

## **Characterising Situated Professional Development for Diffusing Innovations in the Singapore Education Landscape**

Lee Shu Shing, Jang Hari and Dennis Kwek

### **KEY IMPLICATIONS**

- Confluence of innovation's core principles, teachers as learners and facilitator's roles for situated professional development (PD) process relates to how innovations align with policies and whether innovation's intention is to replace or value-add school's existing practices.
- Situated PD structures for innovation diffusion emphasise: (i) coherence with policies and schools' readiness for innovations; (ii) community structures within and across schools; and (iii) support from external organisations and school leaders in evolving PD structures for innovations within and across schools.
- Situated PD for innovation diffusion needs to consider teacher leadership and sustainability. When teachers grapple with these complex issues, situated PD may take pragmatic stances as innovations diffuse across schools. These stances provide rich PD if teachers continue to reflect critically by aligning innovation's intentions, school's needs, existing PD process and resources to sustain innovations.

### **BACKGROUND**

The Singapore education system has invested in policies, such as Thinking Schools Learning Nation (1997), Teach Less Learn More (2004), and educational research since 2002 to move towards student-centred practice and create innovation cultures in schools. These efforts have created successful innovations. It is timely to consider diffusion issues, such as how PD situated in innovation contexts drives diffusion.

### **FOCUS OF STUDY**

The study unpacks the 1) processes of how situated PD occurs, as well as 2) within and across school structures and socio-cultural affordances that shape situated PD for innovation diffusion. The study postulates that situated PD may differ according to innovation types (school-based curriculum, skills-based, and facilitated practitioner inquiry innovations).

### **KEY FINDINGS**

Findings unpack components that make up situated PD process as well as nuances of situated PD structures and its social-cultural affordances across the innovation types and contexts.

## Situated PD process

### Core principles of innovations

Innovations focus on student-centred learning by leveraging technology and real-world experiences (*Theme 1*) into classrooms in varied ways. Accountability and efficiency are valued as innovations diffused to more schools.

### Teachers as learners

The ways teachers learn are shaped by their roles and contributions in the PD process (*Theme 2*). Teachers learn through iterative cycles of lesson co-designing, enactment, and refinement with colleagues and facilitators. The ways scaffolds are provided shape how teachers learn. As innovations diffused, PD process may morph to be more product-driven.

### Facilitators

Facilitators take a distributed expertise stance to support teacher learning within a community (*Theme 3*). Intensity of facilitators' scaffolds is shaped by context and innovation's intention to involve these factors: extent of change in curriculum, flexibility of technology and having a regular teacher community. Different parties take up the roles of facilitators as the innovations diffuse across contexts.

## Situated PD structures

- Synergies with policies and school's readiness drives structures (*Theme 4*) for PD and diffusion. Synergies enable innovations by creating buy-in, partnerships to bring in expertise, resources, and commitment for PD.
- Different innovations design community structures within and across schools (*Theme 5*) to unite teachers and knowledgeable others to learn collaboratively. Affordances of communities are built on new and existing PD structures. Community structures leverage autonomy and relationships so teachers develop ownership to implement and diffuse innovations. Communities leverage diverse stakeholders (through partnerships) to support PD structures and bring in resources for spreading innovations.

- As innovations diffuse, receiving schools evolve PD structures to sustain PD and innovations (*Theme 6*). PD structures maintain internal expertise and teachers' belief of innovation by creating pedagogical leadership division, mentoring programmes, and giving teachers autonomy to continue spreading innovations. Follow through from school leaders and school climate are vital so teachers should take up mentorship roles and develop other teachers through formal and informal means to spread innovations.

## SIGNIFICANCE OF FINDINGS

### For research

Findings unpack situated PD for innovation diffusion as a confluence of: 1) innovation's core principles, 2) how teachers learn about the innovation, 3) how facilitators guide teachers, and 4) structures for teacher learning.

### For practice

Findings show how innovation type shapes situated PD and diffusion.

- a. School-based curriculum innovation may need extensive support and resources due to the strong alignment to national curriculum and the need to redesign the entire school-based innovation. There is richness of teacher learning but the spread of innovations may be less expansive.
- b. Skills-based innovation value-adds existing classroom practices. Teachers create learning packages that supplements existing curriculum by developing students' skills and disposition like peer critique and self-directed learning. The change is less than school-based curriculum innovation. Thus, less resources are needed. The spread of skills-based innovation seems wider while the richness of teacher learning could be less than school-based curriculum innovations.
- c. Facilitated practitioner inquiry develops teachers to inquire new learning designs and address issues. Knowledgeable others

facilitate teachers' inquiries by developing teachers' understandings of technological affordances and theoretical frameworks. The spread of facilitated practitioner inquiry may be widest compared to the above two innovations as the innovation is broad and flexible coupled by its bite-size nature to value-add existing practices. However, the complexity of inquiry as an innovation may lead to short-term implementation. The richness of teacher learning may be compromised.

## **PARTICIPANTS**

Three innovations are purposively selected: school-based curriculum innovation, skills-based innovation, and facilitated practitioner inquiry. They represent technology-mediated innovations that have diffused across schools. Teachers, key personnel and beyond school stakeholders from each innovation are purposively selected for interviews and observations.

## **RESEARCH DESIGN**

The study adopts a multiple-case study design. Within case analyses, develop a micro view of situated PD for the selected innovations. Cross-case analyses provide a macro view of situated PD by comparing similarities and differences of within-case analyses to tease out nuanced understandings of situated PD.

## **About the authors**

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