Part of dissertation to be completed in 2016

Leadership challenges in working towards implementing innovative learning environments

Why Change:

To meet the challenges of globalisation and technology, the phrase '21st century skills and knowledge' is embedded in the education rhetoric of preparing students for a global and virtual future. In response to these challenges, researchers and educators consider the capability of the conventional 20th century schooling model to equip students, with 21st century skills and knowledge, as inadequate. In most cases, they describe an education system that is outdated and archaic.

Timperley, Kaser and Halbert (2014) unequivocally state that, "We know that education systems designed in the last century no longer meet the needs of our learners or our societies. We know that schools must be transformed to engage today's young people" (p.3).

Among educators and researchers there is a strong conviction that to achieve better outcomes for all learners in the 21st century there is a need to strategically change the present education system. "The call for disruptive innovation of education systems – where schools, as we have known them, cease to exist – has a certain appeal for those frustrated with the seemingly snail's pace of system change" (Christensen, Johnson, & Horn, 2008).

Innovative learning environments

Timperley et al. (2014) advocate new approaches and new designs for learning. They propose that,

through a disciplined approach to collaborative inquiry, resulting in new learning and new action, that educators, learners, their families and involved community members will gain the confidence, the insights, and the mindsets required to design new and powerful learning systems. This process will indeed transform their schools into more innovative learning environments (ILE) (p.4).

Innovative Learning Environments (ILE) is an educational initiative that seeks to support the teaching and learning required for 21st century learning. To define ILE, the starting point is first to define a 'learning environment' that is innovative. There are a variety of interpretations and definitions of 'learning environment' and most include a specific focus on technology and digital programmes.

Learning environment

The OECD's Innovative Learning Environments project report (2013a) provides an expansive and comprehensive definition of ILE, firstly, by defining the term, 'learning environment' – "an ecosystem that includes the activity and the outcomes of the learning" (p.11). "Learning

environment is such an important framing concept... (providing) the basic architecture on which to build when the focus is on those environments that are particularly innovative, powerful and effective" (p.16).

The definition of ILE includes learning in places other than the conventional school. This is evident in an ILE case study site from the OECD report (2013a): The Royal Children's Hospital (RCH) Education Institue, Melbourne, Australia. RCH is not only a place where the health development of children and young people is its core business, included in its primary concern is the social and education support of the children in its care.

The context of a 'learning environment' also includes the learners and their particular social and family experiences, knowledge and aspirations, cultural experiences and values. The holistic perspective of 'environment' also emphasises 'time' and the blend of learning approaches, experiences, and settings.

Learning is the focus

Learning-centredness is always central to the change and design process of innovation. It is the first key of the ILE learning principles, identified by Dumont, Istance and Benavides (2010), to guide the development of learning environments for the 21st century. The ILE learning principles are integral to the definition of ILE. All of the ILE learning principles need to be adhered to for ILE to be effective. They are:

make learning and engagement central, be collaborative and encourage cooperative learning, be attuned to the learner's needs, be sensitive to individual differences among learners, design programmes that are demanding, without excessive overload, support learning with an emphasis on formative feedback, and promote "horizontal connectedness" across curriculum areas (p.16).

Four elements provide the starting point for defining the learning environment's pedagogical core. These core elements are: learners, educators, content and resources. They are essential to how a school operates. In ILE, school leaders will 'rethink these elements in innovative ways, such as: regrouping teachers, regrouping learners, 'rethinking the use of time, and innovating pedagogy and assessment' (OECD, 2013a, p.11).

Learning environments that innovate

Learning environments innovate from generally four sources: science, research, technology, and networking to share knowledge. Depending on the context of each learning site, what is innovative practice for one organisation may not be innovative practice for another. An ILE case site described in the OECD report (2013a) is the Australian Science and Mathematics School (ASMS), built on the campus of Flinders University. It was established to innovate mathematics and science education. The school's learning activities are 'interdisciplinary,

personalised, authentic and inquiry-based, including cutting-edge technologies, as well as linked to real world issues' (p.201). Whereas, a different ILE case site is Yuille Park P-8 Community College, Australia. This school is at the centre of a Community Hub offering opportunities and facilities for the wider community. Every aspect of the learning environment is designed to actualise the motto, "Living to learn, learning to live" into a reality for all learners.

Formative Learning Organisations

Design, evaluation, feedback, redesign

Successful and effective ILE operate in a 'formative learning organisation'. Information about the learning taking place undergoes an iterative process of design/feedback/evaluation, collaborative inquiry, and redesign of strategies and structures, for learning and further innovation. The richness of information about learning strategies, students, and learning outcomes is 'converted into meaningful evaluative knowledge that can be acted upon by the learning leadership and others' (OECD, 2013a, p.12).

In a formative learning organisation, the emphasis is upon designing innovation for improvement, that is future oriented. Hopkins, Harris, Stoll and Mackay (2011), describe five phases of school and system improvement, to grow and sustain learning environments, to be formative. These phases are: Phase One, organisational culture and adaptability. Phase Two, implementing individual innovations from the bottom up and using action research. Phase Three, a focus on leadership as implementation and change. Phase Four, building networks and communities of practice with a very strong emphasis on learning. Finally, Phase Five, is systemic improvement by using the knowledge base and differentiated approaches to redesign the learning environment.

Yuille Park P-8 Community College,

addresses its design, strategising, and redesign around eight... pillars – learning communities, stimulating and secure learning environment, professional leadership, focus on teaching and learning, purposeful teaching, shared vision and goals, high expectations for all learners, and accountability – involving a widely drawn set of players (OECD, 2013a, p.108).

Professional learning and development (PLD)

To build the capacity to meet the challenging teaching and design objectives that are fundamental to powerful learning environments, the role of professional learning and development (PLD) is critical. Without purposeful PLD and innovative leadership, the effort required to build a sustainable ILE will fail (Hargreaves, 2003).

To develop or to build upon teachers' expertise and 21st century learning dispositions, leadership needs to prioritise the provision of PLD opportunities for:

shared teacher decision making for adopting evidence-based practices, whether they are based on peer learning from tacit knowledge or academic research... School-wide Professional Learning Communities (PLCs) are powerful agents for creating learning cultures among teachers... PLCs offer the opportunity for leadership preparation and development to be closely aligned with teacher professional development and to be conducted within the school and its network (DuFour & Eaker, 1998, p.119).

Learning leadership

This is what is understood by the term 'Learning Leadership':

Learning leadership puts creating the conditions for 21st century learning and teaching at the core of leadership practice. Students learning is at the heart of the enterprise. The core work is to ensure deep 21st century learning, whatever the environment. Designing and developing innovative learning environments to meet such ambitions requires highly demanding teaching repertoires and for everyone to keep learning, unlearning and relearning (OECD, 2013b, p. 10).

Leadership is not solely an individual activity, or about personalising the functions, it is a process involving others, and is essentially social and interactive. ILE are not restricted to the boundaries or systems of a coventional school therefore leaders may come from a variety of sources.

Learning Leadership demonstrates creativity and often courage... Learning leadership models and nurtures 21st century professionalism... Learning leadership is social and connected...As learning environments innovate, leadership becomes more complex, often involving diverse non-formal partners... transformative learning leadership involves complex multi-level chemistry... Learning leadership is needed at the system level (OECD, 2013b, p. 11).

Distributed leadership

The increased complexity of organisational change of ILE, demands more complex forms of leadership. One of those forms of leadership is 'distributed learning leadership'. Spillane and Diamond (2007) argue, that the challenge for educators is not simply introducing and implementing change in education systems, but also maintaining changes. Distributed learning leadership is necessary to do this. How leadership is distributed across a school depends on various factors. From an ILE case study site in Israel,

The principal and teachers of Mev'ot HaNegev (Israel) were supported by the authorities in their innovative plan to change the organisation of learning. Teachers were given an unusual amount of freedom in the design of learning,

which turned them into leaders for learning. They report a "sense of rejuvenation and empowerment" (OECD, 2013a, p.106).

Leadership in ILE must be distributed because the changes in the learning environment are too complex to be monopolised by individuals. Distributed learning leadership may come from either within the organisation or partners from the outside, and includes student learners.

Leadership challenges

Translating vision into practice

Leadership in ILE goes beyond the traditional approaches to thinking, strategic change and management. It may be easy for leaders to espouse an ideal but how much harder to turn that vision into strategy. This particular challenge for leaders, may also be translated into one for teachers. Joyce and Showers (2002) point out, it may be easy for teachers to know what they should do, but 'harder for them to be able to do it, and most difficult of all for them to embed it into their daily practice' (p.26).

Another serious issue for senior school leaders and principals is when they become preoccupied with the the organisation's management tasks that they neglect the core business of the learning environment, that is learning and teaching.

Organisational structures

Conventional organisational structures may present a challenge to school leadership. These structures may appear inflexible, however mostly it is the entrenched, familiar and sometimes 'comfortable' nature of organisational structures that act as a barrier to the implementation and sustainability of ILE. Leadership is required to rethink these structures and identify those structures that are essential for ILE to function.

Accountability

An acute dilemma confronting learning leadership is achieving a balance between external and internal accountability. The pressure from accountability at all levels of the organisation, exacerbated by political demands, is a challenge that will threaten any vision for transformational change to ILE. As one principal aptly expressed:

I have three pistols to my head: one is the need to prepare the school for another visit from the inspectors... another is the need to present a case to the local authority which is threatening to close the school, and another is the need to improve the attainment figures so we can be lifted out of the status of being "a school in challenging circumstances". And then there is the small matter of trying to lead and manage the school on a day-to-day basis and meet the needs of our students and the community (OECD, 2013b, p. 48).

Linked to accountability is the use of assessment. Teachers, parents and political agencies need to be convinced that assessment will accurately measure the 'new' curriculum knowledge, skills and values delivered in ILE. Many of the 21st century skills and competencies are not readily quantifiable through traditional assessment tools. New methods of assessment will need to be designed and possibly used alongside selected traditional assessment tools as a gauge of student learning and accountability.

Digital technologies

Critics of digital technologies in schools have articulated three main concerns: firstly, the variation of adoption of technologies by teachers; secondly, differential access by students, usually based on socio economic factors; and thirdly, the variable degree of "embeddedness" across the curriculum. Schools that deny its students learning opportunities through digital technologies are seriously disadvantaging them. Technology is a powerful force in its own right, especially as it has a strong and ever expanding influence in the 21st century knowledge based economy.

Leading complex change

Education is renowned for its conservative approach to change at scale, and though research informs educators that complex change is needed to design and deliver 21st century learning outcomes, any change in this direction will be a huge challenge for leadership.

ILE are continually changing and innovating, as teachers and leaders respond to feedback about learning and learners needs. This requires learning leadership, which has the capacity to lead complex change. Gert Hofstede (1991) states that a key aspect of leadership is 'the ability to tolerate ambiguity as against a need for the right answers. Living with uncertainty and ambiguity may be a painful experience but can provide the impulse for self-evaluation' (p.92).

A great deal of resistance to the changes required to implement ILEs may not only be from teachers, but parents and community members as well. Changes from what is familiar and tradition, especially in relation to learning and teaching, high stakes assessment and discipline, may be perceived as too experimental and risky; and in a few cases a threat to possible complacency.

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