Perceptions and Attitudes of Future Primary Education Teachers on Technology and Inclusive Education: A Mixed Methods Research

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ABSTRACT

The goal of the current research was to explore the perceptions of the students in the last year of a degree in Primary Education towards technology and inclusive education. It employed a mixed method research with a combined use of qualitative and quantitative methods. The research population was comprised of 153 learners, and the quantitative sample consisted of 104 participants and the qualitative one 57. Quantitative data collection was conducted using a validated questionnaire, while the qualitative data were collected through individual semi-structured interviews. On analysing the results, it was emphasized the effectiveness of technology to design and implementation of inclusive practices. However, the results also pointed out the necessity to train students technically as well as pedagogically in the use of technological tools. Moreover, it was highlighted the lack of training in inclusive education and inclusive practices during the degree, training that students considered essential to be ready for their future careers.

KEYWORDS

ICT, Inclusive Education, Mixed Methods Research, Primary Education, Teacher Training

INTRODUCTION

Nowadays inclusion has become a national and international commitment. The governments of different countries are developing policies that allow the inclusion of any student to provide him or her the best education possible and maximise his or her potential according to the personal circumstances. Over last decades, there are several official documents that recognise the need to provide an equal education and emphasized the relevance of this issue. In 1948, the Universal Declaration of Human Rights (UN General Assembly), in article 26, lays out that everyone has the right to education. Forty years later, in 1989, the Convention on the Rights of the Child (UN General Assembly) recognizes again the right of the child to education on the basis of equal opportunity (Article 28) that shall be

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directed to the child’s achieving the fullest possible social integration and individual development. The following year, in 1990, the World Declaration for Education for All and the Framework for Action to Meet Basic Learning Needs (UNESCO, 1990) were adopted in the World Conference on Education for All celebrated in Jomtien, Thailand what lead to a movement towards the inclusive school. In 1994 took place the Salamanca Statement and the Framework for Action (UNESCO, 1994) where 92 governments and representatives of 25 international organizations highlight the need to provide an equal education for all within the regular education system. As it is literally proclaimed in the Salamanca Statement, regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of and improve the efficiency and ultimately the cost-effectiveness of the entire education system. On the other hand, the Framework for Action (UNESCO, 1994) establish verbatim that the guiding principle is that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. It is also point out the challenge of the inclusive education and inclusive school, the need to develop a learner-centred pedagogy in which the child is in the centre of the teaching-learning process, a pedagogy capable of developing a education for all independently of the personal circumstances.

All these documents lay the foundations for worldwide policies and strategies on inclusive schools and inclusive education.

Technology plays a relevant role to the needs and challenges of inclusive schools and inclusive education. As Cabero and Córdoba (2009) point out the access to the knowledge society is a key point for the integration, development and participation as active citizens of society and technology provides immense opportunities for that access. Moreover, technological tools help to establish pedagogical innovations and organizational changes, facilitate communication processes and break down spatial and temporal barriers and as a consequence the unity of time, space and action (Cabero-Almenara & Fernández-Batanero, 2014; Sánchez-Gómez, Pinto-Llorente, & García-Peñalvo, 2017). Thus, as Chacón (2007) states, the development of technology has provided us with different tools that permit, on one hand, our personal development, the successful activity completion and the enjoyment of situations that require our own individuality, and, on the other hand, the fully and actively participating in activities in our environment.

LITERATURE REVIEW

In this section, some of the most recent and relevant studies around ICT and inclusive education will be presented.

The mixed methods research study of Josjö (2012) was conducted at different public and independent schools in three cities in northern Sweden. The goals of that research were to describe and analyse teachers’ experiences and perceptions on the use of ICT with students with special educational needs in general educational settings, and to know the relationship between inclusion and technology. Data were collected through a questionnaire and interviews. The quantitative sample was composed of 92 teachers and the qualitative one of 4. The main results highlighted that technology could compensate for differences and contribute to inclusion of students with special needs. However, it was necessary to integrate pedagogy with technology and adapt teaching to learners’ needs. Furthermore, it is emphasized that teachers needed knowledge, equipment and time to make the use of technology more inclusive.

Corkett and Benevides (2015) developed a quantitative study to analyse pre-service teachers’ perspectives of the self-efficacy of integrating technology into lesson planning for the purposes of multiliterate instruction within an inclusive classroom. 143 participants who were enrolled in the mandatory class Special Education/Educational Psychology of the Bachelor of Education (Ontario University) comprised the sample of the research. The instruments used to collect data were a
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