Teachers as Designers of Learning Environments: The Importance of Innovative Pedagogies*

Pedagogy is at the heart of teaching and learning. Preparing young people to become lifelong learners with a deep knowledge of subject matter and strong social skills requires understanding how pedagogy influences learning. Doing so shifts the perception of teachers from technicians who strive to attain the education goals set by the curriculum to experts in the art and science of teaching. Seen through this lens, innovation in teaching becomes a problem-solving process rooted in teachers' professionalism, a normal response to constantly changing classrooms.

Teachers as Designers of Learning Environments: The Importance of Innovative Pedagogies looks at what is currently taking place in schools as potential seeds for change. At the heart of these approaches is a sensitivity to the natural inclinations of learners towards play, creativity, collaboration and inquiry. Examples from 27 national and international networks of schools are used to illustrate how teachers use these innovative practices.

The importance of innovative pedagogies

Pedagogy is a complex concept. A better understanding of innovative pedagogies is required in order to address contemporary educational challenges and improve teachers' professional competence. The first part of this volume sets out the three types of dynamic interactions that are related to pedagogy: between knowledge and practice, research sciences and creative implementations, and educational theories and particular practices.

Understanding how and when innovative pedagogies work requires critical reflection on the purpose and combinations of pedagogies and the potentials of adaptive teaching. The influence of content areas and the context of 'new learners' in teaching, and how to frame system-based pedagogical change are also crucial. These are the main components of an organising conceptual framework, the C's framework, which underpins the analysis of the volume.

Clusters of innovative pedagogical approaches

Setting out a pedagogical continuum allows for the identification of six clusters of innovative pedagogies: Blended Learning, Computational Thinking, Experiential Learning, Embodied Learning, Multiliteracies and Discussion Based Teaching, and Gamification. These clusters are created to group together the hundreds of innovative approaches and promising new practices that currently populate the innovation landscape. Each individual cluster is underpinned by different learning theories and pedagogical approaches.

The second part of this volume explores how to implement these innovations effectively. It offers key elements and challenges that schools and teachers need to address, as well as insights about how to attune these new implementations in relation to particular learners and content domains.

Networks of innovative schools

Networks of innovative schools are an important lever of change, critical for understanding and scaling discrete classroom level innovations. The third part of this volume summarises the work and approaches of 27 national and international networks of innovative schools. The networks featured are diverse and multi-faceted, with some focusing more on the implementation of similar innovations defined by common pedagogical principles, while others work as laboratory for sharing different innovative practices or as a platform to provide professional development to teachers.

This diversity is reflected in the main approaches to teaching and learning reported by the networks, schools and practitioners. Despite this diversity, one key element shared by all networks is their deep engagement with pedagogy and its innovation, and particularly, their endorsement of the OECD Principles of Learning. Another key finding is the role of networks in providing continuous professional development and other forms of teacher support as a way to successfully implement innovative pedagogies.

The main challenge in the analysis of these networks is understanding the impact of the various pedagogical approaches. Improving the measurement of holistic approaches and complex skills is a key area for scaling up and out innovative pedagogies.

Key messages

Teachers as Designers of Learning Environments: The Importance of Innovative Pedagogies sets out a series of key messages for research and policy:

1. Innovative pedagogies are a key part of teacher professionalism. Innovation in teaching is a problem-solving process rooted in teachers' professionalism, rather than an add-on applied by only some teachers in some schools.

2. Mapping the content of innovation is key to advancing a new framework for teaching. The clusters of pedagogies offer a roadmap that can help teachers and policy-makers navigate the innovation landscape, and a first step to building an international framework for pedagogies.

3. *Innovative pedagogies should build on the natural learning inclinations of students*. A key lever for improving the teaching of 21st century skills and the engagement of learners lies in the ability of pedagogies to match the natural inclinations of learners towards play, creativity, collaboration and inquiry.

4. *Achieving student-centred focus requires deliberate, deliberate planning*. In focusing on the role of teachers as creative professionals, the report calls for a highly deliberate form of lesson planning that promotes student centeredness and active participation.

5. *School networks are a paramount source of support for teachers*. Teachers in school networks are continuously in contact with a large community of practice and other resources that are essential support for their professional development.

6. *Innovative pedagogies must align with teacher experience and skills*. Innovation in teaching should be understood as a process in which teachers reflect on their own practices, to better align their personal capacities with innovative pedagogies.

7. *Domains must be more connected to allow for teaching innovation*. Teachers need to become aware of the way domains organise their teaching and how these domains can be better connected to make innovations more effective.

8. *New assessment frameworks are necessary and required to understand and spread innovative pedagogies*. New ways of measuring outcomes that are broad enough to capture 21st century skills and other non-academic outcomes are an imperative for identifying how innovative pedagogies work.