A Template for Facilitating
Knowledge-Building Discourse in Online Teacher Professional Development

Bohdana Allman, Brigham Young University, bohdana.allman@byu.edu
Heather Leary, Brigham Young University, heather.leary@byu.edu

Abstract: Effective teacher professional development is participatory in nature, i.e., situated in practice, collaborative, dialogic, and inquiry-based. Current technologies make online participatory learning experiences increasingly possible. This design case study presents a pedagogy-based template, the Progressive Instructional Conversation (PIC), that guided the redesign of existing teacher professional development courses grounded in sociocultural practices into an online modality. The template elements and their role in facilitating progressive knowledge-building discourse online are presented and discussed.

Keywords: online, knowledge-building discourse, teacher professional development, design.

Background

This study was part of a more extensive design-based research project at a large private university in the western United States. The project's overall goal was to redesign six participatory teacher professional development (TPD) courses into fully online courses to improve access to resources and flexibility of instruction. The program supports teachers' learning through collaboration, dialogue, and inquiry-based approach situated in practice (participatory TPD). It incorporates principles of active learning and adult learning theory, modeling of effective practices, provides opportunities for reflection on one's practice, and offers coaching and expert support, representing best TPD practices (Borko et al., 2010; Darling-Hammond et al., 2017; Dede et al., 2009). Facilitating progressive knowledge-building discourse and promoting dialogic learning is at the core of enacting the program (Hofmann, 2019). It supports teachers as they develop a complex understanding of context-specific and situational issues and apply their knowledge and skills in their classrooms (Harasim, 2017; Scardamalia & Bereiter, 2014; Wells, 2002).

Maintaining the participatory character of instruction and supporting progressive knowledge-building discourse while taking full advantage of available online resources and affordances became the project's key design requirement. The Progressive Instructional Conversation (PIC) template was created to systematically guide the redesign and development processes and to support an effective facilitation of the completed courses. This investigation and related findings are presented as a design case study, which is especially useful in disclosing localized design practice details, related experiences and understanding, and innovative solutions to complex challenges (Boling & Smith, 2012). This design case aims to present the PIC template and explain its structure and functionality revealing its role in facilitating progressive knowledge-building discourse.

Design description

The PIC template represents the structure of a module. Typically, there are ten thematically-focused modules in a course guiding a practicum-based portfolio development. Content and activities within each module are organized in two directions: horizontal and vertical. The template's horizontal progression assists the learners as they move across the four module topics from theoretical focus to practical application. This theory-to-practice progression is an essential element of effective TPD and offers a logical structure for online instruction. It provides a way for teachers to reflectively transcend the theory-practice divide and become comfortable operating from a principled-based practice stance while flexibly responding to the messy yet the most important practical problems within their classrooms. Explicitly attending to this horizontal theory-to-practice progression around module topics creates a pattern of (1) unfolding of complex theoretical concepts in familiar and learner-friendly terms, (2) assisting learners as they interpret their prior practical experiences through a theoretical lens, and (3) supporting the learners as they anchor their classroom practices in a solid theoretical understanding.

The template's vertical progression supports the learning process advancing from individual and collaborative learning toward assisted instruction, reflection, and performance assessment. It is based on a well-known notion of the zone of proximal development (Vygotsky, 1978). All instructional elements, i.e., learning, assistance, assessment, are always present, but the emphasis changes with progression. Two key theory-related factors frame the pedagogical purpose of each phase: *the type of interactions* (Anderson, 2008) and *the phase*

within the inquiry cycle (Garrison et al., 2001; Harasim, 2017; Wells, 2002). The template's vertical progression assists learners as they develop a mastery of conceptual complexity necessary to effectively and flexibly use their theoretical understanding in their everyday practice as they work in diverse situations with a variety of learners.

Learners begin each module by reviewing key concepts, developing background understanding, and reflectively connecting it with their prior knowledge and experiences. This prepares them for active participation in small group collaborative activities where they review each other's work, consider various perspectives, and seek and negotiate acceptable solutions for a common task that expands both their individual and group understanding. In the process, the group discourse becomes exploratory, an important characteristic of a knowledge-building discourse associated with sustained development of ideas. Meeting with others and the facilitator during the class conference is central for completing the intellectual convergence phase of collaborative work. As individuals articulate their conceptual knowledge, share gained understanding, and are exposed to different ideas and solutions, their understanding further develops. The facilitator assists learners as they make deeper connections across topics within the module, challenges their thinking, and highlights and shares notable examples of practical application. These meetings also provide an opportunity to begin an individual reflection on the module's most valuable ideas and their application in one's practice. Practicum assignment is the culminating experience for each module where learners reveal their ability to apply their theoretical understanding in their own practice and receive individualized feedback and coaching. Practicum assignments build on each and, together with other evidence, become a portfolio-based course assessment.

Conclusion

Developing a template that facilitates progressive knowledge-building discourse in online modality creates powerful opportunities for more accessible and flexible professional development for teachers and other professionals. There is a great urgency for quality collaborative models to bring together geographically distributed professionals, promote deep connections between theory and practice, and provide easy and flexible access to resources and interactions within communities of practice.

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