

Chapter 61

Applying the TPACK Learning Trajectory in Blending Practical Teaching Experiences With Online Community of Learner's Explorations

Margaret L. Niess
Oregon State University, USA

ABSTRACT

Inservice teacher preparation balances theory with practical experiences to support teachers in integrate their theoretical knowledge into their teaching practice. Online instruction holds potential for this education but questions how classroom observations are conducted in the teachers' classroom practices, particularly where the teachers are geographically dispersed. This multiple case descriptive study examines an online analogue to traditional classroom observations, where the Scoop Notebook (Borko, Stecher, & Kuffner, 2005) reveals inservice teachers' Technological Pedagogical Content Knowledge (TPACK), more specifically their TPACK-of-practice (Cochran-Smith & Lytle, 1999). The Scoop Electronic Portfolio development process describes teachers' engagement in classroom practices, transitioning their scholarly theoretical knowledge to practical knowledge through in-depth, rich reflections from classroom actions and artifacts. This course blends the practical experiences of the Scoop process with asynchronous community of learners' explorations of instructional strategies. The results describe teachers engaged in action research using Scoop artifacts as objects to think with for transforming their TPACK for integrating technologies in teaching their content, ultimately transforming their TPACK-of-practice.

DOI: 10.4018/978-1-5225-5631-2.ch061

Applying the TPACK Learning Trajectory in Blending Practical Teaching Experiences

In theory, there is no difference between theory and practice. But, in practice, there is.

~Jan L. A. van de Snepscheut, n.d.

INTRODUCTION

Preparing preservice teachers for teaching initially includes multiple theoretical courses to develop their knowledge of teaching and learning. In these courses, they learn that effective teaching involves an alignment of objectives, instructional activities, and assessments. They learn multiple theories on classroom management such as Glasser's choice theory, Kohn's student directed learning, and Canter's assertive discipline. Behaviorism, constructivism, cognitive constructivism, and social constructivism are some theories for explaining how students learn. After teacher-candidates have amassed the theoretical knowledge, they are ready for student teaching – their official practical experience for applying the knowledge they have at that point. However, their student teaching reveals the gap between theory and practice that Jan L. A. van de Snepscheut (http://todayinsci.com/S/Snepscheut_Jan/SnepscheutJan-Quotations.htm) alludes to in his quote, a gap that requires supervisors and cooperating teachers to assist them in traversing the path through their practice teaching.

Upon successful completion of the coursework and student teaching practice, they gain a license to teach. Now, in their first teaching position, they have primary responsibility for everything in the classroom where they are faced with the increased responsibilities for linking theory to practice. At this point, they have less support than they had in student teaching for managing the gap. Ultimately, they seek ways to build on their knowledge for bridging the gap. As inservice teachers, they see the importance of continuing to learn about teaching, to build their knowledge for teaching with an eye on today's students who are learning in more complex social, cultural, educational environments saturated with dependence on multiple digital technologies (hereafter referred to as technologies) in the 21st century.

In essence, inservice teachers are confronted with expanding their knowledge for teaching with the multitude of current and emerging technologies, technologies with which they have limited experience, much less for integrating them as learning tools in their classrooms. To address this lack of experience and knowledge, they actively search for experiences to assist in reframing their knowledge for teaching with technologies. This knowledge is described as Technological Pedagogical Content Knowledge (TPACK), a dynamic, theoretical construct for designing, implementing, and evaluating curriculum and instruction with technology.

The challenge for teacher educators is to design appropriate professional development experiences for inservice teachers, experiences where they are able to engage in relearning, rethinking and redefining teaching and learning as they confront their current conceptions of teaching. To reframe inservice teachers' knowledge that adequately reflects the ideas described by TPACK requires systematic inquiries about teaching, learning, subject matter and curriculum, and schooling much as described in Cochran-Smith and Lytle's conception of *knowledge-of-practice* as a "transformed and expanded view of what 'practice' means" (Cochran-Smith & Lytle, 1999, p. 276). This conception assumes that knowledge is "socially constructed by teachers who work together and also by teachers and students as they mingle their previous experiences, their prior knowledge, their cultural and linguistic resources, and the textual resources and materials of the classroom" (Cochran-Smith & Lytle, 1999, p. 280). This conception of

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/applying-the-tpack-learning-trajectory-in-blending-practical-teaching-experiences-with-online-community-of-learners-explorations/203232

Related Content

The Influence of Professional Development on Primary Teachers' TPACK and Use of Formative Assessment

Drew Polly, Christie Martin, Chuang Wang, Richard Lambert, David K. Pugalee and Catharina W. Middleton (2018). *Teacher Training and Professional Development: Concepts, Methodologies, Tools, and Applications* (pp. 1737-1760).

www.irma-international.org/chapter/the-influence-of-professional-development-on-primary-teachers-tpack-and-use-of-formative-assessment/203253

Graduating From the School of Noranology: Are You a Revolutionary or an Oppressor?

Melanie M. Frizzell, Yolanda Brownlee and Noran L. Moffett (2021). *Navigating Post-Doctoral Career Placement, Research, and Professionalism* (pp. 301-320).

www.irma-international.org/chapter/graduating-from-the-school-of-noranology/275891

Data and Dialogue: Cultivating Transformative Change in Teacher Preparation Programs

Diana B. Lys, Mark L'Esperance, Ann Bullock, Ellen E. Dobson, Linda A. Patriarca and Elbert E. Maynard (2019). *Pre-Service and In-Service Teacher Education: Concepts, Methodologies, Tools, and Applications* (pp. 760-778).

www.irma-international.org/chapter/data-and-dialogue/215594

Massive Online Open Courses for Continuous Career Development in Health Professionals

María Valentina Toral Murillo and Mariana Dorbecker Contreras (2024). *The Lifelong Learning Journey of Health Professionals: Continuing Education and Professional Development* (pp. 195-212).

www.irma-international.org/chapter/massive-online-open-courses-for-continuous-career-development-in-health-professionals/341451

Advisory Committees: Workforce Education Programs

Julie Neal (2015). *Examining the Impact of Community Colleges on the Global Workforce* (pp. 53-70).

www.irma-international.org/chapter/advisory-committees/134784