of learning more explicit

The literacy and numeracy PD contracts, in which staff were currently engaged, were also viewed as aligning with the approaches staff intended to use to integrate the KCs into their programmes. These contracts had a focus on formative assessment, student goal setting, the exploration of a range of strategies, and making the process of learning more explicit to students. To support these approaches, students' personal goals were taped to their desks in many classrooms.

#### Connecting the KCs with other school-wide approaches

School leaders had recently, or were currently, attending PD and visiting other schools to observe practice in a range of areas. This professional learning was shaping school-wide practices at KaNS. Areas that were being explored, and which had the potential to inform the school's approach to the KCs, included the use of:

- assessment rubrics;
- critical thinking strategies, such as De Bono's Thinking Hats;
- co-operative learning strategies; and
- ICT for learning, such as graphic organisers.

# The process: Starting with the whole school

School leaders considered it was important that all staff were involved in new initiatives and in exploring changes to practice that might result from these initiatives. To this end, school leaders initially used a whole-school model of introducing the KCs. As school leaders were also aware that the school had a number of other PD initiatives underway, following a general whole-school introduction to the KCs, one or two teachers from each syndicate level offered to further develop approaches to integrating the KCs that could then be shared with the whole staff. The process used to unpack the KCs with staff is set out in Diagram 3.

#### Diagram 3 Steps taken by KaNS staff to unpack the KCs

#### STEP 1: Whole-school professional development on student and teacher outcomes

In Term 1, school leaders used their understanding of the KCs, and the descriptions of the KCs from presentations at the Normal Schools Forum, to introduce the KCs framework to staff. Staff then examined their existing picture of the attributes of "The Karori Kid" and "The Karori Teacher" and how these fitted with the KCs.

#### STEP 2: Continuing whole-school discussion

At subsequent staff meetings, staff were split into vertical groups to share practical ideas about how the KCs could be integrated into teaching and learning, and discuss key areas such as the connections or overlap between the KCs and the Habits of Mind.

#### STEP 3: Syndicate discussions

At syndicate meetings, staff continued their discussions about how the KCs fitted within the school-wide planning template and their current activities.

#### STEP 4: Development of a trial rubric for Managing self

The curriculum team developed a rubric to support teachers to interpret *Managing self* and to support students to self assess. This rubric was given to each syndicate to use.

# STEP 5: Trialling approaches at a syndicate level

In syndicates, staff discussed practical ways to integrate the KCs into their practice and how they would use the *Managing self* rubric. One or two teachers from each syndicate offered to develop and trial approaches that would then be shared with their syndicate and the whole school.

#### Assessing the KCs

*Managing self* was the focus KC for Term 2. To support teachers to incorporate this KC into their programmes, curriculum leaders developed a rubric that covered the four aspects of *Managing self* they considered to be the most important (exercising initiative, identifying personal goals, taking responsibility for actions, and risk-taking). This rubric included four suggested levels of progression for each aspect, which some staff called novice, apprentice, practitioner, and expert. To develop the rubric staff drew on ideas from recent PD contracts, the rubric developed by Central Normal School, and the rubrics used for assessment in the New Basics programme in Australia. For three of the areas the progressions had been suggested for teachers and students. The fourth area, risk-taking, was left for teachers and students to complete, with support from the curriculum team. Each syndicate was then given the flexibility to interpret this rubric for their own purposes. Teachers adapted the rubric to suit their students. Those in Years 1–4 adapted the language, and some teachers decided to use three levels of progression rather than four.

#### Introducing the KCs to students

In each syndicate, staff trialled a number of different approaches to integrating the KCs, some of which are described below. In Years 7/8, some teachers started a focus on the KCs in the first term as students were preparing for camp. Using scenarios related to students' experiences as a starting point, teachers initiated discussions about *Participating and contributing*, life skills, managing choices, and risk-taking with students. Some teachers connected the KCs with other approaches. For example, one used the Thinking Hats as a tool to support students to evaluate which choices were more appropriate. On returning from camp, some teachers asked students to reflect in their workbooks on how they had demonstrated *Participating and contributing*.

For most teachers, their main focus on the KCs started in Term 2 as they used the school-wide rubric to structure their introduction of *Managing self* to students. Across syndicates, teachers used similar approaches. Most held discussions with students about what *Managing self* meant and used brainstorms and class posters to develop a shared language of terms and criteria. Teachers then used these visual aides and the KC language they had developed to support a range of classroom activities. These activities were all designed to support students to start thinking about *Managing self*, and reflect on their behaviour, with the ultimate aim of students setting personal goals relating to *Managing self*.

In Years 1/2, one teacher was developing ways to give *Managing self* more prominence within curriculum activities. One strategy involved focusing on *Managing self* during group tasks. To set up a co-operative science classification task about zoo animals, the teacher described the steps students would go through. Referring to the criteria about *Managing self* and *Relating to others* that the class had developed, the teacher facilitated a whole-class discussion about why it is important to be able to work with people, what good collaborative behaviour looks like, and how to plan and manage your time. During the task students were prompted to reflect on the content of the task, their teamwork, and how they were managing themselves. At the end of the task students were asked to reflect by rating their skills on a 1 to 5 scale against the following statements:

- I followed all the instructions.
- I co-operated with my group.
- I managed my time well.
- I thought about my behaviour.

In Years 3/4, teachers were using the *Managing self* rubric to support student self-reflection about the KCs. In one class, after an initial introduction to *Managing self*, in negotiation with teachers, students located themselves on a *Managing self* continuum that was displayed on the wall. During classroom exercises students were asked to reflect on how they demonstrated the four aspects of *Managing self* outlined in the rubric. Using this evidence they could then negotiate with the teacher to change their place on the continuum.

In other classes, students and teachers discussed what was going well and not so well in the classroom, and developed strategies to work towards improving classroom interactions. In one

class, students set personal *Managing self* goals. These goals, and strategies to work towards them, were discussed as a class and recorded in students' workbooks. Students were asked to place themselves on a continuum in relation to their goals. This continuum was returned to periodically as students revised their location. The continuum is shown below in Figure 7.



#### Figure 7 Managing self continuum

#### Teachers' reflections on their initial work on the KCs

Teachers considered their focus on the KCs had given them and students a shared language to talk about social skills, behaviour, motivation, and attitudes, and why these were important. They had noticed this language starting to filter through students' conversations with each other in the classroom and playground. Staff noted that this focus had created space for discussions that recognised diversity and gave students the opportunity to talk about their personal experiences. Both they and students valued these opportunities:

The kids are finding it quite exciting... It's about them and who they are... They have to think more about themselves in a focused way...

Some teachers considered that this emphasis was assisting them to move from a focus on behaviour management towards assisting students to self-manage and understand the reasons why this might be important. For example, when discussing how students completed their homework teachers asked questions such as "What are the different ways you approached completing your homework?", "Was that a good choice for you?", and "What other choices did you have?" Others

found the KCs supported their behaviour management practices. For example they used the Habits of Mind: "impulsivity" and the KC: *Managing self*, to discuss behaviour with students.

Teachers commented that the student-centred approaches they used to introduce the KCs to students linked well with current literacy and numeracy PD on teaching to student needs and making strategies explicit. The KCs framework supported them to be more explicit about evaluating the process of learning, as this framework encouraged students to think about setting achievable goals in areas other than literacy and numeracy, plan how to achieve these goals, and explore a range of strategies related to these goals.

Some teachers described their initial discomfort about negotiating with students, when their views about students' capabilities differed from students' views, and students did not have the strategies to action their goals. Some teachers had left students to self-assess. Others started to develop more confidence in discussing these new goals with students. They had observed that students showed strong support for exploring the KCs if they were framed as something that could be continuously improved on, and if a climate of positive feedback was maintained. These teachers created this climate by having discussions with students in a matter of fact way and drawing on evidence that they, the student, and their peers had noticed in relation to the class criteria. They reported that students responded well to these discussions, which resulted in teachers feeling more comfortable with this approach:

I didn't think I would be prepared to deal with things as explicitly as I have...

Other teachers did not have this initial sense of discomfort as discussions of this nature had been an existing aspect of their classroom practice.

Overall, teachers were at different points in relation to integrating the KCs into their classroom practice. After an initial introduction to the KCs some had started to embed discussions about the KCs within curriculum activities. Others noted that the school focus on *Managing self* had led to it becoming a "subject in itself" rather than being integrated into other activities: "I could throw out the rest of the term because I'm so fascinated!" They suggested that, now a shared understanding about the KCs had been developed with students, there was a need to start integrating them more into the curriculum.

#### Making the KCs visible in school life

#### Presenting and displaying

To make the school's approaches visible to staff, information about the key aspects of each KC and the school's curriculum planning framework was placed on displays in the staffroom. To make the KCs more visible to students, most classes had KC posters, brainstorms, or continuums on the wall that students and teachers had developed.
#### Sharing the KCs with parents

At the stage we visited the school, all parents had not yet been formally introduced to all the KCs. Parents who attended a recent parent meeting were told about the KCs and school leaders had also talked to the PTA and board of trustees. Parents were informed in a newsletter about the school's focus on *Managing self*, and parents of students in Years 7/8 were introduced to this KC through a homework exercise in which students were asked to detail the different ways they displayed *Managing self* at home. The school website also includes information about the KCs and how they are being included in the curriculum.

# Reporting

Teachers commented that their focus on the KCs would give them some standard language to use for reporting to parents. Some were starting to use this language for written reporting. Staff considered that developing strategies for more standardised methods of assessing and reporting would need to be approached with caution.

#### Connecting with pre-service trainees

Trainee teachers were familiarised with the KCs by members of the KC team if they were working with these teachers while they were introducing the KCs to students. These trainees had opportunities to observe teachers' work. To ensure that local teacher providers were kept up to date with the school's work on the KCs, school leaders had talked to local university staff about the school's focus.

# Student perspectives on the KCs and school

To gather students' perceptions on the KCs, we held a focus group with Years 7 and 8 students. The students in the focus group mostly had some form of leadership responsibility such as being part of the student council or a school banker teller.

#### Learning about and demonstrating the KCs

Most students in the focus group saw the KCs to be "skills for life" that they needed to learn at school so that they would be able to function in society:

As you grow up you have to learn to be responsible and understand that actions have consequences. Key competencies get that message across. They come in useful as adults, seeing as you use them in everyday society.

Students perceived the way they learn about the KCs to be different from other aspects of their learning, in that rather than being told what to do, "we are trying to figure it out for ourselves". In comparison to other focuses, the approaches taken to the KCs placed a greater emphasis on their ideas and opinions and allowed for the recognition of individuals' skills and attributes. Students valued this emphasis and enjoyed the focus on the KCs. Like their teachers, students thought this approach gave them more responsibility over their learning by giving them the scope to set personalised goals for themselves and to work out strategies to action these goals. Students perceived the KC focus to provide them with strategies they could use to manage their learning at school, and their homework. At this stage, students noted that most of the focus had been on *Managing self*.

When asked for situations in which they demonstrated the KCs, most students talked about how they had demonstrated the three most familiar KCs (*Relating to others, Managing self*, and *Participating and contributing*) during real-life situations, such as activities on a recent school camp:

[I showed *Participating and contributing* and *Relating to others* when I] was at camp and we went rafting. Our rafting group really had to work together and co-operate with each other to ensure we stayed in the boat.

One class was run as a co-operative community. Students noted that this gave them substantial autonomy and enabled them to demonstrate the KCs as they made decisions, planned, and worked as a team. In general, situations that required teamwork were commonly mentioned as times students demonstrated the KCs; for example, group discussions concerning school work, being part of a school team for a literacy quiz, or playing team sports:

[I show *Relating to others* when I] play in my soccer team. Everyone is listening and suggesting things at half-time.

#### The wider learning environment at KaNS

In general, all of the students considered that they learnt the most when they were doing practical, real, and fun things such as science experiments, technology activities like cooking, and activities on school camp. They also learnt from: discussions with their peers and teachers; feedback from teachers; literacy activities about different styles of writing; and learning different strategies. Some students thought they learnt a lot from co-operative work; others preferred individual work. They appreciated the range of leadership opportunities available to them at the school.

Students' comments about their learning environment suggest there were substantial differences between the pedagogy used in different classes. Students from some of the classes recognised that the approaches teachers were taking to the KCs had some commonality with approaches taken to numeracy and literacy, as they were also centred around goal setting and learning strategies. These students felt that they had more autonomy in the classroom and talked about how, during mathematics and other activities, they discussed the strategies they were using with teachers and

their peers. They also discussed the reflections they wrote in diaries. Other students commented, "We don't do much of that." In their classes, a pressure to complete work meant that reflections were written but not returned to. These students noted that, without discussions and conversations that supported them to develop a next step, the value of these reflections was lost.

Overall, students were very positive about the learning experiences on offer to them, but they also made suggestions about things they did not learn from or which could be improved. Students considered they did not learn by repeating known content or by copying things from books or off the board: "With our class we copy all this stuff off the whiteboard and never use it." They also found it hard to learn from strict teachers, if they had too many relievers, or if learning was not at their pace: "When things are thrown at you and you don't have time to digest it." Students considered their learning and the teaching programme could be improved if:

- they had more opportunity to do sustained work, both in groups and individually, and carry through work to its completion: "We start too many things off...";
- they had more choice over activities so that a broader range of interests were represented; and
- teachers used different strategies for selecting students to answer questions or for class activities so that students did not feel "picked on" and classes got equal opportunities for school activities and trips.

In summary, students' comments show that some teachers were using pedagogical approaches that aligned with the theories underpinning the KCs; that is, approaches that encourage student ownership over learning. Students' reflections show their support for these approaches. Other staff appeared to be using more traditional approaches. Students identified the need to pare down curriculum coverage in favour of in-depth work. Some staff also identified this need.

# Where to next?

The initial exploration of the KCs had been a fascinating and enjoyable experience for both staff and students at KaNS. The way they had approached the KCs had supported the staff we interviewed to use student-centred practices and make the process of learning more explicit to students. A next step for the school was sharing, with the whole staff, the practices the early adopters had developed. Teachers commented that this could be a challenge given that many perceived their school environment to be pressured by curriculum overcrowding, the amount of other PD initiatives underway in the school, and accountability requirements. Some considered this was likely to impact on their ability to deepen their understanding of the KCs. They suggested the school was at the initial stages of a journey that needed to be continued:

I'm not sure if our ideas of what they [the KCs] look like are accurate...I'm not sure as a school if we have developed a clear picture yet.

Exploring more formal assessment of the KCs was another next step. Staff had decided to approach this task slowly. The need to rationalise the school planning template by exploring the

overlap between the KCs and existing tools and strategies such as the Habits of Mind, Thinking Hats, and co-operative learning strategies, was also suggested by some as a possible next step.

KaNS is part of a cluster of schools that have applied for funding to continue their work on the KCs through the Extending High Standards Across Schools (EHSAS) contracts<sup>9</sup> offered by the Ministry of Education. It is planned that this contract will support KaNS to continue their work on the KCs and share the understandings they are developing about the KCs with other schools.

<sup>&</sup>lt;sup>9</sup> http://www.minedu.govt.nz/index.cfm?layout=document&documentid=10278&indexid=1004& indexparentid=1072

# Exploring the KCs at North East Valley Normal School

# Introducing North East Valley Normal School (NEVNS)

North East Valley Normal School is a decile 5 contributing school located in a suburb of Dunedin. NEVNS is the second oldest school in Dunedin and serves a highly transient but supportive community. The school has 10 classroom teachers (two of whom job share), a teacher who runs a learning assistance programme, and a roll of approximately 135 students. About one-sixth of the students are Mäori, one-sixth are from a range of other backgrounds, and the rest are NZ European. The school has strong school-wide literacy and numeracy programmes supported by experienced teachers, small class sizes, early intervention for those who are underperforming, and cross-grouping. An emphasis on making connections with the local community is another feature of teaching and learning at the school.

# The fit between existing school practices and the KCs

Staff at NEVNS saw the introduction of the KCs framework to be a timely development that could sit alongside a review of curriculum and pedagogy that began in 2003. In 2003, school leaders realised the school's focused approach to literacy and numeracy had resulted in students performing well compared to national averages. They then turned their attention to exploring approaches to curriculum and pedagogy that could further improve programmes by increasing student engagement and focusing on a wider range of skills.

As a result of this exploration, the school was refocusing their teaching and learning programme. Staff considered this refocusing could potentially provide avenues for exploring and integrating the KCs into teaching and learning. The nature of this refocusing, and the potential connections to the KCs, are described below.

#### Inquiry and integrated learning and links to the local community

Hands-on learning, LEOTC, and connecting with the local community to source authentic contexts for learning are features of the learning environment at NEVNS. To find ways to make more connections between these features, staff were exploring approaches to curriculum integration and inquiry learning. These approaches were perceived as a way to support staff to

take more risks with the curriculum, increase teachers' use of student-centred practices, and extend more able students. The school aimed to find a balance between whole-school thematic units and teacher and student direction. In 2005, the school trialled three integrated units. Two small units centred on the topics of magnetism and sea creatures, and a larger unit on the local environment and the history of Dunedin. Staff saw the integration of the KCs as fitting within an inquiry framework suited to the community focus of the school.

#### Higher-order and critical thinking

In recent years staff had developed a range of approaches to enhancing students' critical thinking skills. They were engaged in ongoing work on strategies to support critical thinking around text comprehension. At NEVNS the use of tools such as de Bono's Thinking Hats and higher-order strategies such as Bloom's Taxonomy were scaffolded at junior levels so students were able to build on these approaches in greater depth as they moved through the school. Staff saw these approaches to be connected with the KCs, and in particular, *Thinking*.

#### Student-centred practice

Staff were also exploring ways to make their practice more student-centred. To this end, teachers were developing formative assessment practices such as student self and peer assessments. Some were exploring ways to support students to become more self-regulated and emotionally intelligent. Staff perceived the KCs would fit with these approaches because they are about the "whole child", assisting social, emotional, as well as academic development. They suggested that an exploration of the KCs could also support students to focus on the processes of learning as well as outcomes, and understand the importance of communicating well and being a lifelong learner.

# The process: Introducing the KCs to the whole school

A whole-school model was used to start developing staff's understandings about the purpose of the new KCs framework, what the KCs looked like, and how they could be integrated into teaching and learning. Weekly staff development meetings were used as a forum for ongoing professional development (PD). The process used at the school is set out in Diagram 4.

#### Diagram 4 Steps taken to unpack the KCs at NEVNS

#### **STEP 1: Exploring student outcomes**

At a whole-school meeting, staff brainstormed the characteristics of an effective learner. A shared view was developed of what an effective learner thinks, feels, believes, values, and does.

#### STEP 2: Introducing the KCs to the whole staff

At a later whole-school meeting, school leaders used their understanding of the KCs and the descriptions of the KCs from presentations given at Curriculum Stocktake meetings and the Normal Schools Forum to introduce the KCs framework to staff. Staff were provided with selected readings about the KCs.

#### STEP 3: Exploring the connection between the KCs and student outcomes

At subsequent whole-school meetings, teachers referred to recent classroom experiences to brainstorm what each KC might look like. They wrote ideas on cards to describe the KCs then sorted them into piles for each KC. These definitions of the KCs were then compared to the previously developed characteristics of an effective learner. Staff noted the synergy between these. For example, an effective learner needs to have lifelong learning attributes such as a self-extending or self-managing systems.

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#### STEP 4: Integrating the KCs into whole-school planning

Staff discussed ways to incorporate the KCs into school-wide planning. They decided to focus on the one KC per term that was most connected with the main theme for each term.

#### STEP 5: Adding the KCs into syndicate planning and classroom activities

At syndicate meetings, staff added the focus KC into syndicate planning by discussing their upcoming activities and deciding which tasks were most suited to this KC. Teachers then designed individual approaches to incorporating this KC into their classroom practice.

#### STEP 6: Ongoing school-wide sharing of practice

At further staff meetings, teachers shared ideas and reflections on incorporating the KCs into classroom practice.

# Integrating the KCs within teaching and learning programmes

# Including the KCs in school-wide curriculum planning

As part of the school move towards an integrated approach to learning and the use of inquiry learning models, school leaders had developed a whole-school planning framework. Whole-school themes for each term were decided by staff, as shown in Table 6. Each syndicate used the theme for each term to structure their plans—but examined different aspects of the theme. One main KC, which staff viewed as best suited to each theme, was selected as a focus for each term.

The KC: *Using language, symbols, and texts* was viewed as threading through school programmes due to its connection with literacy and numeracy outcomes.

	Term 1	Term 2	Term 3	Term 4
Theme	Science and the	Stars on Stage (arts	Time, continuity, and	Food and
(Main essential	environment (science inquiry projects)	and literacy)	change (social studies	nutrition (health
learning areas)		Senior school = arts stage challenge	and mathematics: geometry)	and PE and technology)
		Junior school = transactional writing	Senior school = light	
			Junior school = transport	
Main KC	Participating and contributing (developing environmental responsibility)	Managing self	Thinking (higher-order thinking and problem solving developed through student inquiry)	Relating to others (effective co-operative interaction)
	Using language, symbols, and texts			

Table 6 NEVNS school themes for 2006

In Term 2, *Managing self*, in connection with a Stars on Stage performance and transactional report writing, was the main focus. Staff's shared view of *Managing self* was added into planning templates, as shown in Figure 8. Aspects of *Using language, symbols, and texts* were also included.

Figure 8 Staff's shared view of Managing self as including in planning templates



\* Attributes in italics were reworded by junior teachers to include concepts suited to younger students.

Most staff saw the KCs as being embedded within all aspects of the curriculum. For example, the KCs linked to the Health and PE curriculum when students negotiated and developed strategies for sports teamwork, and via the health focus on values and self-esteem. *Using language, symbols, and texts* was an exception to this, and was the most difficult KC for staff to interpret in curriculum terms. Staff viewed aspects of *Using language, symbols, and texts* to be related to the Stars on Stage performance as students learnt about dance as a narrative and to interpret movements. In general, *Using language, symbols, and texts* was mostly viewed as covered by existing literacy and numeracy programmes. At NEVNS, core aspects of numeracy and literacy are focused on separately from the integrated programme.

# Introducing the KCs to students

Most of the teachers we interviewed started integrating the KCs into their work as they began a focus on *Managing self* in Term 2. Teachers used different approaches to introduce this KC to students, some of which are described below.

In the senior school, one teacher initially started mentioning aspects of *Managing self* incidentally during classroom activities. She then discussed with students what *Managing self* looked like,

sounded like, and felt like as part of a class brainstorm. Following this, she used students' language to develop a *Managing self* poster. During subsequent activities she referred to this poster during group discussions about how students were managing themselves.

Some teachers were making connections between the KCs and the approaches the school used to developing students' critical thinking skills. One had used the Thinking Hats to support students to consider what *Managing self* looked like in relation to report writing and the Stars on Stage performance.

Other teachers used students' inquiry projects as a focus for introducing *Managing self*. As students developed posters about these projects, one teacher used a list of criteria the class had developed to discuss aspects of *Managing self*. When students had completed their posters the teacher facilitated group and individual discussions with students about how they had managed themselves. The teacher asked students for evidence relating to the class criteria, for example: "Did you finish on time?" When students presented their posters in an assembly, they described the content of their study as well as how they had managing themselves to complete their work.

In the junior school teachers used the question "What makes a good learner?" to do brainstorms about *Managing self*. From this they developed a set of criteria for *Managing self*. One teacher used students' words and names on a poster to give students a sense of ownership over the criteria, as shown in Figure 9.

I am a good learner because*		
I look and listen. (Lia)		
I'm patient for turns. (Lia)		
I think about it. (Devi)		
I work hard. (Harmony)		
I practise. (Ella)		
I think about how much I will do. (Nate)		
I ask the teacher for help. (Mahina)		
I share and take turns in groups. (Hayden)		
I try really hard to do my best. (Teesha)		
We are learning about managing-self.		

#### Figure 9 New entrant Managing self brainstorm

\* Students' names have been changed.

Teachers then used students' language to talk about other activities in class. For example, one teacher wove ideas about *Managing self* and *Relating to others* into a co-operative group technology task. This task required students to identify the similarities and differences between

two containers. As the teacher set up the task she told students they would be writing their conclusions on a sheet, sharing their findings with the group, and discussing what went well and not so well about their group work. The teacher monitored the groups as they completed the task. At the end of the task the class engaged in a group discussion about why some teams had managed to get more done than others. The teacher linked this discussion with the statements on the class's *Managing self* poster as well as ideas about *Relating to others*.

The class was then asked to evaluate how well their group had worked together using a thumbs up or down technique (two thumbs up = very well; one up and one down = mixed; two down = not so well). The teacher asked those who worked well to reflect on why their task had progressed smoothly, and those who had argued to suggest alternative strategies.

#### Teacher reflections on introducing the KCs to students

Teachers commented that developing a shared KCs language with students had assisted them to foreground the processes of learning, and gave students a clearer sense that processes as well as outcomes were important. They noted that they had always incidentally covered areas similar to the KCs. But the focus on *Managing self*, and having a shared language, had supported them to have explicit conversations. Teachers suggested that this assisted students to take more responsibility over their learning as students benefited from knowing what the characteristics of a good learner looked like. They noticed that students were starting to use the shared language without prompting in group discussions, and in their conversations with each other. Teachers also noted that the focus on *Managing self* had supported behaviour management practices as it gave students a clearer sense about what behaviours were expected.

#### Assessing the KCs

NEVNS has a strong school-wide assessment programme. Each term all students complete assessments in literacy and numeracy as well as other areas. The results of these tasks feed into classroom programmes and are reported in student profiles and portfolios. Ongoing formative assessment is also an embedded part of classroom programmes. Staff noted that they had a culture of "honest self and peer assessment" in the school with students being supported to set short- and long-term goals. Teachers expressed some concerns that assessing the KCs could lead to them formally "assessing personality and values". They viewed the KCs as more amenable to peer and self-assessment and observation. To this end they were assessing the KCs using their existing formative strategies of group and individual dialogue with students. They were also starting to use the shared criteria they had developed with students to support students' short- and longer-term goal setting.

#### Sharing and reporting the KCs to parents

To introduce the KCs to parents, school leaders had developed a handout that described each KC and showed how they were connected to term plans and school values. To support parents to start using the KCs language, teachers were planning to start talking about the KCs during goal setting at students' three-way conferences. Teachers were not sure about how they would assess the KCs for formal reporting purposes and were currently exploring how to incorporate KCs into students' portfolios and formal written reports. They noted that the section on the Essential Skills in written reports would need to be replaced by some form of reporting on the KCs.

# Connecting with pre-service trainees

NEVNS had a number of teacher trainees working at the school at the time the school was starting its focus on the KCs. These trainees participated in classroom work related to this focus. The trainees reported they had not yet discussed the KCs at college. They would be a focus when the revised curriculum was finalised. It had been suggested to them that they would be incorporating the KCs into their planning in place of the Essential Skills.

The two trainees we interviewed viewed the approaches staff at NEVNS were taking to the KCs to be consistent with the pedagogy they were learning about at college; that is, teachers acting as facilitators who supported students to take responsibility for their learning through goal setting and learning about a range of strategies. They commented on the benefits of having a shared language between year levels to discuss the KCs with students.

# Student perspectives on the KCs and learning

#### Learning about and demonstrating the KCs

Students viewed the KCs as important skills they needed to develop at school so that they would be able to get jobs, manage their lives, and relate well to people in the future:

So it will help us when we are older so we can learn to get along and we can have a good life. Also we learn them young so we can remember them and have more time to practise. It will help you get through bad times.

Students considered the way teachers approached the KCs had both similarities and differences to their usual teaching strategies. In terms of similarities, students discussed how teachers already set up a range of opportunities for them to demonstrate *Managing self* and *Relating to others* as they worked individually or with other students. Students also commented that they got a lot of specific feedback from teachers, and were used to setting goals for themselves and engaging in self and peer review. Therefore, discussing with teachers how they had demonstrated the KCs, and self-assessing the KCs, fitted with these existing approaches. Students noted that teachers

took different approaches to discussing *Managing self*, and reinforcing positive behaviours. Some teachers used a reward system to support them to manage themselves.

Students enjoyed using terms they understood (a shared language) to talk about their development of the KCs. Some appreciated learning new strategies such as how to manage their learning or other students' behaviour, and some considered whole-class or individual discussions with teachers assisted them to reflect on the process of learning: "...it makes you think a little bit more about how you are doing things."

When asked about times they had demonstrated the KCs at school, most referred to the Stars on Stage performance or a recent in-depth inquiry unit on birds. The students described how they were initially scared of participating in Stars on Stage but learnt a lot about having a role in a performance, working as a team, managing their anxiety about performing, and supporting and listening to others. Some considered they had demonstrated most or all of the KCs during this activity: for example, understanding the narrative of a dance was an example of *Using language, symbols, and texts;* participating in an event together was an example of *Participating and contributing* and *Relating to others;* and developing strategies to manage your anxiety about performing showed *Managing self:* 

[I showed *Managing self* when I] was in the Regent I felt nervous I keep saying to myself 'I can do this'. Then when I went on stage I felt great.

Students also talked about the KCs in relation to the different ways they manage themselves and relate to others at home and at school such as when sharing or managing difficult situations:

[I showed the KCs when I] have to keep myself from losing my cool with a pupil when he gets me angry.

#### The wider learning environment at NEVNS

Students in the focus group reported they enjoyed the range of activities on offer at their school and liked the sense of community at the school:

I like our school because it's small, but happy...it's a real community school.

Students reported they both enjoyed and learnt the most from activities that were in-depth, fun, relevant to their lives or interests, gave opportunities to learn by doing, allowed them to examine a topic from different perspectives, and which provided challenges. The recent Stars on Stage challenge and bird inquiry unit were cited as examples of learning experiences that met most of these criteria. For example, when talking about the bird unit, students described how the longer time frame of this study had enabled them to do a range of different activities about birds. These activities catered to students' different interests and learning styles, and supported them to learn about birds in more depth.

Students also mentioned literacy, maths, sports, and the recent focus on *Managing self* as activities that assisted them to learn important skills and strategies they would need in the future:

Reading can help you in lots of different ways: spelling, writing, language, better vocabulary, learning different languages...

In contrast, a recent trip to the museum was described as "boring" by some, as teachers did not make it fun and it did not seem relevant. Likewise, a number of students commented that they could not see why they needed to learn Mäori as they could not see its relevance to their lives.

Students commented that the school's focus on setting both short- and longer-term goals and self and peer assessment assisted their understanding about how they learnt. They were aware of their preferred learning styles, with some noting they learnt best through visual representations such as demonstrations or diagrams, and others from hands-on experiences or repetition.

Students considered their learning environment could be improved by:

- decreasing the amount of repeat coverage of content;
- offering more challenge to those who needed it;
- providing more challenging books for reading time and in the library;
- teachers providing more one-on-one time and feedback: "feedback inspires the kids";
- teachers behaving more as facilitators rather than instructors;
- offering more opportunities for autonomy and choice (one student gave an example from 2005 when they were able to plan their own timetable);
- increasing the use of ICT; and
- improving playground facilities.

In summary, students' views about learning and the way staff had approached the KCs support the school's use of an inquiry approach to increase the depth of learning and student engagement. Students' comments show that teachers were using pedagogical approaches that align with the student-centred theories underpinning the KCs. In particular, their comments illustrate the benefits of goal setting and formative assessment strategies to support students' development of the KC.

#### Where to next?

The school's approach of "making haste slowly", which involved setting aside time for frequent professional dialogue and reflection about the KCs, had supported staff to leave behind an initial reticence about the KCs being "just another thing" to take on board. Staff considered they had a shared sense of ownership over the process and a collective view about the KCs. They were enjoying being at the forefront of curriculum change. School leaders noted that the approach their school had taken to the KCs was grounded in student-centred pedagogy and that it was important that schools had this foundation in place to build on.

Staff found focusing on one KC a term supported students to develop an in-depth understanding of this KC, but noted some tensions in this approach. A number commented on the intertwined

nature of the KCs. For example, KCs such as *Participating and contributing* and *Relating to others*, as well as the focus KC: *Managing self* were relevant to the Stars on Stage activities:

I now realise they are intertwined...you can't take them in isolation, but it's good to highlight one each term...to make the kids more aware of it... It is hard to cover them all.

Staff at NEVNS expressed some anxiety about curriculum coverage. They were grappling with a concern many other schools face: a worry about selling students short if they downsized the curriculum to find space for in-depth learning. At this point in time staff were experimenting with this balance. Students clearly appreciated the refocusing that had already occurred and were enjoying and learning from the school's approaches to the KCs.

Staff were also exploring ways to more formally assess the KCs and noted that this would be a focus for the future. They suggested that teachers need time to experiment with ideas first so that they are able to develop assessments that are not a "prescriptive formula".

Some staff saw the KCs as providing a framework for currently unconnected educational focuses such as de Bono's Thinking Hats and concepts such as resilience. To align school approaches to thinking skills, school leaders had recently completed an equating exercise between the Thinking Hats and Bloom's Taxonomy. They planned to do a similar exercise to examine the connections between the Thinking Hats, Bloom's Taxonomy, and the KCs.

These plans would support staff to deepen their understanding of the KCs and continue to integrate them into school teaching and learning practices.

# Developing exemplars of the KCs at Hillcrest Normal School

# Introducing Hillcrest Normal School (HNS)

Hillcrest Normal School is a decile 10 contributing school in Hamilton. The school has a roll of approximately 518 students—the majority are NZ European, with small percentages of Asian, Indian, and Mäori, and a range of other ethnic groups. Hillcrest Normal School is an Enviro-School, and is currently part of Project Energize, a two-year Waikato District Health Board-funded research programme to improve student fitness and nutrition. The parent community has high educational expectations for their children, supports the learner-centred philosophy of the school, and actively supports their children's learning.

# How did the KCs fit within existing school practices?

HNS staff saw the KCs as being about the "whole child", describing them as intrinsic attitudes, beliefs, and knowledge that thread through all curriculum areas and work together in complex ways. They felt a focus on the KCs would support students to become lifelong learners who are part of, and involved in, their communities. Staff saw the KC framework as a timely development that aligned with current school directions, as described next.

#### Learner-centred practice

HNS has a strong learner-centred philosophy, and for a number of years staff have been exploring teaching and learning programmes that sit with this philosophy. They developed a pedagogy that centred on exploring "rich tasks" (as described below), and incorporated Art Costa's ideas and a focus on thinking skills through the use of Bloom's Taxonomy and de Bono's Thinking Hats. HNS staff saw these focuses as catering for, and challenging, students of all abilities. School leaders noted that developing a school pedagogy had built cohesiveness and consistency, with an outcome that "we are all singing from the same song sheet". For teachers, these focuses and associated professional development (PD) had resulted in improvements to practice and an increased emphasis on teachers as reflective practitioners.

School leaders viewed the adoption of the KC framework as an opportunity to re-evaluate and "sharpen up" practice at the school, supporting staff to share "the what" and "the why" of their

teaching more with their students, so that power is shared. Teachers echoed this, noting the potential for the 2006 focus on the KCs to further increase their emphasis on learner-centred practices.

#### Rich tasks

HNS staff considered it imperative that their teaching and learning programmes met the wide range of student needs at the school: including almost a third of students within any year band being identified by the school as talented and 39 students currently funded as ESOL learners. Staff believed that learner-centred programmes delivered within an integrated curriculum best catered for this range. At HNS, the delivery of an integrated curriculum was focused around "rich tasks".<sup>10</sup> Staff described these tasks as carefully planned, integrated, problem-based, investigative units centred around authentic experiences. The tasks included the school's work on Enviro-School and Project Energize focuses and combined LEOTC with other learning experiences that required students to take responsibility for their learning. Staff noted that the tasks that were selected were inclusive and catered for different learning styles and needs by providing a range of challenges. These tasks were developed utilising ideas from the New Basics initiative in Queensland, learning stories in early childhood education, as well as other approaches. Some tasks arose from "teachable moments"; others were part of year plans. Examples of recent rich tasks were:

- students learning to plan, budget, and buy food as they prepare for a school camp;
- students being involved in the process and decision making surrounding school productions;
- students planning and enacting how to respond to an earthquake during a "disaster day";
- students writing, designing, and making books for a local kindergarten that ran out of books;
- students examining and evaluating their school environment, and as a result, redesigning and creating a new garden from a weedy patch;
- students designing and running the "Hillcrest Games" (like the Commonwealth Games); and
- trialling resources from the Bio-learn site, which involved students learning about a farming situation, and working through a challenge.

The staff at HNS saw rich tasks as vehicles to explore the KCs, so focusing on the KCs was seen as timely and "integrating perfectly" with existing school directions and practice.

# The process used to introduce the KCs and develop exemplars

To support staff to become more reflective practitioners, and be partners in the development of a school-wide pedagogy, HNS developed a model of in-house PD called an action learning cycle.

<sup>&</sup>lt;sup>10</sup> Some aspects of numeracy and literacy are taught separately from rich tasks.

These cycles involved staff meeting over a period of time, with an outcome in mind, to share and reflect on their individual and team practice. Two action learning cycles were completed at HNS during 2005. During the first cycle staff explored using planning models from Gifted and Talented Education (GATE) as a basis for planning for integrated teaching. The second cycle was designed to support staff to interpret the KCs. Staff took photos of critical learning events that they then related to the KCs. In 2006, to further develop staff understandings about the KCs, the whole staff participated in an action learning cycle where the outcome was the co-construction of KC exemplars by staff. In this cycle, teachers were given many opportunities for professional dialogue about the KCs. As a school management team member pointed out, this supported staff to articulate their practice surrounding the KCs, develop a shared language, and understand which learning situations aligned with the KCs. The process used during this action learning cycle is set out in Figure 10.

STEP 1: Gathering information	
Individual staff members	Whole staff
Each teacher took photos of their own students at what they considered to be critical learning moments.	<ul> <li>Presentation about the KCs.</li> <li>Teachers were given readings relevant to the KCs and learner-centred practice, such as an article by James Beane on negotiating the curriculum with students.</li> </ul>
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#### Figure 10 Using an action learning cycle to develop KC exemplars

#### STEP 2: Working in teams (syndicates)

At team meetings, each teacher presented their photos of critical learning moments. The team chose which ones to develop as a possible exemplar of a KC. Together, the team discussed these photos in relation to the learning students were doing and how that exemplified one KC. Each team across the school developed one or two exemplars, highlighting how each linked to a KC (see Figure 11).

#### STEP 3: Whole-staff discussions

Each team presented their KC exemplars to the whole staff, and staff drew comparisons between exemplars from across the school.

#### STEP 4: Developing team KC exemplars

Each team met and planned a rich task, incorporating a KC that fitted with the rich task into their planning. The team implemented their plan, recording students' critical learning moments. Following this, each team met to review and discuss what these photos revealed about the focus KC.

#### STEP 5: Next steps

Following from this action learning cycle, staff planned that each team would write another KC exemplar. Then staff would review this action learning cycle and decide on a next step for their PD.

Figure 11 shows a KC exemplar developed for Year 3 students.

# Figure 11 A KC exemplar developed at HNS

Exemplar: Year Three	
Key Competency: RELATING	TO OTHERS
Language Context: Electronics	(Science and Technology)
Learning Intentions: Student knowledge of circuits is used when constructing individual models of space satellites. Co-operative models of learning where students take on different roles to support decision making and problem solving are developed. Learning Outcomes: • Specific focus within this lesson: Transferring knowledge of how a single circuit works to how a circuit containing two or more	Impacts: Huge personal satisfaction for children from successful task completion. Rich sharing of ideas between children; and modelling within the peer group with all children as contributors. Ability of the teacher to identify and capture the key science concepts and facilitate wider sharing of these was essential to the process. (building and consolidating the knowledge base)
<ul> <li>bulbs and a switch needs to be constructed.</li> <li>Working together in groups to complete the task, modelling appropriate role behaviour and co-operative skills.</li> </ul>	Issues for Consideration: Teacher content knowledge was secured through staff PD sessions prior to the teaching.
Outcomes: Honed technical ability and facility to manipulate electronic equipment for a specific purpose. Trial and error techniques including: • Facilitated /negotiated discussion • Consideration of the "ideas" pool • Experimentation by students • Physical manipulation of equipment	<ul> <li>Organising strategies which support effective, inclusive and productive conversations.</li> <li>Dealing with dominant children in student-led group tasks. Possible solutions:</li> <li>Attention to role definitions/ each child with a responsibility</li> <li>Grouping like-minded children</li> <li>Provision for increased scaffolding for children who lack confidence</li> </ul>

(The exemplar included a photo of a critical learning moment.)

# How the KCs linked to teaching and learning programmes

#### Planning

As a result of the KC action learning cycle, staff were exploring different ways of incorporating the KCs into their planning, and were acknowledging the potential of the KCs to drive planning. Some were questioning whether they were providing sufficiently "deep" opportunities for children to demonstrate the KCs. One teacher found that she was starting to change the activities she had previously included in her plans as they did not have an obvious connection with the KCs. Another staff member suggested that the KCs should be at the centre of planning, and students should be participants in that process:

It will become what I share with my students. A rapport will be developed so that they are more involved in their learning journey.

#### Introducing the KCs to students

At the time of the school visit, teachers were still developing their understanding of the KCs and had not "given it a name for the children". Staff were considering ways to construct the KCs with students.

Although teachers had not formally introduced the KCs to all students, they reported using the language of the KCs incidentally with students. This was supporting them to make the processes of learning more explicit. Examples heard during informal class visits were: "You have to learn to work together on this task"; "You are thinking about your actions?"; "What could you do to solve the problem?"; and "You have three choices...you have to decide."

Some student groups had been more formally introduced to the KCs and related language. The Year 6 student leaders had participated in group brainstorms about what each KC might look like. They had been asked to relate their thoughts about the KCs to their camp experiences. Photos from the camp were then used for students to identify which KCs were happening and how they were being practised. The intention was for students to transfer these understandings to school situations and to make up a display for the school foyer, thus educating a wider audience.

One teacher described how she worked with an ICT extension group to link students' perceptions of the senior school camp with the KCs. Three themes were evident in her class's retrospective brainstorms about the benefits of the camp. These were challenges, success, and co-operation. Using the pages from the draft Curriculum Framework that defined the KCs, the students lined up their brainstorms with these descriptions of the KCs. Students noted that to co-operate effectively they needed to accomplish something together, communicate, trust, encourage, participate, and lead. In doing this students noted that they drew on *Relating to others, Participating and contributing, Thinking*, and *Using language, symbols, and texts*.

Another way school staff had approached introducing the KCs to students was by interviewing the Year 6 student leaders and junior students about their perceptions of their learning environment. Questions asked included:

- What counts for success at HNS?;
- What does the principal say is important at this school?;
- What are your dreams for yourself?;
- What does a good teacher do?; and
- What makes a good teacher?

Students' responses were used by school leaders to further their understandings about how students viewed their learning environment, and to inform PD around the KCs. Staff noted that older students viewed teachers more as facilitators, in contrast to younger students whose comments showed the importance of the relationships they had with teachers.

#### Assessment and the KCs

In HNS school reports the Essential Skills (ES) are reported on in tick boxes. All staff agreed using this format was not appropriate for the KCs, and they would have to consider how to replace the ES section in reports to parents. Staff expressed a need to reposition parents and educate them about the KCs, which could mean bringing the language of the KCs explicitly into student–parent–teacher conferences. One teacher was already informally reporting on aspects of the KCs at these conferences.

Staff noted that the thinking behind the development of learning story-style exemplars for the KCs arose from concerns about an assessment system that they were philosophically opposed to (such as a matrix of progressions across year levels). For a number of reasons, staff were concerned about the rationale for developing a matrix. They considered this could lead to summative assessment of the KCs resulting in generalisations being drawn from context-specific situations. Staff also felt uncomfortable about the idea of "assessing personality". As a form of assessment, staff saw the KCs as more amenable to ongoing peer- and self-assessment, and to teacher observation. The intended use of the school KC exemplars was as a moderation tool to support teacher observations.

# Connecting with pre-service trainees

The school had not organised separate formal training about the KCs for pre-service trainees. Trainees who were working at the school attended staff meetings about the KCs, and participated in the work that was being done in individual classrooms.

# **Student perspectives**

#### Learning about and demonstrating the KCs

At HNS, the student focus group was made up of some of the Year 6 student leaders. These students perceived the KCs to be the "skills" they needed for a "good life", and saw the importance of learning them when young:

Managing self and relating to others are two things that everybody needs to know. Thinking is part of everyday life...

If we [children] learn the Key Competencies when we're young, then when we grow older we will be able to get better jobs, and be able to do things better.

When asked how they had demonstrated the KCs, students in the focus group initially talked about the more obvious social aspects of the KCs *Relating to others*, and *Participating and contributing*, such as comforting someone who was homesick at camp, being in mixed teams and working on a problem together, knowing people's boundaries, and being able to communicate personal needs to an adult.

Students described the benefits of *Managing self*, especially when they set their own goals, did self- and peer-assessments, and got purposeful feedback from their teachers and others so they would know what and how to improve.

Students also described how the KCs were interwoven in specific subjects. For example, in maths, *Thinking* was about learning different strategies. Understanding how you use different languages in different subjects was part of *Using language, symbols, and texts*.

#### The wider learning environment

Students at HNS were aware of new approaches their teachers were trying and strategies they were learning across a range of areas, and how these related to the KCs. When asked what they had learnt the most from this year, they responded:

Strategies [in maths]—we are learning different ways of doing things.

Working as a team to solve something.

From discussions with others and learning from my mistakes.

Doing drama: It teaches me to be more confident.

In the work that teachers had done with groups of students, it was interesting to see how students had identified the importance of taking risks, and of the power of learning if you go beyond your comfort zone, whether it be in the social, emotional, academic, or physical arenas. When reflecting on why they were given co-operative activities at camp, students responded:

People have different fears and strengths.

You need to work with different people better.

You get a better understanding of teamwork.

You accomplish things you couldn't do by yourself.

Overall, students identified that when activities were fun, new, and different, they engaged better and felt that they learnt more. The rich task experiences they had had outside the classroom were seen as particularly significant learning times. Students had obviously enjoyed working and learning about real things in the outdoors. Being given explanations so that they knew the purpose behind what they were doing was also seen as important.

In commenting on the aspects of their education that could be improved, students, like their teachers, were reflective practitioners. They did not want to be passive recipients of information. They commented that spending too much time listening without breaks was not helpful to their learning. Some students expressed a concern about why they were learning Mäori, and noted that they did not understand the purpose for this learning.

In summary, students' comments reflected the shifts the school was making in becoming more learner-centred. Students' descriptions of the connection between the KCs and the co-operative and self-management behaviours they were learning, show how the school's direction was aligned with pedagogies that are likely to support students to demonstrate the KCs.

# Where to next?

Across the school, staff at HNS felt excited about all the possibilities that working and moving forwards with the KCs presents both to themselves and to their students. They identified a need to continue extending their boundaries to ensure that their work was learner-driven and offered all students real experiences and appropriate scaffolding. They noted that all students needed to be given opportunities to develop the KCs, not just GATE students, or those who were part of specific extension or withdrawal groups.

Staff discussed the importance of consistency across the school about what each KC looks like, and getting the balance right in planning. To support this consistency to develop, a number of areas for future exploration were suggested. Staff noted that all the KCs could potentially fit with most rich tasks, therefore there was a need to discuss whether they would highlight one or two KCs or incorporate them all. Making the language of the KCs accessible for younger students was also considered important. Staff also saw the need to explore and unpack *Using language, symbols, and texts* together, commenting that this was the most difficult KC to interpret. Once a sense of consistency had been achieved, staff would explore ways to formally introduce the KCs to students and parents.

Staff saw the benefits for themselves and students of continuing their work on integrating the KCs within school initiatives, including the GATE model, Project Energize, and their Students as

School Leaders programme. They hoped this would continue to build resources and exemplars for staff, students, and parents around the types of successful practices in current use.

At HNS, exploring the KCs was an iterative process as the KCs were continually being made visible, and current practice was evaluated to ascertain alignment between the school focuses and the new KC framework. Staff considered this iterative and "measured" approach would facilitate their continued exploration of the KCs.

# Developing KC matrices at Central Normal School

# Introducing Central Normal School (CNS)

Central Normal School is an inner-city decile 5 contributing school in Palmerston North that serves a wide ethnic and socioeconomic community. It has a roll of approximately 540 students across its mainstream, special education, and bilingual classes. The majority of students are NZ European, and about 40 percent are Mäori. A wide range of other ethnic groups are also represented at the school. The school is staffed by approximately 30 full-time teachers, including three RTLBs and one RTLit who also support teachers and students in schools on the western side of Palmerston North. In addition, 22 support staff assist students in the school's inclusive special education programme.

# Integrating the KCs within teaching and learning programmes

Staff saw the KCs framework as being important to education and society, having the potential to provide a continuum from early childhood education through to tertiary education and beyond. "Good citizens", "capable people", "well-adjusted members of society", and "life-long learners" were seen as outcomes. Staff considered that this meant the KCs had the potential to be seen as "not just as a school thing" and they would "become part of everyone's understandings about learning".

In the three years prior to the school's focus on the KCs, CNS had a professional development (PD) focus on literacy, numeracy, thinking skills, and social skills. The school management team considered that the KCs fitted well with these recent initiatives, and wanted to integrate the KCs within their existing programmes, seeing this as an opportunity to reorganise the curriculum. This re-organisation is described below.

#### Developing a framework for integrated learning

The staff at CNS saw the introduction of the KCs framework as an opportunity to adopt an integrated approach to the curriculum. This approach was viewed as more meaningful for both students and teachers. Within an integrated approach, staff planned to foreground the KCs and therefore increase the priority placed on the skills and processes necessary for life-long learning.

Staff suggested that this shift away from knowledge-based study would result in the learning contexts becoming "the vehicle", and the KCs "the road". Within this framework, staff described the KCs as an "over-riding umbrella that filters into and underpins everything we do".

# Connecting the KCs with other school-wide approaches

In order to facilitate an integrated learning approach, the staff decided to use inquiry learning in authentic contexts to focus classroom programmes. Therefore PD in inquiry learning was undertaken as a whole staff. To refocus their approach to curriculum, staff also drew on previous PD and school-wide practices that they wished to maintain. These were:

- the use of assessment rubrics;
- the use of the Habits of Mind;
- the use of questioning techniques and critical thinking tools, for example, David Whitehead's work, Bloom's Taxonomy, and de Bono's Thinking Hats; and
- the practice of the Virtues Project.

# The process: Starting with the whole school

School leaders considered it important that all staff were involved and had ownership in their journey with the KCs. They began the process of exploring how the KCs could be integrated into school programmes by gathering information and disseminating it to staff. Following this, a whole-school PD model was used to introduce the KCs to staff, as outlined in Figure 12.

#### Figure 12 Steps taken to unpack the KCs at CNS with staff

#### STEP 1: Gathering information about the KCs and integrated learning

School leaders attended the KC presentation at the Normal Schools Forum and visited another Normal School to learn about curriculum integration, and staff were given readings about the KCs.



#### STEP 2: Whole-school PD

At the beginning of Term 1, 2006, a teacher-only day was held. During this day, school leaders shared findings about curriculum integration from their visits and readings. Staff viewed presentations by staff from other schools about their approach to curriculum integration and new staff members shared their experiences of integrated learning. Staff discussed how they could align integrated teaching and learning programmes with their understanding of the KCs. Whole-school PD on inquiry learning was also undertaken, as this was felt to be necessary for an integrated approach. This PD was provided by a staff member from Massey University.

#### STEP 3: Forming a team to develop a KC matrix

The enthusiasm generated from this PD resulted in the senior school team (Years 5/6) meeting and developing a levelled matrix for one KC: Managing self, ready to begin the school year (see Table 7). The criteria for Managing self were grouped under three learning intentions for the curriculum levels 1-4:

- 1. Exercises Initiative
- Identifies Personal Goals 2.
- Responsible for Own Actions 3.

#### STEP 4: Developing a shared understanding of the KC matrix with whole staff

The senior team took their levelled matrix to a staff meeting for discussion and comment.

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#### STEP 5: Building ownership and a shared understanding of KC matrix at individual team levels

Each team then met to put the matrix criteria into language they felt their own students would understand. They also discussed where they thought their students were now (in relation to their matrix), and what their students' next steps could be.

#### **STEP 6: Developing further matrices**

A similar process, as outlined in Steps 3 to 5, was used to draw up a matrix for the KC focused on in Term 2: Participating and contributing.

Table 7 shows the matrix of progression developed by school staff for *Managing self*.

#### Table 7 Managing self rubric

Key Concept Matrix: Managing Self			
Level One	Level Two	Level Three	Level Four
Exercises initiative	Exercises initiative	Exercises initiative	Exercises initiative
<ul> <li>Makes choices</li> <li>Follows an instruction</li> <li>Shows leadership qualities in small group situations</li> </ul>	<ul> <li>Makes good choices</li> <li>Follows more than one instruction</li> <li>Shows leadership qualities in whole-class situations</li> </ul>	<ul> <li>Makes good choices consistently</li> <li>Follows instructions and routines without teacher direction</li> <li>Shows leadership qualities with increasing confidence</li> </ul>	<ul> <li>Always makes good choices</li> <li>Consistently follows instructions and routines without teacher direction</li> <li>Shows leadership qualities effectively and with confidence</li> </ul>
<ul> <li>Identifies personal goals</li> <li>States that there is something they need to learn</li> <li>Reflects orally</li> </ul>	Identifies personal goals • Writes personal goals • Writes simple success criteria • Writes simple reflections	<ul> <li>Identifies personal goals</li> <li>Writes specific personal goals</li> <li>Identifies and writes specific success criteria</li> <li>Reflects honestly and realistically on goals</li> </ul>	<ul> <li>Identifies personal goals</li> <li>Writes specific long- and short-term goals</li> <li>Reflects, evaluates, and modifies goals using measurable criteria</li> </ul>
Responsible for own actions	Responsible for own actions	Responsible for own actions	Responsible for own actions
<ul> <li>Is aware of some rules</li> </ul>	<ul> <li>Follows rules</li> </ul>	<ul> <li>Follows rules consistently</li> </ul>	<ul> <li>Always follows rules</li> </ul>
<ul> <li>Discusses own behaviour with support</li> </ul>	<ul> <li>Discusses own behaviour</li> </ul>	<ul> <li>Takes ownership for behaviour</li> </ul>	<ul> <li>Copes with successes and failures maturely</li> </ul>
Aware that there are consequences for choices	Understands the consequences for choices	<ul> <li>Accepts consequences for choices</li> </ul>	

# Planning for integrated learning based on the KCs

As part of their move towards an integrated curriculum, CNS had started to structure their planning around school-wide themes. Each term, a theme has a focus on one key learning area, but also straddles a number of other curriculum areas. To support staff to integrate the KCs into their planning, the school's specific targets for 2006 were based around the KCs. Staff began by weaving one KC into each term's school-wide theme. For example, in the school-wide theme of "My Zone" in Term 2, the KC: *Participating and contributing* formed the basis of an integrated inquiry about an aspect of themselves and their local area. Each team across the school took a different approach to the term's theme, but in their planning, teachers tied student learning activities to three learning intentions for *Participating and contributing* that they had worked on both as a team and as a staff, and had unpacked further with their students. These learning intentions were:

- participating in groups;
- sense of responsibility; and
- accepting individual differences.

Table 8 gives an example of how the staff had woven their KC focus and these learning intentions together in their planning.

intentions	5	
Stages of Inquiry		
Tuning in	Learning activities	Key Competency focus
<ul> <li>Engaging students in the topic</li> <li>Assessing prior</li> </ul>	<ol> <li>What represents us? In pairs ask students to draw any symbol that they think represents NZ—try to draw out the Marae, Rugby, etc.</li> </ol>	Working with one other person, sharing and listening to different ideas.
knowledge, interest, & attitudes	<ol> <li>Ask students to draw themselves in their locality. Do they understand that they belong to a larger community other than the Manawatu, or New Zealand?</li> </ol>	Works independently with guidelines.
<ul> <li>Assessing gaps in knowledge</li> <li>Refining planning</li> </ul>	3. Ask each student to bring something significant to them and ask them to explain its significance.	Shows tolerance and acceptance of others' individualities—cultural and
Gathering     questions	<ol> <li>Study a television commercial that shows a collection of New Zealand images and decide which one represents "us" and why.</li> </ol>	social.
	5. Our flag. What does it mean? What do the symbols represent? What was it created for? Is it still relevant to us (adopted in 1902)? How could a new flag for today's NZ look? What would be the pros and cons of changing the flag? Do other countries change their flags? When and why?	Reflects and appraises, considering others' ideas. Accepts that others have a point of view.

# Table 8 Example of "My Zone" planning that weaves together the KC focus and learning intentions

# Integrating the KCs into classroom practice

To introduce the KCs to students, teachers set up activities that enabled students to explore what a particular KC could look like both in specific and general classroom life. For example, in Term 2, staff and students worked together to develop class criteria for what *Participating and contributing* looked like. These criteria were placed on posters and charts around classrooms so that students had access to them. Some classes had also identified how they could demonstrate *Participating and contributing* in specific curriculum areas as well as in general classroom life (see Figure 13).

# How we PARTICIPATE & CONTRIBUTE during READING by: We help each other by giving each other ideas We accept each others different ideas and thoughts We discuss answers together Show leadership in our groups Listen and encourage others.

Teachers used similar approaches to introduce the KCs to students, but depending on the activities they were currently engaged in, took different approaches to further integrating the Term 1 and Term 2 focus KCs: *Participating and contributing* and *Managing self* into their classroom practice. In Term 2, working in groups formed a big part of the "My Zone" work. Referring to the criteria and posters they had developed about *Participating and contributing*, some staff and students specifically identified the criteria for group roles; that is, leader, recorder, reporter, and member. Staff noted that this involved a lot of class discussion, group work, reflection, and reinforcement.

In their work on "My Zone", teachers in a junior class used ideas about *Participating and contributing* and *Managing self* to support students to gain an overview of the activities they were undertaking and to reflect on these. Teachers constructed an action plan for their study on the classroom floor as a hopscotch. Each number marked a stage in their study, so students could see the progression they would make in their study. The hopscotch was actively used as students sat around it to either reflect, to review, and/or to foresee the stages of their action plan. One of their classmates threw a beanbag onto the appropriate number/stage, and hopped the action plan/hopscotch, picking up the beanbag from the highlighted stage. This was backed up by a class journal that documented in more detail the events of each stage and student findings along the way.

The RTLBs, RTLit., and support staff working in the school special education programme supported students by using the KC criteria vocabulary of the class their students were working within. In addition to this, the special education staff drew up a pre-level 1 matrix to use in setting Individual Education Programme (IEP) outcomes for their special needs students.

# Assessing the KC

The matrices that staff developed were used as formative assessment tools. In general, staff saw the development of the KCs happening on a continuum, so felt assessing them in a formative way was more appropriate. This would mean an increase in student self- and peer-assessment, as well as an increase in reflective time for both teachers and students. Some teachers incorporated either the KC matrix or a breakdown of this into a school "sharing book" that each student takes home. In this book, students self-assess where they think they are currently at, and identify their next steps. One teacher commented that as these books went home, and with students if they moved schools, they were starting a process of communicating with parents and colleagues about the KCs.

Staff plan to assess the KCs, within the context of a particular school theme, using the matrices they had developed. A curriculum achievement level for each of the three identified learning intentions will be given to each child. This achievement level, together with a 1–5 progress indicator, will be shared with parents and caregivers in the end-of-year report.

# Reporting

Staff acknowledged that the format of their current formal report to parents did not fit with the integrated curriculum nor the KCs. Senior staff intended to form a committee of teachers and parents to discuss their report format. As they moved away from a focus on specific curriculum areas, many staff also favoured a move away from formally assessing and reporting on these, towards assessing and reporting on the KCs, as well as literacy, numeracy, and physical education.

For some students with special education needs, learning was documented digitally to share with parents and others. Staff planned to align these assessments with the KCs, as the KCs formed the basis of IEP learning outcomes.

# Teacher reflections on the school's exploration of the KCs

In reflecting on their exploration of the KCs to date, staff acknowledged that changing teaching practices was a challenge. They noted that they were all at different stages along a continuum, and that time and support would keep them moving. A couple of staff expressed concerns about keeping up with the pace of curriculum change and whether or not students were benefiting. In bringing students with them on "yet another wave of curriculum development", they wondered if students would become "guinea pigs...lost between two worlds".

However, most staff had already noticed how shifts in their practice were having benefits for students. They saw the perceived low achievers participating more within the classroom

programmes and having more opportunities to shine. They thought this was because the KCs were more about the whole person and everyone has strengths they could share and offer others.

When more relevant local content was added to the school programmes, staff felt that students were positively engaged in learning. Staff outlined examples of authentic projects they considered engaged students and supported their development of the KCs and ability to take action in their environment. In their "My Zone" work, the juniors were evaluating a local playground and were actively engaged in putting a proposal together to present to the City Council about how to improve this playground. As part of developing their understandings about the role of playgrounds, students visited some local playgrounds. In so doing, concepts about playgrounds were explored as was their potential for offering a wide variety of physical challenges. These ideas were reinforced back at school where students had many opportunities to construct playgrounds using blocks, to discuss their ideas, and to record their constructions. As a result of this work, staff felt that students were well-prepared for working on the proposal they were going to present to the City Council.

Another authentic project around local content was undertaken by the middle school. They were working in consultation with Department of Conservation staff on the replanting of a local beach. This involved research and learning about native coastal plants. The teacher described how her students also took control of the practical planning side of their project when they did the costings, the first aid, and the risk analysis for their beach excursion. The teacher reported that her students felt a high degree of personal ownership in the project.

# Making the KCs visible in school life

#### Sharing the KCs with parents

Staff at CNS were starting to share the understandings they had developed about the KCs with parents. At the start-of-year parent-teacher meeting and through newsletters, the principal had provided parents with an overview of the KCs. Since then, all students had taken home their sharing books with a self-assessment of a KC. An end-of-term school celebration time for parents and students was planned which would extend and reinforce any learning that all members of the school community had done about the KCs.

#### Connecting with pre-service trainees

For the teacher trainees on section at CNS, the KCs were an unknown, so they learnt alongside the staff, witnessing any changes in thinking and practice. When pre-service trainees return for their sole charge later in 2006, they will start to fit into the school and class models for the KCs.

# **Student perspectives**

The Year 6 focus group we interviewed for this case study was drawn from the school's Young Leaders group. These students had recently taken part in the Young Leaders conference in Wellington. This had given them insights into the importance of leadership, and what it meant to be a leader. Steve Maharey (Minister for Education, and the local MP) had also visited the school and spoken to this group.

# Learning about and demonstrating the KCs

The students thought that learning about the KCs was different from other aspects of their learning. They described the school approach to learning through the KCs as exciting and more challenging and said it had made them really think and question. Approaches that the school and teachers were putting in place, like the matrices, were being noticed and appreciated by the students. On being asked to rate how this year at school was going, one student who selected "Very well" noted:

I'm working harder, learning more, being more interactive, feeling happy and safe at school, and because I've been chosen for some exciting things that have influenced me.

Like the staff, students saw the KCs in terms of life skills, and were able to see how they applied them in other areas of their lives; for example, helping out at home, doing and getting their homework done. One student saw the KCs as "different strategies to have a good life" and that knowing about them and practising them will "help us to do what's right".

Students thought learning about *Participating and contributing* was not just about their own learning, but also about learning as a team. They described the need to take on others' points of view, whilst also recognising that people are different, that they learn in different ways, and have different things that they can offer. Students acknowledged the benefits of learning about *Participating and contributing*, from both personal and societal points of view:

When I write...with my buddy, we have to participate and contribute to the story, share tasks, and compromise with each other.

We are doing more learning as a team. In our work on 'My Zone', it was about us, but we were working with others, and learning from different people's points of view.

Hopefully more people will care about more things.

In describing their understandings of *Managing self* and *Relating to others*, students talked about the social aspects of learning that they now felt more aware of, knowing about different situations and how to handle them, knowing about people's boundaries, and learning about strategies to help others:

I help them out in hard situations and make sure they're happy and safe.

I can turn things around and help someone get over a bad situation. If someone is upset, I ask them what's wrong, then I change the subject and they end up happy again.

Students' descriptions of learning about the three more familiar KCs (*Participating and contributing, Managing self,* and *Relating to others*) was in contrast to how they described the two other KCs. Students did not give examples of how they demonstrated *Using language, symbols, and texts.* They described aspects of *Thinking* as strategies to manage their integrated theme work:

When I do my theme [work], I try to think as hard as I can. Sometimes it's hard to know which information to use.

Questioning has helped me to learn [in theme work].

#### The wider learning environment at CNS

When students were asked what they had enjoyed and learnt the most from this year, their responses showed that fun activities and being provided with challenges were high on their list. The challenges students mentioned included the physical challenges of camp, the challenges of increased expectations of them as Year 6 students, the emotional and social challenges they meet every day, and the intellectual challenges of specific subjects. Students thought that when school activities were more practical and fun, they were more likely to remember them and learn from them.

When asked about how their learning could be improved, students suggested that learning could still be made more fun. Examples for how this could be achieved included learning through games or plays. Students also thought that they spent too much time passively listening, and that teachers did not have a lot of time for one-to-one explanations. They suggested having access to more interactive computer programs could make up for this. Classroom management on the part of teachers was another area that students thought could be improved. Students considered that too much of teachers' attention was focused on disruptive students.

In summary, students' comments during the focus groups and from the surveys show their support for the approaches taken to the KCs at the school, and the school's shift towards an integrated curriculum, increased access to authentic community-based learning such as through the "My Zone" work, and use of collaborative learning strategies. These approaches align with the studentcentred pedagogies that underpin the KCs. Students were able to make connections between the KCs, what they had learnt from their experiences as members of the school's Young Leaders, and what they were doing in class in their theme work, as well as the greater responsibilities, expectations, and challenges they now had as Year 6s, and the importance of being a good role model for the school's younger students. This was illustrated by one student when relating his learning about teamwork and leadership skills. He read out a quote he had noted from their meeting with Steve Maharey: "Don't take credit yourself, acknowledge the team."
#### Where to next

All staff felt positive about how their work on the KCs, alongside their PD on inquiry learning and the integrated curriculum, had impacted on their practice. They and students expressed enthusiasm and a sense of ownership over this work. Even though some staff had found the change initially daunting, they enjoyed working as a school, realising that the exploration and learning they had done both as professionals and with their students, was more personalised to their community, and was building a greater sense of community. To build on this sense of learning being more personalised, and to support students to make further links to real-life situations, staff planned to continue their emphasis on sourcing authentic learning opportunities. One teacher reflected that this necessitated looking at classroom programmes from a different angle, identifying and being driven by the needs of students. Staff saw the need to continue to monitor themselves, both individually and collectively, and to accept that their work on the KCs and integrated learning was an evolving process, so it would continue to change and they would have to be flexible to allow for that to happen.

Overall, staff considered their focus on the KCs had formed the basis for a more holistic way of teaching and learning and were enthusiastic about the shifts that had occurred at the school. They saw the potential for further change as they continued their exploration of the KCs.

# Developing progressions for the KCs at Kelburn Normal School

#### Introducing Kelburn Normal School (KeNS)

Kelburn Normal School is a decile 10 full primary school, situated in central Wellington, with approximately 20 full- or part-time teachers and 350 students. The majority of students are NZ European. The school has a strong commitment to high standards of literacy and numeracy and providing opportunities to extend students' creative skills through the employment of specialist teachers in performing and visual arts, music, and second languages. This enables classroom teachers to be released one afternoon a week for planning and professional development (PD). Differentiated learning is a focus at the school. Students' needs are catered for through ability grouping in classrooms and the provision of extension groups in key areas.

#### The fit between existing school practices and the KCs

Staff saw the KCs framework as centred around ideas of lifelong learning, that is, the skills students need to be a good learner and take an active part in their community. Unlike the Essential Skills, which staff noted were not in "kids' speak", teachers saw the KCs as skills they and students could "put a name to". Staff considered that this "naming" would support students to be more aware of the full range of attributes they needed to be successful learners.

The school goal for students is to support them to develop the learning dispositions needed to be lifelong learners. As a result of AsTTle assessments, which showed that students were not strong in critical thinking, the school identified a need to shift the focus of school programmes towards practices that support the development of these skills. Staff considered this refocusing could potentially provide avenues for exploring and integrating the KCs into teaching and learning. The refocusing is described below.

#### Meta-cognition and critical thinking

School leaders identified that the school had strong summative assessment systems in place but needed to increase the focus on using assessment results and formative assessment to feed into learning and to support students to develop meta-cognitive skills. Accordingly, to provide teachers with the tools to be able to do this, staff had recently attended literacy and numeracy PD.

This PD included a focus on formative assessment strategies such as setting success criteria and developing student self- and peer-assessments. Staff noted that these formative strategies were aligning with the approach they wished to take towards the KCs.

Staff were also exploring ways to support students to deepen their understanding of thinking skills models such as Bloom's Taxonomy and de Bono's Thinking Hats. Staff viewed these models as aligning with the KC: *Thinking*.

#### Inquiry and integrated learning

Along with formative assessment, staff were increasing their use of other student-centred practices. School leaders considered that structuring curriculum delivery around an integrated inquiry-based model would offer more in-depth learning experiences that could be used as a vehicle to support students' development of critical thinking and meta-cognitive skills. As a result, in 2005, the whole school undertook PD on the Action Learning inquiry model. Following this, school library practices were reviewed to ensure that they were consistent with the school's emphasis on information literacy. Staff considered that an exploration of the KCs by staff and students could be integrated within the school's integrated inquiry-based approach. They also identified the need to continue to separately teach key literacy and numeracy skills.

#### Visual and performing arts

KeNS has a focus on empowering learners' creative skills through the visual and performing arts. The school arts programme emphasises students drawing on existing knowledge and experiences to create new knowledge (original art works or performances) and the use of teacher–student dialogue to reflect on this process. Staff considered these student-centred practices aligned with, and could be enhanced by, a focus on the KCs.

## The process: Developing a shared understanding of progression in the KCs

School leaders at KeNS considered it was vital that all staff had ownership over the process of developing a shared view of the KCs, and that the KCs were approached in a seamless and progressive way as students moved through the school. Therefore, they decided on a whole-school approach to integrating the KCs into teaching and learning. This process started with activities designed to support staff and students to develop a shared understanding of the KCs. The process used is set out in Diagram 5.

#### Diagram 5 Steps KeNS staff took to unpacking the KCs

#### STEP 1: Forming a team

A cross-syndicate team of staff with an interest in the KCs was formed. This team comprised staff with different levels of teaching experience.

#### STEP 2: Gathering information

Team members started to gather information about the KCs or descriptions of complex performances similar to the KCs. This material included the presentations on the KCs from the Normal Schools Forum, the success criteria Ohakune Primary developed for self-motivated independent learners,<sup>11</sup> and key points about the KCs from the Curriculum Project Online discussion forum.<sup>12</sup>

#### STEP 3: Whole-school professional learning

At a teacher-only day, staff were given a presentation on the KCs that was developed from the KC team's background research.

#### STEP 4: Unpacking the KCs at syndicate level

At a second whole-school PD session, in syndicate teams, staff brainstormed four key themes for each KC at their curriculum level. These themes were placed in a chart and cross-syndicate themes highlighted. For example, for the KC: *Thinking*, all syndicates suggested "asking questions". For the KC: *Relating to others*, all syndicates mentioned "co-operation and negotiation" as shown below.



 $\Box$ 

<sup>&</sup>lt;sup>11</sup> http://www.ohakune.school.nz/index2.htm

<sup>&</sup>lt;sup>12</sup> http://www.centre4.interact.ac.nz/modules/forum/forum.php?module\_key=23307

#### STEP 5: Developing school-wide progressions

The KC team then used the themes that spanned syndicates to develop success criteria in the form of a matrix of progressions for the KCs. Staff suggested what student skills and behaviours might look like at different year levels. For example, what questioning behaviour looked like at Level 1 through to Level 4.

#### STEP 6: Mapping further professional development

The matrix was examined by school leaders to identify any areas in which staff might need upskilling and, as a result, whole-school PD in questioning skills was organised.

#### STEP 7: Introducing the KCs to students

Each teacher then developed a way to introduce the KCs to students and get students' ideas about what each KC looked like. The ideas from each class were collated and taken to a whole-school PD session. Staff worked in syndicates to examine the common themes in students' brainstorms.

#### $\Box$

#### STEP 8: Combining student and teacher views

For *Relating to others* and *Thinking,* staff and students combined their ideas and language together to develop a matrix that could be used by all. This matrix showed what each KC looked like at each syndicate level.

#### Integrating the KCs within teaching and learning programmes

#### Integrating the KCs into whole-school planning

At KeNS the teaching programme is structured around whole-school themes. Staff decided that one or two KCs that most related to each theme would be focused on each term. In Term 1, 2006 a whole-school inquiry unit on the Commonwealth Games was used as a vehicle to start integrating the KCs into teaching practice. The KC: *Managing self* was selected as the focus to support students as they completed individual projects on interest areas such as drugs in sports, country profiles, or training programmes, and prepared for the school-wide Commonwealth Games sports day. In Term 2 the KC: *Relating to others* was selected as the focus to support students as they worked in pairs to develop projects for a science fair. Teacher and student brainstorms were used to select four themes that were integral to *Relating to others*. These were:

- accepting different ideas;
- being a good listener;
- sharing ideas; and
- working in a group.

At the time we visited the school, the KCs had not been formally integrated into longer-term planning.

#### Weaving the KCs into teaching and learning in the senior school

Once staff had developed their initial ideas of what the KCs looked like, students were then brought on board. Depending on the age of students and their personal teaching style, each teacher used a different strategy to introduce the KCs to students.

With older students, teachers introduced the five KCs and explained where they had come from and how they related to what was already happening in class. To support students to take ownership over the KCs and talk about them in their own language, over the period of a week or so, most teachers facilitated a brainstorm about each KC and asked students in Year 3 and above to do a similar homework exercise.

As they supported students' work on individual projects for the Commonwealth Games unit, senior teachers started to weave the language they and students had developed for *Managing self* into activities and conversations.

#### Integrating the KCs into formative assessment practices

Staff considered it vital that students were part of the assessment process for the KCs and therefore saw the KCs as being assessed mainly via formative strategies such as student reflections and self-assessment, peer-assessment, and teacher-student dialogue. As part of the Commonwealth Games unit, teachers started to develop assessments for the KC: *Managing self*. One teacher designed a pre- and post-self-assessment sheet to be completed by the student, a buddy, and the teacher, as shown in Figure 14. The *Managing self* criteria used for this assessment were developed from brainstorming and discussion with students. Teachers noted that having these criteria supported them to use evidence to discuss each student's position on the self-assessment sheet. To support students to reflect, during conferences with students they asked questions such as, "Did your project go as you planned?" and "Did you finish your project?"

#### Figure 14 Commonwealth Games pre- and post-self-assessment



NAME:

DATE:

Please tick in the boxes below what you think you are like at Managing Yourself.

BEFORE C. GAMES UNI T

AFTER C. GAMES UNI T

Managing Ourselves	A strength	lfl try hard	Not always	Hardly ever	A strength	lfl try hard	Not always	Hardly ever
Making sensible choices for ourselves.								
Be responsible for our own actions and behaviours.		U			pens, this			
Look after our own property.					npleted by acher. Fol			
Set realistic goals and say how we will achieve them.		this, a co	onference	e was hel	ld with the	e teacher.		
Plan what to do and stick to our plan.								
Get tasks finished on time.								
Organise ourselves independently.								

Once this self-assessment had been completed, students filled in a next steps sheet to identify an aspect of *Managing self* they wished to progress.

In Term 2, teachers started a focus on *Relating to others*. Some teachers facilitated a class brainstorm about this KC using the four key themes developed by staff as headings. Class groups then put the common themes from these brainstorms into "I" statements and developed posters that showed the class criteria for each KC. The "work in a group" aspect of *Relating to others* developed by some senior students is shown in Figure 15.

#### Figure 15 Example of senior school Relating to others criteria

Relating to others	
★ work in a group	
I can be a team player.	
I am an approachable team member.	
I can be fair.	
I include others.	
I am a trustworthy person.	
I can take turns.	
I can take on responsibilities.	
I know how to compete fairly.	

#### Introducing the KCs to students in the junior school

In the junior school, a teacher-directed approach was selected to introduce each KC separately to students. Some teachers initiated discussions about what each KC looked like; others organised role plays about aspects of each KC. Like teachers in the senior school, some staff in the junior school developed posters that showed class criteria for *Relating to others* written in the form of simple "I" statements. The "work in a group" aspect of *Relating to others* for a junior school class is shown below in Figure 16.

#### Figure 16 Example of junior school Relating to others criteria

#### **Relating to others**

#### 🖈 work in a group

In the junior school I am learning to co-operate and work as part of a group.

Junior teachers noted that in order for students to understand the behaviours relating to the KCs they needed to be constantly reinforced. They commented that a developmental approach, focusing on attributes similar to the KCs, had always been part of their work. Younger students needed a lot of skill teaching as they learn to function independently, and relate to and work with their peers. These teachers considered the whole-school focus on the KCs could result in increased recognition of the role of this skill teaching in preparing students for the senior school.

#### Teacher reflections on introducing the KCs to students

Teachers commented that students responded well to the focus on the KCs because they enjoyed talking about the KCs, and because the approach taken had similarities with the way learning intentions were set at KeNS, and the language used to talk about the school's inquiry approaches.

A number of teachers considered the way they had introduced the KCs, and woven them into their practice, had supported students to take more responsibility over their learning. They also suggested that talking about *Managing self* and *Relating to others* at the beginning of the year could be very useful in supporting the set-up of class processes and routines.

Other teachers were unsure about what to do next and were looking for direction. Following the initial introduction of students to the KCs, these teachers were not sure if they should be "teaching" the KCs separately, if they should be weaving them into their practice, or if they were covered within existing curriculum areas such as Health and PE.

#### Reporting

To include the KCs within more formal reporting processes, staff had started to incorporate the KCs into a section in the school report about behaviour and work habits. A paragraph that briefly introduced the KCs to parents had been included in the report template. The mid- and end-of-year reports showed selected aspects of the KCs, and students were rated using three levels (beginning to; proficient; achieving to a high standard). Staff planned that, once they had further developed the KC criteria, these reports would be further amended. Teachers were also starting to put KC self-assessment sheets, such as the one shown in Figure 14, in students' portfolios.

Staff were also planning that the KC criteria would be used as part of students' three-way conferences. At the start of the year, as part of target setting at these conferences, students currently set academic and social goals. It was planned that students would start to use the KC criteria to set some of these goals.

#### Sharing the KCs with parents

Although school leaders planned to spend time consolidating staff views about the KCs before sharing their ideas more widely with the school community, some information sharing had started with parents. The parents who attended a community meeting at the beginning of the year had been introduced to the KCs, and students from Year 3 upwards had discussed the KCs with parents as part of a homework exercise. Further homework exercises were also planned. As mentioned above, the KCs were starting to have a presence in more formal reporting through written reports and portfolios.

#### Connecting with pre-service trainees

The school had not organised formal training about the KCs solely for pre-service trainees, but those who were working at the school attended staff meetings and training sessions on the KCs, and participated in the work that was being done in individual classrooms.

#### Student perspectives on the KCs and learning at KeNS

#### Learning about and demonstrating the KCs

Students thought the KCs were important as they were skills they would need to function successfully as adults in their social and work lives:

They are five basic things that you don't really think about, but you need.

People won't be too happy in their lives if they can't relate to others or manage themselves.

Students considered teachers' approaches to the KCs had both similarities and differences to other aspects of their learning. They described the KCs as "more personal", and as a result the methods teachers used to introduce them were different. They considered the KCs leant themselves to discussion and debate and enjoyed hearing others' views, discussing the KCs with their families, and having input into shaping the class view of the KCs: "It's not just the teachers' ideas—it's 50–50." Some talked about how the focus on the KCs had enabled them to learn new strategies.

When asked to describe times they had demonstrated the KCs, most students talked about demonstrating *Managing self* as they organised individual or team work for the science fair, during the Commonwealth Games unit, or when preparing for a drama production. Most noted they demonstrated the three most familiar KCs (*Managing self, Relating to others,* and *Participating and contributing*) during these experiences:

[I showed *Managing self*, *Relating to others*, and *Participating and contributing* when I] was in the play I had to learn my lines with time management. When I was relating to others I got to know people by practising with them.

Some students also talked about how they demonstrated *Managing self* at home as they organised themselves, and *Relating to others* as they learnt to get on with other students. One talked about *Managing self* in the context of reflecting on their learning:

[For science fair I showed *Managing self* when I] thought of positives of my work and what I could do better for next time, to improve and learn more. I managed my time well and was sure about my answer.

A couple mentioned how they demonstrated *Thinking* through using strategies such as brainstorming. Students considered they used *Using language, symbols, and texts* when learning foreign languages and for interpreting maps and diagrams.

#### The wider learning environment at KeNS

In terms of the general learning programme at KeNS, information from the focus group and surveys indicated that students valued the variety of activities on offer at the school. Students in the focus group reported enjoying and learning the most from activities that were fun, did not repeat known content, were in-depth, offered a range of connected activities, provided a clear purpose or goal to work towards, and offered a level of challenge that was appropriate. The main recent activities cited that met all or most of these criteria were preparing for the presentation day for a science fair, drama productions, and inquiry units such as the one on the Commonwealth Games. Students thought they learnt both content and skills from these experiences, including indepth content knowledge about a range of areas, writing skills, and how to work in a team and individually. In contrast, students described work such as short science units as "boring", as they did not give time for in-depth exploration and they were presented out of context.

The information we collected from the surveys and focus group interview showed that some students could talk about "learning how to learn" and could see how formative assessment strategies supported them to take ownership over their learning, whilst others viewed the teacher as the expert. The focus group students described how they got a lot of specific feedback from teachers. This feedback, and class discussions, were perceived as very valuable. In the focus group, students were ambivalent about the value of learning intentions, reflections, and self-assessment as they felt they did not have enough knowledge to self-assess. They felt this should be the role of the "expert" teacher who had the experience to judge their work. Others found reflections useful as they gave them a way to tell teachers more about themselves and what was not working for them. Some students found it easier to self-assess the KCs compared with subject-specific skills or content knowledge as they felt they knew more about how they were performing in relation to the KCs. Students were very ambivalent about the benefits of peer assessment. Most found it difficult to be honest as they did not want to hurt their friends' feelings.

When asked how their learning environment could be improved, students acknowledged that it was hard for teachers to cater for all the different needs in their classes and could see that they were offered a number of extension opportunities. Nevertheless they considered teachers were sometimes teaching to the middle (particularly in mathematics), or over their heads (particularly in languages). Other suggestions for improving teaching and learning included:

- more in-depth units;
- more one-on-one just-in-time feedback from teachers;
- teachers asking for, and taking more note of, students' opinions about schooling and what they could do to assist their learning;
- more opportunities to learn strategies to deal with other students' behaviour such as team members who did not pull their weight and bullying; and
- having a grass field.

In summary, students' comments about what they thought supported their learning, and what they thought could be improved, show support for the shifts in practice underway at the school, that are

aligned with the student-centred theories that underpin the KCs. In general, students valued teachers' use of student-centred practices. They supported the use of inquiry units as a vehicle to give more depth to their learning, and the focus on the KCs within these units. Their comments indicate that teachers' increased use of formative strategies was starting to have an impact. Their reflections also show a need for students to be further supported to understand how these strategies benefit their learning in regard to subject-specific skills and content and the KCs.

#### Where to next?

Both staff and students had enjoyed the school's initial exploration of the KCs. Students in particular valued being able to input into the process. Locating an exploration of the KCs within an inquiry learning process had supported staff and students to develop a shared language that functioned to reinforce this process and enhance formative assessment practices. Staff noted that they now needed to consolidate their learning about the KCs. To this end, they identified a number of future focuses for their work. These included:

- continuing their work on combining student and teacher views into a shared criteria for the KCs;
- exploring the meaning of *Using language, symbols, and texts* and developing a shared view of what this KC looked like;
- exploring ways to integrate the KCs within the key areas of numeracy and literacy;
- exploring ways to provide more authentic learning opportunities for students such as the use of the environmental and community resources surrounding the school;
- continuing to develop formative assessment practices and ways to more formally report progress in regard to the KCs without adding an extra administrative burden;
- finding ways to further support teachers to integrate the KCs into their practice; and
- adding the KCs into longer-term plans.

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## Appendix A: Key Competencies NZCER Teacher Questionnaire 2006

#### Admin Code [

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#### What is this questionnaire about?

This questionnaire is part of a project being undertaken by your school and the New Zealand Council for Educational Research (NZCER) about the way your school is incorporating the new Key Competencies framework into teaching and learning. These Key Competencies are:

- Managing self
- Relating to others
- Participating and contributing
- Thinking
- Using language, symbols, and texts

In this questionnaire are questions about teaching practices associated with the Key Competencies, and questions about school culture and environment and managing change.

Your views and comments are **very** important to this research. Your responses are confidential. This questionnaire should take you about 20–25 minutes. A summary of the results will be presented to your school.

#### How do I fill in the questionnaire?

Please fill out this questionnaire by circling the numbers that apply to you, by filling in the circle that best shows your answer, or by writing in the spaces provided. Thank you. If you are using a pen and want to change your answer, please put a cross through the answer you want to change, like this (**X**), and select another answer.

Once you have completed the questionnaire please place it in the envelope provided and return it to NZCER.

#### Thank you very much for your time.

## **Section A: The Key Competencies**

The 5 tables below describe some teaching practices that are associated with each Key Competency. For each statement circle one number to indicate:

- (A) How important you consider each of these practices to be; and
- (B) How often these practices occur in your classes.

		(A)	How i p	mporta		this			s occi	often d ur in yo ses?	
1)	Managing self	<ul> <li>Very important</li> </ul>	– Important	– Neutral	<ul> <li>Not important</li> </ul>	<ul> <li>Not at all important</li> </ul>		– Very often	– Often	<ul> <li>Sometimes</li> </ul>	– Hardly ever
a)	Students are given choices in learning activities or contexts.	1	2	3	4	5		1	2	3	4
b)	Students set their own learning goals.	1	2	3	4	5		1	2	3	4
c)	Students plan how they will work, and organise their time.	1	2	3	4	5		1	2	3	4
d)	Teachers spend time helping students to learn.	1	2	3	4	5		1	2	3	4
e)	Teachers spend time telling students how to behave.	1	2	3	4	5		1	2	3	4
f)	Students are supported to assess their own work and think about what they can improve.	1	2	3	4	5	-	1	2	3	4
g)	Students take part in discussions about meta-cognition and how they learn.	1	2	3	4	5		1	2	3	4
h)	Individual students are given time to think or talk about how they have learnt something.	1	2	3	4	5		1	2	3	4
i)	Students are supported to assess their peers' work and give feedback.	1	2	3	4	5		1	2	3	4
j)	Teachers give students feedback about their strengths.	1	2	3	4	5		1	2	3	4
k)	Teachers give students feedback about areas for improvement, and assist students to work out their next learning steps.	1	2	3	4	5		1	2	3	4
I)	Teachers give students all the help they need with their learning.	1	2	3	4	5		1	2	3	4
m)	Teachers help students feel confident about learning.	1	2	3	4	5		1	2	3	4
n)	Teachers have high expectations for all students.	1	2	3	4	5		1	2	3	4

		(A)	How i p	mport ractice		this			How c s occu class	ır in yo	
2)	Relating to others	<ul> <li>Very important</li> </ul>	- Important	- Neutral	<ul> <li>Not important</li> </ul>	<ul> <li>Not at all important</li> </ul>		– Very often	– Often	<ul> <li>Sometimes</li> </ul>	- Hardly ever
a)	Students are given time to talk about their views with other students.	1	2	3	4	5		1	2	3	4
b)	Students complete activities in collaborative groups.	1	2	3	4	5		1	2	3	4
c)	All students are given opportunities to lead group or class activities.	1	2	3	4	5		1	2	3	4
d)	Students are taught ways to manage group dynamics.	1	2	3	4	5		1	2	3	4
e)	Teachers help students to understand each other, and the ways different people learn.	1	2	3	4	5	_	1	2	3	4
f)	Students are encouraged to respect and help each other.	1	2	3	4	5		1	2	3	4
g)	Students and teachers are encouraged to respect and help each other.	1	2	3	4	5		1	2	3	4
h)	Teachers model the behaviours, skills, and attitudes they would like students to develop.	1	2	3	4	5		1	2	3	4
i)	Teachers encourage students to take responsibility for their actions.	1	2	3	4	5		1	2	3	4
j)	Students are taught about the different ways people communicate (eg the way people make eye contact).	1	2	3	4	5		1	2	3	4
k)	Students are taught about how best to communicate in different situations (eg when they are with friends, or when they go on a trip).	1	2	3	4	5		1	2	3	4

		(A)	How i p	mporta		this				ften d ir in yo ses?	
3)	Participating and contributing	– Very important	- Important	- Neutral	<ul> <li>Not important</li> </ul>	<ul> <li>Not at all important</li> </ul>		– Very often	– Often	<ul> <li>Sometimes</li> </ul>	– Hardly ever
a)	Students are given opportunities to learn about things they are interested in.	1	2	3	4	5		1	2	3	4
b)	Students' existing knowledge and experiences are used in teaching.	1	2	3	4	5		1	2	3	4
c)	Students are supported to feel safe asking questions.	1	2	3	4	5		1	2	3	4
d)	Students have the opportunity to learn about different values and ways of doing things.	1	2	3	4	5		1	2	3	4
e)	Students are given time to explore and clarify their own values.	1	2	3	4	5		1	2	3	4
f)	Students are supported to feel safe when giving views that are different from other students.	1	2	3	4	5	_	1	2	3	4
g)	All student groups are actively supported to join in lessons (eg boys and girls, or people from different cultures or friendship groups).	1	2	3	4	5		1	2	3	4
h)	Classroom contexts include Mäori points of view and ways of doing things.	1	2	3	4	5		1	2	3	4
i)	Classroom contexts include Pacific peoples' points of view and ways of doing things.	1	2	3	4	5		1	2	3	4
j)	Teachers plan for students to learn outside the classroom (eg on LEOTC trips).	1	2	3	4	5		1	2	3	4
k)	Learning activities enable students to participate in a range of social and cultural settings (eg with students from other schools, on a marae, or with scientists).	1	2	3	4	5		1	2	3	4
I)	Authentic contexts are used for learning activities (eg organising a school event or recycling or gardening projects).	1	2	3	4	5		1	2	3	4
m)	Teachers support students to take action on issues of concern to themselves (eg students decide what healthy food options are for sale at school, or raise money to help people).	1	2	3	4	5		1	2	3	4

		(A)	How i p	mport ractice		this			How c s occu class	ır in yo	
<b>4)</b> 1	Fhinking	– Very important	– Important	– Neutral	<ul> <li>Not important</li> </ul>	<ul> <li>Not at all important</li> </ul>		– Very often	– Often	<ul> <li>Sometimes</li> </ul>	– Hardly ever
a)	Students are encouraged to be curious and try out new ideas.	1	2	3	4	5		1	2	3	4
b)	Students have the opportunity to make mistakes, and learn from them, without penalty.	1	2	3	4	5		1	2	3	4
c)	Students have the opportunity to identify and discuss new ideas and problems, and don't just learn "facts".	1	2	3	4	5	-	1	2	3	4
d)	Students have the opportunity to analyse or redefine new ideas or problems.	1	2	3	4	5		1	2	3	4
e)	Students have the opportunity to explore the range of possible solutions to problems.	1	2	3	4	5		1	2	3	4
f)	Students are encouraged to adapt their existing skills and knowledge to use in new situations.	1	2	3	4	5		1	2	3	4
g)	Students work in cross-curricula contexts and use ideas and skills from different subjects to solve problems.	1	2	3	4	5		1	2	3	4
h)	Students are encouraged to persevere and experiment with different solutions.	1	2	3	4	5		1	2	3	4

		(A)	How i p	mporta		this			often d ur in yo ses?	
5)	Using language, symbols, and texts	– Very important	– Important	– Neutral	<ul> <li>Not important</li> </ul>	<ul> <li>Not at all important</li> </ul>	<ul> <li>Very often</li> </ul>	– Often	<ul> <li>Sometimes</li> </ul>	– Hardly ever
a)	Students have the opportunity to learn about the language of different subjects areas (eg science or maths language and symbols).	1	2	3	4	5	1	2	3	4
b)	Students have the opportunity to learn about the conventions of different subjects (eg how doing science research is different from doing research about your family).	1	2	3	4	5	1	2	3	4
c)	Students learn about and gather information from a range of sources (eg people, the Internet, books, or surveys).	1	2	3	4	5	1	2	3	4
d)	Students are taught how to pick information sources that are reliable.	1	2	3	4	5	1	2	3	4
e)	Knowledge and texts are presented to students as having different interpretations rather than as given "facts".	1	2	3	4	5	1	2	3	4
f)	Students have the opportunity to use different tools to organise and summarise information (eg mindmaps or graphic organisers).	1	2	3	4	5	1	2	3	4
g)	Students are taught how to analyse different types of information to look for patterns and trends.	1	2	3	4	5	1	2	3	4
h)	Students are encouraged to synthesise information and create new knowledge and ideas.	1	2	3	4	5	1	2	3	4
i)	Students are taught how to present ideas differently to different audiences (eg by using speeches, posters, or Powerpoint).	1	2	3	4	5	1	2	3	4

## **Section B: School environment and culture**

6) This section of the survey asks some general questions about your school culture and environment, and how new initiatives are managed. Please answer these questions by circling one number for each statement.

Implementation of new initiatives	– Strongly agree	– Agree	– Neutral	– Disagree	<ul> <li>Strongly disagree</li> </ul>
a) Information about most new initiatives and the changes they will cause clearly communicated to me.	are 1	2	3	4	5
b) I am confident that most new initiatives will make a difference to teachi and learning.	ng 1	2	3	4	5
c) I have the flexibility to try out new ideas related to most new initiatives.	1	2	3	4	5
<ul> <li>I have enough release time to plan and implement changes related to new initiatives.</li> </ul>	most 1	2	3	4	5
e) I have enough access to professional development to support most ne initiatives.	w 1	2	3	4	5
f) I have enough access to other staff who can support me in developing new initiatives.	most 1	2	3	4	5
g) I have enough access to resources to support most new initiatives (eg resources.)	ICT 1	2	3	4	5
Leadership and vision					
h) There is effective communication and respect between school leaders teachers.	and 1	2	3	4	5
i) The school leaders motivate, inspire, and create confidence among oth	ners. 1	2	3	4	5
j) This school provides opportunities for different staff members to be lea	ders. 1	2	3	4	5
k) All staff are involved in setting the direction of new initiatives.	1	2	3	4	5
<ol> <li>School leaders plan for the implementation and monitoring of most new initiatives.</li> </ol>	v 1	2	3	4	5
<ul> <li>m) School leaders take action to deal with issues and challenges that arise most new initiatives.</li> </ul>	e with 1	2	3	4	5
n) The primary concern of everyone in this school is student learning.	1	2	3	4	5
<ul> <li>Most teachers at this school share similar beliefs and attitudes about effective teaching and learning.</li> </ul>	1	2	3	4	5
Learning organisation					
p) I regularly discuss ways of improving students' learning with other teac	hers. 1	2	3	4	5
<ul> <li>q) I regularly look at student data with other teachers and discuss what th suggests for classroom practice.</li> </ul>	is 1	2	3	4	5
r) Staff regularly observe each other in the classroom and give feedback.	1	2	3	4	5

s)	I am committed to working in teaching teams.	1	2	3	4	5
t)	I have a commitment to the whole school and all students, not just my class or syndicate.	1	2	3	4	5
u)	I am a learner alongside students at this school.	1	2	3	4	5
V)	The school uses external facilitators to support school development.	1	2	3	4	5
w)	We connect with staff at other schools or institutions to improve programmes.	1	2	3	4	5
Sc	hool climate and expectations of students					
x)	I like working in this school.	1	2	3	4	5
y)	There is a team spirit throughout this school.	1	2	3	4	5
z)	Students in this school are enthusiastic about learning.	1	2	3	4	5
aa)	Students have the opportunity to participate in school decision-making.	1	2	3	4	5

## Section C: Information about you

#### 7) Please indicate your gender.

 $O^{1}$  Female  $O^{2}$  Male

- 8) Which ethnic group(s) do you belong to? (please tick all that apply)
- O<sup>a</sup> New Zealand European
- O<sup>₅</sup> Mäori
- O° Pacific peoples (eg Samoan, Tongan, Cook Island, Fijian, Niuean)
- O<sup>d</sup> Asian (eg Chinese, Indian, Thai, Japanese, Vietnamese)
- O<sup>e</sup> Other (eg African)

#### 9) Please indicate your age.

O<sup>1</sup> 20–29 years

- $O^2$  30–39 years
- $O^{3}$  40–49 years
- $O^4$  50+ years

#### 10) What year level(s) do you teach? (please tick all that apply)

O <sup>a</sup> Year 1/new entrant	O <sup>₅</sup> Year 2	O° Year 3	O <sup>d</sup> Year 4	O <sup>e</sup> Year 5
O <sup>r</sup> Year 6	O <sup>g</sup> Year 7	O <sup>h</sup> Year 8	$\mathbf{O}^i$ Non-teach	ing staff

#### 11) What is your position/level of responsibility in your school? (please tick one)

- $O^{1}$  1<sup>st</sup> or 2<sup>nd</sup> year teacher
- O<sup>2</sup> Teacher (eg Scale A, specialist teacher)
- O<sup>3</sup> Middle management (eg syndicate leader)
- O<sup>₄</sup> Principal, DP, or AP

12) How long have you been teaching at this school?

 $O^1$  0–2 years  $O^2$  3–5 years  $O^3$  6–10 years  $O^4$  11+ years

## **Section D: Summary questions**

- **13) What forms of professional development do you find most effective, and why?** (Please describe)
- 14) Is there any additional support you think you will need to incorporate the Key Competencies framework into your classroom practice? (Please describe)
- 15) Is there anything else you would like to say about teaching and learning at this school?

Thank you very much for answering these questions. Could you please return this questionnaire to NZCER in the envelope provided.

## Appendix B: Key Competencies Student Questionnaire 2006

Admin Code [ ]

What is this questionnaire about?

Dear student,

This questionnaire is part of a project being done by your school and the New Zealand Council for Educational Research about the way you learn at school. By filling in this questionnaire you will be helping your teachers to make learning better at your school.

Your views are very important. This questionnaire asks about what you think of school and the way you learn at school. These questions are not a test. There are no right or wrong answers. Please think about each question and be honest when you answer.

Nobody except you and the researchers will see your answers. When you have finished the questionnaire please give it to the person collecting it.

#### How do you fill in the questionnaire?

This questionnaire needs to be filled in carefully.

- Please use a pencil so you can rub out your answer if you want to change it.
- Please colour in the circle that best shows your answer, like this (●).
- If you are using a pen and want to change your answer, please put a cross through the circle you want to change, like this (●), an X fill in another circle.

Thank you very much.

### Section A: Information about you

1. Are you a girl or boy?

 $O^1$  Girl  $O^2$  Boy

- **2.** Which group(s) do you belong to? (you can colour in more than one circle if you need to)
- O<sup>a</sup> New Zealand English or European

O<sup>b</sup> Mäori

O<sup>c</sup> Pacific peoples (like Samoan, Tongan, Cook Island, Fijian, Niuean)

O<sup>d</sup> Asian (like Chinese, Indian, Thai, Japanese, Vietnamese)

O<sup>e</sup> Other (like African, please write here)

#### 3. What year level are you in at school?

- $O^{_1}$  Year 5
- O<sup>2</sup> Year 6
- O<sup>3</sup> Year 7
- O<sup>4</sup> Year 8

#### 4. What room or class are you in?

Room number \_\_\_\_\_ or Class

name\_\_\_\_\_

## Section B: Your school

This section asks you some general questions about how you feel about school. Please show how much you **agree** with each statement by colouring in **one** circle like this  $(\bullet)$ .

	Strongly agree	<b>Agree</b> 2	Middle <sup>3</sup>	Disagree 4	Strongly disagree
a) Doing well at school is important to me.	0	0	Ο	0	0
b) I try hard at school.	0	0	0	0	0
c) I get bored at school.	0	0	Ο	0	0
d) The things I learn at school will be useful when I am older.	0	0	0	0	0
	Strongly agree	<b>Agree</b> 2	Middle 3	Disagree	Strongly disagree
e) Students behave well in my class.	0	0	0	0	0
f) Students at this school like learning.	0	0	0	0	0
g) I am safe at this school.	0	0	0	0	0
h) I like being at school.	0	0	0	0	0
i) I feel part of this school.	0	0	0	0	0
	Strongly agree	<b>Agree</b> 2	Middle 3	Disagree 4	Strongly disagree
j) I like my teachers.	0	0	0	0	0
k) Our teachers learn with us.	0	0	0	0	0
1) Teachers ask us for our ideas when making decisions.	0	0	0	0	0
m) The school rules are fair.	0	0	0	0	0
	Strongly agree	<b>Agree</b> 2	Middle 3	Disagree 4	Strongly disagree
n) I enjoy reading and writing.	0	0	0	0	0
o) I do well in reading and writing.	0	0	0	0	0
p) I enjoy maths.	0	0	0	0	0
q) I do well in maths.	0	0	0	0	0

## Section C: How teachers help me to learn

The 5 tables below describe some ways teachers help students to learn.

For each statement please colour in **one** circle to show **how often** this happens in your class.

#### 1) Managing myself and my learning

Но	w often does this happen in your class?	Very often 1	Often 2	Some- times 3	Hardly ever 4
a)	I am given choices in the things I do.	0	0	Ο	0
b)	We are able to set learning goals for ourselves.	0	0	0	0
c)	I plan how I will work and use my time.	0	0	0	0
d)	Teachers spend time helping us to learn.	0	0	0	0
e)	Teachers spend time telling us how to behave.	0	0	0	0
f)	I look carefully at my work and think about what I can do better.	0	0	0	0
g)	Teachers give us time to talk about how we are learning.	0	0	0	0
h)	I am given time to think or talk about how I have learnt something.	0	0	0	0
i)	I look carefully at other students' work and give them feedback.	0	0	0	0
j)	Teachers tell me what I have done well.	0	0	0	0
k)	Teachers tell me what I need to do better, and help me to work out how I can do this.	0	0	0	0
1)	I get all the help I need with my learning.	0	0	0	0
m)	Teachers help me to feel confident about learning.	0	0	0	0
n)	Teachers show that all students can do well.	0	0	0	0

### 2) Relating to other people

Ho	How often does this happen in your class?		Often 2	Some- times <sup>3</sup>	Hardly ever 4
a)	I am given time to talk about my ideas with other students.	0	0	0	0
b)	We work on activities in groups.	0	0	0	0
c)	I have a turn being a leader in group or class activities.	0	0	0	0
d)	I learn ways to manage discussions when we work together.	0	0	0	0
e)	Teachers help us understand each other, and the ways we learn.	0	0	0	0
f)	Students respect and help each other.	0	0	0	0
g)	Students and teachers respect and help each other.	0	0	0	0
h)	Teachers behave how they would like us to behave.	0	0	0	0
i)	Teachers encourage us to take responsibility for our actions.	0	0	0	0
j)	We learn about the different ways people communicate (like the way people make eye contact).	0	0	0	0
k)	We learn about how best to communicate in different situations (like when we are with friends, or when we go on a trip).	0	0	0	0

### 3) Being part of different communities

How often does this happen in your class?		Very often	Often 2	Some- times <sup>3</sup>	Hardly ever 4
a)	I learn about things I am interested in.	0	0	0	0
b)	Teachers use my ideas and experiences in class.	0	0	0	0
c)	I feel comfortable asking questions.	0	0	0	0
d)	We learn that people have different values and do things differently.	0	0	0	о
e)	I have time to think about what is important to me.	0	0	0	0
f)	I feel safe giving views that are different from other students.	0	0	0	0
g)	All the different groups in my class join in lessons (like boys and girls, or people from different cultures or friendship groups).	0	0	0	0
h)	We do activities that include Mäori ways of doing things.	0	0	0	0
i)	We do activities that include Pacific peoples' ways of doing things.	0	0	0	0
j)	We learn things outside the classroom (like on class trips).	0	0	0	0
k)	We do activities with different groups of people from outside school (like with students from other schools, on a marae, or with scientists).	0	0	0	0
1)	We work on real-life projects (like organising school events or doing recycling or gardening projects).	0	0	0	0
m)	We take action about things that concern us (like we decide that students need to be able to buy healthy food for school lunches, or we raise money to help people).	0	0	0	0

### 4) Learning how to be a creative thinker

How often does this happen in your class?		Very often	Often 2	Some- times <sup>3</sup>	Hardly ever 4
a)	Teachers encourage me to be curious and try out new things.	0	0	0	0
b)	I feel able to make mistakes, and learn from them, without getting told off.	0	0	0	0
c)	We learn about new ideas and problems and don't just learn "facts".	0	0	0	0
d)	We talk about different ways of looking at ideas or problems.	0	0	0	0
e)	I learn that there can be more than one solution to a problem.	0	0	0	0
f)	I use the skills and ideas I already know in new situations.	0	0	0	0
g)	We use ideas and skills from different subjects to solve problems (like using ideas from science and maths together).	0	0	0	0
h)	If something doesn't work, I am able to try something different.	0	0	0	0

### 5) Understanding how to use tools and information

Н	How often does this happen in your class?		Often 2	Some- times <sup>3</sup>	Hardly ever 4
a)	We learn about the language of different subjects (like science words or maths words).	0	0	0	0
b)	We learn about the different ways things are done in different subjects (like how doing science research is different from doing research about your family).	0	0	0	0
c)	We gather information from lots of different places (like people, the Internet, books, or surveys).	0	0	0	0
d)	We learn how to pick information that is reliable.	0	0	0	0
e)	We learn that the things we read or see can have more than one meaning.	0	0	0	0
f)	We use different tools to help us organise and summarise information (like note taking, mindmaps, or graphic organisers).	0	0	0	0
g)	We look at information to find things that are similar or different.	0	0	0	0
h)	We talk or write about what new things the information we collected is telling us.	0	0	0	0
i)	We present our ideas differently to different audiences (like by using speeches, posters, or Powerpoint).	0	0	0	0
# Section D: Your views on what helps you learn

6) At school, what are the <b>three</b>	7) How does each thing help you to
things that most help you to learn?	learn? (write your answer below)
(write your answer below)	
i)	
ii)	
iii)	

8. What are the things you like most about learning at this school?

- 9. What could be made better about learning at this school?
- 10. Is there anything else you would like to say about this school or your learning?

# Thank you very much for answering these questions. Could you please give this questionnaire to the person who is collecting it.

# Appendix C: Key Competencies Normal Schools/NZCER Project Principal/School Leader Interview

# BACKGROUND

- 1) For how many years have you been a principal/school leader?
- 2) For how many years have you been a principal/school leader at this school?
- 3) How many years have you been at this school in total?
- 4) Could you give me a brief overview of the character of this school, and the community it serves? (eg Stable roll or staff? Parental expectations?)

# THE KCs

- 5) What do you understand the KC framework to be about? Do you see the KCs as being similar or different to past frameworks such as the Essential Skills? (How?)
- 6) What type of learning situations do you consider best support students to develop the KCs?
- 7) At your school, are you refocusing any areas or working towards shifting teaching practice? Could you tell me about this, and how the KCs fit with these shifts? (eg The background to the shift? The areas focused on inquiry/integrated/student-centred?)
- 8) Do you expect using the KC framework will lead to any changes in:

#### Teaching practice?

- Classroom practice and teacher roles?
- School approaches to the curriculum, assessment, or reporting?

#### Student learning?

- In students' skills, behaviours, and attitudes?
- In the connections made between classroom and real-life experiences?

#### Whole-school practices?

- School culture/school learning community?
- School leadership?

### Other

• Other areas? (eg relationships with parents/community, timetabling, resource use?)

# WHOLE SCHOOL CHANGE AND PD APPROACHES

- 9) How do you see your role as a leader in regard to supporting staff to integrate the KCs?
- 10) What approaches are being used to assist staff to take on board the KC framework (eg PD, release time, readings?) How did staff develop their ideas of what the KCs looked like?
- 11) Do staff have enough access to PD and resources to assist them?
- 12) How have the KCs been integrated into school planning?
- 13) How supportive of the KC framework are staff (both those who are involved and those who are not yet)?
- 14) Could you tell me about any current or future challenges you see for staff, students, or the school as you integrate the KCs?
- 15) How are you (or your school) evaluating how things are going as you introduce the KCs?

## **EXTERNAL INVOLVEMENT IN THE KCs** (if relevant)

- 16) Are College of Education staff or pre-service trainees playing any role in your school's work on the KCs?
- 17) Have parents been involved in your school's work on the KCs?
- 18) Are external facilitators playing any role in supporting staff to integrate the KCs?
- 19) Do people outside your school (e.g., employers, community groups, etc) have any role in your school's work on the KCs?

## THE FUTURE

- 20) From your experiences, what advice would you give to other schools as they start to integrate the KCs?
- 21) From your experiences, what advice would you give to the Ministry of Education or professional development providers about the support and resources that are needed to assist schools to integrate the KCs?
- 22) Is there anything else you would like to say about the KCs that we have not discussed?

## Thank you very much for your time.

# Appendix D: Key Competencies Normal Schools/NZCER Research Project Teacher Interview

# YOUR BACKGROUND

- 1) How many years have you been teaching?
- 2) How many years have you been teaching at this school?
- 3) What year level(s) do you teach?
- 4) Do you have any positions of responsibility?

# THE KCs

- 5) How did you find out about the KCs?
- 6) What do you understand the KCs to be about? Do you see the KC framework as being similar or different to past frameworks such as the Essential Skills (How)?
- 7) 7a) What are the main teaching approaches you are encouraged to use at your school? (eg. inquiry learning, integrated learning, higher order thinking, student-centred practice)?
  - 7b) How do you see the KCs fitting within these approaches?
- 8) How did staff at your school develop your ideas of what the KCs looked like? (eg. through shared PD?)
- 9) How have the KCs been integrated into your planning and classroom practice?
- 10) How did you introduce the KCs to students? How did this go?

# **EXPECTATIONS OF THE KCs**

11) What type of learning situations do you consider best support students to develop the KCs?

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12) Do you expect using the KC framework will lead to any changes in:

# **Teaching practice?**

- Your classroom practice and role as a teacher?
- Your, or school approaches, to the curriculum, assessment, or reporting?

## Student learning?

- In students' skills, behaviours, and attitudes?
- In connections between classroom and real-life experiences?

# Whole-school practices?

- School culture/school learning community?
- School leadership?

## Other

 Other areas? (eg relationships with parents/community, timetabling, resource use?)

# MANAGING CHANGE

- 13) Do you have input into the approach your school is taking to the KCs?
- 14) What PD or resources are available to you to assist you to integrate the KCs into your practice? Is this enough? (e.g., release time, PD sessions, readings)
- 15) How supportive of the KC framework are staff at your school (both those who are involved and those who are not)?
- 16) Could you tell me about any current or future challenges you see for staff, students, or your school as you integrate the KCs?
- 17) How are you (or your school) evaluating how things are going as you introduce the KCs?

## **EXTERNAL CONTRIBUTORS** (if relevant)

- 18) Are College of Education staff or pre-service trainees playing any role in your school's work on the KCs?
- 19) Have parents been involved in your school's work on the KCs?
- 20) Are external facilitators playing any role in supporting you to integrate the KCs?
- 21) Do people outside your school (e.g., employers, community groups, etc) have any role in your school's work on the KCs (who and how)?

# THE FUTURE

- 22) From your experiences, what advice would you give to other schools as they start to integrate the KCs?
- 23) From your experiences, what advice would you give to the Ministry of Education or professional development providers about the support and resources that are needed to assist schools to integrate the KCs?
- 24) Is there anything else you would like to say about the KCs that we have not discussed?

# Thank you very much for your time.

# Appendix E: Key Competency Student Focus Group: 2006

# (5–8 male and female students)

# (2nd Draft)

INTRO SELF. Student year level 5 \_\_\_\_ 6 \_\_\_ 7 \_\_\_ 8 \_\_\_\_

Number of: Female students:\_\_\_\_\_ Male students:\_\_\_\_\_

(DRAW location map of student names on separate paper)

Hi, my name is \_\_\_\_\_ I'm a researcher from NZCER (NZCER is a place that does research about schools and learning). Your teachers are trying out some new teaching ideas, and we are visiting your school to talk to students and teachers about what has been happening at your school. (I'll tell you more about these new ideas later.)

Today I'd like to talk to you about your learning. I'm really interested in hearing your ideas and opinions.

I'll be using the things you tell me to write a report and to give feedback to your teachers.

- I am going to record this discussion. I will also take some notes. Your answers to the questions will be kept confidential. This means I won't use your name to discuss what you say with anyone else in your school or in the reports that I write. Do you have any questions about this?
- You don't have to be part of this group if you don't want to, and you don't have to answer all of the questions if you don't want to.

A couple of "house" rules

- To respect each other, it's important that you don't talk about what other people have said in this group to other students or teachers. So what's said in this group stays in the group. Is everyone okay about that?
- So that it is easier for me to take notes, if one person is talking, could we let them finish before the next person talks? Tell me if you would like to talk next. Thanks.

Before we start, I'll tell you the main things I'll be asking you about. These are:

- The things that you enjoy about school;
- The work you have just been doing on\_\_\_\_\_; and
- The things that do and don't help you to learn.

You'll have a chance at the end to add anything else you might want to say, or ask me questions.

# General learning at school

- 1. From all the things you've done at school this year so far, what are the things you've **enjoyed** the most?
- 2. From all the things you've done at school this year so far, what are the things you've **learnt the most** from? (What did you learn?)

The Key Competencies (linked to school focus)

# Give out student response sheet

In the unit your class did about \_\_\_\_\_

- Kelburn: Science Fair/Commonwealth Games (KC = some –check with school??)
- Karori: Past; present, and future ("Past" KC = RO, PC)
- Central Normal: T1, Healthy Choices, KC=MS; T2, Our Place, KC= PC
- NEVS: Stars on stage (KC = Managing self)
- Hillcrest rich task: Physical activity/Project Energize (KC = Thinking+PC)
- Takapuna: KC journals, cycle tour, unknown destinations (KC = all)

you were doing some learning about the Key Competenc(ies) \_\_\_\_\_. Here is a definition of these KC(s) to remind you.

# PLACE and READ OUT KC prompt card(s) relating to the KC focused on

- Relating to others (RO)
- Participating and contributing (PC)
- Managing your self and your learning (MS)
- Thinking (T)
- Using language, symbols, and text (ULST)
- 3. Please write an example on your sheet of how you demonstrated this KC as part of the unit your class did.

(THEN ask students to share their example with the group....)

4. Write an example on your sheet of another time you used this competency, at school or at home.

(THEN ask students to share their new example with the group...)

5. Is the way you are learning the KC different or similar to the way you have learnt about other things at school?

# PLACE all prompt cards

6. These are the five KCs. Why do you think these things might be important for young people to develop? Write an example on your sheet.

(THEN ask students to share their new example with the group...)

# Authenticity

- 7. Could you tell me about some of the ways your teachers set up "real" tasks for you to do at school or with people in the community? (like working on environmental projects or making decisions about things that happen at school.)
  - What are some of the "real" tasks you do?
  - Could you tell me what sorts of things you learn from these?

# Learning how to learn

- 8. What are the things you do at school that help you to understand about **how you or other people learn**? (Like you might be doing journal reflections, setting learning goals for yourself, or learning together in groups).
- 9. Are there any other things you could be doing that could help you to have more understanding about how to learn?
- 10. From all the things you've done at school this year, what are the things you've **enjoyed the least or learnt the least** from?

# Summary

- 11. On the back of your sheet could you choose one face to show how this year had gone for you overall and write the reasons for your choice.
- Does anyone want to share their reasons for their choice?





I) In	our study
1) In on	·····
I showed the Key Compet	tency of:
O Managing self	
• Relating to others	Tick one or more
O Participating and contr	ributing
<ul><li>Thinking</li><li>Using language, symbolic</li></ul>	ools and texts
$\rightarrow$	
when I	
~	
2) Another time (at scho	col or at home) I have shown this competency is when I
2) Another time (at scho	pool or at home) I have shown this competency is when I
2) Another time (at scho	pool or at home) I have shown this competency is when I
	pool or at home) I have shown this competency is when I Tes are important for young people to develop because

4 a) How is this year at school going for you? (circle one)

Very well	Well	Okay (	$\frown$	Not very well	$(\cdot \cdot)$
4 b) Please give rea	isons for	your choi	се.		
•••••	•••••	•••••	•••••	•••••	•••••

Is there anything else you would like to say about learning at your school?

Thank you very much for your time. Do you have any questions?

# Appendix F: Student Information Sheet



# Student Information Sheet New Zealand Council for Educational Research (NZCER) research project on Key Competencies

At your school your teachers are trying out some new ideas to help you to learn, and live and work with other people, both now and in the future. The New Zealand Council for Educational Research (NZCER) is doing a research project about what is happening at your school.

#### What will I be asked to do?

In Term 2 we will be visiting your school. We would like to interview you and about 5–8 other students from your school as a group. We will ask questions about what you think about the learning you do at school. This interview will take about 30–40 minutes and will be held at school during the day. We may also collect examples of your schoolwork.

#### Who else is involved?

We are also interviewing teachers at your school and other people who help you with your learning. We may also visit your class to watch what is going on.

#### What will happen to the information I give?

Anything you tell us will be confidential. Your teachers will not know what you say; only the researchers will know. We will be writing about what you and other people say in some reports. We will not use your name. Your school will get a copy of the reports we write.

#### Do I have to take part?

We would really appreciate your help with this project. When we come to visit your school you can decide not to be part of the interview even if you have already said you will.

### Who will benefit from this project?

You will be helping us to find out more about how teachers can make learning better for students. This information could help the teachers at your school and other schools.

## What do I do next?

If you want to be part of the group interview or if you are happy for us to collect some of your schoolwork, please fill in the consent form and give it to your teacher. If you are chosen to take part we will also give you a letter and a form to take home to your parents. If you have any questions about this project, please talk to your teacher or contact Sally Boyd at NZCER on (04) 802 1466 or email: sally.boyd@nzcer.org.nz

Thank you very much.

Sally Boyd, Project Leader



# Student Consent Form NZCER study on Key Competencies

I have read the Information Sheet and understand what is being asked of me.

I agree to be part of a group interview for the NZCER study.

🗆 Yes	🗆 No	(please tick one)
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I agree to my work being collected for the NZCER study.

□ Yes	🗆 No	(please tick one)

Please print your name clearly.

My name is

	First na	ame	Last name	
My signature is				
	□ boy □ Year 6	□ girl □ Year 7	Year 8	
The name of my school is				
The date tod	ay is		2006	
Thank you very much for your help. Please give this form to your				

teacher. We will collect this form when we visit your school.

# Appendix G: Teacher/Pre-Service Teacher Information Sheet for Interview



# Teacher/Pre-service Teacher Information Sheet for Interview

# New Zealand Council for Educational Research (NZCER) study on Key Competencies

The New Zealand Council for Educational Research (NZCER) is undertaking a study regarding teaching and learning in some of the Normal Schools. This study is funded by the Normal Schools Association from a Ministry of Education grant.

This school has volunteered to be part of this research project, and is one of the six schools in the study. The purpose of the NZCER research is to examine how staff are interpreting and actioning the new Key Competencies framework in the light of the other initiatives underway at each school. Key Competencies are the attributes all people need to live and learn and be an active member of society. The five Key Competencies in the New Zealand Curriculum are:

- Relating to others;
- Managing self;
- Participating and contributing;
- Thinking; and
- Using languages, symbols, and texts.

# What we are asking of you

The research involves collecting information that will be used to develop a case study of the experiences of staff and students at this school. As part of this study, we would like to interview you for about 1 hour when we visit this school in Term 2. This interview will be about how you are integrating the new Key Competencies framework into your classroom practice. A copy of the interview questions has been included with this letter. We will provide each school with one teacher release day to cover the time teachers are out of the classroom.

### What else does the research involve?

The research involves two main types of data collection. In Term 1 we asked teaching staff and some students to complete questionnaires about teaching practices related to the Key Competencies.

In Term 2 when we visit your school we will also be interviewing other staff and possibly people in the wider community your school connects with. We will be conducting a focus group with a small number of Year 6–8 students, and we will be asking teachers to assist with the selection of these students. We may collect some school policies and examples of teacher work or student data, or do informal observations in classrooms. If you have any examples of the work you are doing with students on the Key Competencies could you please bring them with you to the interview. Thank you.

### Who will benefit from this research?

The aim of the research is to provide your school with information that will help you to further develop your teaching and learning programmes, and to provide models of good practice that could assist other schools to interpret and action the Key Competencies framework. We believe that the results of this research will be interesting and useful for principals, teachers, policy makers, and the wider community that surrounds schools.

### How will the research be reported?

When we visit in Term 2, we will do a presentation summarising the questionnaire data from your school. Later in the year we will give feedback from the case study data we collect. We hope this will assist your school to further develop school teaching and learning programmes. The research results will be formally written up as a report for the Normal Schools and the Ministry of Education. From the findings we also plan to write an article and a conference paper for the Normal Schools conference. We will also report the findings to the series of Normal Schools forums that are part of this research.

## Ethics and confidentiality

Any information collected for this project will be confidential to the members of the research team and held in a secure location. You may withdraw from the research at any stage up until the final report phase.

Your school has agreed to be named as part of this research. The names of school staff or students will not appear in any material written as a result of this research. We will send copies of the case study we write to a school representative to check.

We would really appreciate your involvement in this research. If you are willing to participate in this project please complete the attached consent form. We will collect this form when we visit your school. If you have any further questions about this project, please do not hesitate to contact me by phone or email.

Kind regards,



Sally Boyd and Verena Watson Project Leaders New Zealand Council for Educational Research Email: sally.boyd@nzcer.org.nz Phone: 04 802 1466



# **Teacher Consent Form (interview) NZCER study on Key Competencies**

I have read the NZCER Information Sheet and understand what my involvement will be in the research project.

I agree to participate in the research project and provide the information that is asked of me.

Please print your name clearly.

Your full name:	 
School name:	
Email:	
Signed:	 
Date:	

Thank you very much for your participation and help. Could you please keep this form. We will collect it when we visit your school.