

All learners develop skills and competencies for lifelong success and civic responsibility

Aotearoa New Zealand needs an education system that provides learners with the knowledge, skills and competencies to be successful in work and life, to contribute to their family and whānau, and to positively impact their local and national communities. The Education Act sets out the following objectives for schooling and early childhood education:

to focus on helping each child and young person to attain educational achievement to the best of his or her potential; and

to promote the development, in each child and young person, of the following abilities and attributes:

- resilience, determination, confidence, and creative and critical thinking:
- good social skills and the ability to form good relationships:
- participation in community life and fulfilment of civic and social responsibilities:
- preparedness for work; and

to instil in each child and young person an appreciation of the importance of the following:

- the inclusion within society of different groups and persons with different personal characteristics:
- the diversity of society:
- cultural knowledge, identity, and the different official languages:
- te reo Māori and the Treaty of Waitangi.

The New Zealand curricula guide schools and kura in developing their own curricula to help young people achieve these goals. Part of the way the New Zealand curriculum does this is by setting out key competency areas — while Te Marautanga o Aotearoa develops a graduate profile from the aspirations of whānau — that children and young people need for study, work, lifelong learning and the realisation of their potential.

An effective education system following these objectives provides learning opportunities and experiences that develop the social, cultural, emotional and cognitive competencies of learners' and cultivate an appreciation of their social and civic responsibilities. In the Aotearoa New Zealand context, this includes instilling an appreciation of the Treaty of Waitangi, its principles, and the partnership between tangata whenua and the Crown. This paper examines the broad picture of students' experiences and development against the first three bullet points in the Education Act objectives. The other parts of the Act objectives are covered in other evidence briefs, although they all overlap and interconnect.

Why do skills and competencies matter?

Skills and competencies

The development of skills and competencies in young people is one of the primary goals of formal education systems. While there is some overlap between the two ideas, skills can be thought of as specific to a particular field (such as tackling in rugby, or reading a balance sheet) while competencies are broader, more abstract, and can

contribute to success in multiple areas. Competencies may include the ability to make friends easily, to respond productively to feedback, or to organise one's own learning schedule.

The development of skills and competencies is both an end in itself and also a means by which other ends are achieved. Learners make use of their competencies in combination with all the other skills and resources available to them in order to succeed. So effective learning can include setting and working towards personal goals, building relationships with other people, developing community knowledge and values, growing one's knowledge of and use of cultural tools (language, symbols, and texts), and the knowledge and skills found in different learning areas. As they develop these competencies, successful children and young people are also motivated to use them, recognising when and how to do so and why.

Competency development equips learners with the tools to thrive in an increasingly diverse, complex and evolving world.

From a broader social perspective, knowledge, skills, and competencies are important because of their contributions outside the domain of the economy and work. They contribute to:

- increasing individual participation in democratic institutions;
- social cohesion and justice;
- strengthening human rights and autonomy as counterweights to increasing global inequality of opportunities and increasing individual marginalization;ⁱⁱ
- the ability to assess information and distil information based on value judgements or evidence-based information, and
- the ability to manage responding to life's challenges and setbacks effectively.

Civic responsibilities

Civic responsibilities, and the content of citizenship education, can be contested ideas due to different people's beliefs and world views. Many of these convictions are separate, though, from the skills and competencies required to understand and participate in how Aotearoa New Zealand is run.

There is substantial international evidence that democratic societies enjoy better economic and social outcomes, leading to overall higher levels of wellbeing.ⁱⁱⁱ If we accept that democratic societies produce better social and economic outcomes over the long term, and if we accept that Aotearoa New Zealand is a well-functioning democracy worth preserving - then there are drivers around active and ongoing participation in this democracy that, unless attended to, will in time undermine the quality of our democracy.

Krieble proposes "3Cs" in citizenship education to support the meeting of these civic responsibilities. '*Content* refers to information about civics and citizenship, or "academic" knowledge; *Critical thinking* is the ability to critically assess and process news and information; and *Connection* is the application of information to problems in the world and everyday life.'^{iv} The Crick Report in the United Kingdom claimed that good citizenship consists of three components: social and moral responsibility, political literacy, and community involvement.^v Both of these trios draw a distinction between content and connection; between political literacy and community involvement. Successful citizenship education involves both the acquisition of factual knowledge

and the opportunity to act in response to it; civics education processes focusing on knowledge transmission alone have limited effect.^{vi}

Civic engagement describes the ways in which 'an active citizen participates in the life of a community in order to improve conditions for others or to help shape the community's future'.^{vii} This includes voting, and other activities such as volunteering, donating to charity or contacting a politician. Civic engagement is a fundamental part of building social capital, and for building and maintaining strong democracies.^{viii} Such engagement requires both understanding the democratic process and having the will and opportunity to participate in it.

At a foundational level, this civic education can include developing a basic knowledge of democratic government, and then participating in social processes such as voting in elections or on local campaigns. At a higher level, this can involve a critical evaluation of social conditions and consequent action. Civics exists in relationships, not institutions,^{ix} and active participation in democratic citizenship helps develop the competencies to fulfil our civic responsibilities.

Civic competency can be understood as the extent to which citizens feel capable of shaping the communities around them through democratic means. This grows from (and contributes to) a sense of belonging, being valued and being enabled to contribute; the development of which starts in early learning and continues throughout children's and young people's educational journeys.

There are significant overlaps between these local civic objectives, and Aotearoa New Zealand's international obligations to develop 'global citizens'. Global citizenship is a framework with strong links to the Sustainable Development Goals, to which Aotearoa New Zealand has obligations to report and give consideration until 2030.

Global citizenship education aims to empower learners to assume active roles to face and resolve global challenges and to become proactive contributors to a more peaceful, tolerant, inclusive and secure world. It helps learners look critically at complex and interconnected global challenges. Developing global citizens is also an objective of the draft government international education strategy.

Developing civic competencies in children and young people can also support protection of human rights. Civic competencies promote young peoples' ability to organise and vocalise support for gender, sexuality, disability, cultural and religious rights — or any other rights that may need active protection.

Lifelong success

The development of skills and competencies can contribute to a learner's success and fulfilment at any stage of their life. In a rapidly-changing world, with little certainty over many of the skills that could be required in the workforce 20 years from now, competencies which enable the development of new skills and the re-evaluation of goals will be of considerable value.

Success should also be understood as more broad than just meeting the needs of the future workforce. While this is an important factor, it neglects the contribution of education to living a rich and fulfilled life. Learners are entitled to say what they understand success to look like for them. This is particularly important in the context of Māori succeeding as Māori; different skills and competencies may be important for different conceptions of success.

All learners

Some groups of Aotearoa New Zealanders enjoy less success in the education system than others. Those from economically deprived backgrounds achieve NCEA qualifications in significantly lower proportions than those from more privileged economic backgrounds. After controlling for this variable, Māori in English medium and Pacific students achieve fewer qualifications and at lower levels than students from Pākehā and other ethnic backgrounds.^x Equity continues to be the biggest issue. An education system meeting its goal of helping all learners achieve lifelong success needs to address the causes of why certain groups are less successful than others, under the current system.

The role of the New Zealand curricula in developing competencies

The New Zealand curricula in the compulsory sector are well-placed to enable the development of competencies that children and young people need for lifelong learning and success. In Aotearoa New Zealand there are two national curricula: *The New Zealand Curriculum* (NZC) for English-medium schools and *Te Marautanga o Aotearoa* for Māori-medium provision.

In addition to these, *Te Whāriki me Te Whāriki a te kōhanga reo* provide a curriculum standard, criteria and a framework for early learning services. These curricula provide guidance that supports teachers and ECE providers in developing learner competencies and values including social and communication skills, higher-order thinking skills, self-control, positive self-concept, and participating and belonging. In the context of *Te Whāriki a te Kōhanga Reo*, the whānau are critical designers of the curriculum and the equivalent capabilities that align to their aspirations. This development of learner competencies and values can be incorporated into learning and teaching in an individual learning area and across learning areas.

Though they come from different perspectives, these curricula start with visions of children and young people who will develop the competencies they need for study, work, and lifelong learning and go on to realise their potential.

Te Whāriki

The early learning curriculum standard, criteria and framework seek to imbue young children with the competencies for future work, life and success. The 'strands' in the ECE Curriculum framework contribute to the development of dispositions that provide a strong basis for the ongoing development of the competencies, and include:

- Wellbeing | Mana Atua
- Belonging | Mana Whenua
- Contribution | Mana Tangata
- Communication | Mana Reo
- Exploration | Mana Aotūroa

Te Whāriki provides guidance that supports early childhood education services to deliver curricula that empower infants, toddlers and young children to be confident and increasingly competent learners. When deciding which areas to focus on, teachers and educators take into account the interests, strengths and needs of the children and the aspirations of parents, whānau and community. The *Te Whāriki* guidance document supports every child to be strong in his or her identity, language and culture in the context of a bicultural curriculum.

The New Zealand Curriculum (NZC)

NZC explicitly positions key competencies as part of a curriculum for the 21st century. These 'capabilities for living and lifelong learning' are:

- thinking
- using language, symbols and texts
- managing self
- relating to others
- participating and contributing

NZC asserts that children and young people use the competencies to live, learn, work, and contribute as active members of their communities. 'More complex than skills, the competencies also draw on knowledge, attitudes, and values in ways that lead to action. They are not separate or stand-alone. They are the key to learning in every learning area.'

The development of the competencies is both an end in itself (a goal) and the means by which other ends are achieved. Successful learners make use of the competencies in combination with all other resources available to them. These include personal goals, other people, community knowledge and values, cultural tools, and the knowledge and skills found within and across different learning areas. Opportunities to develop the competencies occur in social contexts and the competencies continue to develop over time, shaped by interactions with people, places, ideas and things.

Te Marautanga o Aotearoa

Te Marautanga o Aotearoa sets the direction for teaching and learning in Māori medium kura, wharekura and other settings, where at least 51 per cent of the curriculum is taught in and through te reo Māori.

Te Marautanga o Aotearoa graduates will:

- develop as confident and resilient individuals
- realise their full potential and lead fulfilling lives
- communicate effectively in te reo Māori
- take pride in their identity
- participate in and succeed in te ao Māori and the wider world.

For learners to succeed, the kura, whānau, hapū, iwi and community must work together effectively and consistently. *Te Marautanga o Aotearoa* upholds the cultural identity and heritage of learners and their whānau, based on whānau aspirations, and supports the learning environments of both kura and wharekura settings. All learners should have the opportunity to acquire knowledge in all learning areas and to meet the aspirations and holistic outcomes expected of graduates. Through this approach, they will be able to reach their full potential, and to participate effectively and positively in the Māori community and the global world.^{xi}

Appreciating the Treaty of Waitangi is central to learners being able to understand their social and civic responsibilities

An appreciation of the value and position of tangata whenua plays a central role in growing cultural intelligence and civic competency in learners. Part of this is ensuring that all New Zealanders understand the importance of honouring the Treaty of Waitangi, which is why the Treaty is central to the New Zealand Curriculum and foundational to curriculum decision-making. Growing an appreciation of The Treaty of Waitangi can illuminate both Pākehā and Māori worldviews of what it means to be a citizen within Aotearoa New Zealand society. Through this appreciation, children and young people are better able to understand there are competing worldviews of what it means to be a citizen of Aotearoa. In turn, this helps children and young people engage with what citizenship means for them, including cultural intelligence, national identity and local and national history, and enables them to realise their own democratic agency. This is a critical step towards creating young people who feel able and empowered to shape their local and national communities (not just by a geographical understanding). Equally, it may support awareness of the barriers that some may face to democratic participation.

The education system needs to demonstrate partnership, active protection and equity by being both proactive and responsive to Māori learners and playing a central role to protect and foster Māori identity, language and culture as specified through the Treaty of Waitangi. The Treaty of Waitangi commits the Crown to work in partnership with Māori and to support Māori aspirations. The education system honours the Treaty of Waitangi by striving for better outcomes at the individual, whānau, community and societal level for both Māori and non-Māori. There have been gains in Māori enjoying and achieving education success as Māori. However, performance at a system level is not yet where it needs to be to support equitable outcomes, a thriving Māori economy and prospering whānau, hapū and iwi.

Social and emotional competencies in the NZ curricula

The New Zealand Curriculum recognises that the social and emotional competencies are the “key to learning in every learning area”,^{xii} and initiatives such as Positive Behaviour for Learning (PB4L) are aimed at strengthening relationships and creating more positive home and school environments. Ultimately, such approaches are aimed at removing barriers to engagement and improving students’ chances to achieve at school and beyond.

NZC provides good opportunities for schools to explore concepts and values including culture, equity, diversity, discrimination and conflict in a way that supports students’ social and emotional development. NZC suggests that educators concentrate on future-focused issues such as citizenship: ‘exploring what it means to be a citizen and to contribute to the development and wellbeing of society’.

A core focus of the Health and Physical Education learning area in NZC is the “wellbeing of students themselves”. In this learning area, it is stated that, for students to lead full and satisfying lives, among other things, they need to be supported to:

- Build resilience, a positive identity, a sense of self-worth and empathy
- Learn how to cooperate and negotiate
- Learn processes for responsible decision-making
- Develop other competencies such as those needed for mental wellness and safety management

Some of the Health and Physical Education achievement objectives include ideas about students '*learning about*' the many factors that influence social and emotional wellbeing as well as '*learning for*' their own and their community's social and emotional wellbeing by '*learning by doing*' health promotion. These achievement objectives position students as active participants who can work to shape their classroom and school environment so that it better promotes wellbeing,^{xiii} and can contribute to their own wellbeing through self-development.

Te Marautanga o Aotearoa supports a holistic approach to teaching and learning. It acknowledges that values and attitudes are integral to who students are, how they act, how they engage with others, and how they respond to learning experiences. Values and attitudes are inextricably linked to and influenced by culture. The individual kura curriculum reflects the shared values of the whānau, hapū, iwi and kura community.

Civic responsibilities in the NZ curricula

While our curricula do not currently feature any formal requirements for citizenship education, the Social Sciences learning area provides rich opportunities to explore what it means to be a citizen and to contribute to the wellbeing of society. There is some consensus on capabilities that contribute to democratic life, and these can be seen as elements of the "participating and contributing" key competency of the New Zealand Curriculum and in the values and graduate profile of Te Marautanga o Aotearoa. Certain core skills and competencies are important for capable and equal participation in Aotearoa New Zealand society.

The New Zealand Curriculum and Te Marautanga o Aotearoa provide the framework for opportunities to learn about democratic participation in a range of curriculum contexts, alongside the development of competencies that enable active democratic participation. Te Marautanga o Aotearoa specifically sets the direction for teaching and learning in Māori medium primary and secondary kura to enable students to participate and succeed in te ao Māori me te ao whānui.

A developing approach to curriculum, progress and achievement

A Ministerial Advisory Group has recently been established to provide advice on strengthening the design and use of the national curricula to better understand and support student progress and achievement. The Advisory Group will provide recommendations about a work programme to develop the capability of teachers and leaders to work with their students, parents, whānau and communities to:

- design and deliver local curricula that include learning opportunities which integrate knowledge, skills and key competencies in the New Zealand Curriculum, and Māori medium graduate qualities and characteristics in Te Marautanga o Aotearoa
- personalise learning opportunities to meet the needs and aspirations of all students and their whānau, within an inclusive and culturally responsive learning environment
- be data literate, understanding and acting on data/evidence for improvement, including making effective and efficient use of information in inquiry, planning and reporting, and sharing meaningful reports with students, parents and whānau.

How are we doing at developing competencies?

Competencies are inherently difficult to measure. Attempts to measure competence through achievement metrics can narrow the curriculum and obscure an understanding of learners' competency development.

However, an approach to measure aspects of competency growth meaningfully is currently being developed by NZCER. Their *Key Competencies: Report Series 2017*^{xiv} is an exploratory study of key competencies in the available NMSSA data in English medium. This exploratory approach evaluated the extent to which:

- NMSSA assessment tasks showed how and when students were able to demonstrate aspects of the key competencies;
- the synthesis of information across the assessments, across learning areas could be used to shape broad indicators of progression in developing and strengthening key competencies, between year 4 and year 8;
- the insights generated could provide guidance about how to assess progress in key competencies, which could be done in a new cycle of NMSSA.

The report suggests that competency development may usefully be estimated from three proxy capability sets drawn from the NMSSA data; of critical inquiry, perspective-taking, and disciplinary meaning-making. This project is ongoing.

Other evidence is also far from straightforward. Lifelong success correlates with a number of other social indicators that reach beyond the education sector, such as earnings, perceptions of wellbeing, and incarceration rates. No single measure can encapsulate how well different conceptions of success are being achieved across lifetimes. Particular conceptions of success can be targeted by individual indicators: for example, interim reports on *Ka Hikitia* consider how well Māori feel they are able to succeed given Māori conceptions of success. A key insight of the *Education matters to me* report (OCC, 2018) is that many children and young people experience racism at school, and experience a lack of participation in decision making about their own lives and schooling.

Quality teaching is a key enabler of competency development. Skilled teachers can identify a range of competencies in children and young people. As with other elements of quality teaching, a range of skills and knowledge and well-developed relational capability is required for teachers to understand where a child or young person is up to in the development of their competencies, and how best to support their next steps. One competency may not be more or less important than another in general, but prioritising the development of a particular competency may be useful for a child or young person at a particular time or in relation to specific experiences. The perception of relevance is important: children and young people told the Office of the Children's Commissioner they would be more likely to engage if they learned about things relevant to their lives, which linked to their own aspirations and interests.^{xv}

A number of tools and resources have been developed that support teachers to notice, observe and better understand the development of competencies.^{xvi} The resources developed by NZCER and the University of Waikato, in the Key Competency Indicator project, include rich video examples of good teacher practice in support of competency development.^{xvii}

What the evidence says about developing social and emotional competencies

Among the goals of competency development through the curricula are supporting students to enjoy lifelong success and fulfil their social and civic responsibilities. There are specific groups of competencies which underpin these goals. While most of these can be aligned to the multi-faceted nature of the “key competencies”, there is specific evidence about the value of particular families of competencies independent of their coverage in the curricula.

Relational competencies, often called social and emotional competencies, are the basis from which technical skills and knowledge are developed. Relational competencies can be understood as the capacity of students to have healthy relationships with themselves and those around them, and to be able to use those relationships to pursue their goals. They are critical enablers of children and young people's ability to succeed in their education, life and work.

Over the last two decades general agreement has emerged among those who study child development, education and health that social and emotional skills matter for many areas of development, including learning, health and general wellbeing.^{xviii} Also, research has demonstrated that high-quality, evidence-informed social and emotional learning (SEL) approaches produce positive outcomes for students, including improved behaviour, attitudes and academic performance.^{xix}

A meta-analysis of 213 school-based universal social and emotional learning programmes found that SEL could be effective for a number of outcomes, including improvements in academic achievement, social and emotional skills, attitudes to self and others, pro-social behaviour, and reductions in problem behaviours and emotional distress. This meta-analysis found that SEL programmes brought about, on average, the equivalent of an 11 percent gain in students' academic achievement, compared with controls.^{xx}

Children who develop age-appropriate relational and higher-order thinking competencies are more likely to develop healthy relationships with peers and adults and are more likely to be resilient in the face of adversity. Moffitt et al. (2011) found that childhood self-control was a strong predictor of improved health, wealth and public safety outcomes.^{xxi} Learners who develop these competencies are less likely to develop mental health problems and as a result likely to be more productive and effective in their working lives.

Social and emotional competencies are often described as ‘soft skills’ that enable better working outcomes. They include resilience, determination, confidence and creative thinking. They are linked to the development of the key competencies and equip children and young people to become lifelong learners who utilise their knowledge and skills in new settings.^{xxii}

Relational competencies are an end in themselves as they contribute to well-being and a higher quality of life. Additionally, being able to develop strong relationships and a positive self-concept supports children and young people in actively pursuing their goals. Strong relationships with teachers, friends and family/whānau allow learners to access the knowledge, support and opportunities that are beneficial to them. A relationally-competent student is able to build strong relationships in pursuit of their goals; academic, professional or otherwise.

Lippmann et al. (2015), in a meta-study of the research on 'soft skills', examined their relationship to four key workforce outcomes: employment, performance on the job, income, and entrepreneurial success.^{xxiii} The skills found most likely to increase odds of success across all outcomes, and which employers expect employees to have, were:

- social skills;
- effective communication skills;
- higher-order thinking skills (including problem solving, critical thinking, and decision-making);
- self-control and
- positive self-concept.

In the USA, the Collaborative for Academic, Social and Emotional Learning (CASEL) suggest there are five core competencies that young people need.^{xxiv} These are; social awareness, social decision making, self awareness, self management and relationship skills.

In New Zealand, the 2016 *Survey of Adult Skills* indicated that, in addition to professional qualifications, New Zealanders need strong personal and inter-personal skills.

There is a recognised link between relational competency development and outcomes across the education system. However, some of these competencies can be harder to develop in environments where students' identities and cultures are not recognised and respected. Simultaneous Success Trajectories (SST) is an empirically-grounded approach to learning which recognises that students' well-being, identity and culture are critical enablers of educational achievement.^{xxv}

Competencies in practice

Previously some competencies and skills were seen as more concrete and measurable than others, and assessment may have focused on what can be measured. In the 2014 *Survey of Adult Skills*, more than half of 16-25 year olds indicated that they regularly use high-level thinking and problem solving skills. In addition, more than 60 percent provided answers that illustrate traits of resilience.

TIMSS, PIRLS and PISA examine the thinking and reasoning skills and strategies students are most likely to employ when reading a piece of text, answering a question or working on a problem. TIMSS and PISA studies show that questions requiring higher-order thinking skills were a relative strength for New Zealand students, compared with relatively simple tasks such as recalling knowledge and using procedures.^{xxvi} PIRLS and PISA (reading) assess reasoning skills, encompassing the ability to interpret and integrate ideas in texts, to reflect, and to examine and evaluate content, language, and textual features in writing. These skills and strategies are also a relative strength for our students.^{xxvii}

New Zealand students tend to perform well when demonstrating higher-order skills in comparison with their international peers, particularly in the contexts of reading and science. However, the most recent 2015 evidence for reading at the primary level showed a significant weakening of these skills compared with both their international peers and their New Zealand peers in previous years.^{xxviii}

There is also room to ensure that competencies developed in education effectively align with lifelong learning, family and whānau aspirations and the needs of employers. Recent research by MBIE found a 'complex clash of norms and expectations' between employers and young people in South Auckland.^{xxix} This mismatch of expectations was seen to contribute to a lack of labour engagement.

Civic competencies

The first report of a series of publications based on the results of the International Civic and Citizenship Education Study (ICCS) undertaken in 2008, revealed that New Zealanders score among both the highest and the lowest for levels of civic knowledge. No other country in the study had as wide of a distribution.^{xxx} Māori and Pacific males were found to have the most limited knowledge of democracy. This indicates that the "civic empowerment gap" is prevalent, and appears to mirror the other inequalities in our society.^{xxxi} At the same time, research in primary classrooms has identified that a lack of focus on social sciences teaching has led to a lack of progress between year 4 and year 8 (NEMP, 2005, 2009).^{xxxii}

New Zealand's average civic knowledge score was significantly above only five other OECD countries (Austria, Chile, Greece, Luxembourg and Mexico), and distributed in a manner that correlates highly with socioeconomic indicators. Thirty-five percent of New Zealand students achieved scores at the highest proficiency level (Level 3) compared with an average of 28 percent across all ICCS countries. At the other end of the scale, 14 percent of New Zealand students had scores below proficiency Level 1 compared with the international average of 16 percent. In all ICCS countries, students whose parents had higher-status occupations gained higher civic knowledge scores. Similar results were found for students whose parents had higher educational qualifications and whose homes had larger numbers of books. New Zealand students were more likely than the average student across all countries to report that they were encouraged to express their opinions, bring up points for discussion and make up their own minds about issues, and New Zealand teachers reported that that promoting students' critical and independent thinking was an important aim of civic and citizenship education at higher rates than teachers in other countries.

The ICCS study also shows a gap between the citizenship knowledge of high- and low-achievers, with girls doing better than boys, and European and Asian students doing better than Māori and Pacific students. New Zealand teachers were very confident teaching topics in the social sciences related to cultural identities, equality, human rights and the environment, and much less confident teaching legal, political and constitutional topics.

Knowledge alone does not constitute interest or intention to participate in the democratic process. The third report of the ICCS study found no clear pattern of association between students' average knowledge scores and their level of interest in social and political issues, nor their intentions for future civic action.^{xxxiii} Analysis of expected electoral participation scores showed Aotearoa New Zealand to have the greatest proportion of variation explained by background variables, such as gender, socioeconomic background, and parental interest. There is a wider pattern of democratic disengagement in voters aged 18 to 39, and this has been evident in each of the last three elections in Aotearoa New Zealand. These results point to a need for something other than content or more "academic" civic knowledge in the New Zealand curricula.

Active and participatory approaches to citizenship education, where learning is applied to real-world contexts and interests in practice, appears to be more successful at leading to increased civic engagement. Research from the Teaching & Learning Research Initiative (Ward et al., 2017)^{xxxiv} focused on the interpretation of 'personal social action' in NCEA senior Social Studies. A key finding was that students needed to be well supported, but that when they were both the young people and their teachers reported the value of this course for the development of their skills for civic and community engagement. The authors also reported that there is a lack of agreement on what kind of citizen should be sought through this process.

In Māori contexts, including the application of Te Marautanga o Aotearoa, there is a strong emphasis on the contribution that students make to their marae, hapū and iwi, based on whānau aspirations. Building a strong foundation in these domains as a foundation is embedded in Te Marautanga o Aotearoa.

Unless there is continued support for growing the engagement of all New Zealanders in a democratic society, we will see an ongoing pattern of disengagement and disenfranchisement. Opportunities for children and young people to express their agency in this domain include involvement in student councils and student representation on Boards of Trustees, but fewer than half of teachers canvassed in the NMSSA social studies review thought that students had opportunities for participating in social action on issues of interest and relevance to them at their school.^{xxxv} When schools model democratic communities they provide their children and young people with the experiences that will enable ongoing social and civic engagement.

Developments in competency needs

Current international work on the definition and selection of competencies emphasises the increasingly complex contexts within which they are applied. The priority competency needs of students may develop and change, and the following two examples detail potential contextual changes that may impact them significantly.

Competencies for cultural diversity

Aotearoa New Zealand meets the criteria for a 'super diverse' society. Countries are considered super diverse when more than 25 per cent of residents are migrants or when more than 100 nationalities are represented.^{xxxvi} Aotearoa New Zealand is now home to 160 languages and there are over 200 ethnicities in Auckland. Both numbers are forecast to increase.

This diversity creates pressures and new challenges, as well as opportunities, for the future of Aotearoa New Zealand society. International trade is a critical component of Aotearoa New Zealand's economic prosperity. Children and young people need to be equipped with international and intercultural knowledge and competencies so as to engage effectively with the outside world, especially with our key trading partners from Asia. In response to these challenges, we must equip our learners with the competencies to work, live and learn in an increasingly global and diverse society.

Cultural diversity also involves much more than only national identities. The complexities of multiple ethnicities, sexualities, family structures, values, socioeconomic statuses, religions and more are addressed in an accompanying evidence brief.

Digital competencies

Digital competencies are critical if learners are to have the skills needed to adapt to the future workplace. The nature of work is changing rapidly as businesses, societies and economies respond to the growth of information technologies. A 2015 Australian report found that around 40% of current Australian jobs are considered at high risk of automation over the next 10 to 15 years. Estimation of job automation in New Zealand found that 46% of the New Zealand work force faces a high risk of computerisation.^{xxxvii} The importance of digital skills is further reflected in their wage return. Workers able to solve relatively complex problems using a computer are paid 27% more on average across the OECD than those workers who can perform only the most basic computer functions.^{xxxviii} For New Zealand the percentage difference is 35%.

In the face of this uncertainty, Aotearoa New Zealand must embrace the rapid pace of change. Learners will need to utilise their higher-order thinking skills and relational competencies in a digital context and be able to adapt their thinking in a constantly changing working environment. Access to goods and services and an increasing amount of social interaction now takes place in digital contexts. The education system needs to play its part in preparing children and young people for the challenges of the digital world.

Digital competencies are targeted specifically within the New Zealand curricula. The development of the two new technological areas in the Digital Technologies | Hangarau Matihiko curriculum, including the progress outcomes in these strands, aims to support the continued development of competencies related to this area.

Digital competencies – how we are doing?

The 2016 *Survey of Adult Skills* measured New Zealanders' abilities in using computers to acquire and evaluate information, communicate with others and perform practical tasks. The Survey found that New Zealanders' problem solving skills are among the highest in the OECD, with 45% of adults possessing moderate to high problem solving skills. These skills are the highest amongst young adults below age 35. There is a need to ensure that this digital competence continues to grow, which the inclusion of digital technologies in the New Zealand curricula seeks to enable.

Summary

Developing skills and competencies is important for meeting the objectives set out in the Education Act. The New Zealand Curriculum sets out particular key competencies and the framework for how school curricula may support learners to develop them. Te Marautanga o Aotearoa provides opportunities for kura and whānau to identify the capabilities that are critical to them, and meet their aspirations. As well as knowledge and skills, competencies are particularly important in education as they enable further learning and development, including learning how to learn, in addition to being worthwhile objectives in themselves. Social and emotional competencies in particular underpin many other areas of learning and are critical enablers of children and young people's ability to succeed in their education, life and work.

Competencies are difficult to measure, but work is ongoing on developing proxy measures of related capabilities and outcomes. Some of the data we do have available illustrate the relative strength of Aotearoa New Zealand students in higher-order thinking skills, while drawing a mixed picture in other areas. Developing civic competencies is important, and the form these take is not precisely specified in the

New Zealand curricula. By international measurement standards, New Zealand has a pronounced “civic empowerment gap” between the capabilities of different groups of students that mirrors many other areas of inequality in our society.

Well-developed competencies and skills are important tools for all learners in New Zealand, to enable them to succeed and adapt in an ever-changing world and fulfil their social and civic responsibilities.

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