Education Review Office
Te Tari Arotake Mātauranga

DEVELOPING
KEY COMPETENCIES
IN STUDENTS
YEARS 1 TO 8

November 2019

Ko te Tamaiti te Pūtake o te Kaupapa
The Child – the Heart of the Matter

New Zealand Government
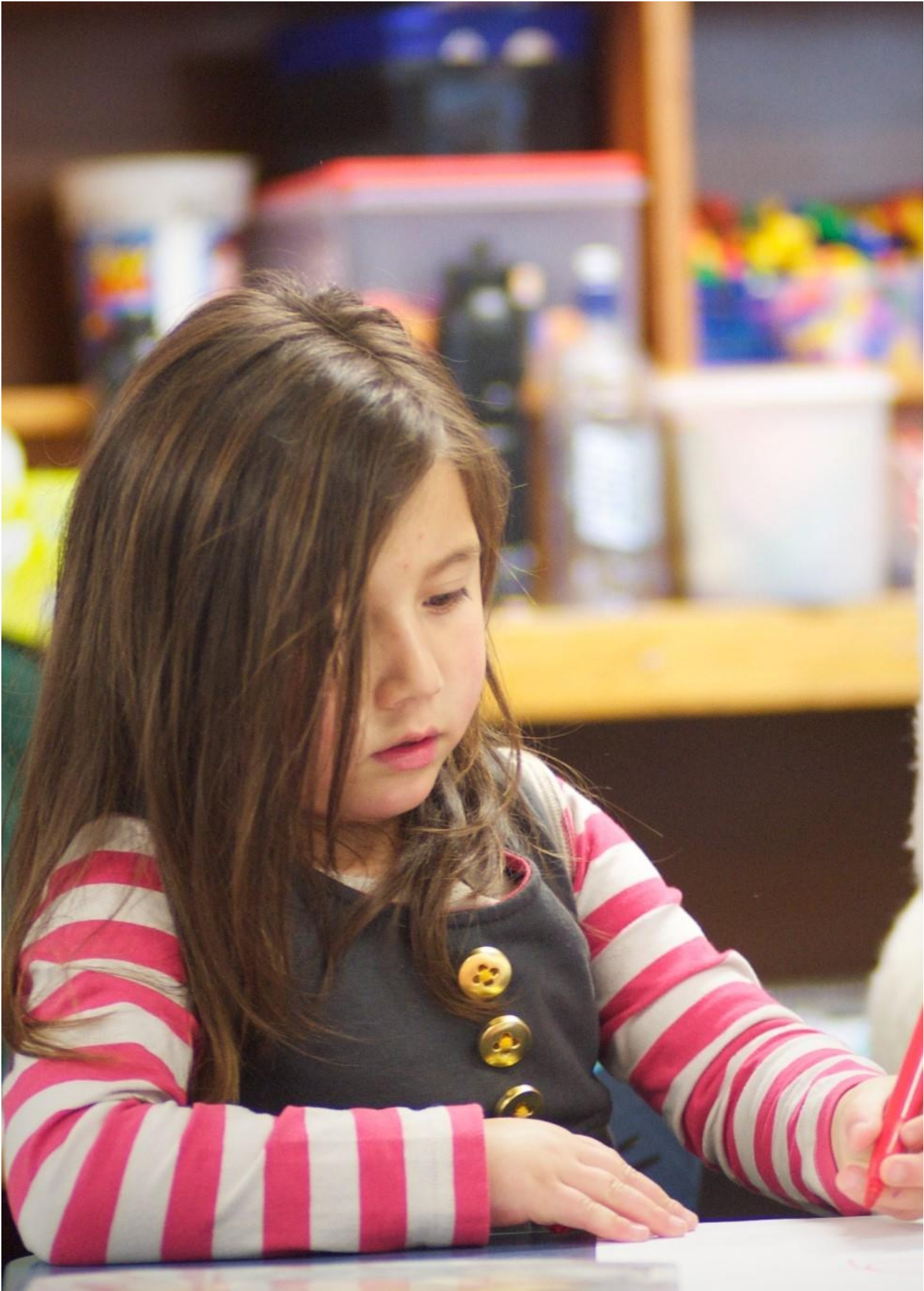
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Key competencies contribute to positive outcomes for learners

Key competencies (KCs) are an important dimension of *The New Zealand Curriculum* (NZC). They place students at the centre of teaching and learning.

Enduring change in society and the environment has implications for the kind of education young people require, and the focus for the teaching and learning they experience.

To successfully learn and deal with change, students must continue to build their knowledge and skills. They also need to explore how values influence thinking and action, and to actively build their competencies. All of these elements need to come together to enhance students' interactions with others, their learning and wellbeing, and other aspects of their lives. Students require opportunities to: think; use language, symbols and texts; manage themselves; relate to others; and participate and contribute.

The New Zealand Curriculum states:

> *The key competencies are both an end and means. They are a focus for learning – and they enable learning. They are the capabilities that young people need for growing, working, and participating in their communities and society. (2007, p. 38)*

The OECD Education 2030 framework states that "students who are best prepared for the future are change agents. They can have a positive impact on their surroundings, influence the future, understand others' intentions, actions and feelings, and anticipate the short and long-term consequences of what they do" (2018, p. 4).

The NZC key competencies do not sit in isolation. New Zealand's education pathway from early to tertiary learning is designed to support children and young people to learn, build on, and use key competencies to be confident, connected, actively involved, lifelong learners.

Figure 1: Competencies across education sectors
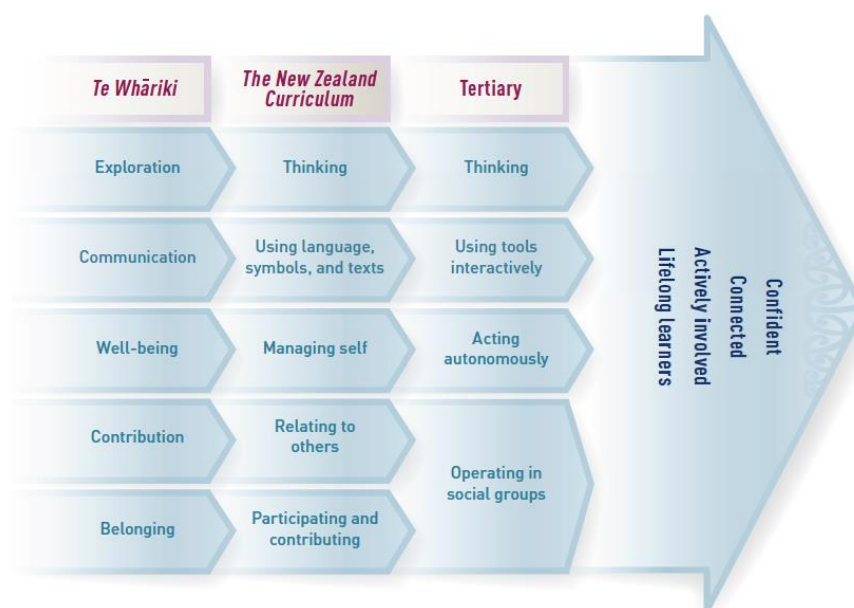
Source: NZC, 2007, p. 42

Alongside this report, ERO has published a companion piece that provides the reader with a context and rationale for why key competencies are integral to successful teaching and learning. It is important that these two reports are read together.

This Education Review Office (ERO) report describes what a sample of New Zealand schools with Years 1 to 8 students are doing to integrate and support the development of key competencies in their students.

It outlines the support that schools are giving their students to use these competencies in their learning and wellbeing. The report also explores what schools are doing to promote the understanding of key competencies among parents, whānau and trustees.

Fully implementing key competencies requires a deliberate approach

The New Zealand Curriculum outlines what school leaders and teachers need to consider to successfully implement key competencies:

> *When designing and reviewing their **curriculum**, schools will need to consider how to encourage and monitor the development of the key competencies. They will need to clarify their meaning for their students. They will also need to clarify the **conditions** that will help or hinder the development of the competencies, the extent to which they are being demonstrated, and how the school will **evaluate** the effectiveness of approaches intended to strengthen them. (NZC, 2007, p. 38)*

The themes of this quotation provide significant guidance for successful implementation of key competencies that will be referenced throughout this report:

»   **localising** the curriculum to make learning relevant for students
»   setting **conditions** to enable students to use the key competencies in their learning/wellbeing
»   **evaluating** the effectiveness of approaches used to strengthen student use of the KCs.

Learning and wellbeing are strongly linked and are not easily separated in practice. This is evident in literature about the key competencies, and from ERO's previous findings. For this report, **learning/wellbeing** will be the form used to emphasise this link, and reflect ERO's earlier findings:

> *Wellbeing is vital for student success and is strongly linked to learning.[1] New Zealand and international research shows that many school factors influence student success. Although there is no single measure for student wellbeing, the factors that contribute to it are interrelated and interdependent. For example, a student's sense of achievement and success is enhanced when they feel safe and secure at school. This in turn lifts their confidence to try new challenges, strengthening their resilience. (ERO, 2016: p. 4)*

Figure 2, on the next page, is adapted from a 2018 New Zealand Council for Educational Research (NZCER) paper prepared for the Ministry of Education.[1] That paper outlines four phases of development in thinking about the key competencies, as reported by research projects with a focus on the purpose and place of key competencies since their introduction in the NZC (2007).

These four phases provide a means of understanding how the guidance in the NZC can be applied successfully in local curricula, and a basis for gauging where schools are situated in developing their use of key competencies (see Figure 3.)

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[1] McDowall, S. and Hipkins, R. (2018). *How the key competencies evolved over time: Insights from research*. Wellington: NZCER.

Figure 2: Moving to student use of key competencies
(based on NZCER's discussion paper)

Phase 4
KCs and action competence

Students engage in critical inquiries that require problem solving, creativity, critical thinking, and collaborative ways of working.

They actively engage in open-ended explorations, such as how sustainability for the planet can be achieved.

Teachers support students by using their deep disciplinary knowledge and understandings of the KCs.

Teachers capably support students to draw on and combine different parts of the curriculum in new ways.

Phase 3
Integrating KCs into learning areas

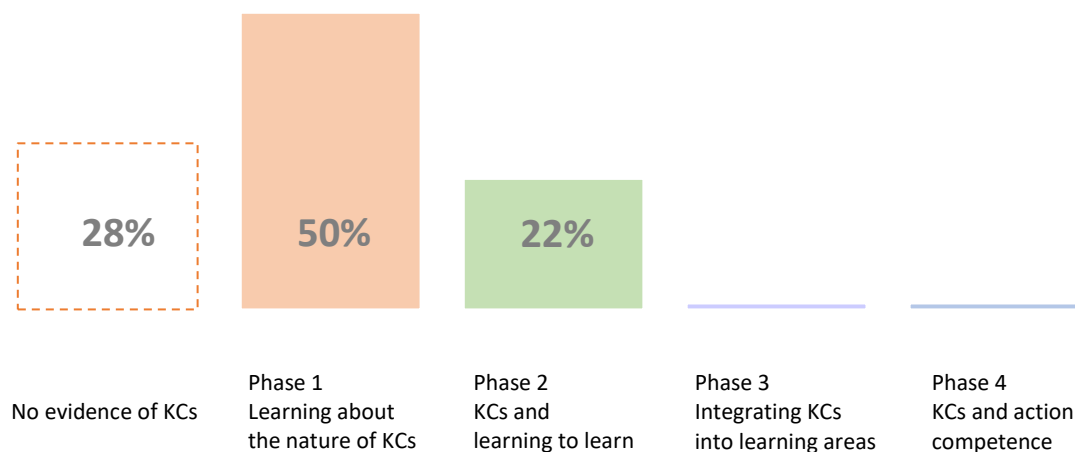KCs are seen as multifaceted and support students to make meaning of content from various curriculum areas.

Each learning area is viewed as having its own set of 'capabilities'. These capabilities show what students *can do* with their learning, drawing on all the KCs in the process.

Phase 2
KCs and learning to learn

Relationships between KCs, ideas about learning to learn, and lifelong learning are emphasised in planning and teaching.

Phase 1
Learning about the nature of KCs

KCs are referred to by teachers in planning, and in discussions with students.

ERO's findings

Most schools with Years 1 to 8 students (72 percent) had begun to support students to use key competencies to enhance their learning/wellbeing

Figure 3: Schools are yet to fully implement key competencies

| 28% | 50% | 22% | | |
| No evidence of KCs | Phase 1
Learning about
the nature of KCs | Phase 2
KCs and
learning to learn | Phase 3
Integrating KCs
into learning areas | Phase 4
KCs and action
competence |

» All schools in the sample have not yet fully implemented the key competencies as outlined in *The New Zealand Curriculum*.

» Most commonly, key competencies were not deliberately taught or evaluated.

» Leaders and teachers were uncertain how key competencies can contribute significantly to students' agency in their learning/wellbeing.

» The teaching of key competencies was not evident in more than a quarter of schools ERO visited.

The teaching of key competencies was not evident in 28 percent of New Zealand schools with Years 1 to 8 students

In 50 percent of New Zealand schools with Years 1 to 8 students, teachers, children and community were learning about the nature of key competencies

Localising curriculum — There was variability in how schools and teachers interpreted the role of KCs and their place in localised curricula.

Localising curriculum — 'Managing self', 'participating and contributing' and 'relating to others' were often present in these schools, but 'thinking' and 'using language, symbols and texts' were missing.

Setting **conditions** — Most of these schools emphasised KCs as a means to enhance student behaviour rather than promote student self-regulated learning.

Setting **conditions** — There was uncertainty whether school values successfully promoted student use of KCs in their learning/wellbeing.

Evaluating effectiveness — Evaluation about the effectiveness of the implementation of KCs was sometimes done. There was little reporting to the board about ways students were supported to use KCs in their learning/wellbeing.

Key competencies were used to support children as capable learners in 22 percent of New Zealand schools with Years 1 to 8 students

Localising curriculum — These schools had begun to develop ways to include the KCs explicitly and meaningfully in their curriculum.

Setting **conditions** — Teachers and leaders in these schools used the KCs to develop school-wide strategies that involved all students in their learning.

Setting **conditions** — Students were able to talk about ways they used the KCs to enhance their learning/wellbeing.

Setting **conditions** — In a few of these schools, students had opportunities to contribute meaningfully to how they managed their learning.

Evaluating effectiveness — Evaluation about the effectiveness of the implementation of KCs was sometimes done. There was little reporting to the board about ways students were supported to use KCs in their learning/wellbeing.

More can be done by schools to enhance student use of key competencies

While 72 percent of the schools were developing student use of key competencies, more can be done to realise the intentions of the NZC. The following areas for development are worth considering when localising each school's curriculum.
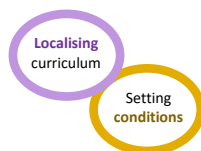
The key competencies need to feature **explicitly** in teaching and learning practice through:

–   deliberate teaching that supports students to use KCs across all learning areas
–   opportunities for students to use KCs in open-ended explorations about problems that have no obvious right answer but nevertheless require our attention[2]
–   inclusion of two overlooked KCs, 'thinking' and 'using language, texts and symbols'.

School leaders should **gauge** the quality and worth of initiatives designed to promote key competencies by:

–   determining ways students could be better supported to use KCs as self-regulated learners and develop their metacognitive strategies
–   considering ways to integrate KCs into learning areas and support students to use them to construct knowledge (NZCER's Phases 3 and 4)
–   reporting to their boards and parents/whānau about the implementation of KCs and their contribution to student success in learning/wellbeing.

The following table, *Making the most of key competencies*, outlines what is happening in some schools at a surface level. It also provides possibilities for moving to a deeper use of key competencies to support learners and illustrates this endeavour with examples of good practice.

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[2] Bolstad, R. and Gilbert, J. (2012). *Supporting future-oriented learning and teaching – a New Zealand perspective*. Wellington: Ministry of Education. (p. 2).

Making the most of key competencies

From surface level use of KCs	To deep level use of KCs	Getting there (examples from the field)
Teachers use written and visual prompts to remind students and parents about KCs and how they fit with other aspects of learning/wellbeing.	Students use KCs, independent of teacher prompts, to show their *capabilities* in their learning. The KCs reveal what students can do and how they go about it.	Teachers are deliberate in the way they support students to use the KCs in the breadth of their learning experiences – both in and outside school. Teachers encourage students to ask one another for information, evaluate one another's ideas and monitor each other's work. This teaching approach strengthens students' capabilities as learners. *In our learning it's all about trust. We show how we can manage ourselves and our learning.* – student

Schools develop student-centred curricula by including KCs in documentation and expectations for teaching.	Students have opportunities to engage and contribute to new ways of thinking about learning. They actively use and build knowledge.	Teachers actively support students to use a variety of thinking tools to decide how they go about their learning. For example, students ask themselves:
		    - *what am I going to do with this information?*
		    - *how are **we** going to use information to help **our** learning?*
		
		Findings from a school-administered survey helped leaders to modify the original, unmanageable set of school dispositions. The dispositions now better represent the KCs and are in 'child-speak.' Because of this work, the KCs are more relevant to students and they use them in their learning/wellbeing.
		
		You show key competencies by actually doing them, and knowing you are doing them. – student

Teachers and leaders reward students with certificates for exhibiting behaviours that demonstrate some of the KCs (extrinsic).	Students independently and intuitively use KCs as part of their everyday learning (intrinsic).	Teachers negotiate with their students' learning/wellbeing goals informed by the KCs. They have learnt 'to take a step back' to provide opportunities for students to determine how they go about their learning. Students contribute reflections to their personal reports by referring to how well these goals are met. *They (KCs) are just woven through everything. They are easy to figure out and use.* – student
Teachers support students to use some KCs to *cooperate* with others by completing tasks in a helpful manner.	Students use all KCs to *collaborate** with others to develop new understandings and ways of learning. **Working together on an intellectual endeavour – more than just being helpful.*	School leaders and teachers have authored a picture book to help students understand the importance of working with others to enhance their learning/wellbeing. Students are inspired by two bird characters. The tūī learns lessons from the wise kōtuku about how it can learn 'to fly high by being a problem solver, confident communicator, self manager, team player, and connected learner.' *They (KCs) are for us and the teachers. When we learn about things, we choose which KCs we are working on.* – student

Localising curriculum

Setting conditions

'Managing self', 'relating to others', and 'participating and contributing' are likely to be framed as social skills. 'Using language, symbols and texts' is seen as the literacy and numeracy competency.	KCs are viewed as overlapping and supporting each other and applicable to all learning. To separate them is seen as diluting their overall, positive impact.	KCs strongly underpin the school's vision and contribute to positive interactions. Students demonstrate them in meaningful ways, and in a variety of settings. They direct their learning by using KCs in a holistic way. Students learn in an environment that promotes whanaungatanga and collaboration. Concepts referred to in waiata support students to understand how the KCs interrelate and *help us to achieve, through our lives.*
KCs are taught as part of integrated inquiry topics that include aspects of science, social sciences, health, technology and the arts.	Students are supported by teachers to bring their diverse life experiences, ideas, and insights to **all** aspects of their learning/wellbeing, including the KCs.	Personalised, deliberate teaching supports students to regulate their learning. Teachers notice, recognise and respond to students' strengths and emerging requirements. They select KCs to help each student engage with the learning they are involved in. Students use and practise these competencies in a variety of learning contexts. *Our school has a picture on the wall – a wave and a beach. You get to decide where to put yourself in the picture. You could be still on the beach, or paddling, or out riding the wave.* *– student*
KCs are seen as an important dimension of the curriculum, sometimes referred to as *soft skills*. Their influence on children's learning and wellbeing is often viewed by teachers as being too difficult to evaluate.	KCs are considered as essential to ensuring student success as confident, connected, lifelong learners. Evaluation actively involves students gauging the quality of their learning, and for identifying next steps.	In the process of strengthening the school's evaluation processes, students are asked by teachers to notice when their learning gets harder and talk about what they did when this happens: *How did you do that?* *How could you help someone else to do that?* *How did you feel when you got stuck?* *How did you manage yourself when you felt like giving up?* *What strategies did you use?* *What did you say to yourself?* The board receives regular reports about how well students use the school's learner attributes (including KCs) in their learning/wellbeing. Students ask one another for information, evaluate one another's ideas and monitor each other's work. This aspect of the school's curriculum initiative supports students to think of ways to improve how they think, establish effective relationships, and give direction to their learning. The language associated with KCs is used by students at the three-way conferences with parents and whānau. Children share their progressions in relation to the KCs, using evidence they have gathered. *We talk about the KCs in relation to our learning before, during and after our work. – student*

Setting **conditions**

Evaluating effectiveness

Schools need more support to implement key competencies

Commenting on New Zealand's introduction of the key competencies in 2007, Lamb et al.[3] suggest that there is a lack of clarity from policy documents about how teachers and schools can implement curricula that promote key skills for the future.

> *The national curriculum provides little guidance as to how students are expected to learn and teachers to teach these skills.*

(Lamb, Maire, Doeke, 2017, p. 34)

Ministry of Education initiatives to support schools to develop their local curricula should include ways students can use key competencies to grow, work and participate in their communities and society. *Developing key competencies in students* as an emphasis in all PLD provision will contribute positively to supporting teachers and school leaders to be deliberate in implementating the key competencies across the curriculum.

Where to from here?

The intention of this report is to describe what is happening in schools with Year 1 to 8 students and identify areas for leaders and teachers to embed key competencies in their localised curricula.

The findings from this study require that leaders and teachers give more attention to extending students' use of key competencies.

In the future, ERO will evaluate how well students are supported to use and develop the key competencies in their learning across the curriculum.

Findings for this report are based on visits made to 118 schools. This is a limited sample. ERO would like to hear from schools that have successfully supported students to use the key competencies and evaluated the impact of this work on students' learning/wellbeing. Please contact us directly: info@ero.govt.nz

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[3] Lamb, S., Maire, Q. and Doeke, E. (2017). *Key Skills for the 21st Century: an evidence-based review.* Project Report. Sydney: NSW Department of Education.

Appendix 1: How information was gathered to determine what schools are doing to bring key competencies to life for their students

During Term 2, 2018, as part of regular reviews, ERO teams conducted exploratory work to find out what schools with Year 1 to 8 students do to develop the key competencies in their students. Reviewers interviewed adults and students, read school documentation and observed teaching and learning practices. They were guided by the following broad questions:

- how is the school supporting their students to develop key competencies?
- what does that look like in the school?
- how do students and their parents and whānau recognise and understand students' progress in developing these competencies?
- what does the board of trustees know about these as a part of the school's desired outcomes for students?

ERO clarified with schools that it was not evaluating the appropriateness or effectiveness of what they were doing in implementing key competencies. ERO also indicated that it understood that key competencies might be referred to in different ways and that terms used could vary from school to school.

Appendix 2: ERO's sample of schools was similar to the national picture

Table 1: A mix of different types of schools was sampled

School type	Number of schools in sample	Percentage of schools in sample[4]	National percentage of schools[5]
Full primary (Years 1-8)	55	47	52
Contributing (Years 1-6)	52	44	40
Intermediate (Years 7-8)	10	8	6
Special	1	1	2
Total	118	100	100

Table 2: Schools represent different socio-economic communities

Decile group[6]	Number of schools in sample	Percentage of schools in sample	National percentage of schools
Low decile	37	31	29
Medium decile	50	42	39
High decile	31	27	32
Total	118	100	100

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[4] Differences between sample and national schools were not statistically significant. The differences between observed and expected values in Tables 1 to 4 were tested using a Chi square test. The level of statistical significance used for all testing in this report was $p < 0.05$.

[5] The national percentage of schools as at June 2018.

[6] Deciles 1-3 are low decile schools; deciles 4-7 are medium decile schools; deciles 8-10 are high decile schools.

Table 3: Different sized schools represented

School roll[7]	Number of schools in sample	Percentage of schools in sample	National percentage of schools
Very small	13	11	8
Small	16	14	21
Medium	51	43	38
Large	25	21	21
Very large	13	11	12
Total	118	100	100

Table 4: A balance of urban and rural schools sampled

Urban/rural area[8]	Number of schools in sample	Percentage of schools in sample	National percentage of schools
Main urban area	65	55	53
Secondary urban area	9	8	6
Minor urban area	11	9	10
Rural area	33	28	31
Total	118	100	100

Appendix 3: Explanation of terms to describe quantity

Table 1: Terms used to describe quantity

Terms used[9]	Percentage
All	100%
Almost all	91% – 99%
Most	75% – 90%
Majority /Generally/Many	50% – 74%
Minority/Less than half/Some	15% – 49%
A few	less than 15%

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[7] Roll sizes for full primary, contributing and intermediate schools are: very small (1-30); small (31-100); medium (101-300); large (301-500) and very large (more than 500).

[8] Main urban areas have a population greater than 30,000; secondary urban areas have a population between 10,000 and 29,999; minor urban areas have a population between 1000 and 9,999; and rural areas have a population less than 1000.

[9] Adapted from Education Scotland.