RESEARCH BRIEF SERIES

Teacher Inquiry about Pedagogical Practices

A Case Study of a Singapore School

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KEY IMPLICATIONS

- Findings provide a contextualised view of teacher inquiry (TI) process in a school and unpacked the contextual factors that have led to variations in the TI process. Findings provide insights on how one primary school in Singapore creates structures to give teachers autonomy to enact TI in a centralised-decentralisation education context and how these structures have shaped TI.

- Facilitation by knowledgeable others may help teachers reflect more deeply. It may be useful to encourage teachers to design broader interventions so that there are opportunities to implement the intervention, collect diverse evidences, reflect and refine TI iteratively. As the school embarks on approaches and structures to facilitate the TI process, it is important to ensure consistency and transparency to all internal stakeholders.

- The school may make efforts to appoint champion teachers to facilitate TI. However, teachers may take a pragmatic, efficiency mindset to stress the TI product and not the process. They may also not feel competent to lead TI, which implies that schools may need a "coalition team" with the right competencies and mindsets to drive TI.

BACKGROUND

In line with the Teacher Growth Model, school-based efforts promote TI in communities. TI is the systematic study of one's teaching practice.

Our research site is a typical primary school in Singapore. While there are many TI tools, such as lesson study and learning circles, in 2017, the school involved five subject groups in an Action Research (AR) workshop. Each group experienced TI using AR and implemented an intervention based on problems identified.

In 2018, the school scaled up AR as a whole school approach for TI. Teachers are organised as subject-based Professional Learning Teams (PLT). Two PLTs are purposively selected. Each community has refined the interventions from the 2017 AR workshop.

FOCUS OF STUDY

The research questions (RQs) are: (1) What is the process of enacting TI about pedagogy within communities in a Singapore school? and (2) What are the school-based structures involved and how do these structures enable and/or inhibit TI about pedagogy?

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KEY FINDINGS

Themes 1 to 4 describe the TI process (RQ1). Themes 5 to 6 (RQ2) describe the school structures, social-cultural affordances and how they enable and/or inhibit TI for the PLTs.

1. <u>Inquiry is a collaborative process.</u> Teachers perceive TI as collaborative because it is situated in a PLT structure. The PLTs' different inquiry objectives meant that teachers enacted the collaborative process differently.

2. <u>Inquiry is an on-going and iterative process.</u> Teachers see TI as on-going as there has been continuity over 2 years. PLTs could iterate TI differently; either through the entire inquiry process or in a cyclic manner within a stage of the process. How TI iterates may be shaped by the PLT's inquiry objective and intervention.

3. <u>Inquiry is a tool for evidence-informed practices.</u> Evidences collected has helped teachers make pedagogical decisions. However, the range of evidences analysed differed according to the PLT's inquiry objective and scope of intervention.

4. <u>Inquiry provides opportunities for reflection.</u> TI allows teachers to engage in collaborative reflection in and on practice. Teachers felt that facilitation by knowledgeable others may be necessary so they could reflect more deeply.

5. <u>School leadership taps on existing structures for TI.</u> School leaders leverage formalised structures to build teachers' capacity for TI. School leaders also provide time-tabled time for teachers to engage in TI. School-level sharing facilitates TI by diffusing new pedagogical strategies and sharing experiences. Structures (such as staff room sitting arrangement) boost informal sharing. School leader's priority influenced the topic for TI. It has allowed teachers to access resources to facilitate TI. Limited communication between stakeholders in the school inhibited TI. Findings show that teachers had different understandings about the outcome of TI. They have varied understandings of school structures and there are different understandings of the TI process because stakeholders experience AR differently.

6. <u>Structures enable spaces for teachers' decisional capital to promote TI.</u> The PLT structures create a place and time for teachers to dialogue and create social capital for inquiry. PLT structures provide leeway and time-tabled time for teachers to decide on the frequency and agenda of meetings.

Teachers have the autonomy in how they implemented the TI process. However, the PLT structure may be constrained by teachers' mindset or competency. While teachers' willingness to enact interventions provided an embodied experience of the TI process, teachers might take a pragmatic stance to stress the product rather than process of TI.

SIGNIFICANCE OF FINDINGS

Findings contribute to research by providing a contextualised view of the TI process in a school and unpacked the contextual factors that led to variations. Findings show how school structures enable and/or inhibit the TI process. Findings provide insights on how a school creates structures to give teachers autonomy to enact TI and how these structures shape TI.

Findings contribute to practice by suggesting several tips for implementing TI in a school. First, *facilitation by knowledgeable others* may help teachers reflect more deeply. Guiding questions are useful to facilitate teachers' discussions and reflections. Second, it may be useful to encourage teachers to *design a broader scope of interventions* so that there are opportunities for inquiry and experimentations. Teachers can implement the intervention, collect diverse evidences, reflect and refine TI iteratively. Third, *the problem and impetus for TI is key*. When teachers see the need and relevance for intervention, it may motivate teachers to inquire and reflect deeply with multiple evidences.

As a school embarks on approaches and structures to facilitate the TI process, it is important to *ensure consistency and transparency to all internal stakeholders*. The school may make deliberated efforts to appoint champion teachers to facilitate TI. However, having a knowledgeable other of "the intervention" may lead the team to take a pragmatic, efficiency mindset to stress the product and not the process of TI.

Another factor relates to how teachers may not feel competent to lead TI. This finding implies that school may need a "coalition team" with the right competencies and mindsets to drive TI.

PARTICIPANTS

Diverse informants are selected from three levels (school, community, and teacher). The school Vice Principal, Math and English Head of Departments, and the School Staff Developer are selected to understand

overall school contextual structures and conditions for TI. The two PLTs are selected to understand TI *at the community level. At the teacher level*, all teachers from the two PLTs are involved to elicit their personal views about the community's TI process. The total number of participants involved is 12, 4 key personnels and 8 teachers.

RESEARCH DESIGN

The study adopts a multiple-case study design. Within-case analysis develops a micro, PLT view of TI processes and structures. *Process coding* captures actions in TI processes, school structures, and social-cultural affordances that shape TI.

After process coding, *thematic analysis* is done to derive themes for each PLT. Cross-case analysis provides a macro view of common TI process and structures. *Thematic analysis* derives similarities and differences of TI process, school structures, and its social-cultural affordances across PLTs.

About the authors

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Request for more details

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