An Exploratory Study on Perceptions and Use of Technology by Novice and Future Teachers: More Information and Less On-Line Collaboration?

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ABSTRACT

The article discusses the factors that affect the choice of teachers to integrate technology in their teaching and presents the results of a questionnaire administered to 805 teachers attending professional development training courses (TEA and PAS) in the Veneto Region (Northern Italy). The research is aimed at collecting data for the development of a teachers training program that is effective in motivating them to a broader and more effective use of technology. The study reveals how teachers still have little consideration for the potential of interactive and collaborative technology, preferring to use technology for searching information and materials rather than for discussion and participation in on-line communities with their peers, in order to improve their teaching and towards a collaborative construction and sharing of knowledge. The study also confirms the findings in the literature on the subject relative to a number of factors (internal and external) that are perceived as obstacles to the decision to integrate technology in education and proposes specific training activities that are useful in order to remove them.

Keywords: Interactive/Collaborative Technologies, Teachers Beliefs, Teachers Education, Technology Integration

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1. INTRODUCTION

This exploratory study of N = 805 training teachers, arises from the need to understand what are the perceptions, beliefs and the actual use of technology by teachers that participate in the Active Internship Training Program (TFA-Tirocinio Formativo Attivo) and in the special courses to obtain their qualification (PAS-Percorsi Abilitanti Speciali) in the Veneto Region (Northern Italy). In Italy compulsory education lasts for 10 years (from 6 to 16 years of age) and it covers 5 years of primary school, 3 years of lower secondary school and the first two years of upper secondary school. TFA is an innovative one-year initial teachers’ preparation University course for lower and upper secondary school and is in a programmed number: starting from 2010, it replaced a two-year University-based Specialization training program for teaching in Secondary Schools (SSIS). Unfortunately, the TFA curriculum has a small number of hours dedicated to laboratories for the acquisition of digital competences. So, the immediate goal of this study was to try to obtain significant data that could be used to develop a more effective training program, both in terms of digital competence, and motivational skills (Muscarà and Messina, 2015) that are capable of actually impacting their teaching practices now and in the future. In fact, there is a lot of research evidence that recommends that teachers have a richer, more continuous and thorough training during their initial apprenticeship (Tondeur et al., 2012) (Krumsvik, 2014) (Polly et al., 2010).

This issue is especially important in Italy as the initiatives of the last twenty years focusing on teachers training, generally have obtained interesting results but always limited to pilot projects or non-structural projects (Galliani, 2014). In Italy there are no dedicated in-service teacher training courses. Teachers can participate in training courses organized in or outside schools, but they are not mandatory and only a small number of teachers attend by their own choice. Courses are organized by public or private bodies and can be financed by school or the Regional School Offices or by teachers themselves. In a year, every teacher has 5 days provided for attending a training program. On the institutional side, the Italian national plan currently includes more professional development actions derived from the National Plan for Digital Schools, (2007). These actions to introduce ICT in schools included four initiatives: a fund to buy Interactive Whiteboards, and three other projects only for a small number of pilot schools (el@sse 2.0, scuol@ 2.0, “Editoria digitale scolastica” i.e. digital books). The pace of adoption is slow, for example in 2014 only 25% of classroom is equipped with an IW, but the real problem is teachers training and competence in the use of technologies, so the Italian Ministry of Education, University and Research (MIUR) funded specific teacher training for at least three teachers per pilot school.

In Europe, including Italy and the majority of countries, the most important surveys (e.g. SITES 2006, TALIS 2008) illustrate that teachers reveal a sense of inadequacy with respect to their competence in the use of technology. In the Italian context, the IARD study (2008) confirms the resistance on the spread of e of digital technology in education: their use is not reflected in a particularly favorable attitude in teaching: although 57% considers them an important teaching tool while only 6% consider them an irreplaceable support for teachers (Gui, 2010). More recently, the results of the last OECD report (Avvisati et al., 2013, p.25) reveal that despite that 50% of teachers have attended at least six days of technology training in the two previous years, it’s revealed that the use of technology in the classroom is still sporadic at all school levels (the answers ranged from “never or almost never” to “a few times a month”). This does not seem to be a problem with the availability of technological resources in Europe (European Commission, 2013) as for example the number of computers and their frequency of use does not appear to be correlated: some countries with the highest rate of technology use are also those with fewer resources.
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www.igi-global.com/article/university-students-and-technologies/104171?camid=4v1a

The Shluvim Social-Professional Network: A Bridge for Educational Challenges and Trailblazers in Education
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