How key competencies are treated in the OECD '2030' framework: Implications for the *New Zealand Curriculum*

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For some time the OECD has been working on a new model to update and replace the DeSeCo framework from which the *New Zealand Curriculum* (*NZC*)[1] key competencies originated (see the first paper in this series[2]). Here in New Zealand we have also been working on evolving our understandings of the complex nature of key competencies, and how we might ensure they can support the sorts of transformative changes in curriculum that the OECD intended (paper 2 in this series[3]).

This paper addresses the question of whether, and if so how, our evolving understandings of the role the key competencies play in the curriculum has anticipated more recent OECD thinking. In the light of the new 2030 model, do we now need to make changes, or should we keep going on our key competencies/capabilities journey as described in paper 2?
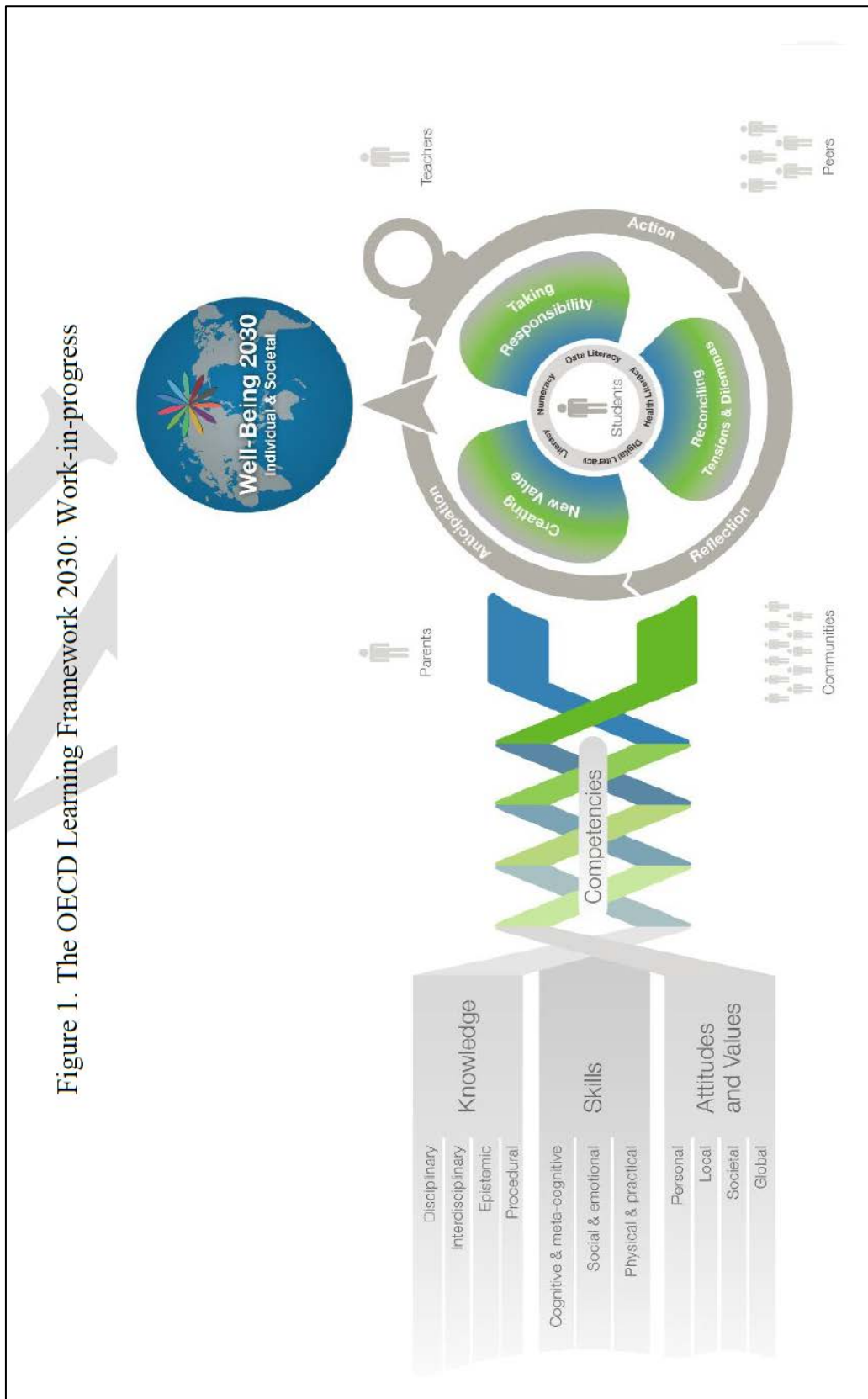
An overview of the 2030 learning compass

The model in Figure 1 is the most recent iteration of the "2030 learner compass" that captures the current consensus emerging from this collaborative international project. It was sourced from working party notes and is clearly labelled as work in progress.

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1   Ministry of Education (2007). Wellington: Learning Media. Available at http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum

2   Hipkins, R. (2018). *How the key competencies evolved over time: The evidence base.* Wellington: NZCER, available at www.nzcer.org.nz/research/publications/key-competencies-evidence-base

3   Hipkins, R. & McDowall, S. (2018). *How the key competencies evolved over time: Insights from the research.* Wellington: NZCER, available www.nzcer.org.nz/research/publications/key-competencies-insights

Figure 1: The OECD learning framework 2030, work-in-progress

Figure 1. The OECD Learning Framework 2030: Work-in-progress

Key competencies have always been defined as comprising a complex mix of knowledge, skills, attitudes and values (see paper 1). New detail about the sub-components of each of these is shown in the compass model (the words on the left hand side). Notice the explicit naming of *epistemic* knowledge (i.e. how we know what we know) along with the more common disciplinary and procedural knowledge. Another important difference is that interdisciplinary knowledge is also named.

Thinking was the sole "cross-cutting" key competency in the original DeSeCo model. It was called cross-cutting because it was intended to be woven together with the other named key competencies (see paper 1 in this series). This line of thinking about what weaves with what has clearly evolved— in the OECD 2030 model there are three "transversal" competencies (represented as 'tabs' inside the compass in Figure 1).

1. **Taking responsibility:** There is an overarching aim to encourage students to take agency for their learning and for their actions in the world. They can only do this if they are more proactive in accepting responsibility.

2. **Creating new value:** On the surface this could be seen as being entrepreneurial. However the briefing notes suggest a wider scope. This is about collaborative knowledge work— recombining what different people know to arrive at new insights and solutions.

3. **Recognising tensions and dilemmas:** This cross-cutting competency draws attention to the volatile and uncertain conditions that characterise life in the 21st century. It sends a signal that students should be learning about risk and uncertainty, and how to make decisions and take action under such conditions.

Notice the shadowy outline of people around the compass. The briefing materials emphasise the sociocultural concept of *co-agency*. In essence students need supportive conditions to take agency and it is, at least in part, up to the adults in their lives to help create those conditions. While the role of teachers is important, so is the part played by other adults. Students also need to be aware of their role—what they do and what adults do will interact to create conditions for them to take agency, or not. This need for self-awareness cues the metacognitive intent of *thinking* as the cross-cutting DeSeCo key competency.

The overarching aim of the DeSeCo project was that students would be able to lead a "successful life in a well-functioning society" (see paper 1 in this series). The aim here is much the same but the wording has evolved to become "individual and societal wellbeing" (in the globe at the top right of Figure 1). Arguably there is a shift in emphasis from mostly being about economic success. The briefing notes encompass wider aspects of wellbeing, including the health of the planet.

We now include a critique of this model from an academic with expertise in teaching for the sort of active engaged citizenship envisaged here. We then turn to critical questions about weaving the components of the model together.

Box 1: An academic's reading of the 2030 compass (Bronwyn Wood, Victoria University of Wellington)

The OECD Learning framework 2030 builds closely on the previous work of the DeSeCo report (OECD, 2005) and responds to some 'new' challenges which require a further set of competencies and capabilities that relate to environmental, economic and social challenges. In keeping with earlier work (Nelson & Kerr, 2006; OECD, 2018), it reinforces the need for a group of "active, responsible and engaged citizens" (p. 4) who can address the significant issues emerging—beyond that of governments.

Four 'new' competency-related ideas in particular are identified. I will describe and critique each briefly:

- **Broader education goals (especially wellbeing):** This signals a shift to broadening the purpose of education and perhaps recognising that previous iterations of competencies have been critiqued for their potential utilitarian and economic interpretations (Reid, 2007).
- **Learner agency:** This heightened focus on agency extends upon 'participating and contributing' to the potential to 'influence people, events and circumstances for the better'. However, citizenship agency in this document is often conflated with behavioural goals of 'good learners' and 'personalised learning' which conveys a narrow conception of citizens and the type of actions young people could actually take. A neoliberal and passive (individualistic) version of citizenship seems to be desired. By contrast we have richer and more developed notions of citizenship embedded in *NZC*, with very good examples of active citizens in senior social studies especially (Wood, Taylor, Atkins, & Johnston, 2017).
- **Broad knowledge, skills, attitudes and values:** The emphasis on knowledge in this model is important and mirrors many of the shifts in thinking New Zealand has made since early implementation of key competencies (Hipkins, 2010; Wood & Sheehan, 2012). The explicit naming of disciplinary knowledge, epistemic knowledge, and procedural knowledge addresses the dilemma that these distinctions could be collapsed into procedural knowledge in the DeSeCo model. This broader and richer focus on knowledge clearly implies that competencies should be integrated in learning through the disciplines, and not separate to them.
- **Transformative competencies:** This 'catch all' part of the model constitutes a rather muddled approach to a set of skills to address sustainability, conflict, and the need for responsible citizens. It is trying to do too many things, overlaid by an economic (neoliberal) imperative to increase economic innovation, entrepreneurships, and self-regulation.

References

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Does the OECD 2030 model align with the idea of key competencies as agents for curriculum weaving?

On initial impressions, the signals about the importance of curriculum weaving are very weak in the OECD 2030 model. The zigzag structure at the centre of the model implies the weaving of knowledge, skills, attitudes, and values to produce competencies per se. However, this zigzag provides no signals as to how this weaving should occur. Essentially this is the "black box" between the idea of building competencies and the outcomes anticipated—i.e. the 2030 learning compass itself.

In this respect, the 2030 model has not addressed the weaving dilemma that also sat at the heart of the DeSeCo model. By contrast, our evolving journey of understanding how to weave the parts of *NZC* into rich and meaningful learning experiences (see paper 2 in this series) does provide some strategic thinking about what sorts of curriculum design decisions might need to be made inside this black box. Furthermore, if we read this model through the lens of our own experience in New Zealand, we could argue that the OECD model has the potential to evolve in a similar direction to the idea of "capabilities" as descriptors of what students can do with their learning (see paper 2).

In this way of thinking, the diagram could be read to imply that the three transversal competencies *emerge* from a weaving of knowledge, skills, attitudes, and values. Students demonstrate these competences as they engage with the intended learning. This is precisely our argument for the capabilities described in paper 2—with the added specification that this weaving takes place in the context of rich learning tasks. If this argument holds, we could rename these transversal competencies as capabilities without losing the integrity of either our own thinking or that of the OECD.

The test of this argument is whether or not the sorts of capabilities we have been describing in our curriculum thinking can be readily aligned with aspects of these three transversal competencies. A second important test is the potential worth of such an analysis. Would there be potential benefits for students and teachers if we developed this type of interpretation? Addressing this question might help ameliorate impressions of a muddled "catch all" of ideas at the heart of the 2030 learning compass (see the critique on the previous page). These are the twin tests of this line of thinking about weaving that we now address.

The potential for alignment between the transversal competencies and the capabilities identified in *NZC* curriculum development work

The idea that capabilities remix facets of the individual key competencies with knowledge and skills, in the context of rich tasks, evolved as researchers addressed several practical dilemmas in the *NZC* context (see paper 2). The small set of capabilities described for the National Monitoring Study of Student Achievement (NMSSA) and for use within the Coherent Pathways Tool, provides a basis for testing potential alignment with the 2030 transversal competencies.

Recognising tensions and dilemmas: This transversal competency readily aligns with the analysis undertaken when developing the theoretical framework for the NMSSA analysis. For example, the

discussion of the cross-cutting relationships between capabilities for *critical inquiry* and *perspective-taking* and the capability for *deciding and acting* includes the following comment:

> Note the inclusion of risk analysis and probabilistic reasoning. These are important aspects of capability for engaging with complex issues and deciding on possible courses of action. '21st century' critique of current learning experiences is often critical of the absence of risk-taking so we have included it as part of deciding and acting. (Hipkins, in press)

Creating new value: One of the tensions inherent in the idea of students undertaking "knowledge work" is that they need to learn the processes of discipline-building in different knowledge areas (this is the epistemic knowledge on the left-hand side of the 2030 model). Again, the *NZC* capabilities analysis has anticipated this need. The capability of *disciplinary meaning-making* makes explicit the epistemic references that already exist in the *NZC* learning areas.

Taking responsibility: In contrast to the other two transversal competencies, the emphasis placed on this one is mainly about building the *disposition* to act in the world. This is emphasised in the capability of *deciding and acting*, but arguably it is also critically important to build knowledge for informed action, which brings all three of the other capabilities into play (*critical inquiry, perspective taking, disciplinary meaning-making*).

The above examples are only a brief sample of alignments that could be made between our capabilities thinking and the transversal competencies in the 2030 model. Furthermore, other capabilities that have been identified as important for our students to develop could be aligned in the same way. To illustrate, the idea of students building "assessment capability", which was central to the analysis in the report *Directions for Assessment in New Zealand*,[4] could be readily aligned with the need for students to take greater agency over their learning. As another example, the following argument is made in materials that support the introduction of a more fully elaborated digital technologies component to the technology learning area of NZC:

> The goal of this change is to ensure that all learners have the opportunity to become **digitally capable** individuals. The change signals the need for greater focus on our students building their skills so they can be innovative creators of digital solutions—moving beyond solely being users and consumers of digital technologies. (Emphasis added and paragraph break removed).[5]

Here the idea of building "digital capabilities" is directly aligned with the imperative to create new value.

Curriculum weaving is the key idea that activates these alignments. The key competencies provide an accessible starting point to access the less familiar weaving components (assuming the content to be included as the more familiar component).[6] When understood as multi-faceted, the *NZC* key competencies have already proved sufficiently flexible and comprehensive in their potential to cover any re-mixing we might envisage when unpacking diverse types of capability. As the brief analysis in

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4   http://assessment.tki.org.nz/Assessment-in-the-classroom/Assessment-position-papers
5   http://technology.tki.org.nz/Technology-in-the-NZC
6   We do need to be careful about this assumption given the development of four types of knowledge in the 2030 model.

this section illustrates, the weaving process can be expected to work with the transversal competencies as well. Indeed the ease of alignment arguably provides a sort of validation of our current weaving trajectory.

Potential benefits of an aligned approach

The brief analysis just presented suggests that alignment between our current direction of curriculum thinking and the OECD's 2030 thinking can be readily established. We turn now to the second of our self-imposed tests. Is the suggestion that we continue to develop our capabilities thinking, with an eye to alignment with the OECD 2030 compass, in the best interests of our New Zealand students, as currently articulated in the *NZC* vision?

NZC signals that a future focus is important—it is one of the principles for curriculum design. We can also see this future-focused sensibility in the OECD's learning compass. The reference to the year 2030 looks out to the time when today's young children will be entering adulthood. The transversal competencies reference volatile uncertain times ahead for societies and for our planet. The overall emphasis reflects other recent research of how learning and schooling need to evolve in the face of these challenges. One example is the Learning Futures project in the UK.[7] Specifically this research suggested that students need to become future-builders not just future-copers. The emphasis on taking agency and becoming an active citizen reflects this intent.

Some recent key competencies research has anticipated the future-focused challenges outlined in the paragraph above (see paper 2 in this series). The book *Key Competencies for the Future*[8] argues for remixing the key competencies and knowledge from the learning areas in ways that more deliberately support students to be and become future-builders. It is important to note here that the examples included in each chapter illustrate ways in which innovative teachers and schools are *already doing* this sort of curriculum work. However, the examples used in *Key Competencies for the Future* are exceptional rather than commonplace. They are also somewhat retro-fitted to support the future-focused framing and its associated rethinking of high-level outcomes for learning. The teachers did not necessarily clearly envisage the complex weaving of key competencies and curriculum knowledge and skills that the researchers could see happening in practice. The 'value add' here could be that more explicit exemplification of weaving, based on the current work of exceptional teachers, could help lift the curriculum thinking of other teachers as well.

Recent uptake of a set of weaving cards designed by NZCER[9] has revealed a ready enthusiasm amongst teachers for rethinking the weaving of aspects of the key competencies and curriculum knowledge into rich learning experiences for students. For many teachers and school leaders the hands-on activity makes sense and quickly generates the insight that there is much more to key competencies than had been previously understood. In principle, new strategies for curriculum weaving seem to be energising. They stimulate teachers to look at *NZC* in new ways. This is only anecdotal evidence but it suggests that now could be a good time to spread and scale the weaving idea.

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[7]   http://lfuturesnews.co.uk/
[8]   www.nzcer.org.nz/nzcerpress/key-competencies-future
[9]   www.nzcer.org.nz/remixingthekeycompetencies

One caveat is that we need to be careful not to expect too much of young people. Some of the aspects of the learner compass are what we might expect of adults, not school students. Furthermore, as the critique in Box 1 implies, current power structures in schools and in society mean that it is futile to hope that students can begin to set the world to rights. The danger here is that the 2030 model could be seen to take an individualistic view of a citizen learner. In a recent workshop Bronwyn Wood further argued that this constitutes a thin version of citizenship education, that takes the inclusion of values as an opportunity to go "straight back to character education" as they have done in the UK. Bronwyn has researched students' ability to take social action in a recent TLRI project.[10] She noted how important it is that teachers actively support student agency. It could be argued that the OECD idea of co-agency has this concern covered, but the point about power structures suggests otherwise. System-wide changes, not just curriculum changes, will be needed to keep students' experiences of learning evolving along the lines suggested.

On the positive side, the workshop group noted a promising alignment between ideas such as agency/co-agency and practices that kura value and strongly believe in. For example, the emphasis on the collective rather than the individual was seen as a promising basis for ongoing conversations about New Zealand's bicultural journey.

In summary

The consensus view of a recent curriculum working group (see paper 5[11] in this series) was that *NZC* already has the potential to cope with the ideas embedded in the OECD model. We should continue on our current developmental trajectory because curriculum thinking at the cutting edge in New Zealand has already anticipated where the OECD 2030 compass seeks to go. This paper provides an analysis that supports this argument.

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10   www.tlri.org.nz/tlri-research/research-completed/school-sector/creating-active-citizens-interpreting-implementing

11   Hipkins, R., McDowall, S., Darr, C., & Bolstad, R. (2018). *Next steps for key competencies in New Zealand's curriculum.* Wellington: NZCER.