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Robert Raley Peterson
University of Wollongong

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Establishing an online community for special education in Bulgaria

Robert Raley Peterson
B.S. Cornell University

A thesis submitted in partial fulfillment of
the requirements for the degree

Doctor of Philosophy

from the

University of Wollongong

Faculty of Education
January 2009

Abstract

The purpose of this study was to apply existing design principles for the creation of successful communities of practice (CoPs) to the development of a new online community with the aim of (1) exploring the practice of special education in Bulgaria and (2) evaluating the extent and ways in which the online community supports the practice. Research and development was framed by the *design-based research* approach. The study was organized into three phases: *needs assessment*, *formative evaluation*, and *effectiveness evaluation*. Four versions of the online community were created: *prototype*, *alpha*, *beta*, and *final*.

Qualitative data were collected from personal interviews and discussions held on the online community website. Quantitative data were collected from website usage logs. Mixed data were collected from web-based questionnaires and surveys and expert consultation and usability evaluation sessions. Mixed-method studies of this nature are often described as following an *exploratory research design*. Such studies begin with the collection and analysis of qualitative data, which can then be used for the creation of instruments designed to collect quantitative data. In this case, the instrument was a website created to support an online community.

Findings indicate that the main issues affecting the practice of special education in Bulgaria relate to the integration of special needs and Roma minority students into mainstream schools. Findings also indicate that the online community, called Special Education Bulgaria (SEB), must further evolve to adequately address issues related to integration. SEB was found to be an effective online community but only partially effective as a CoP. It is argued that future iterations of SEB be designed to facilitate an *innovative knowledge community* on the topic of integration. Such a community would be designed to foster the development of new practices among special and general educators and other stakeholders of the integration process. It is suggested that the results of this study may apply to countries with *cultural dimensions* similar to Bulgaria. Macedonia, Romania, and Croatia are recommended for further investigation.

Preface

For most, it takes a stretch of the imagination to comprehend how a study involving the development of an online community for special education in Bulgaria could be carried out by an American graduate student at the University of Wollongong in Australia. The likeliness of such a project occurring ten years ago would have been low. But today, international cooperation and exchange at this level is more common than ever, and we can blame the Internet.

I like to think that this study is an example of good karma. The pieces just seemed to fit as the exploration into the practice of special education in Bulgaria unfolded. During my first visit to Bulgaria in September 2005, I was still very much uncertain that the project could work. Though I had spent one session at the University of Wollongong and several years prior preparing, when I actually set foot in Bulgaria, I was a little lost. It was overwhelming, for example, to arrive and see all of the billboards, store names, street signs, practically everything in the Cyrillic alphabet.

By the time I returned to Australia, however, everything was coming together. From a research standpoint, I found that Bulgarian special educators were familiar enough with using the Internet to benefit from an online community. There was also sufficient Internet access and interest in the study. From a cultural standpoint, I was also at ease. I took the opportunity to travel across the country, from Sofia to the Black Sea. I had experienced a country with a history far deeper than that of Australia or the US. It is the land where the first Europeans settled as they crossed over from the Middle East. In later visits to Bulgaria, I also visited Istanbul and Macedonia.

My favorite excursions in Bulgaria were to Rila Monastery, Melnik, Veliko Tarnovo, the Southern Black Sea Coast, and the Pirin Mountains, but there were many other locations, such as Koprivshtitsa, Velingrad, and the Old Town in Plovdiv, that I would recommend. Down south, Ohrid, Macedonia was also a highlight.

One of the more unexpected aspects of travel in Bulgaria was the discovery of so many foreigners, not Bulgarians, but Aussies and Kiwis. It seemed like I met more people from down under than anywhere else in the world. One of the worst moments was a serious bout of food poisoning from an Americanized restaurant in Sofia. It was the chicken. I learned my lesson about sticking to Bulgarian cuisine when in Bulgaria. The most disheartening aspect of travel in Bulgaria was the highly visible gap between the rich

and the poor. In Sofia, the nation's largest city and capital, the areas visited by tourists are relatively clean and modern, but it does not take long to discover that these areas are a screen behind which the majority of Bulgarians actually live.

I began the study thinking that learning Bulgarian would not be necessary. For the most part, this was true, but learning the language to an intermediate level was one of my greatest personal achievements during the project. It was tremendously helpful for travel and for qualitative data analysis. Microsoft Word's Bulgarian spellchecker and a free downloadable Bulgarian dictionary (Angelov, 2005) were essential to my success with communicating electronically.

The study was conceptualized in San Francisco, where I worked for a Bulgarian robotics company as a trainer and technical writer. I had an interest in special education as I had grown up hearing stories about my mother's career as a special educator. My colleagues at the robotics company indicated that the special education profession was practically invisible in Bulgaria. Based on their comments, it appeared that children with special educational needs were either not identified for accommodations or, in more severe cases, completely excluded from the education system. This was an eye-opening discovery and a catalyst for the study's proposal.

The connection to Australia came from a contract position in which I worked with an Australian website developer at Edith Cowan University in Perth. The developer introduced me, by email, to Associate Professor Jan Herrington, who would later become the study's lead supervisor. A contact was made in the Department of Special Education at Sofia University when I applied for a Fulbright grant to fund initial stages of the project.

For me, this project has always made sense. It combines many of my interests including travel, instructional design, website development, foreign languages, technical writing, and special education, and was travel mentioned? Clearly, anyone interested in taking on such a study also has a passion for travel, but how is the research significant to both special education stakeholders in Bulgaria and the body of knowledge regarding the development of online communities? This is the question addressed in Chapter 1 and that culminates in the study's research questions and goals.

Declaration

I, Robert Raley Peterson, declare that this thesis, submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy, in the Faculty of Education, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. This document has not been submitted for qualifications at any other academic institution.

Robert Raley Peterson

January 2009

Acknowledgements

In Australia, thank you to my supervisors Associate Professor Jan Herrington and Dr. Ian Olney in the Faculty of Education at the University of Wollongong as well as Associate Professor Deslea Konza in the School of Education at Edith Cowan University for their continued support and supervision of my research. I also wish to thank the University of Wollongong for tuition and living assistance through a university postgraduate award and tuition fee scholarship.

In Bulgaria, many thanks to my associate supervisor, Associate Professor Mira Tzvetkova-Arsova, in the Department of Special Education, Faculty of Primary and Preschool Education at Sofia University, for her long-term commitment to this study. Thank you to Associate Professor Krassen Stefanov, in the Department of Information Technologies, Faculty of Mathematics and Informatics at Sofia University, for support of the study and sponsoring the project from within the European Union's (EU's) TENCompetence project. Margarita (Magi) Venelinova Petrova, a PhD candidate in Tzvetkova-Arsova's department, was also an excellent resource and took on an active role with the study as did Kornelia Todorova, a PhD candidate in Stefanov's department and co-author of the project's second journal article.

This project would not have been possible without assistance from my personal contacts from Bulgaria. The language, travel, and housing assistance provided through these contacts made the project affordable. Moreover, the contacts provided great insight into Bulgarian culture, history, and politics as well as the Bulgarian education system. Thank you very much to the Mladenovs: Lucho, Vania, and Dancho. This research would never have begun without the wonderful translation assistance and Bulgarian language tutoring from Antoaneta Andreeva and cultural and travel guidance from Ivan Andreev, Dushko Kesiakov, and Svilen Stoyanov. Finally, thank you to my university research subjects as well as the staff at special schools and non-profit organizations visited while in Bulgaria as well as the EU's TENCompetence project for partial sponsorship of the study.

For the Kyrks, Petersons, Roudas, and Svetichs ...

“The whole object of travel is not to set foot on foreign land; it is at last to set foot on one’s own country as a foreign land.” — Gilbert Keith Chesterton (1920).
The riddle of the ivy. *Tremendous trifles*.

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DEFINITION OF TERMS

CoPs: Communities of practice are groups of professionals and other stakeholders “who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, McDermott, & Snyder, 2002, p. 4). Also fundamental to the CoP concept is the notion that in a shared field of practice, novices steadily develop into experts due to interaction in the community (Lave & Wenger, 1991).

DBR: Design-based research is an approach to researching, developing, and evaluating technologically-based educational interventions. The critical characteristics of design-based research are “addressing complex problems in real contexts in collaboration with practitioners; integrating known and hypothetical design principles with technological affordances to render plausible solutions to these complex problems; and conducting rigorous and reflective inquiry to test and refine innovative learning environments as well as to define new design principles” (Reeves, 2000, p. 26).

IKCs: Innovative knowledge communities are deliberately designed to facilitate innovation and knowledge advancements. “One of the central differences between CoPs and IKCs is that people who work in the latter ones are ‘forced’ to create new forms of acting, working and learning in order to deal with the challenges of turbulent work environments” (Hakkarainen, Paavola, & Lipponen, 2004a, p. 80).

Research participant: A participant who was interviewed or responded to an email questionnaire.

SEB: Special Education Bulgaria is an online community developed according to CoP design principles for special education stakeholders in Bulgaria (see www.specialeducationbulgaria.com).

TENCompetence: The European network for lifelong learning and competence development is an integrated project of the European Commission’s 6th Framework Programme, priority IST/Technology Enhanced Learning, contract 027087 (see www.tencompetence.org).

Website participant: A participant who registered for the SEB website but was not otherwise in communication with the researcher.