

Table 1: The Emergent Roles of Teachers and Students in the New Pedagogies for Deep Learning

Teachers (Pedagogical Capacity)	Students (Deep Learning)
Build trusted relationships with students and peer teachers; seek good mentors	Build trusted relationships with teachers and peers; seek good mentors
Help students find and build on their interests and aspirations through deep learning tasks	Explore own interests and aspirations in learning goals and tasks
Require challenging learning goals, tasks and success criteria for self and students that require creation and use of new knowledge	Develop capacity to define learning goals, tasks and success criteria, partnering in the learning process
Develop repertoire of teaching strategies; use different strategies to activate learning	Reciprocal teaching and learning from and with peers and teachers
Provide high-quality feedback and encouragement, especially when students face challenges in learning	Develop capacity for reflection and perseverance in the face of challenges; provide high quality feedback and encouragement to others
Collaborate with other teachers and leaders researching the impact of different learning strategies on students (i.e., use an inquiry cycle approach)	Provide feedback to teachers and peers on what is working in one's own learning; build mastery of the learning process and one's own progress
Model a proactive disposition towards learning, creating new knowledge and taking action with that new knowledge	Develop intellectual and attitudinal dispositions towards creating new knowledge and doing things with it in the world
Continuously discover and create digital learning tools and resources to: <ol style="list-style-type: none"> 1) explore new content, concepts, information and ideas; 2) challenge students to create new knowledge; 3) connect with students, peers, and experts beyond the classroom; 4) accelerate students' ability to drive their own learning process; and 5) assess and share information on students' learning abilities and dispositions 	Continuously discover and create digital learning tools and resources to explore new content, concepts, information and ideas. Use these tools to create new knowledge, to connect with peers and experts throughout the world and to use new knowledge in the world

These roles will be described and exemplified in the rest of this report. We will start by describing four of these emergent roles in the new learning partnerships: 1) relationships, 2) student aspirations, 3) feedback, 4) learning to learn and peer tutoring.

Figure 5: New Learning Partnerships

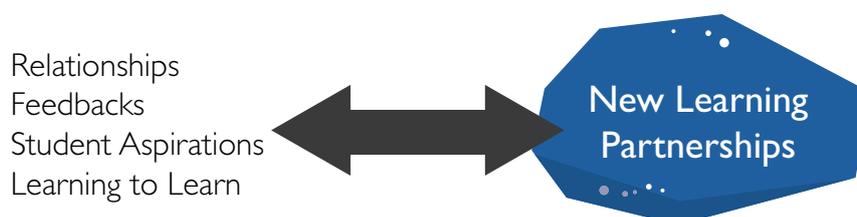


Table 5: New Leadership Roles and Enabling Conditions.

	Leadership Roles	Enabling Conditions
Culture	<ul style="list-style-type: none"> • Foster commitment to the moral imperative of change; build 'culture of yes', inviting change • Encourage risk: non-judgmental stance especially at the beginning; talk openly about mistakes • Continuously develop, define and communicate the new vision • Influence but do not control change • Practice collaboration: use the group to change the group • Model being a learner 	<ul style="list-style-type: none"> • Readiness for change and openness to new possibilities • Shared commitment to moral imperative • Common and shared vision, even if not yet crystallised • Learning leadership culture with high expectations for all • Collaborative climate
Capacity	<ul style="list-style-type: none"> • Make new practices visible and transparent • Co-develop measures to support learning from the work • Provide and receive coaching, mentoring and professional learning • Find the means to provide ubiquity of technology • Be a partner in the learning, model the use of digital tools and devices, not necessarily as experts • Help to assess the impact of new practices on deep learning 	<ul style="list-style-type: none"> • A plan for achieving the vision • Ways of measuring where things are now, learning from the work • Professional learning that builds pedagogical capacity and embeds the new concepts • Ubiquitous technology integrated with the whole new framework • Whole system framework

We have grouped these roles and conditions into the broad categories of 'culture' and 'capacity.' Both categories are needed for deep and sustained change within and across complex systems.⁷⁵ We begin here by describing how leaders can influence directional vision and culture, and then turn to innovation and capacity-building elements. One point to make at the outset: the change we are observing as new pedagogies take hold is neither top-down nor bottom up change. It is both and, it is also sideways. Ideas and energy flow vertically and laterally. Dissatisfaction mounts on the ground *and* at the top; pockets of new activity begin to stir; powerful new catalysts appear (such as digital access); new patterns of interaction break through; leaders at both the top and the bottom recognise and respond intuitively, independently, and then together; and the movement takes off. The role of leaders is to simultaneously help the organisation to 'let go' and 'rein in.'

⁷⁵ Fullan 2010; Barber *et al* 2010; Kay and Greenhill 2013