Chapter 13

Teachers’ Initial Training in Online Working With Students

Adriana Nicu
Lucian Blaga University of Sibiu, Romania

ABSTRACT

In order to train future teachers, it is necessary for their trainers to master ICT knowledge and skills and to be convinced that the online environment is a chance for intellectual and social development. Students are influenced in their future teaching career by the way they are trained in digital technologies. Most studies about online learning come from teachers and express their position. Initiating teachers in Romania to integrate ICT into teaching needs the existing models in the world as guidance, keeping regional economic, financial, and cultural particularities in mind. This chapter shows the results of a questionnaire administered to a sample of Romanian students representing their views on the use of ICT in schools. Interpreting and analyzing the results is just one piece of a puzzle regarding the integration of new technologies into teaching.

INTRODUCTION

There are numerous teacher training studies addressing the skills that future teachers need to have to integrate new teaching technologies. These studies are focused either on distinct subjects or generally address this issue (Haydn, 2003; Howard et al., 2015; Dockendorff & Solar, 2017). However, there is a correlation between the explosive progress of technology and adequate training and rigorous teaching staff to use these tools with their students. Consequently, many teachers are not yet ready to integrate new digital technologies into the curriculum.

Paul Kirschner (2003) said that “if the Internet is an information highway, then teachers could be killed on this highway because, for the first time in history, students are better equipped to use the tools needed to acquire and transmit knowledge than their teachers” (p. 5). This message has been confirmed over time and is becoming more apparent for generations in the third millennium. The distances between teachers’ digital competences, especially those close to the end of their careers, and students in the current generation, may be considerable. This may be true as we look at things only in terms of searching

DOI: 10.4018/978-1-5225-5085-3.ch013
and storing information. If we see the procedural side of pedagogical content, things are no longer as dramatic for teachers.

To help the student develop skills to work in the online environment, the key person remains the classroom teacher. The teacher is responsible for providing learning opportunities through which students can use Information and Communications Technology (ICT) to learn and communicate. The teacher is responsible for the complexity in understanding and transmitting the knowledge of the content in these new digital forms. For this reason, the issues raised by Shulman (1986) are more current than ever: What are the domains and categories of content knowledge in the minds of teachers? How, for example, is the knowledge of general pedagogy related to content knowledge? In what forms are the domains and categories of knowledge represented in the minds of teachers? What are the promising ways to improve the acquisition and development of such knowledge? It is the teacher who has the knowledge of the specialized content and the methodology of his/her teaching, to which s/he adds the technological knowledge (Mishra & Koehler, 2006). It is therefore essential for all teachers to receive the needed training to create these opportunities for students.

CONCERNS ABOUT INTEGRATING ICT SKILLS INTO SCHOOL

Used since the early 1990s, the term ICT is correlated today with changes in education. Most researchers (Wagner, 2005; Zucker, 2008; Balanskat et al., 2006) emphasize that simple knowledge of information technologies is not enough to support teaching-learning processes. Quality education is needed to facilitate the proper integration of digital technologies in the design of lessons.

Numerous countries have included ICT in their initial teacher education curricula and have organized ICT training courses for practitioners. ICT teacher training is very diverse and so are the experiences from different countries (Jung, 2005). In the absence of systematic training, teachers tend to use technological tools that they know best and apply them more easily, leading to a great variation in practices and low performance in students’ performance (Livingstone, 2012). ICT favors student-centered education in conditions where the teacher knows how to prepare and produce the materials needed for this approach. The conclusion is that the extent to which ICT can show its potential in education depends on how teachers integrate ICT into teaching and learning process (Balanskat et al, 2006; Valcke et al, 2007; Enochsson, 2009).

In the OECD report, conducted by Enochsson and Rizza in 2009, which includes findings from 21 national case studies, it indicates, firstly, that ICT is not used regularly or systematically in teacher training. There are good examples, made by enthusiastic teacher trainers, but only a small fraction of preservice teachers benefits from this and there is little evidence of innovative use of recent technologies such as Web 2.0. In the 21 studies mentioned in the OECD report, confusion is noted in defining the quality of a “good user” of new technologies. Having ICT skills involves a vast and vague range of requirements. ICT competencies have “fluctuated wildly in recent years in England,” wrote Terry Haydn (2014, p. 457). Haydn specified that 1998 ICT standards for qualified teacher status had more than one hundred technical skills to use new technologies. Since 2007, this competency framework has been reduced to 33, and teachers have to support an online ICT test.

The programme Preparing Tomorrows’ Teachers to use Technology (PT3) was run in the USA from 1999 to 2003 to help address the challenge of preparing teachers to use technology. However, many teachers still have not come to integrate technology into their teaching. Larry Cuban (2001) appreciated that,