Chapter 5

An Exploratory Study on Teacher Training: The Use and Impact of Technologies Within a Specialization Course for Special Needs

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ABSTRACT

Since 2012, the concept of “special training needs” in Italian ministerial legislation has been connected to the concept of inclusion. In the Italian school system, students with disabilities are fully integrated in standard school activities. They can take advantage of the presence of a teacher who is a supportive figure for the whole class, who has received training in inclusion and the management of teaching strategies for dealing with disabilities. In order to train teachers who will fit that profile, a specialization course is organized by Italian universities to train teachers at every level of instruction. The chapter is contextualized to the last course of academic year 2016-2017, which took place at the University of Macerata, addressed to preschool and primary teachers. Exploratory research using a qualitative approach was run to highlight, on one hand, student teachers’ preconceptions and expectations about the effectiveness of technologies for inclusion; and, on the other hand, their opinions about the activities proposed during the technology course.
INTRODUCTION

This chapter presents the results of research conducted in 2016-2017 at the University of Macerata (Italy) with pre-service teachers in the course entitled, ‘Specialisation Course for Supporting Activities in Classes where Students with Disabilities are Included’ (DM 249/2010 art. 5 e 13). The aim of the research was to analyze the validity of the course, as well as to improve students’ ability to use information and communication technologies (TIC) (e.g., computers, tablets, specific software, Internet, blogs, social media) in everyday inclusive activities. The same law that regulates the course considers TIC fundamental to working in the classroom in an inclusive manner, increasing active participation by every student, avoiding forms of exclusion and discrimination against the students who present with special needs (i.e., disabilities, learning disabilities, coming from a different culture, emotional difficulties), as well as creating communication with the community.

In the development of the research, two phases of inquiry took place, now briefly presented and analyzed in depth in the second part of the chapter.

• **First Phase:** At the beginning of the course, pre-service teachers completed a questionnaire that collected data about technological abilities in every subject (i.e., knowledge of available technology in the education context; abilities to use it; knowledge of increasing inclusion through technology; frequency of using technology in the classroom) and awareness of European guidelines for educators.

• **Second Phase:** At the end of the course, participants completed the questionnaire again, and participated in focus groups with the intent of demonstrating individual point of view regarding technology use at school, which the group had the chance to develop during the course (i.e., changes in perception and awareness of the importance of technology at school for inclusion purposes).

The primary goal of this inquiry is to show the importance of supporting teachers with specific training and gaining knowledge of strategic and inclusive implementation of technology. Despite the massive diffusion of technological supports through sophisticated hardware and software, some teachers still do not see the importance of these tools in teaching and learning. A more specific training on technology will help teachers to change the way they look at technology. Pre-service teachers need to understand the potential for developing cooperative and inclusive learning trajectories in the class, as well as for developing relations with other schools (fundamental to creating links and sharing best practices between teachers), institutions involved in inclusive processes in the community (e.g., neuropsychiatry wards, speech therapists, psychologists) and with families.

The results of this study are included in the research conducted by various universities in Italy (Genoa, Bologna, Padua, Perugia, Cagliari and Bolzano) with the aim of improving the quality level of education and inclusion in educational institutions, and developing the role of the specialized teacher able to provide support in classes with students with special needs. Among the variables in the improvement of quality levels of inclusion, the research focuses on some aspects that the present article analyses: ability to create a ‘contact point’ (through modifications) between curricular projects (of the class) and personalized/individualized education plans (PEI - Piano Educativo Personalizzato) for the students with disabilities. This skill involves specific abilities of the specialized teacher and a shared knowledge with all the teachers (Kochhar et al. 2000), including the ability to activate and combine resources among