



# Creating capacity for learning: Are we there yet?

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## Abstract

Over the years, I've been investigating capacity for learning to understand under what conditions it's seeded, flourishes and is sustainable. Drawing on my own and others' research and knowledge, I've supported school and system leaders internationally in endeavours to create and sustain capacity for learning. My sense is that everyone engaged in similar activity believes that we want the best learning opportunities and outcomes for every child. But, to use a journey metaphor, have we arrived? In this article, I reflect on where we are now, then consider the purpose of learning, who should learn and what kind of learning is needed. I suggest what a system might look like if creating capacity for learning becomes a reality and how we might get there. In conclusion I argue for reorienting the continuing journey.

**Keywords** Educational change · Rethinking learning · Learning organisations · Learning systems · Learning leadership

## Introduction

Twenty years of this new millennium have sped past. During this time, creating capacity has been my compelling focus. Initially, it was capacity for lasting improvement, but this shifted to capacity for learning because the global changes we face require much more than improvement. Capacity is:

a power—a 'habit of mind' focused on engaging in and sustaining the learning of people at all levels of the educational system for the collective purpose of enhancing student learning in its broadest sense. It's a quality that allows people, individually and collectively, routinely to learn from the world around them and to apply this learning to new situations so that they can continue on a path toward their goals in an ever-changing context (Stoll 2009, p.125).

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To have capacity for learning is to be truly open to embracing transformations necessary to address the complex educational challenges we face.

Over the years I've investigated capacity for learning to understand under what conditions it's seeded, flourishes and sustainable.<sup>1</sup> Broadly, at individual and collective levels I found that it involves working with and on beliefs around efficacy, motivation and emotions, promoting community and connections, stimulating inquiry and creativity, enabling and enhancing practice, and providing time. Capacity for learning in schools is enhanced from outside by recognising the importance of learning for all, respecting and promoting professionalism, powerful learning opportunities, deep understanding of individual schools, designing networking, sensitive critical friendship and ensuring time. Drawing on this and others' research and knowledge, I've supported leaders of schools and systems internationally in endeavours to create and sustain capacity for learning. I'm sure that everyone engaged in similar activity believes that we want the very best learning opportunities and outcomes for every child and young person. To consider our progress I use a journey metaphor, asking 'have we arrived yet'? This echoes children's familiar refrain when they moan on long journeys 'are we there yet?' Sadly, for too long we've seen and heard—but far too infrequently attended to—many students' frustrations with an educational experience that lacks meaning and isn't engaging them.

In this piece, I first reflect on where we are now. Next, I consider the purpose of learning, who should learn and the kind of learning needed. Looking ahead to the next 20 years in this fast changing, unpredictable world, I suggest what a system might look like if creating capacity for learning becomes more than an aspiration and how we might get there. I conclude by arguing for a reorientation in our continuing journey toward capacity for learning.

## Where are we now?

Passing through the landscape over 20 years, numerous efforts exist to create capacity at many levels of systems in extraordinarily diverse contexts. Considering educators' capacity for improvement in relation to enhanced student outcomes as measured by traditional assessments of the 'basics', the evidence is encouraging. Policy makers and practitioners in many countries now pay attention to a wealth of research demonstrating interventions associated with high achievement. Efforts exist at school, local and even national levels to improve student outcomes through 'evidence-based' practice. This includes strong encouragement for practitioners to incorporate student data into their planning and practice. Many more leaders around the world access leadership development opportunities. Understanding is growing that professional development means much more than going on one-day courses although this still isn't the reality for many teachers (OECD 2019). Systems increasingly design collaborative activities and networking between teachers and between

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<sup>1</sup> I elaborate on this in detail elsewhere (Stoll 1999, 2009; Stoll et al. 2003). My more recent research and writing also uses other terms but essentially focuses on aspects of creating capacity for learning.

school leaders as a positive strategy for teacher development and to support school improvement. Unfortunately collaboration is sometimes mandated—or feels as if it is—making it repelling rather than compelling (Datnow and Park 2019).

While we've been involved in these efforts, the landscape has been fast changing. Pressing local, national and global challenges perpetually confront educators and the systems in which they work, affecting their endeavours. Some aren't new and many are interlinked. Many countries still experience a great divide between 'haves and have nots', with disparities related to poverty, where children live, gender, cultural background, disability, and living with one parent or carers. Dramatic advances in technology and social media abound, with Generation Z known as the iGeneration or Digital Natives for good reason. Child and adolescent mental health concerns are increasing, too many young people are tense when they study (OECD 2017) and feel the influence of the cult of celebrity. Teacher and leader shortages in different countries are frequently influenced by job pressures and stress resulting from low trust and punitive external accountability. The rise of populism and questioning of expertise is challenging for researchers who have spent years developing this. Stories proliferate of climate change, conflict and displaced people. Stark health issues face us with ageing populations, those ravaged by disease and affected by pandemics. Then there's 24/7—for many an over-busy life, for others the frustration of 'nothingness'. It's a powerful list of complex, frequently interrelated and evolving challenges, for which education must take partial responsibility.

Opportunities and possibilities abound too. Advancements in medical interventions include the judicious use of artificial intelligence and other technology. And there's the courage and influence of the young, whether through social entrepreneurs crowd sourcing efforts to solve intransigent community problems, or activists—for example Malala Yousafzai's campaign for girls' rights to education, young people in the US speaking out against gun control, and Greta Thunberg, the young climate activist who inspires children and young people in many countries and gives them confidence to 'strike' for their future. We should feel hopeful that young people want and may be able to provide answers to global challenges—leaders of learning at all levels take note.

Despite many encouraging efforts, too many children around the world are left behind, physically, emotionally or both. Strategies are desperately needed to address all children who are short-changed by much less than what it would take to really make them fly. So, we clearly aren't there yet. Even if we're on the right journey, would a modified route make more sense?

## Learning for what, whom and where?

To develop capacity for learning, we must first answer the much-contested question 'what are we preparing children for?' More of those born now can look forward to a 100-year life (Gratton and Scott 2017). For example a child born in 2007 has a 50% chance of living to 102 in Germany, 103 in Canada and 107 in Japan—they'll still be alive in the twenty-second century. What will it even take for them to flourish in 2050? How will they learn to be flexible and adaptive, to make good choices

about their lives, and be able to change paths confidently and as necessary over a long life? Can we ensure that they will love learning—that this will become the ‘go to’ approach to resolving challenges they face? How can formal educational learning environments extend and deepen children’s engagement with and understanding of technology? How can they use this to enhance the learning of their peers and, indeed, their teachers? In the age of social media, how can we ensure that children connect more deeply; to really understand and care about others? And how can education support them in feeling good about themselves and being able to find their way through difficult times? How can learning experiences help children find the inner calm that helps them to focus their learning when their lives outside are filled with chaos, pain or fear? Learning has both to connect with their world and to open doors to a world of opportunities. This isn’t to dispute literacy as a basic right but to argue that right now, and for the future, a broader set of fundamentals are equally important to ensure learning that is ‘lifeworthy’ and ‘lifeready’ (Perkins 2014).

To take this seriously means that what we needed 20 years ago isn’t what we need now. Encouragingly, numbers of countries and jurisdictions are developing new curricula. The OECD’s Future of Education and Skills 2030 multinational project is exploring the knowledge, skills, attitudes and values students need ‘to thrive and shape their world’ and pedagogical systems to develop these effectively. And national and international efforts aim to deepen learning through more powerful pedagogies. But a narrow curriculum of ‘basics’ still faces too many children. An associated diet of instruction seen in schools 100 years ago accompanies this, with high stakes external assessments of those basics. Many teachers and school leaders feel impelled to focus on these and treat everything else as second class. There’s much more to do over the next 20 years—and it’s needed a great deal sooner.

To ensure the necessary change, children aren’t the only ones who have to learn. In a deep, moral, humane, social and frequently uncertain enterprise, all those supporting children’s learning need to be adaptive, creative, caring facilitators of learning and voracious learners themselves. Benefits of content expertise aren’t negated, but ensuring that children are motivated and equipped to engage in deep and continuous learning requires the same of teachers, leaders and other stakeholders. Here, I’m including parents, community members and agencies, those in meso- or mediating-level organisations like districts, municipalities or leading partnerships of schools, policy makers and politicians. Everyone in the ecosystem surrounding schools needs to be learning—individually and together, and across levels. This enterprise depends on serious openness to profound learning. I mean the kind of transformative learning whereby long-held assumptions will be challenged. Taken-for-granted mindsets and perspectives may need shaking up to be “more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action” (Mezirov 2000, pp. 7–8). Such transformative change is fundamental to capacity for learning.

My assumption and hope is that we will still have schools in 20 years. But, for schools to be relevant locations for children’s learning they too need to change significantly. Designing new buildings and structures that offer twenty-first century learning spaces can certainly add to children’s learning experiences, but old teaching practices and school routines aren’t changed by new packaging. Real change has to

occur in the entire mindset, culture and *modus operandi*. Educators have to transform their schools into learning organisations (SLOs). Our research highlights that through collective endeavour, such schools have the capacity to change and adapt routinely to new environments and circumstances as their members, individually and together, learn their way to realising their vision (Kools and Stoll 2016; OECD 2016; Stoll and Kools 2017). In SLOs learning with, from and for the benefit of others, knowledge creation and sharing within and beyond the school are part of the organisational DNA. Trusting relationships, time and technology support the hard work of being willing to think together. External policies also influence schools' ability to transform themselves into learning organisations; for example the way the system is organised, funded, develops people, approaches assessment and accountability, and engages stakeholders (OECD 2018).

### What kind of learning?

A major shift needs to occur in the way we think about how adults in schools and school systems learn. The transformative learning needed involves three key elements:

First, *being mindful about and in learning*, rather than mindless (Langer 1997), paying much greater attention to what is going on around us, to other ways of thinking and acting, to trying out new ideas and reflecting honestly and openly with others on them. In many ways, it's connected to greater improvisation around practice—being able to let go of preconceived beliefs when something new arises. It will also involve everyone paying greater attention to meta learning (Watkins 2003), to learning about their learning. And this needs to happen both individually and collectively.

Second, *recognising the importance of inquiry as and for learning*. Curiosity is essential to the learning mindset, and inquiry is a stimulus of powerful professional learning. Little children ask many questions but that number declines as they move through school. Being inquisitive isn't prominent in adulthood; rather, certainty is seen as a sign of strength. Learning can be enhanced through spirals of inquiry (Halbert and Kaser 2013): exploring and probing for greater understanding about what powerful and meaningful learning for children is; thinking deeply about what we are doing, why, and how we may be contributing to the problems children face in their learning; not taking action without learning more ourselves; and checking that any revised actions make a positive difference for students.

Third, *talk about and for learning must come to the fore*. Learning organisations and systems are fundamentally social. While community members may absorb social norms and observing a colleague closely can be valuable to see what they are doing, without asking them why they selected a particular technique, their theory of change is unclear. It's hard to know how they think what they're doing works to enhance the children's learning. Consequentially, it's also unclear to the observer what it means for their own practice. Even if they believe they understand what their colleague intended, misinterpretation is possible. It's essential to become smarter at probing tacit knowledge. Talk is vital to help deepen knowledge. But talking is also

about relationship building, and means devoting greater effort to listening carefully and clearly understanding what others are saying before challenging.

## **What does this mean for creating capacity for learning over the next 20 years?**

Going forward, we have to move beyond functional definitions of capacity. This can't just be about building skills to ensure people have 'the right amount' or that they are able to do, deliver or implement something. It's so much more—what it will truly take to realise an urgently needed vision of learning for all. It's about capturing the interest, imagination and hearts of teachers and school leaders so that they're committed to the journey ahead with all of its likely detours. This means focusing greater attention on the open mindset, motivation and energy for change. Having capacity for learning also requires enabling the nourishing relationships, conditions, culture and structures that promote interrelationships and synergy. What might this look like in 20 years' time or sooner if we're moving in the right direction? And what will it take to get there? In the following themes, I briefly summarise my 'ideal' future for capacity for learning, then unpack what this needs to involve. I use the future tense linguistically to signify hope, but the text contains an agenda for change.

*Collective endeavour and co-creation—creating capacity for learning won't be 'your responsibility' or 'my responsibility' but will be located at all levels of the system and community, involving people in genuine collaboration.* Policy-makers and practitioners will listen to each other to genuinely understand each other's perspectives, taking seriously what the other proposes and has to offer (Osborn and Canfor-Dumas 2018). Students will be co-designers of strategies to engage them and deepen their learning. Teachers will use varied assessments of the diverse capabilities and attributes that they're facilitating their students to develop. They will design some with colleagues and community members who will support them in carrying out real-world assessments (Lucas and Spencer 2017). Other assessments will be externally designed and may be used nationally, or even internationally. Developing and bringing plans to life will also involve external community expertise in equal partnerships, with creative activity drawing from interdisciplinary thinking and the world beyond education. Research will feed into, inform and enrich these efforts.

*Stimulating and nourishing learning and workplaces for all—learning will be systemic, with frequent, stimulating and challenging opportunities to learn alone and with and from others, face-to-face and virtually in workplaces that promote wellbeing.* Teachers' practices and mindsets will demonstrate broad repertoires and adaptive expertise (Hatano and Inagaki 1986), enhanced by associated inquiry-oriented professional learning (Le Fevre et al. 2016). Individuals will be more proactive in pushing themselves out of their comfort zone into the learning zone (Senninger 2000). Diverse external partners will be more involved in and contribute to learning. Learning experiences will also better support life and work changes, different needs as workers get older (Bingham 2019), ongoing seniors'

learning for active ageing (Istance 2019), and a more flexible workforce. To support staff wellbeing, we will see many more examples of changes to the working week to enable better work-life balance. Work will become more meaningful, as schools promote ‘the thriving self’ (Hannon and Peterson forthcoming). Opportunities to develop and practise mindfulness will increase, as educators will view this as a fundamental feature of creating capacity for learning.

*Networked learning and knowledge exchange—collaborative learning across boundaries will be part of normal practice, with knowledge and other learning resources readily shared and circulated in a culture of generosity.* Colleagues will devote significant attention to moving around successful student learning strategies. They will help each other learn about these strategies and contextualise them for their own contexts. Technology will support this, as will increased and more nuanced understanding about the power of social networks for networked learning and knowledge exchange (eg Rodway 2018). And design will balance accessibility and depth—thinking about ways of getting messages out that capture attention, appeal to and spark interest in populist cultures while nudging people toward and stimulating deeper engagement with and in learning.

*Learning leadership—in 20 years leadership at all levels will be immersed in and focused on learning rather than instruction—learning as a way of being.* Learning of all stakeholders will be prioritised and a naturally expected feature of all schools and systems, with children’s learning in its broadest sense and wellbeing firmly located at the centre of all activity. Learning leadership will be collaborative, involving community partners and students (OECD 2013). Leaders will be adaptive and much more adept at improvising. To support this, leadership learning will help teams of leaders in developing these capabilities. Creative leadership learning will also support them in exploring and developing conditions in which colleagues feel able to take risks, inquire into stubborn problems, explore potential learning strategies, experiment, innovate, fail and use failure for learning (Stoll and Timperley 2009). Schools will be fearless organisations (Edmondson 2019), as will middle tier organisations. Crucially, leaders will also model wellbeing, by taking their own seriously.

*Authentic accountability—collective responsibility for student success won’t just be on the shoulders of groups of teachers or schools. And stakeholders will be convinced that practitioners are serious about ensuring the most powerful and nourishing learning experiences for everyone in their community.* Together, school, system and community stakeholders will agree on the purpose, nature and forms of accountability. They will commit to their personal and collective roles in ensuring they are accountable to students, each other and society for creating, developing and sustaining the best possible learning experiences and outcomes. People will feel compelled to consider why they do what they do and how they know that their actions lead to their desired and intended outcomes—their theories of change. They will engage in evaluative thinking—“learning for change” (Bennett and Jessani 2011). This will involve questioning, reflecting, learning, capturing lessons learnt, and designing systems to apply their learning to improvements that lead to desired outcomes. Innovators and evaluators will collaborate with practitioners and policymakers (Earl and Timperley 2015), as they learn their way into the future. Researchers will offer



developmental evaluation approaches—evaluation for, not just of, learning—with nuanced methodologies exploring stories of change from different perspectives. Practitioners will learn how to evaluate their change efforts in authentic, penetrating and thorough ways. Many more co-created examples of peer review will exist, with colleagues learning how to challenge and deepen each other's self-evaluations. A variant will be community review—extending such reciprocal learning processes to include external partners viewing students' learning experiences through diverse lenses.

*A different language, based on changed mindsets—language will be updated, with much greater thought given to messages inherent in definitions.* Common terms will be questioned and revised when they're no longer fit for purpose. People won't be talking about learning as merely the outcome of 'interventions' or using the term 'instruction' without defining how this leads to deep and meaningful learning. Rather, they'll think more deeply about experiences and processes of learning and what it takes to ensure these are relevant, profound, valuable and promote a lifelong love of learning and strong sense of wellbeing. To match the agency and efficacy that professionals feel, their activity won't be evidence-based; it will be evidence-informed—even, evidence-enriched—as they confidently investigate important questions of practice, drawing on and generating evidence to help them answer these. Educators will be in the driving seat, not the evidence. And teamwork, creativity, adaptivity, resilience etc. will no longer be described as 'soft' when, frankly, they're hard to learn, especially if it's after many years of neglect.

## Where next?

This aspirational agenda to create capacity for learning needs and will take time. Almost 20 years ago, colleagues and I argued 'It's about learning: and it's about time' (Stoll et al. 2003). Time feels even more precious than it did then; we seem to have less time to achieve more. But we should no longer believe that we can realise deep, meaningful change quickly. Indeed where learning is concerned, the journey is ongoing. This isn't however a time for cruise control. Creating capacity for learning, individually and collectively is critical right now. We have to shift gear. If we don't, in 20 years many more children will have diverged on their own learning journeys, leaving us well-meaning educational practitioners, policymakers and researchers far behind. It's essential that we all open ourselves up to serious learning for the long journey ahead. We need to model deep learning and to create the supportive relationships, conditions, cultures and structures. And we have to involve the children. No more 'are we there yet?'; this is an enduring and exciting journey. Thinking about your own journey, where do you need to go next in creating capacity for learning?

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## References

- Bennett, G., & Jessani, N. (2011). The knowledge translation toolkit, bridging the know–Do gap: A resource for researchers. International Development Research Centre. <https://ajpp-online.org/resources/downloads/04-TheKnowledgeTranslationToolkit.pdf>.
- Bingham, D. (2019). *Older workforces: Re-imagining later life learning*. London: Routledge.
- Datnow, A., & Park, V. (2019). *Professional collaboration with purpose: Teacher learning towards equitable and excellent schools*. New York: Routledge.
- Earl, L., & Timperley, H. (2015) Evaluative thinking for successful educational innovation. *OECD Education Working Papers*, No. 122. OECD Publishing, Paris. <https://doi.org/10.1787/5jrxtk1jtdwf-en>
- Edmondson, A. C. (2019). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. New Jersey: Wiley.
- Halbert, J., & Kaser, L. (2013). *Spirals of inquiry for equity and quality*. Vancouver: BCPVPA Press.
- Hannon, V., & Peterson, A. K. (forthcoming). *Thrive*. Cambridge: Cambridge University Press.
- Hatano, G., & Inagaki, K. (1986). Two courses of expertise. In H. Stevenson, H. Azama, & K. Hakuta (Eds.), *Child development and education in Japan* (pp. 262–272). New York, NY: Freeman.
- Istance, D. (2019). Seniors' learning. *European Journal of Education*, 54, 9–12. <https://doi.org/10.1111/ejed.12317>.
- Kools, M. and Stoll L. (2016) *What makes a school a learning organisation? OECD Working Paper, No. 137*. Paris: OECD Publishing. <https://doi.org/10.1787/5jlwm62b3bvh-en>.
- Gratton, L., & Scott, A. (2017). *The 100-year life: Living and working in an age of uncertainty*. London: Bloomsbury.
- Langer, E. (1997). *The power of mindful learning*. Reading, MA: Addison-Wesley.
- Le Favre, D., Timperley, H., & Ell, F. (2016). Curriculum and pedagogy: the future of teacher professional learning and the development of adaptive expertise. In D. Wyse, L. Hayward, & J. Pandya (Eds.), *The Sage handbook of curriculum, pedagogy and assessment*. London: Sage.
- Lucas, B., & Spencer, E. (2017). *Teaching creative thinking: Developing learners who generate ideas and can think critically*. Carmarthen: Crown House.
- Mezirov, J. (2000). Learning to think like an adult: core concepts of transformational theory. In J. Mezirov (Ed.), *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass.
- OECD. (2013). *Leadership for 21st century learning, educational research and innovation*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264205406-en>.
- OECD. (2016). *What makes a school a learning organisation: A guide for policy makers, school leaders and teachers*. Paris: OECD publishing. <https://www.oecd.org/education/school/school-learning-organisation.pdf>
- OECD. (2017). *PISA 2015 results (volume III): Students' well-being*. PISA, Paris: OECD Publishing. <https://doi.org/10.1787/9789264273856-en>.
- OECD. (2018). *Developing schools as learning organisations in Wales, implementation education policies*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264307193-en>.
- OECD. (2019). *TALIS 2018 results (volume I): Teachers and school leaders as lifelong learners*. Paris: OECD Publishing. <https://doi.org/10.1787/1d0bc92a-en>.
- Osborn, P., & Canfor-Dumas, E. (2018). *The talking revolution: How creative conversation can change the world*. Oxford: Port Meadow Press.
- Perkins, D. N. (2014). *Future wise: Educating our children for a changing world*. San Francisco, CA: Jossey-Bass.
- Rodway, J. (2018). Getting beneath the surface: Examining the social side of professional learning networks. In C. Brown & C. L. Poortman (Eds.), *Networks for learning: Effective collaboration for teacher, school and system improvement*. Abingdon: Routledge.
- Senninger, T. (2000). *Abenteuer leiten – in Abenteuern lernen*. Münster: Ökotoxia.
- Stoll, L. (1999). Realising our potential: Understanding and developing capacity for lasting improvement. *School Effectiveness and School Improvement*, 10(4), 503–532.

- Stoll, L. (2009). Capacity building for school improvement or creating capacity for learning? A changing landscape. *Journal of Educational Change*, 10(2), 115–127.
- Stoll, L., & Kools, M. (2017). The school as a learning organisation: A review revisiting and extending a timely concept. *Journal of Professional Capital and Community*, 2(1), 2–17.
- Stoll, L., & Temperley, J. (2009). Creative leadership: A challenge of our times. *School Leadership and Management*, 29(1), 63–76.
- Stoll, L., Fink, D., & Earl, L. (2003). *It's about learning (and it's about time)*. London: RoutledgeFalmer.
- Watkins, C. (2003). *Learning: A sense-maker's guide*. London: Association of Teachers and Lecturers.

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