Preface

This book is about online learning communities (OLC) and teacher professional development (TPD). Borko (2004), put forth that “We are only beginning to learn, however, about exactly what and how teachers learn from professional development, or about the impact of teacher change on student outcomes” (p. 3). In this book, the ambition is to contribute to such knowledge by focusing what OLCs in various forms have to offer to practising teachers and teacher trainees when it comes to professional development. As such, what is the character of teachers’ professional development? Is it workshops and seminars, could it be a life-long continuous learning and development process towards some unidentified goal? Should it be formally orchestrated on state, local or school level, or informally chosen by the teacher as a self-directed learner, searching for a continuously informed and better understanding of the conditions of teaching and learning? Further, what is this phenomenon called OLC? When does accessing a website or reading and communicating in an online forum become a membership in an OLC, and what keeps this assumed community together? Does it differ to be a member of an OLC from being a member in communities in real life? In this book, questions like these are addressed, some answered, yet others are raised. We will start by giving a brief orientation relating to OLCs before readers head into the chapters. Thereafter, we provide some initial concerns about teacher’s professional development that can be equally valuable for the potential reader.

Before presenting some possible cornerstones of OLC we would like to start with directing the readers’ interest towards some central notions of the concept of community. That is before community goes online. According to Selznick (1996), community is a dynamic concept. It should according to him not to be associated with a predetermined and objective definition with a clear and central meaning open to only one specific understanding. It is rather the opposite. The concept is open to different kinds of meanings and understandings, depending on social, cultural and societal frameworks. This understanding is also present in Bauman (2001). He argues that community is related to a tension between safety and freedom, which gives a two-folded understanding. Almost like Janus, the Roman god of doorways and passages: one face showing the concept of community associated with a feeling of being part of and sharing something positive with others, another showing the community as threatening our autonomy, demanding us to give up our sense of individuality. Another distinction can be addressed with help from Tönnies (1963). He describes the concept as either being a coherent community in which culture and social practices are infused with moral unity and intimacy or a place in which each member’s autonomy and mobility is favoured. Regardless of which understanding, community seems to be an illusive concept, letting itself be defined and used in multiple ways (Delanty, 2003), and in addition we argue that the social and moral dimensions of being together as humans are equally important as always present (Lindberg & Olofsson, 2008; Olofsson & Lindberg, 2006).

Through the writings of for example Lave & Wenger (1991) and Wenger (1998), the concept of community became intertwined with the L in the acronym of OLC. The learning community was in addition
given a central role of their concept of Community of Practice (CoP). A concept that seems possible to relate to all three notions about community presented above. Relating to an educational context, Grant and Agosto (2008) sum up ideas such as:

“...a community of practice is a site of learning and action where participants engage in a joint enterprise to develop a whole repertoire of activities, common stories, and ways of speaking and acting for social justice. This endeavor diminishes the borders between community and school, as well as between virtual paces and physical spaces [...] enabling other social arenas to incite new ways of relating and inciting solidarity that is characterized by conviviality and criticality” (p. 189).

So then, what does the concept of community imply when it goes online? In the past decade, the emergence of information and communication technology (ICT) and the development of the Internet also allow people to socialise with others using blogs, wikis, social software, tagging and sharing information, personalising the web, reaching out to and becoming part of the world in ways unprecedented. This makes technology a means for creating new forms of being together in what we know as OLCs. Trying to understand what constitutes an OLC is not an easy task (Preece & Maloney-Krichmar, 2003). In this book, five basic constituents of OLC seem, in different ways and within different practices, are present. Those are, people, purposes and policies (De Souza & Preece, 2004) and activities and tools (Carlén & Jobring, 2005). From the positions sketched out, there are apparent possibilities for an OLC to foster its members, and for a membership in an OLC to harbour processes of learning and development. For teachers of today, the OLC is the place to be when it comes to professional growth and development.

In fact, when turning the focus for a moment to TPD, what different views could be elucidated? Fraser, Kennedy, Reid and McKinney (2007) suggested a joint framework of three different models wherein several dimensions of TPD are included when discussing a possible framework to examine TPD. First, the three interrelated aspects of professional learning suggested by Bell and Gilbert (1996): personal, social and occupational. Second, the analytical framework of Kennedy (2005), in which the purpose of the TPD could be located along a continuum of being transmissive, transitional or transformative. Third, Reid’s quadrant of teacher learning (McKinney et al, 2005), which is comprised of two dimensions: formal-informal and planned-incidental. Through this joint framework, the complex nature of TPD is recognized. Villegas-Reimers (2003) also gives broad background descriptions of different views on TPD. Starting in professional development, referred to as the development of a person in his or her professional role, Villegas-Reimers continues to include in TPD the professional growth of a teacher as a result of gaining increased experience after examining his or her teaching systematically. This process which includes formal and informal experiences in which the content of these experiences, the processes by which they occur and the contexts in which they take place must be included. Only recently, according to Villegas-Reimers, has TPD come to be considered a long term process, which would include regular opportunities and experiences that are planned systematically to promote professional growth. This is a new perspective for teaching, Villegas-Reimers continues, since the TPD available to teachers has for years been in-service training or staff development usually consisting of workshops or short courses. She summarizes this new perspective in seven characteristics. First, it is based on constructivism rather on a transmission-model. Second, it is conceived of as a long-term process. Third, it is conceived of as a process that takes place in a particular context. Forth, it is intimately linked to school reform. Fifth, a teacher is conceived of as a reflective practitioner. Sixth, professional development is seen as a collaborative process. Seventh, professional development may look and be very different in diverse settings. All of these characteristics appear in different and innovative ways in the chapters of this book, and as such they mirror the complexity of TPD.
Starting in the foundation of this book; the teachers participating in and communicating with others in an OLC are in one way or another active in a process of professional growth and development. According to Vrasidas and Glass (2004, p.3), “Innovative professional development for teachers will involve opportunities for teachers to share their expertise, learn from peers, and collaborate on real-world projects”. In the cases and models, methods and pedagogies included in this book, opportunities in Vrasidas and Glass’s sense are provided and discussed. OLC and TPD could therefore be seen as endeavours for both understanding TPD, framed within OLCs, and understanding the design of virtual arenas in which teachers have possibilities to develop into what Triggs & John (2004) call an “enabled professional”; i.e. “one who has the capacity to respond to changing conditions, anticipate future technologies and re-define their practice so that they are enabled rather than constrained by external policy agendas” (p. 427). The collaborative work described in this book might well be a way to expand the scope of OLCs, bridging teacher-training practices to teacher practices, and thus including already practising teachers, teacher trainers, and teacher trainees, school-leaders, policy-makers, educational researchers and other stakeholders in joint educational communities (Olofsson & Lindberg, 2007).

This book is divided into four different but interrelated themes. Chapters 1 and 2 represent the first, “Theoretical and Technological Foundations”. Chapters 3-9 represent the second theme “Methods and Models of Online Learning Communities in TPD”. Chapters 10-12 represent the third theme “Innovations in the Use of Technology and TPD”. Chapters 13-15 represent the fourth and final theme “Pedagogies afforded by technology in TPD”. The positioning of chapters within different themes has been a difficult task. It is most likely that each chapter respectively could be suitable for more than one theme, which highlights the interrelated nature of them. Nevertheless, the themes are only there to give the reader an orientation within the context of the book, and the position is not to be considered a mutually exclusive categorisation. However, making these distinctions is the power invested in us as editors and we have executed this power for the good of the reader and for the good of the book.

In Chapter 1, “Theoretical Foundations of Teachers’ Professional Development”, Ingrid Helleve from Norway, shows a possible understanding of how the theoretical foundation of the concept of TPD has changed over time. In the chapter she states that being a professional teacher or teacher educator also means to participate in an ongoing learning process and that the main concern of teachers is to guide and help students to learn. According to Helleve, this means that teaching is in its nature closely connected to personal attitudes and values. This gives that policy-makers and ongoing learning cannot dictate teaching and TPD and that reflection has to be built on teachers’ own participation in defining their own profession. The chapter suggests a close connection between teachers and teacher educators as a prerequisite for ongoing professional development in education. Further, the possibility to communicate through OLCs has made reflective activities through action research between distant educational environment easier to organize and facilitate. Finally, the chapter claims that future school development depends on personal engagement from teachers and teacher educators in an ecological learning process supporting students, student teachers, novice teachers and experienced practitioners.

Shelleyann Scott from Canada, in Chapter 2, “The Theory and Practice Divide in Relation to Teacher Professional Development”, explores the divide between theories of effective TPD, particularly the potential inherent in OLCs, and the realities of practice within educational contexts. Two case studies, one from Australia and the other from Canada, illustrate the positives and negatives inherent within professional development approaches in these contexts. A number of key dimensions are identified, which when coalesced inform the establishment and sustainability of effective programmes. She argues that online technologies present innovative ways to overcome the impediments to effective professional development. The chapter suggests that online communities of practice utilising social networking technologies provide new opportunities for initiating so-called ‘webs of enhanced practice’ (Scott, 2009).
(see also Chapter 10), where individuals around the globe can engage in collegial collaborations that enhance the passion of teaching.

Chapter 3 is written by Rebecca Scheckler from the USA, and is titled “Case Studies from the Inquiry Learning Forum: Stories Reaching Beyond the Edges”. Two intense case studies of teachers using the Inquiry Learning Forum (ILF), an online space for professional development in inquiry pedagogies, are presented. The chapter shows that the ILF initially conceived as an online professional development tool in the form of a Community of Practice (COP) was reconceived as an electronic tool within a larger space that included the online tool but also many co-present spaces pertinent to a teacher’s practice of inquiry pedagogy. Further, the case studies also demonstrate the transformative nature of teachers engaging in a COP. Not only does the teacher change, but also the COP changes by the practice. The author addresses the need for teachers to feel disequilibrium in their practice before they are willing to engage in change of those practices. In the end of the chapter it is argued that future trends in using online COPs for professional development need to look at practices in these terms where allowance for transaction, support outside the electronic space, and disequilibrium are considered.

In Chapter 4, “Changing the Metaphor: The Potential of Online Communities in Teacher Professional Development”, Margaret Lloyd and Jennifer Duncan-Howell from Australia address that belonging to an online community offers teachers the opportunity to exchange ideas, make connections with a wider peer group and form collaborative networks. The authors suggest that the increasing popularity of teacher professional communities calls for a deepened understanding of how they work and to determine the role they may play in TPD. The chapter maps data from a doctoral study to a recently developed model of professional development to offer a new perspective of how online communities can add to a teacher’s personal and professional growth and, in so doing, add to the small number of studies in this field. This chapter is concluded with a call for a revision of the way professional development in the 21st Century is approached. The authors suggest that old models and metaphors hinder the adoption of more effective means of professional development for teachers and that a new metaphor is needed to show how new tools require a rethinking of professional development strategies particularly in how individual teachers take ownership of their own learning.

Chapter 5 is written by Norbert Pachler, Caroline Daly and Anne Turvey, all from the UK, and is titled “Teacher Professional Development Practices: The Case of the Haringey Transformation Teachers Programme”. This chapter discusses the need for new models of TPD in the context of established and emerging technologies and socio-constructivist theories of teacher learning within online and other communities. The authors present the current contexts affecting professional development in England and discuss the significance of the shift towards collaborative and community approaches to teachers’ learning. The chapter argues that transformation is a key concept, however troublesome, in considering the aims of professional development for teachers’ use of technologies in their everyday practice. The authors explore these ideas by presenting the case of the Transformation Teachers Programme (TTP), a wide-scale teachers’ development project carried out in a London borough by Haringey City Learning Centre (CLC), and they examine how this project has implemented new approaches to Information and Communications Technology (ICT) and teachers’ professional development, based on collaborative experimentation, enquiry and risk-taking within online and other community-based arrangements.

Alastair Wilson and Donald Christie from Scotland, in Chapter 6, titled “Realising the Potential of Virtual Environments: A Challenge for Scottish Teachers” describe how one national school’s intranet with universal access is currently being developed in Scotland (anticipated completion in late 2009). In the chapter, they claim that this new technology will provide teachers with access to a variety of tools with which to develop their teaching and learning. Drawing on the experience of the Applied Educational Research Scheme (AERS), a five-year research programme funded to build research capacity in Scottish
Education, the chapter seeks to explore the potential for teachers in Scotland to realise effective use of this new technology in their professional learning. The chapter uses current research literature on teacher professionalism and professional learning in Scotland to establish the context in which Scottish teachers are currently working. The chapter then utilises three vignettes drawn from research within AERS to argue that the development of virtual environments to support professional learning in Scotland requires further, significant collaborative working between practitioner, policy and research communities.

In Chapter 7, “Challenges of Online Teacher Professional Development Communities: A Statewide Case Study in the United States”, Vassiliki I. Zygouris-Coe and Bonnie Swan from USA, state that with so many educators needing either initial preparation or ongoing professional development to build and sustain expertise in their discipline, online professional development arises as a viable, effective, and timely vehicle for teacher training. They argue that online learning technologies have the potential to transform professional development of teachers; penetrate cultural, discipline, and other barriers; bring educators together to learn, share successes and challenges; and co-construct and transfer learning. The chapter presents examples of success and challenges associated with a large-scale U.S. state-wide online teacher professional development community. Further, the authors also make the case for implementing a systematic approach to investigating the effectiveness of online teacher professional development communities through ongoing assessment and responsive evaluation.

Chapter 8, written by Joaquin Gairin-Sallán and David Rodriguez-Gómez from Spain, and titled “Teacher Professional Development through Knowledge Management in Educational Organisations”. They address that professional development has mainly centred on training processes that involve updating knowledge, yet it has made little headway as a construction that includes both professional and personal characteristics and working conditions. It has in addition focused more on developing training programmes than on analysing the tools for continuous training. The chapter analyses the relationships between professional development, organisational development and the creation and management of collective knowledge. The authors claim that these three concepts can be interrelated and contribute to change when we place ourselves within the framework of autonomous organisations with collective projects focused on lifelong learning. The chapter outlines the ‘Accelera experience’ of knowledge creation and management in communities, describing the model and process used. It is put forth that the ‘Accelera experience’ combines the creation of OLCs and the philosophy and technology of what is known as social software.

Chapter 9, “Thinking Things Through - Collaborative Online Professional Development” is written by John P. Cuthell from the UK. In the chapter, he proposes that one of the most powerful ways of changing the thinking about how we teach and learn is to experience for ourselves the power of collaborative project-based experiential learning. According to the author, few teachers have had the opportunity to learn this way, and this creates barriers for those who want to change their pedagogy. The Oracle Education Foundation’s Project Learning Institute is said to provide teachers with the experience of collaborative project-based learning, using ThinkQuest® to create their own curriculum project. The author argues that by collaborating with their peers, tutors and mentors, teachers are able to model the projects, environment and experiences they want for their classes through a blended learning experience. The chapter describes a model of continuous professional development and its impact on schools, pedagogies and professional philosophies.

Chapter 10, titled “Innovations in the use of Technology and Teacher Professional Development”, is written by Donald E. Scott and Shelleyann Scott from Canada. The chapter explores the innovative uses of technology for TPD as well as its impact in the classroom on learning and teaching. The chapter includes two international case studies. The first outlines technological innovations in graduate programme delivery within the university context in Canada. The second case presents a multi-dimensional professional
development initiative in Australia that has influenced teachers’ and students’ learning. Scott and Scott describe two models: the macro-oriented “Webs of Enhanced Practice” that addresses the professional development of educators and experts; and the micro-oriented “Webs of Enhanced Learning” focusing on the learning occurring at the classroom level. In the chapter, they argue that these two models represent innovations in the use of technology as they conceptualise the eclectic use of multi-modal, varied technologies to advance the professional development of communities of learners.

In Chapter 11, titled “Game Informed Virtual Patients: Catalysts for Online Learning Communities and Professional Development of Medical Teachers”, Michael Begg, David Dewhurst and Michael Ross from Scotland emphasize that modern medical education necessitates a complex interleaving of issues relating to practice, professional and personal development, teaching and learning. In the chapter, the authors argue that this complexity has led, in part, to medical education being persistently located in the vanguard of eLearning development. The formation of online communities of practice in medical education is explored and ways in which the technologies at their disposal in an online environment can support multi-specialty and multi-professional development are described. The authors state that it is clear that eLearning and ICT more generally can provide a vehicle for enhancing professional engagement with the education of students and for self-development in numerous ways. Further, they describe their approach to the development of virtual patient resources and in particular, how this iterative dialogue arising from the allied processes of practice, reflection and pedagogy required to create new learning tools and resources has contributed to professional development of those engaged in teaching medical students and in building OLCs at the University of Edinburgh.

Chapter 12, titled “Videopaper as a Bridging Tool in Teacher Professional Development”, is written by Trond Eiliv Hauge and Svein Olav Norenes from Norway. The chapter demonstrates the possibilities of new media and affordable technological tools supporting TPD in a workplace setting. In the chapter, the authors describe how they over a period of six months followed a team of five mathematics teachers in a secondary school working jointly to improve their teaching and team practice by the support of a multimedia web developer system (VideoPaper). According to the authors, VideoPaper is an easy-to-use tool for development and sharing of web-documents integrating video resources, images and texts reflecting local practices. The authors describe the study as taking the form of developmental work research aligned to historical-cultural activity theory in line with the work of the Finnish professor Yrjö Engeström and was adapted to local needs and conditions of work. Hauge and Norenes put forth that their findings point to changes in teachers’ conceptual approaches to learning and teaching and consequences for technology enhanced support for professional development. They argue that the study contributes to the understanding of the complexities in bridging practices between social and technological design for teacher development and the development of learning communities. In addition, that design of online learning systems fostering TPD must seek to explore and find innovative ways to support transformative actions, where participants are able to create, discuss and connect representations of collective objects of activity to their workplace setting.

Diana Laurillard and Elizabeth Masterman, both from the UK, focus in Chapter 13, “TPD as Online Collaborative Learning for Innovation in Teaching”, on supporting university teachers in the UK in more innovative uses of digital technologies. The authors claim that although the use of these technologies is widespread and increasing, it is not always optimised for effective learning. Further, according to the authors it is important that teachers’ use of technology should be directed towards innovation and improvement in teaching and learning, and should not merely replicate their current practice in a digital medium. The authors therefore make the case for an online collaborative environment to scaffold teachers’ engagement with technology-enhanced learning. The authors’ findings from their recent research are outlined into a blended approach to TPD, and they use these to identify the requirements for an online
collaborative environment: tools for learning design, guidance, and access to relevant resources to support
teachers in their discovery of new forms of technology-enhanced teaching and learning. In the chapter,
they argue that such an environment would provide a framework for a “community of innovation” in
which teachers participate both as learners and as researchers.

Pamela Whitehouse, Erin McCloskey and Diane Jass Ketelhult from USA, in Chapter 14, titled “Online
Pedagogy Design and Development: New Models for 21st Century Online Teacher Professional Develop-
ment” examine the shifting priorities of online teacher professional development design, particularly
through the lens of online pedagogies. They argue that the teaching profession is changing as a response
to multiple outside pressures and the rising importance of digital media and digital literacies in teaching
and learning. Further, that whether one’s purpose is to design an online teacher learning community or
formal professional development program, decisions about technology use will mediate how the learning
communities or training programs function. Whitehouse, McCloskey and Ketelhult put forth that design-
ers, when choosing communication tools or digital media for inclusion in their program, ideally draw
from their technological pedagogical content knowledge, or TPCK – i.e., their understanding of which
technologies will support pedagogy appropriate for the content and learners targeted. In the chapter, the
authors offer a model for online teacher professional development program design that makes visible
the interaction between the technology, the content, the pedagogy and the learner.

The final Chapter 15, “Challenges for the Teacher’s Role in Promoting Productive Knowledge Con-
struction in Computer-Supported Collaborative Learning Contexts”, Maarit Arvaja, Raija Hämäläinen
and Helena Rasku-Puttonen from Finland put forth that contexts resting upon a theoretical base of
Computer-Supported Collaborative Learning (CSCL) are productive for TPD and teachers’ pedagogical
activities. In the light of two different cases from secondary-level and higher education contexts, the
authors examine how teachers’ pedagogical choices influence the quality of students’ activity, namely
web-based discussion. They state that a future challenge is to develop both pedagogical and technological
tools to support the monitoring and enhancement of students’ learning process during online learning.
The chapter further argues that TPD is challenged by new technological tools in formal learning environ-
ments. They conclude that teachers need possibilities to share their thoughts, reflections and good ideas
for making progress and that teacher collaboration within work communities is a powerful element in
teachers’ workplace learning.

Our idea with this publication was already from the beginning to find ways of moving away from
TPD-barriers such as top-down decision making and little or no support in transferring professional
development ideas to the classroom. This could, as touched upon above, be achieved by adopting the
concept of community (Lave & Wenger, 1991; Wenger, 1998), linking it to TPD, and situating it online.
We were convinced that TPD in that way could be practiced within the contexts of OLCs, and be en-
hanced and sustained over time by the informed use of technology (Henderson, 2007). In addition, TPD
in OLCs could thereby be framed by social processes such as mutual engagement, shared repertoire of
interest and joint enterprise, always in relation to the teacher’s practices and with a point of departure in
each teacher’s needs (see also Marks, 2005). All 15 chapters address, in various ways, important aspects
and dimensions related to our idea. They provide theoretical foundations for developing research on
this topic together with cases, models, methods and pedagogies for improved education delivery with
great potential to improve practice. The chapters give the readers a solid ground when working towards
enhancing TPD using OLC.

In line with the overall idea with this publication, from the onset we also had a clear picture of the
potential audience. We had envisioned a publication with potential to attract various, but equally important,
stakeholders. A book suited for professionals who, on a daily basis, work with issues concerning OLC,
TPD and ICT, i.e. teachers, principals, educational researchers, technologists and designers, curriculum
developers, teacher professional associations, teacher training staff, teacher trainees, universities and colleges. Hopefully, the contents of this book at its completion, has enabled this vision to come true.

We in addition hope and believe that this book will be important and cause debate, discussion and development within this specific area. Further that its informed use in policies, learning and teacher developing activities enhance the insight of what impact learning designs and learning arenas can have in order to enrich the practices of both staff and students and how they engage in it on a daily basis. The issue of OLC and TPD combined with methods for improved education for sure deserves such attention.

REFERENCES


