Preface

HOW THIS BOOK CAME ABOUT

Technology Implementation and Teacher Education, along with Technology Leadership in Teacher Education, was born from professional dialogues among scholars around the world. I love going to international conferences and listening to ideas of experts from different areas. Ideas grow with interaction: sometimes I have coffee or lunch with scholars that I just met at a conference so I can learn more about their practices, teaching philosophies, and important issues in their environments. Such conversation causes me to ponder this question: how can I successfully apply practices in Austria, Netherlands, Japan, or Great Britain, to the context of the United States, the country in which I am teaching? This book aims to mimic the structure of such a process: international authors, who are teacher educators, present their best practices in their environments. They also imply how their cases can be generalized so that the audience can think about how to adapt and implement what worked in the authors’ environments into those of the readers.

Technology changes rapidly. Since the time span from a book proposal to the publication is about two years, books that focus on pedagogical issues rather than technological how-to tend to attract teacher educators. Also, an editor of an instructional technology book needs to have a keen sense of current and emerging trends. To grasp the trends, I skimmed through over 500 journal articles and conference proceedings covering the most recent three years. I composed the draft for the book proposal after identifying critical issues and trends. Then a group of teacher educators exchanged ideas about the draft and finalized our book proposal. While doing so, we decided to publish books for two different strands. One was for leadership in teacher education and the other was for teacher educators as reflective practitioners.

During fall 2008, I sent out emails to scholars who already published in relevant topics. The response was very encouraging. I especially enjoyed the process of reading their ideas via email or listening to them over the telephone. Authors asking for my feedback often motivated me to look for recent publications on their topics. Hence, there was a constant active exchange between authors and myself. Furthermore, reviewers and authors had very productive interaction during the formative evaluation process: first during the chapter proposal stage, then during the chapter drafting stage. The process was double-blind reviewed, so I often acted as a mediator to pass on the comments and questions between the reviewers and the authors. Authors displayed a high degree of professionalism as they used formative feedback to make their chapters stronger. This is another example of professional dialogue refining ideas.
ORGANIZATION OF THIS BOOK

The first section of this book discusses online and blended learning. Charalampos Mouzakis and Constantinos Bourletidis show details and participants’ perceptions about their blended learning course initiated by the Greek Ministry of Education. Matthew Niemitz, Scott Slough, Kristen St. John, R. Mark Leckie, Leslie Peart, and Ann Klaus present a case study about adventure learning, a type of hybrid inquiry-based learning. Swapna Kumar analyzes factors that influence teacher educators’ choices of online activities. Karen J. Johnson reports how an electronic discussion board can support peer support among student teachers.

The second section of the book focuses on communication and collaboration. Hasan Tinmaz and İlker Yakin provide an application for a 3x3 two-dimensional matrix of technology perception framework in information and communication technologies (ICT). Phillip David Jones and Adrian Ting show how an ePortfolio can promote peer-supported reflection. Virginia McCormack argues that VoiceThread, a Web 2.0 tool, can support collaborative learning. Lesia Lennex and Kimberly Fletcher Nettleton share their findings about the implementation of hand held technologies.

The third section is structured around social and affective issues. Nor Aziah Alias and Nor Aiza Alias discuss how technology can support affective learning. Kati Vapalahti, Miika Marttunen, and Leena Laurinen showcase a blended role-play model that raises awareness about the use of intoxicants among youths. Judith Cramer and Margaret Crocco present gender issues in digital learning.

The fourth section goes into subject-specific teacher education. Irina Lyublinskaya and Nelly Tournaki share reflections of preservice elementary school teachers after they utilized probeware in an inquiry-based math and science methods course. Ronald MacDonald demonstrates effective use of a hand-held data logger in a science classroom. Brenda Capobianco and James Lehman investigate preservice science teachers’ process of integrating educational technology into the science classrooms. Christopher J. Johnston describes how preservice elementary teachers evaluate technology tools for mathematics education. Gladis Kersaint narrates course development and changes for her mathematics-specific technology course. Manuel Santos-Trigo shows uses of graphic tools that promote a deep understanding of mathematics. Adam Friedman and Tina L. Heafner examine the impact of Web 2.0 tools including blogs, wikis, and podcasts on social studies education.

The fifth section addresses frameworks and applications for learning environments of the digital age. Chinwe Ikpeze shows elements for supporting reflection. Sara Winstead Fry demonstrates how a professional handbook can support the reflective process. Begoña Gros mentions general definitions for games as well as how games are used in schools. Chris Penny offers detailed accounts of implementing a podcasting project for teacher candidates. Kevin J. Reins shows a use of digital ink on tablet PCs for integrating notes and supporting interaction.