Towards an Education Workforce dedicated to Human Flourishing

What professional development do our leaders and teachers need?

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Introduction

The purpose of this paper is to offer a draft framework to support a systemic approach to the professional development of leaders and teachers in K-12 education if education is to reframe its purpose in light of the challenges humanity faces. The second phase of the High Performing Systems for Tomorrow (HPST2) programme proposes that becoming fit for the future entails creating systems focused on Educating for Human Flourishing (EHF). This is a transformational agenda. An alignment of forces, ranging from OECD itself to the UN and World Economic Forum now exists, united in a view of the new direction of travel. OECD pioneered work in this space with its Education and Skills 2030 project. The UN convened a summit on the *Transformation of Education* in 2022[1].

The foundation paper[2] to this EHF programme summarises the debate thus:

The challenges that confront 21st century societies are existential. Is the flourishing person someone who finds their highest potential in helping to resolve them? This goes beyond future readiness and even futures literacy. It is a capacity to support future transformation.

The transformation that is required is already underway. It is happening in pockets, projects and prototypes that are being developed in many parts of the world by visionary educators[3]. Transformation must necessarily be an evolutionary rather than a revolutionary process. Many steps are needed to progress this evolution, not least the *societal* reconsideration of education's purpose. However, without a simultaneous re-skilling of educational capacity – its leadership and extended workforce – the project is doomed to failure. This is a failure humanity cannot afford.

The professional development of educators is therefore of the utmost importance, as every high performing system has known. Much in current practice around teacher- and leadership learning remains relevant and valuable. It has many strengths. It is important that those strengths are not lost; but also that we acknowledge frankly some weaknesses. Therefore the focus here is on how existing professional development frameworks might be further redesigned or extended if the ambitious goal of supporting human flourishing is to be met.

The basis for the proposals set out in this paper rests on a number of foundations:

- The assumptions that underpin the work of HPST2, in particular the vision entailed in the idea of *Education for Human Flourishing* (EHF). This contains ideas both about the new competencies learners will need if human flourishing is to be achieved in the dark and challenging circumstances humanity currently faces. And it has implications too for the nature of systems (and therefore the leadership) that can promote such competencies

- A mapping exercise of a sample of the most forward-thinking professional frameworks currently in operation (attached as an appendix)

- Thought leadership in this space that points to the *implications for teacher and leadership learning*.

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[1] https://www.un.org/en/transforming-education-summit

[2] Stevenson M (2022)

[3] Hannon 2022; Schleicher 2018

Frameworks for professional development

Educators committed to developing education for human flourishing have not waited for policy makers to catch up. Globally we see initiatives in clusters, networks and sometimes individual entrepreneurial schools modelling the change, and becoming the change. Their work is inspirational, and the testimonies of their young graduates is building a growing evidence of the power of the new curricula, pedagogies and assessment methods under development. Whilst these approaches are becoming codified, it must be recognised that the evaluative challenge is considerable. Education for human flourishing entails 'head, heart and hand'; and this is much more complex to evidence than the (apparent) simplicity of measurement by standardised tests. Going hand-in-hand with the evolution of practice is the learning happening amongst the practitioners. This is reflective practice or praxis. Enough experience is now available to indicate the direction in which professional educators' learning and development (PD) needs to move to achieve the new goals.

The appendix to this paper sets out a brief exploration of some extant PD frameworks already in use around the world. Frequently, but not always, PD programmes are aligned to professional standards frames, which are in turn used for accreditation purposes.

The sample for this mapping has been selected from those which in the last decade represent serious efforts to look to the future whilst at the same time remaining firmly committed to the school improvement model. They attempt to capture a sense of what leaders and teachers should *be*; and what they should be able to *do*. In considering new implications for professional learning in the context of pursuing true human flourishing, we do not lose sight of the continuities with existing best practice, including for example:

- the emphasis on education leaders as leaders of learning, and as learners themselves;
- the notion that leadership must be inclusive, and distributed;
- a focus on personal qualities such as honesty, authenticity and humility;
- leadership needing to demonstrate moral integrity;
- underpinning social-emotional competencies, such as empathy.

It may be worth noting here the confusing use of terminologies in this field. The terms 'capabilities', 'aptitudes', 'competencies', 'skills' are often used interchangeably and inconsistently. In this paper the term 'competency' will be used as the key construct, since it has been rigorously explored and utilised in the predecessor OECD project *Education and Skills 2030*[4]. The term 'competency' denotes the combination of knowledge, skills, values and attitudes considered to be of value in a particular domain. It overcomes the unhelpful and false dichotomy between knowledge vs skills, recognising the relevance of both and their inherent connection. And it acknowledges the importance of including values and attitudes as an important part of the piece. In what follows therefore, the term 'competency' will be deployed as the key construct; but it is beyond the scope of this paper to develop in detail the constituent knowledge, skills, values and attitudes that would constitute the whole.

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[4] Description and Selection of Competencies, OECD 2005

Moreover, it is recognised that the wider educational workforce (including learning mentors, specially trained classroom support workers and a whole range of allied professionals) is an absolutely vital component of high performing systems. Whilst it is beyond the scope of this paper to explore the implications of the arguments presented here, the direction of travel following on from this focus on leadership and teachers will be apparent.

Professional learning for leaders: the challenge

As numerous publications have pointed out, the task of education leadership has never been more important or challenging[5]. Leaders must grapple with the legacy of health-related disruption; unacceptable and unsustainable growth in inequality across and within nations; mental health problems amongst learners and teachers; and leadership burnout. In many jurisdictions, the recruitment to the role of School Principal has become problematic, as teachers baulk at the magnitude of the task. This makes it all the more imperative that preparation for, and development within, the role becomes more authentic and constant.

Part of that is the acknowledgment that the job has changed. There has been a marked trend to see Principals as a key contributors to system leadership: whether that be directly in the form of federations of schools or multi-academy trusts (such as in the UK); or in broader consultative and engaged roles within district initiatives (such as in districts like British Columbia and Kentucky). This role is focused on contributing to the direction of travel of the system as a whole. This paper incorporates considerations of both institutional and system leadership (roles which are sometimes vested in the same individual).

In relation to systems, the work of the EHF project suggests that systems that are moving towards 'human flourishing' need now to embrace at their core some new features. These are:

- Equity

- AI enabled and aware

- Ecosystemic

The implications of these dynamics are explored below. However, since they are clearly not features typically to be found in current systems, we are looking at a considerable task of system change, not simply that of system maintenance. This consideration informs the emphasis placed below on systems thinking; and is informed by recent work on change in complex systems[6].

Similarly, at the school/institutional level, the leadership challenge is now one of a different order to that faced by previous generations of leaders. We now need institutions that actively contribute to the furtherance and development of key goals: rules-based democracies, based on the values of universal human rights and equity. But democracy is in need of renewal: perhaps it has always been so (though heretofore, schools have not seen this as part of their business). However now, in an AI world that threatens the fragility of democracy (and of course the apprehension of truth) schools as critical social institutions have a key role to play in the furtherance of this aspect of human flourishing. Partly this is to be done by creating the optimal conditions for a workforce to address the competencies young people need for human flourishing. But is also, to an extent, a community leadership role: one which conceives of schools as parts of a wider ecosystem.

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[5] As examples, see the suite of publications produced by the WISE All-In group: https://www.wise-qatar.org/education-disrupted-leadership-for-a-new-era

[6] Leadbeater and Winhall 2022 https://www.systeminnovation.org/green-paper ; Big Change: Three Drivers to Transform Education Systems 2023 https://www.big-change.org/publication/new-education-story

With these considerations in mind therefore, the following set of competencies is proposed as the basis for a renewed framework for educational leadership. Their choice reflects the current state of thought leadership in this space[7], but the framing ultimately must stand or fall by the degree to which they respond to the overarching imperative: a new reorientation towards a paradigm founded on the idea of flourishing, rather than old concepts of 'success'.

1. Re-boot educational purpose through narrative

The 'leader as story teller' has a long pedigree and an increasing body of scholarly analysis[8]. The argument of the EHF project is that education needs to set a new purpose and new goals. Whether they are conscious of it or not, education leaders participate in public narrative, either perpetuating or challenging and replacing taken-for-granted ideas about what education is for. The new paradigm implies the need to call out the old purpose of education, embedded in Human Capital Theory, and replace it with a narrative – crafted for context, culture, history – rounding out the ideas of human flourishing on a thriving planet.

In particular, reframing the human endeavour in the wider framework of our place in nature; constantly stressing our interdependence with the natural world and its fate, are new dimensions to how leaders need now to co-create narrative. Moreover, the new post-COVID (and long overdue) elevation of well-being as a critical element of education's purpose needs to be woven in more explicitly to the story of schools; it is a prerequisite to creating a culture of caring. This includes learners (and the workforce) feeling that they belong, and that they are safe. This is an aim in itself; not merely an instrument for better academic attainment.

Since leaders of education are fundamentally in the business of shaping the future, it is their duty to understand the contours and implications of the disruptive VUCA world. And then to participate in the crafting of a new narrative, envisioning new futures and possibilities – and education's role in getting us there. This means education leaders mobilising new voices in order to articulate the new narrative, in a way that builds first public and then political support. Narrative creation is learnable (multiple programmes exist). The complete suite of knowledge, skills, values and attitudes entailed needs to be worked out in situ.

2. Orchestrating learning ecosystems

The best leaders have always understood the critical role that is played by fostering strong collaborative relationships with the surrounding community, especially parents and carers. Often however the rhetoric has been stronger than the practice. But now, the traditional silos of schooling are no longer adequate to the challenge of providing the range, diversity and personalisation of learning opportunities that young people now need if we are all to thrive. Many more organisations and sectors need to be involved. One way to think about this is to reconceive of 'education systems' (usually top-down hierarchical arrangements of management) as *learning ecosystems*.

The EHF (2023) paper makes the case for supposing that local learning ecosystems might facilitate education for human flourishing, including the research into emergent practice. As the International Summit on the Teaching Profession (ISTP) put it: The question should not be: 'What can schools do to serve all learners?' *It should be: 'What can schools do to orchestrate various other government entities and*

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[7] WISE 2023 ibid; Hannon V and Mackay A *The Future of Educational Leadership: 5 signposts* CSE 2020

[8] E.g. Ganz,M What is public narrative? Harvard 2009

community partners, and to leverage broader investments in social infrastructure, in order to give all learners the full range of supports they need?[9]

If schools and systems are to move in this direction, it requires a fresh set of competencies for success, that can lead to efficient, effective and sustainable ecosystems. Amongst these are: leading through influence not status; unlocking the learning assets of communities, and extensive engagement with stakeholders beyond the education sector. Considerable work is underway on what this looks like in practice.[10] In the new conditions we face, schools cannot do everything: they need to incorporate themselves in nets of learning opportunities, not least digital ones. With the limitless wealth of such opportunities available to young people online (albeit mostly in the cognitive domain) – likely to be increasingly personalised – leaders need to consider how these can be incorporated into the overall mix. Again: this is a learnable competency. It involves new knowledge and skills, but perhaps more importantly different attitudes and values.

3. Championing equity

One problem with incorporating an 'equity' competency in this suite focused on human flourishing is that it is perhaps over-familiar. Nominally at any rate, equity has featured in education's goals (and therefore leadership frames) for three decades. However, in the context of a wide vision of human flourishing, previous conceptions now appear to be inadequate. Whilst we yearn for a peaceful planet, the dehumanising of groups in a culture of dominance is what has led, and continues to lead, to the perpetuation of conflict and the   precariousness of peace.

As argued in the EHF paper, a proper understanding of the idea of human flourishing means that the objective is not to help everyone achieve the same thing, expressed as a single set of minimum education requirements. It is more about helping everyone find their purpose through learning, combining aspirations and distinctively human competencies in order to contribute to shaping a thriving future.

It is essential to grasp how fundamental equity is in terms of achieving a flourishing future on a peaceful planet. Moreover, research and scholarship is indicating that reducing inequality is also key to delivering future prosperity. Boushey (2019) demonstrates how rising inequality is a drain on talent, ideas, and innovation.

That is why it is necessary now to think in terms of equity, diversity and inclusion (EDI) – three distinctive dimensions of this vision. This is not just about equity in outcomes, access or inputs. This is fundamentally about what is valued and how: whose history? Which values? Which cultural norms? It is about celebrating diversity and practising inclusivity – embracing the differences not just of race, gender, LGBTQ; but also of neurodiversity. The competency in this space therefore is understanding and implementing EDI. Again, there has been an explosion in this area in the last few years, not least that which addresses the issue of indigeneity – now completely reconsidered in terms of educational goals. Again, the values and attitudes may be foundational; but a core of emergent knowledge and skills is growing – for example, how to conduct an environmental analysis, as a means of understanding local inequalities and perspectives.

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[9] *Moving Forward After the Pandemic* ISTP 2022

https://drive.google.com/file/d/1YvYOcvNC-zHwKj7iMZesUXRRciL1jZXN/view

[10] Luksha P (2020) Learning Ecosystems: *An Emerging Praxis for the Future of Education,*

4. Systems thinking: managing dynamic complexity

Clearly, the complex disrupted environment in which we are now working requires leadership that is capable of thinking in systemic terms, as opposed to linear mechanical ways. It is too much – and unnecessary to expect – leaders to become sophisticated system analysts deploying some of the mapping tools now available in the public sphere.[11] However it is important – especially in the context of moving towards ecosystemic working – that an understanding of how complex issues relate to each other is fostered; and leaders become acquainted with some of the concepts that should be in mind when trying to make sense of confusing, challenging situations. The key concepts here are purpose, power, relationships, resources; and of course their interrelationship.[12] This is a classic case where the knowledge dimension of this competency (analytical) is supplemented by the human dimensions – attitudes and values of personal understanding and empathy. Our institutions now more than ever need to be agile and flexible (COVID provided the perfect instance of this) - at a time of uncertainty, ambiguity, and risk.

System thinking can help leaders avoid becoming overwhelmed by complexity, and work towards actionable strategies that take into account the range of factors in play. Whilst leaders in public service are increasingly acquiring this competency through their professional learning, school leaders are not. There are now PD prototypes in development.[13]

5. Leading and managing innovation

The PD frameworks mapped in the appendix make clear the importance of being able to use evidence and research, always with a focus on students' learning. Moreover, a number of PD frameworks stress the need to foster a culture of learning. However, as schools pivot towards the future, this is insufficient. What is needed now is innovation; but innovation which is disciplined, purposeful and carefully evaluated (with the right metrics). Leading and managing this process is all about the competency to *"inspire productive action in yourself and others during times of creation, invention, uncertainty, ambiguity, and risk."*[14] This entails understanding methods of innovation and how they sit alongside the use of research; involving users –especially learners – in the effort. A range of well-evidenced and developed methodologies now exists and is readily available to be deployed in the endeavour. These methodologies may not be standard in leadership development programs; but their use is growing, new approaches are emerging and expertise

becoming more widespread. They include methods like Human Centred Design (Harvard) and Spirals of Inquiry (British Columbia)[15]

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[11] For example the Mapping tool produced by the International Public Policy Observatory

https://theippo.co.uk/mapping-systems-for-policy-impact-introducing-ippos-seppa-method

[12] Leadbeater and Winhall *Building Better Systems* https://www.systeminnovation.org/green-paper

[13] For example, Leadbeater's work with the Association of Independent Schools in South Australia (AISSA) on systems thinking in the *Learning Impact Project*

[14] Cone 2019

[15] Harvard Design Thinking in Education

tll.gse.harvard.edu/designthinking#:~:text=Design%20Thinking%20is%20a%20mindset,refining%20 ideas%2C%20and%20testing%20solutions ; Spirals of Enquiry   See Halbert and Kaser, 2013; and see also www.noiie.ca

Such methodologies offer the leader who aspires to engage in a transformational shift approaches which are similar, in that they –

- place purpose and focus upfront, with the requirement really to debate what the goals are;

- acknowledge the complexity of educational goals and problems, not falling back on managerial linear planning techniques;

- rely upon convened teams of empowered educators to explore, inquire, learn and implement together in a structured, disciplined way;

- utilise prototyping as a technique

- emphasise the importance of involving and engaging the most important actors – the learners, their families and their communities.

This last point is important. EHF depends upon our creating environments where learners are excited about learning, motivated, included and cared for. So the quality of the learner experience must be attended to with a sensitivity which has been markedly lacking in schools' histories[16]. Leaders who become competent in these approaches are able to engage in future-focused innovation with real professional responsibility. Again, this is a learnable competency, with well-established methods now available.

Developing Agency in others and in self

In the wide consultation processes which accompanied the evolution of OECD's Education and Skills 2030 project, time and again the issue of agency arose – in two ways. First, it became readily apparent that the concept of agency is absolutely fundamental if we are serious about creating self-regulating, purposeful learners with the competencies needed to shape the future. If learners' experience of schooling is one of passive compliance, how can they possibly be expected to cope with – let alone shape – a flourishing future? The EHF foundation paper situates agency as individual, collaborative and collective. And though the primary suggestion is that people make a greater difference in the world when they work with others, there is also an implication that educators should equip not only individuals with the competencies they need but groups, communities and societies too: in other words, that educators should build collective competency.

However, secondly, educators draw attention to the fact that if they themselves do not experience or enact agency, how can they teach their students to do so? How can it be modelled if the circumstances do not permit it? Therefore, in addition to building their own sense of agency (purpose, identity and action) education leaders need to find ways to enable the learning community – workforce and students – to do so too. But the personal, interior sense of agency by a leader must not be neglected. The internal dimension relates to the transformation of self, the authorising of self.

Past notions in this space were concerned with distributed leadership. An extension of this is the exploration of intergenerational leadership. One important outcome of the UN Summit on Education Transformation in 2022, was a stream of work examining the possibilities of this, and resulting in the guide[17] *Uniting generations and sharing power to transform education*. At both state and institutional level, leaders are developing methods fully to involve learners in the development of strategy and direction.[18]

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[16] Hannon and Temperly 2022

[17] https://neweducationstory.big-change.org/uniting-generations-and-sharing-power-to-transform-education

[18] See for example the work of South Australia in intergenerational leadership
 https://discover.education.sa.gov.au/our-strategy/

One way to approach the question of how this competency might be developed is to consider the personal/professional mindsets involved (value and attitudes) and the skills and knowledge that are needed[19] Some are highly consistent with previous best practice in existing frameworks (collaboration, systems thinking, strategic working, identifying and releasing talent). Others reflect the reorientation proposed in the new paradigm for young learners: curiosity; networking; prioritisation of own mental health and that of others; empathy and social awareness; value driven.

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[19] WISE 2022

What does this mean for a learning workforce?

The competencies proposed above are intended to develop systems and institutions directed towards the goal of human flourishing; but of course ultimately this can only be achieved through the direct relationship between teachers and learners, in the classroom and beyond. There needs to be a direct relationship between those competencies and related set for teachers - how we see the role of teachers evolving.

What is it that we need our learning workforce to do? What is the job? What are the outcomes that are sought for young people? Certainly ensuring the mastery of the conventional literacies; certainly competency in key domains of subject knowledge. But scholarship[20], practice, and to some degree, jurisdictional policies have tilted towards a more holistic view, incorporating

- The '4 Cs' critical thinking, collaboration, creativity, communication
- Character
- Social and emotional competence, including meta-cognition and well-being

The forerunner to the EHF project (*High Performing Systems for Tomorrow*) embraced these dimensions, but also argued for a further expansion, if we are to pursue the ambition of flourishing humanity. The suggested additional competencies for learners were: adaptive problem-solving, ethical decision-making and aesthetic perception.

These considerations point to the need for yet further, more ambitious aims for developing the teacher workforce. Lest it be thought such proposals are fanciful or unachievable, it should be noted that *every one of the competencies proposed for inclusion in what follows is being modelled in practice right now somewhere in the world*. This paper does not deal explicitly with the interstitial role of teacher leadership – seen not as a stepping stone to principalship (though it might be) but as valid in itself. Teacher leadership is the process in which educators exert influence through relationships and interactions beyond their scope in the classroom. At its best and most powerful it is uniquely rooted in student voice. This is a growing feature in schools, and deserves more attention than space here permits. Focus on it would likely entail a blend of the leadership and teacher competencies here, rather than a distinctive new domain.

1. Facilitating deep learning

The thrust of the work of the EHF project is that teaching and learning needs to change in a fundamental way to support thriving at all levels: in people, places and on the planet. Such an agenda requires, as the EHF foundational papers show, learning that is adequate to the profound challenges and opportunities we face. What we need from a modern education workforce therefore is the capacity to organise experiences, relationships and content in order to foster our expanded ambitions for young people. It embraces pedagogy in particular, but with obvious implications for curriculum (see below). This has been called

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[20] See the Center for Curriculum Redesign https://curriculumredesign.org/ccr-releases-4d-framework-1-0-for-skills-character-and-meta-learning

'deeper learning'[21], or '4-Dimensional Education[22]'. There are other models driving in the same direction[23] Considerable effort has gone on, worldwide, to develop adequate pedagogical approaches; it is not the intention of this work to attempt a synthesis or taxonomy of them; and certainly not to prescribe a particular approach.

Teachers rarely engage (as once they did) with theories of constructivism, behaviourism, or liberationism. Systems differ in the degree to which they have discouraged broadcast-style instruction, seeking more interactive methods. What seems important now in considering the professional development that teachers need is to establish that the key competency is that of skilled selection of the appropriate pedagogical approach, focused on facilitating deep learning. The repertoire that is available is extensive, and does not need reinventing by individual teachers or groups – though it can undoubtedly be adapted according to context. The repertoire includes, inter alia:

- Direct instruction

- Problem-based learning

- Cross-disciplinary teaching

- Service learning

- Passion based learning

- Socratic dialogue

- Project-based learning

Whichever approach is in play, it is fundamentally about authentic, challenging learning tasks, preferably ones that are relevant to and engaging for the learner: and these tasks need to go beyond individual, intellectually focused effort. As the range of approaches becomes better codified, and evidence mounts about the circumstances in which they are effective, we will be in a better position to support teachers to become competent in the business of pedagogy selection. This requires:

- Knowledge (of pedagogical repertoire for deeper learning)

- Skills (resource building)

- Values and attitudes (open-mindedness, imagination, professional inclusivity)

2. Curriculum co-design

The nature of the curriculum itself naturally lies at the heart of this discussion. If the role of teachers continues to be conceived as that of 'delivering' the curriculum, as though it were a parcel, little progress will be made in pursuing education for human flourishing. Nor however can it be envisaged that the curriculum is an empty space to be filled at teachers' behest. EHF takes the view developed in the course of OECD's *Education and Skills 2030* project[24] that curriculum is a powerful lever which, amongst other

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[21] https://deep-learning.global/ ; OECD 2016

[22] https://curriculumredesign.org/our-work/four-dimensional-21st-century-education-learning-competencies-future-2030/

[23] See, as examples, Big Picture Learning https://www.bigpicture.org/approach ; Education Reimagined: https://education-reimagined.org/wp-content/uploads/2021/01/A-Transformational-Vision-for-Education-in-the-US.pdf

[24] See in particular the project's paper on curriculum redesign https://www.oecd.org/education/2030-project/contact/brochure-thematic-reports-on-curriculum-redesign.pdf

things, can ensure a degree of consistency across institutions that contributes to greater equity; but, at the same time, it must be recognised that too much prescription can limit the creativity and agency of students and teachers if there is not sufficient space for them to explore their own interests and sense of purpose. The *2030* project explored extensively the phenomenon of curriculum overload, arguing that in many instances the scales had tipped too far towards prescription. In a world where knowledge is expanding exponentially, this is an untenable approach.[25]

Each jurisdiction will reach its own settlement on this question. The perspective adopted here is to propose that wherever the balance is struck between state-prescribed curriculum and teacher (or school) autonomy, the essential new competency for teachers is that of *curriculum co-design*.

In the case of state-mandated curriculum, this competency relates to working with state-level experts to co-design the nature of the prescribed content. There are many instances of this in practice – for example the 2030 project took as one case study British Columbia, where the 2017 curriculum redesign process was predicated on a co-design process with serving classroom teachers[26]. This was felt to be key, not only in the quality, rigour and practicality of the work that emerged but also in the process of engaging the workforce as a whole to enact the vision and make it real.

In the space where teachers have autonomy over the curriculum then the competency relates to the co-design process with other stakeholders (learners, other staff, community). In particular, co-designing aspects of the curriculum with learners is an emerging competence: one which many teachers aspire to, but which they recognise can be complex. They need support to acquire the competence.

The purpose of this emphasis on co-design is (a) to ensure that teacher expertise and insight is fully incorporated in the process of state level curriculum redesign; and (b) to emphasise that within a school, agency and co-agency are particularly enhanced when the curriculum is the subject of intentional collaborative work. However, teachers will not be equipped to engage in these co-design processes if they do not acquire the competency.

The knowledge dimension of this competency might start with the principles of curriculum design, which OECD suggests are[27]:
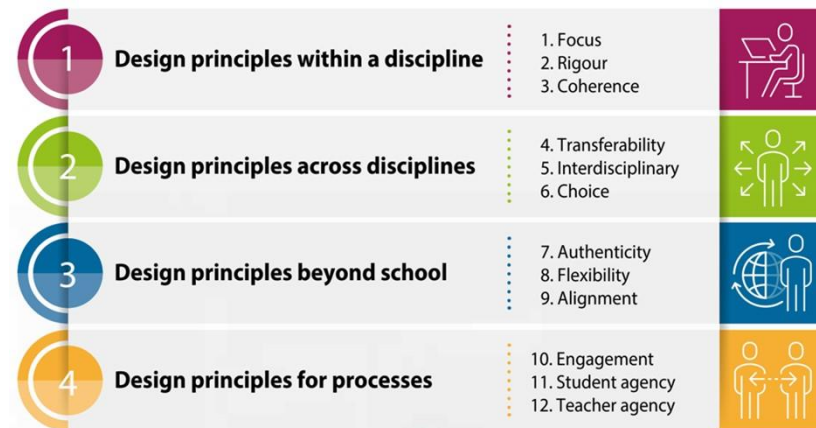
Schools that have empowered their teachers to engage in curriculum co-design observe that there is sometimes some unlearning to do in terms of values and attitudes: for example, the possibility of non-linear progression (recognising that each student has her/his own learning path and is equipped with different

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[25] Saarivirta and Kumpulainen, 2016

[26] https://curriculum.gov.bc.ca/rethinking-curriculum

[27] https://www.oecd.org/education/2030-project/contact/brochure-thematic-reports-on-curriculum-redesign.pdf

prior knowledge, skills and attitudes when s/he starts school); together with the recognition that a curriculum is a living and evolving tool, not a fixed 'thing'.

3. Assessment choreography

Across the world there is increasing recognition that conventional methods of assessing learning are not working. One problem is the plethora of functions that assessment is expected to fulfil: from promoting more effective learning in individuals, through judging their performance; through to judging institutions' performance; right through to judging the performance of systems. The result is that the purpose which is at the very heart of all this – promoting powerful learning – is not achieved; least of all in the service of human flourishing. In his critique of the current state of assessment Lucas[28] points out that not only does high-stakes testing, reliant on standardised tests, have a damaging impact on health and well-being of students, but it is not evidencing the kinds of dispositions and capabilities that society wants (as reported by employers, colleges and universities). Lucas quotes the illuminating analogy suggested by WT Randolph, the Commissioner of Education of Colorado[29]

To solely use standardised achievement tests is like casting a net into the sea – a

net that is intentionally designed to let the most interesting fish get away. Then, to

describe the ones that are caught strictly in terms of their weight and length is to

radically reduce what we know about them. To further conclude that all the contents

of the sea consist of fish like those in the net compounds the error further. We need

more kinds of fish. We need to know more about those we catch. We need new nets.

The 'new nets' have been in development and use in a multitude of settings internationally. They include, amongst others[30]:

- Learner profiles (such as those in use in the Mastery Transcript Consortium, the International Baccalaureate [IB], XP School [UK]; Big Picture Learning)
- Psychometric tests (such as Carol Dweck's Growth Mindset Assessment, Harvard's Human Flourishing App)
- Extended Investigations (such as the EPQ in the UK, and the Extended Essay of the IB)
- Micro-credentialing (such as those developed by Digital Promise)

It must be apparent that there is much more to do, both in research and development terms[31] and above all in policy terms to move in this direction to support the goal of human flourishing; and this work is prerequisite to expecting a new competency on the part of teachers who for the most part are not

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[28] Lucas 2021

[29] pz.harvard.edu/sites/default/files/AssessmentReimagined_Booklet_0.pdf

[30] For a full discussion of new methods see Lucas 2021 and Miligan 2020

[31] Fortunately this is an expanding area: see the New Metrics Project (University of Melbourne)

https://education.unimelb.edu.au/melbourne-assessment/home/partnerships ; Rethinking Assessment (UK) https://rethinkingassessment.com/ ; Project Zero (Harvard) https://pz.harvard.edu/sites/default/files/AssessmentReimagined_Booklet_0.pdf ; The Brookings Institution brookings.edu/blog/education-plus-development/2017/08/31/new-data-on-the-breadth-of-skills-movement-over-150-countries-included

granted the learning and development opportunities to utilise the full range of methods becoming available. Nevertheless: how might we describe the teacher competency that we would be looking for?

Professor Sandra Miligan, Director of the Assessment Research Centre at the University of Melbourne New Metrics for Success project[32] suggests that a teacher who is competent in assessment will have

- developed a repertoire that enables them to design, with colleagues and learners, a process of gathering evidence from a variety of contexts so that a learner can show what they are truly capable of in any domain of learning,

- knowledge of how to make considered judgements (on the basis of the above) about the learner's position on a scale of competence in that domain, from less expert to more expert, interpreting what the learner knows and can do and what they need to learn next, with a sufficient degree of confidence, to support learners in their learning and to provide the recognition of attainment that people can trust.

As High Resolves[33] has argued, we need to focus on better understanding the best combinations of multimodal assessments to select, depending on context and desired outcomes. In any case, a variety of modalities will be increasingly imperative as AI tools make the inadequacy of conventional methods even more apparent. The acquisition of assessment repertoire is critical. In the pursuit of human flourishing, perhaps the modality of learner profiles is most salient, since these enable students to better manage their own learning, monitor their own progress and recognise the learning skills they already have or need to attain.

So perhaps the metaphor to capture this competency is *assessment choreography*. It is important that the ask of teachers is both fully supported by the policy as well as the research environment, so that we are not expecting the impossible from teachers. Thus, skills in things like statistics, normal curves, measurement theory, data analytics, item analysis, data banks, data analytics, or standardisation do not feature in the knowledge dimension of this competence. But ideally, teachers should also be able to identify the various ways that incompetent or faulty assessment can crush the will and confidence to learn, narrow the conception of learning, and hence reduce standards of attainment. The 'attitudes' dimension of this competence is important: shifting from the view of assessment which is solely about judgement, towards a wider understanding that encompasses assessment for- and as- learning.[34]

4. Digital literacy

It has been anticipated for a decade, but perhaps generative Artificial Intelligence (AI) made its breakthrough impact in education with the launch of Chat GPT in 2022. Without doubt, this is but the harbinger of many other products with an accelerating range of applications and user friendliness. Whilst many young people immediately played with the potential of the tool, the response of education systems has been predictably slow and hesitant. That is understandable, since the implications are immense and the stakes are high. The work of the EHF project is predicated on the understanding that AI carries enormous consequences for the future of humanity; and therefore it is imperative that education crafts a response which is measured and wise.

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[32] Email communication with the author October 2023

[33] High Resolves 2020

[34] See Lorna Earl (2012)

The Beijing Declaration of 2019[35] recorded an international consensus that AI needed to be integrated into education. 2023 saw the first international guidance on the question[36]. November 2023 also saw the first international summit on Safety and AI[37] convened by the UK government. The issue has forced itself onto the agenda in education as never before, and responses are still emergent and unclear. What is certain is that AI holds the capacity either to advance the aim of human flourishing as never before or entirely to destroy it. It has been argued[38] that Digitally Enabled Learning Ecosystems (DELEs) – where every child, irrespective of geography and socio economic status, has access to adaptive learning and AI that safely and securely adds value to the learning experience – have the potential utterly to transform education in pursuit of human thriving.

What then might we reasonably expect of teachers in this fast-moving but highly consequential domain? What is clearly unacceptable is for the education workforce to lag behind the world their learners are entering. Plainly, education content is almost literally infinite and widely available. New tools are coming online daily. Since the perspective of the EHF project has been to advocate for the development of learning ecosystems, the part to be played by AI and technology in general must also be key. There are many dimensions to the creation of such ecosystems – including strategy, connectivity, platforms etc[39]. Here we focus on what is entailed for teacher's competency and therefore their professional development. According to 2023 survey data on the governmental use of AI for education, only some seven countries (China, Finland, Georgia, Qatar, Spain, Thailand and Türkiye) reported that they had developed or were developing frameworks or training programmes on AI for teachers. Only the Ministry of Education of Singapore reported building an online repository centred on the use of ChatGPT in teaching and learning.[40] According to TALIS (the Teachers and Learning International Survey), teachers identify developing technology skills for teaching as their second-most important professional learning need, but 44 percent of teachers in OECD countries do not receive any technology-related professional learning. And systems spend substantial money on new technologies without investing in helping teachers to use it more effectively[41]

It is clear from UNESCO's reviews that as yet, little work has been done to reassess the competencies needed by teachers to understand and use AI for teaching, learning and for their own professional learning; nor yet the advocacy work to ensure that these are integrated into professional development frameworks. In lieu of this detailed work, we advance here simply the notions that the required competency entails:

- Knowledge and skills to navigate widely available generative AI tools; to use appropriate such tools for their own professional development; but also to employ and critique tools for the use of students themselves; understanding of ethical considerations how to personalise by utilising earning analytics software to determine how students are learning, what content and ideas excite them, and when and where they are disengaging.

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[35] https://unesdoc.unesco.org/ark:/48223/pf0000368303

[36] UNESCO 2023

[37] https://www.gov.uk/government/topical-events/ai-safety-summit-2023

[38] Barrett and Harte 2023

[39] Barrett et al ibid

[40] UNESCO 2023

[41] Schleicher 2022

- Value and attitudes that, whilst deploying AI tools wisely to optimise opportunities, yet remain vigilant about their shortcomings and risks (tech professionals refer to the tendency of AI to 'hallucinate'[42]); open and curious attitudes to AI that facilitate appreciative utilisation.

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[42] https://www.techtarget.com/whatis/definition/AI-hallucination

Conclusions and recommendations

In summary, this report proposes that, in pursuit of education for human flourishing, the professional development of both leaders and the education workforce needs to be reconsidered. The suggestion is that frameworks for this development need to include a set of new competencies. These are:

Leadership competencies:

1. Re-booting educational purpose through narrative

2. Orchestrating learning ecosystems

3. Championing equity

4. Systems thinking: managing dynamic complexity

5. Leading and managing innovation

6. Developing Agency in others and in self

Teacher competencies

1. Facilitating deep learning

2. Curriculum co-design

3. Assessment choreography

4. Digital literacy

These suggestions are made in the full awareness of the crisis facing education in terms of recruitment. UNESCO's estimates indicate the need globally for an additional 24.4 million teachers in primary education and some 44.4 million teachers for secondary education, in order to achieve universal basic education by 2030.[43] Latest convenings of the ISTP have made commitments to reorganizing teachers' time and working conditions to support teachers in their shifting role; and to rethinking preservice and in-service professional learning[44]. Central to this a is a vison of a much more collaborative profession. As the ISTP gatherings have made clear, we face a choice: taking the education workforce in the High Competency-High Wage direction (the hallmark of a number of high performing systems); or accepting a lower level of professionalism, less job satisfaction and the current spiral of decline.

The suggestions are consistent with other work on the future of teaching and 'the new professionalism'[45], but place particular focus on the implications of a serious focus on education for human flourishing as our paramount goal.

No part of the framework proposed above is merely theoretical or hypothetical. Every dimension has real-life correlates in the real world, in action now. Perhaps jurisdictions might ask the questions: how might

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[43] unesco.org/en/articles/world-teachers-day-unesco-sounds-alarm-global-teacher-shortage-crisis

[44] NCEE ISTP 2022

[45] https://www.oecd.org/education/ceri/new-professionalism-future-of-teaching.htm

these competency sets fit our context with and resonate in our circumstances? What depth work needs to be done in terms of further research and developments to pursue this direction of travel?

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Appendix: A light-touch mapping of extant professional development programmes

This mapping exercise informs the paper 'Towards an Education Workforce dedicated to Human Flourishing'.

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Introduction

The methodology employed in this mapping exercise involved a review of official documents, educational resources related to teacher and leadership development frameworks and interviews. Multiple sources, including reports from educational organisations, government publications, academic research papers, and online repositories, were analysed to identify and collate relevant frameworks. The paper adopts a forward-looking perspective, considering frameworks that not only address current needs but also point the way to the future. In selecting the frameworks to explore, criteria were adopted that aligned with the overarching goals of promoting human flourishing and fostering innovation in education. This entails, for example, a deliberate focus on frameworks that incorporate well-being as a pivotal aspect of teacher and leadership development. The chosen frameworks are not only contemporary but also future focused.

This report maps out some existing frameworks for teachers and leadership development in education according to these criteria. In the next section, these frameworks are explored, highlighting their key features.

Professional teacher development frameworks

Professional teacher development frameworks often share common elements and principles, although they may be adapted to specific contexts and needs. Common features found in the frameworks which met our criteria, have been drawn from the following programmes:

- Ensena Peru,
- Learning Forward USA
- the International Baccalaureate (IB) Organisation
- the National Professional Qualification (NPQ), United Kingdom
- the Australian Institute for Teaching and School Leadership (AITSL), Australia
- New Zealand Professional Learning and Development (PDL),
- Education Estonia,
- Transformative Educational Leadership, British Columbia, Canada
- Teach for All; International
- Singapore's teacher development frameworks

Focus on Student Learning

The focus on student learning has long been the cornerstone of Teacher Development frameworks, as it underscores their fundamental purpose. Recent publications continue to emphasise the crucial connection between effective teacher development and improved student learning. The OECD's recent "Education at a Glance" report focuses on the importance of investing in teacher quality, highlighting how it positively affects student performance and overall educational fairness (OECD, 2021[1]). Furthermore, a study by Ingersoll and Strong (2019[2])shows that well-designed teacher development programmes have a positive impact on student achievement and engagement, underlining the vital role teachers play in creating meaningful learning experiences. These recent findings reinforce the idea that effective teacher development not only empowers teachers but also creates a better learning environment, benefiting students in their educational journey.

An example is the Australian Institute for Teaching and School Leadership (AITSL), which places a strong emphasis on student learning through its initiatives (2023[3]). AITSL's primary mission is to promote excellence in teaching in Australian schools, with a primary goal of improving student outcomes and the overall quality of education. AITSL links its resources and supporting professional learning for educators to a set of professional standards.

Goal-Oriented

Many teacher development frameworks are mission-oriented, aligning their teacher development initiatives with a clear purpose. These mission-driven approaches reflect a strategic alignment between teacher development and the overarching objectives of educational organisations, as recognised in reports by the OECD, which highlight the need for teacher development programmes to align with educational goals and student success (OECD, 2021[1]; Ingersoll and Strong, 2019[2]). They underscore the importance of preparing educators to fulfill these missions, ensuring a direct and positive impact on student learning experiences and outcomes.

For example, the International Baccalaureate Organisation (IBO) places a strong emphasis on developing teachers to effectively deliver its curriculum, which is dedicated to fostering inquiring, knowledgeable, and caring young individuals (2023[4]) .Similarly, in the United Kingdom, the National Professional Qualification for Leading Teacher Development (NPQs) are tailored to enhance teaching skills with a specific aim of improving student achievement (2020[5]).

Continuous Learning

Teacher development frameworks reviewed champion a culture of perpetual improvement and lifelong learning within the teaching profession. They underscore that professional development is not a one-off event but rather a continuous journey of growth and enhancement. They align with the broader recognition, as evidenced in OECD reports, that professional development should be an ongoing and integral aspect of educators' careers, facilitating their growth and ultimately benefiting student learning outcomes (OECD, 2021[1])

For instance, the IBO encourages educators to actively engage in continuous professional development, equipping themselves with the latest best practices to better serve students (2023[4]). Similarly, Learning Forward, as highlighted in their framework, places a strong emphasis on continuous, job-embedded professional learning for teachers (2023[6]). Moreover, Singapore's educational framework is committed to the concept of lifelong learning for educators, promoting the idea that teachers should continuously acquire new knowledge and skills (2023[7]).

Collaboration and Communities of Practice

Within the teacher development frameworks under examination, the promotion of collaboration and the establishment of Professional Learning Communities (PLCs) emerges as a central component. These frameworks prioritise the idea that educators can achieve more when they work together, sharing their best practices and learning from one another to enhance instructional quality. This shared commitment to collaboration underscores the recognition that the collective wisdom and expertise of educators can drive meaningful improvements in teaching and learning, aligning with the OECD's stance on collaborative practices within education (OECD, 2021[1]).

For instance, Ensena Peru, an educational organisation committed to improving education, actively encourages collaboration among its Teaching Fellows, emphasising the importance of engagement not only within their peer group but also with the broader community (Ensena Peru, 2023[8]).This approach creates a rich learning environment, where educators work together, learn from one another, engage with students and the community, and continuously strive to improve their teaching practices. Similarly,

Learning Forward emphasises the creation of PLCs as a means to foster collaboration among educators (Learning Forward, 2023[6]).

In Singapore, teachers are encouraged to join PLCs. In these groups, they work with other teachers to look at student data, share their best teaching methods, and keep improving their teaching (Ministry of Education Singapore, 2023[7]). Education Estonia helps teachers collaborate by making it easier for them to meet and work together (Education Estonia, 2023[9]). This way, teachers can share what works best in teaching, exchange ideas, and learn from each other.

Reflective Practice

A prevalent theme that emerges when examining various teacher development frameworks is the importance of fostering a culture of self-reflection and self-assessment among educators. This practice serves as a valuable tool for teachers to identify areas for personal and professional growth while setting meaningful professional development goals (OECD, 2021[1]). The following examples underscore the broader recognition across frameworks of the value of self-reflection and self-assessment as indispensable tools for educators in their ongoing journey of professional development.

For instance, the IBO actively encourages teachers to engage in reflective practice as a means to refine their teaching methods and enhance their effectiveness (2023[4]).

In the United Kingdom, the NPQs underscore the significance of reflective practice, making it a pivotal component of their programmes where teachers are encouraged to introspectively evaluate their teaching practices (Department For Education, 2020[5]).

The Professional Learning and Development programme in New Zealand emphasises self-assessment, reflection, and evaluation of teaching practices (2023[10]). Teachers are encouraged to assess their own performance, identify areas for improvement, and adjust their teaching methods accordingly.

Personalised Learning

Many teacher development frameworks acknowledge the rich range of experiences and needs that teachers bring to the profession. They appreciate that a one-size-fits-all approach to professional development is insufficient. Rather, these frameworks are designed to offer tailored opportunities that cater to the unique requirements of educators, whether as individuals or within specific groups. These examples below exemplify tailored approaches within frameworks, ensuring that educators receive the support and resources they require to thrive in their professional journey, as recognised in the OECD's "Education at a Glance" report (2021[1]).

For instance, the NPQ in the United Kingdom stands out by providing diverse pathways and qualification levels, ensuring that educators can access professional development aligned with their distinct needs and career stages (Department For Education, 2020[5]).Similarly, Singapore's educational framework places a strong emphasis on differentiated professional development, reflecting a commitment to addressing the specific needs of educators (2023[7]). Learning Forward champions the creation of personalised professional learning plans that directly target the unique needs and interests of teachers (2023[6]).

Data-Informed Decision-Making

Contemporary teacher development frameworks underscore the critical role of data in shaping instructional decisions. Within these frameworks, data is seen as a powerful tool to gauge and enhance teaching strategies. They align with broader educational principles highlighted by the OECD, which recognises the significance of data-driven decision-making in education, particularly in assessing student performance and adapting teaching approaches accordingly. (2021[1])

Learning Forward emphasises the utilisation of data to evaluate the effectiveness of professional learning endeavours and make necessary adjustments (2023[6]). Similarly, in Singapore's educational framework, data assumes a central role in informing instructional decisions and driving ongoing improvements in teaching practices (2023[7]).

Teacher Leadership

Teacher leadership appears in numerous teacher development frameworks, acknowledging the significant impact teachers can have beyond the classroom. These frameworks align with the recognition by the OECD that teacher leadership can be a powerful force for innovation and progress within education systems, ultimately benefiting students and the broader community (2019[11]).

Ensena Peru actively cultivates teacher leaders who not only excel in their classrooms but also play crucial roles in educational advocacy and leadership, contributing to broader systemic change (2023[8]). Similarly, Learning Forward underscores the pivotal role of teacher leadership in driving professional development and fostering a culture of continuous improvement (2023[6]).

The National Professional Qualification (NPQ) for Leading Teacher Development programmes focuses on preparing educators to lead and guide the professional growth of their peers (Department For Education, 2020[5]).

The Singapore Teacher Leadership Programme aims to develop teacher leaders within the education system by giving educators opportunities to take on leadership roles within their schools and institutions (2023[7]). This allows teachers in the programme to build essential leadership skills that benefit their own growth and contribute to improving the education system as a whole.

In the Teach For All network, member organisations offer leadership development programmes that go beyond traditional teacher training (2023[12]). These programmes aim to identify, nurture, and empower teachers who show leadership potential. Participants receive training in leadership skills, advocacy, and community engagement, preparing them to be agents of change in their schools and communities.

The New Zealand Professional Learning and Development system also includes leadership development opportunities for educators who aspire to leadership roles within the education sector (2023[10]). This helps in the cultivation of teacher leaders who can positively influence their colleagues and schools.

Research and Innovation

Research and innovation are components in some teacher professional development frameworks, driving continuous improvement. Embracing research and innovation in teacher development is promoted by the OECD in its reports (2019[11]; 2021[1]).

Singapore, for instance, fosters a culture of educational research and innovation through institutions like the Academy of Singapore Teachers (AST) and the Centre for Research in Pedagogy and Practice (CRPP) (2023[7]). These organisations actively facilitate research endeavours and the development of innovative teaching methods, aligning with international best practices (OECD, 2019[11]). Similarly, Education Estonia places significant emphasis on research and innovation within its educational landscape, actively encouraging teachers to engage in evidence-based practices and innovative teaching approaches (2023[9]). By conducting and facilitating research projects, they equip educators with the knowledge and tools needed to adapt to evolving educational needs and enhance student learning outcomes (2019[11]).

The Australian Institute for Teaching and School Leadership (AITSL) underscores the importance of research by conducting studies and offering a wealth of resources that support educators in their professional growth (2023[3]). These resources, such as best practice guidelines, case studies, and

research reports, provide valuable insights into effective teaching and leadership strategies that directly impact student learning.

Evidence-based practice is represented in various teacher development frameworks, underscoring the significance of grounding educational decisions in well-founded research and empirical evidence.

The IBO places a strong emphasis on the incorporation of research-based practices into its programmes, highlighting the value of empirical knowledge in shaping effective educational strategies to support teacher development (2023[4]). By incorporating research into curriculum development, offering research-based professional development opportunities, conducting and supporting research initiatives, providing resource materials, using research to inform assessment and evaluation, fostering a network of educators, implementing research-based policies, and utilising feedback and evaluation data, the IBO ensures that teachers have access to research-informed practices that enhance their professional growth and, ultimately, benefit student learning (2023[4]). Likewise, Learning Forward champions the use of research and evidence as guiding principles for informed decision-making in the realm of professional development (2023[6]).

A focus on the utilisation of research is more likely to be found than upon innovation. One exception is the Transformative Educational Leadership Programme (BC) that encourages leaders to play a critical role in promoting innovation and adaptability in teaching practices (2023[13]). They create an environment where teachers are encouraged to experiment with different pedagogical methods, embrace technology, and explore new strategies (see below).

Cultural Responsiveness

Cultural responsiveness is key in many teacher development programmes, as it acknowledges the diverse backgrounds and needs of students, fostering a more inclusive and effective educational experience. By embracing cultural responsiveness in teacher development, educational systems can better address the diverse needs of students, promote equity, and enhance the overall quality of education. These principles align with the OECD's emphasis on inclusive and equitable education systems that prioritise the well-being and success of all students (OECD, 2012[14]).

For instance, in New Zealand, with its culturally diverse population, teacher professional learning and development (PLD) programmes place a strong emphasis on cultural responsiveness, particularly in understanding the needs of indigenous Māori and Pacific Island students (2023[10]). These programmes aim to equip educators with the knowledge and skills to create culturally inclusive learning environments.

The Transformative Educational Leadership Programme underscores the significance of incorporating indigenous aspects into teacher development (2023[13]). This approach recognises and values indigenous knowledge, perspectives, and cultures within the educational process, emphasising cultural sensitivity and inclusivity in teaching and leadership practices. By engaging educators with indigenous communities and integrating indigenous content into the curriculum, teacher development becomes more attuned to the diverse needs of indigenous students. This, in turn, fosters an educational environment that is not only more inclusive but also culturally responsive, ensuring that the unique backgrounds and experiences of indigenous learners are recognised and valued.

Technology integration

Technology integration is one component of teacher development programmes as it empowers educators to adapt and thrive in the rapidly evolving landscape of education. The importance of technology integration aligns with the OECD's recognition of the pivotal role technology plays in shaping 21st-century education (2016[15]). Embracing technology not only enhances teacher effectiveness but also equips students with the digital skills necessary for success in an increasingly technology-driven world.

Singapore has been at the forefront of technology integration in its education system, recognising the transformative potential of technology in enhancing teaching and learning. Teachers in Singapore receive comprehensive training and ongoing support to harness technology effectively for instructional purposes and professional development (2019[11]). This proactive approach not only equips teachers with the necessary digital skills but also enables them to leverage technology to engage students and improve educational outcomes.

New Zealand's Professional Learning and Development (PLD) system underscores the significance of technology in modern education (2023[10]). Acknowledging the dynamic role technology plays, teachers in New Zealand undergo training that focuses on integrating technology seamlessly into their teaching practices to enhance student learning experiences (2023[10]). By embracing technology, educators can adapt to diverse learning styles, provide personalised instruction, and access a wealth of educational resources that enrich their teaching.

While these frameworks share common elements, they also have unique characteristics and priorities shaped by their specific missions, contexts, and goals.

Professional leadership development frameworks

The Professional leadership development frameworks explored were:

- Learning Forward,
- the International Baccalaureate (IB) Organization,
- BTS Spark,
- Transformative Educational Leadership Programme,
- Big Education,
- Progressive Leadership Academy,
- Thought Leadership Institute,
- Teach For All,
- Leadership Standards for Principals and Vice-Principals in British Columbia the Ontario Leadership Framework,
- New Zealand Professional Learning and Development (PDL),
- Singapore's educational system.

They often share several common principles and components, although they may be tailored to specific contexts. Here are some common elements and examples from each framework:

Focus on Continuous Improvement

Continuous improvement appears in various leadership development frameworks, providing the bedrock for efforts aimed at elevating teaching and leadership practices. These frameworks align closely with the overarching educational principles championed by the OECD, which place a strong emphasis on the necessity of continuous improvement mechanisms within educational systems to drive progress in teaching and learning (2021[1]).

The International Baccalaureate (IB) Organisation emphasises its commitment to continuous improvement in curriculum, teaching, and assessment practices (2023[4]). Likewise, Singapore's educational framework

places significant emphasis on continuous improvement, encompassing policies, practices, and leadership within the education sector (2023[7]).

The Transformative Educational Leadership Programme recognises that leadership development is an ongoing, dynamic process (2023[13]). It actively encourages leaders to engage in continuous learning, reflection, and professional growth, which includes seeking feedback, engaging in self-assessment, and maintaining a steadfast commitment to lifelong learning.

Similarly, the Ontario Leadership Framework actively supports a culture of continuous improvement in educational leadership (2013[16]). Within this framework, educational leaders are not only encouraged but expected to revisit and revise their professional growth plans regularly, allowing for adaptation to changing circumstances and the proactive addressing of emerging challenges.

Collaboration and Learning Communities

Collaboration and the cultivation of learning communities stand out as one of the pillars across various leadership development frameworks, underscoring the importance of leaders coming together and mutually enriching their knowledge. These principles align with the broader educational principles supported by the OECD, which advocate for the establishment of collaborative learning environments to foster innovation and ongoing progress in education (2021[1]).

Learning Forward takes an active role in promoting the formation of professional learning communities, where leaders collaborate, share ideas, and collectively enhance their practices (2023[6]). Likewise, Teach For All participants are encouraged to engage deeply with the communities they serve, forging connections with students, parents, and community leaders (2023[12]). This community-oriented approach cultivates leadership skills, empathy, and a profound understanding of the challenges faced by marginalised communities.

Similarly, the International Baccalaureate (IB) Organisation fosters a spirit of collaboration among educators and schools within its network, facilitating the sharing of best practices to benefit all (2023[4]). In Singapore, collaborative learning is championed within the educational framework, highlighting its vital role in driving improvements, not only among teachers but also within school leadership (2023[7]).

The Big Leadership Adventure (UK) actively promotes collaborative learning experiences for leadership roles (2023[17]). Participants are immersed in collaborative projects, engage in peer learning, and benefit from networking opportunities, enabling them to glean insights from diverse perspectives and experiences.

Vision and Innovation

Vision and innovation are exemplified in leadership development programmes like the Thought Leadership Institute (TLI). TLI encourages leaders to think critically and innovatively, offering them a platform to explore emerging trends, research findings, and best practices in education (2020[18]). By doing so, leaders are invited to remain at the forefront of educational leadership, equipped with the vision to drive transformative change in education. TLI seeks to nurture leaders to become visionaries and change agents in the field, inspiring them to develop innovative solutions to complex challenges.

Similarly, the Transformative Educational Leadership Proramme framework emphasises the significance of embracing innovation in education (2023[13]). Leaders within this framework are exposed to cutting-edge practices, technologies, and teaching methods, empowering them to lead their institutions toward innovative solutions and enhanced educational outcomes.

Data-Driven Decision-Making

The principle of data-driven decision-making can be found in various leadership development frameworks, highlighting the pivotal role of data and evidence in shaping informed choices. This reflects the view that leaders need access to accurate and objective information to inform their decisions, and the skills to interpret data. In the context of education, where numerous factors influence student learning and outcomes, data provides leaders with insights into what is working and what requires improvement) (Boudett, 2013[19]).

The International Baccalaureate (IB) Organisation encourages leaders to use data to inform decisions regarding curriculum and instructional practices, promoting data-driven educational strategies (2023[4]). Likewise, Singapore's educational framework places a strong emphasis on data-driven decision-making not only at the school level but also within the broader education system, recognising the value of data in shaping effective policies and practices (2023[7]).

Reflection and Self-Assessment

The emphasis on reflection and self-assessment emerges as one of the components within various leadership development frameworks, emphasising the value of leaders actively engaging in self-assessment to enhance their professional practices. A review by Ingersoll and Strong underscores the significance of self-assessment in leadership development. The review highlights that leaders who engage in regular self-assessment are more likely to identify areas for improvement and set meaningful goals for their growth. Self-assessment is the foundation for effective leadership development, as it allows leaders to take ownership of their learning journey (2019[2]).

As an example, Singapore's educational framework places a strong emphasis on fostering reflective practices among its leaders and educators, recognising the transformative potential of such practices in driving improvements in overall effectiveness (2023[7]).

The Ontario Leadership Framework invites leaders to evaluate their own leadership practices against the framework's established standards, thus gaining insight and identifying specific areas for improvement and setting precise development goals (2013[16]).

Alignment with Standards and Best Practices

The principle of alignment with standards and best practices is present within various leadership development frameworks, emphasising the importance of adhering to recognised benchmarks and evidence-based methodologies. Reviews within the educational field have emphasised the significance of aligning leadership development with standards and best practices. Such alignment enables leaders to draw on evidence-based strategies and research findings (2019[20]).

Learning Forward places a strong emphasis on the alignment of professional development initiatives with well-established standards for professional learning and best practices (2023[6]).

In a similar vein, Singapore has well-defined standards and competencies for educational leaders, which serve as a benchmark for leadership development programmes. The framework outlines the specific knowledge, skills, and attributes that leaders at various levels, from school leaders to system-level administrators, should possess, which ensures that leadership development is closely aligned with expected standards (2023[7]).

The Leadership Standards for Principals and Vice-Principals in British Columbia serve as a guide for defining the roles and responsibilities of leaders (2023[21]). Educators aspiring to leadership positions are expected to utilise these standards as a structured roadmap for their professional development, ensuring

their preparedness to navigate the multifaceted challenges and expectations associated with leadership roles.

The NPQ (UK) programme is strategically aligned with educational standards and frameworks, affirming its commitment to equipping leaders with the skills and knowledge necessary to meet the evolving demands of the education sector (2020[5]).

Student-Centred Focus

A student-centred focus stands as one of the principles in numerous leadership development frameworks, placing major importance on the learning experience and outcomes of students. It places students at the core of educational leadership practices, ensuring that all decisions, strategies, and initiatives are designed to enhance student learning and well-being. This focus reflects a commitment to creating a positive, engaging, and inclusive educational environment that prioritises the needs and aspirations of students (Lusk, 2010[22]).

Within the Transformative Educational Leadership Programme framework, student well-being and success take center stage (2023[13]). Leadership development within this paradigm adopts a student-centred approach, enabling leaders to gain a profound understanding of the needs and aspirations of students.

Ethical and Values-Driven Leadership

Ethical and values-driven leadership principles can be found in a number of leadership development frameworks. Ethical leadership sets the foundation for trust and integrity within educational institutions, which are fundamental for creating a positive and inclusive learning environment. The alignment of leadership practices with ethical values ensures that leaders act with honesty, fairness, and transparency, which in turn fosters a culture of trust among both educators and students (Brown, 2014[23]).

The Transformative Educational Leadership Programme in particular, emphasises the significance of ethical considerations in leadership roles (2023[13]). Within this framework, leaders are encouraged to engage in a reflection process on their values, principles, and the ethical dimensions of their decisions. This reflective process aids leaders in cultivating a strong moral compass, fostering a deep commitment to equity and social justice, and aligning their leadership practices with these principles.

Likewise, the Leadership Standards for Principals and Vice-Principals in British Columbia provide a tangible example of the importance of ethics and values-driven leadership (2023[21]). These standards establish clear accountability for leaders in educational roles, ensuring transparency and integrity in their actions and decisions.

Similarly, the Progressive Leadership Academy programmes place a substantial emphasis on ethical leadership and values-based decision-making (2023[24]). Leaders who participate in these programmes are actively encouraged to align their actions with ethical principles and consider the broader impact of their leadership on individuals and communities.

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Annex

The professional teacher and leadership development frameworks explored were:

- Big Education
- BTS Spark
- Dream a dream, India
- Education Estonia
- Ensena Peru
- Leadership Standards for Principals and Vice-Principals in British Columbia the Ontario Leadership Framework
- Learning Forward, USA
- New Zealand Professional Learning and Development (PDL)
- Progressive Leadership Academy
- Programme for Aspirational Leaders and Managers in Education (PALME), Qatar
- Singapore's teacher and leadership development frameworks
- Teach for All; International
- Teachers learning Together, Rwanda and Kenya
- The Australian Institute for Teaching and School Leadership (AITSL), Australia
- The International Baccalaureate (IB) Organisation
- The National Professional Qualification (NPQ), United Kingdom
- Thought Leadership Institute
- Transformative Educational Leadership Programme, British Columbia, Canada