A Case Study on the Perceptions of Educators on the Penetration of Personal Learning Environments in Typical Education

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ABSTRACT

Personal Learning Environments (PLEs) help students manage and take control of their own learning. As such, the PLE promotes self-regulation in learning and allows learners to aggregate, manipulate and share digital artefacts within a flexible and versatile online space. This paper presents a case study in Greece, concerning an investigation about the penetration of PLEs in typical education. In particular, this case study aims at investigating the perceptions of educators about PLEs and their challenges in incorporating PLEs in their teaching practices. The findings are commented on the pros and cons of PLEs and the opportunities that they offer to the modern classroom. According to the results of the present research, most respondents are generally aware of the PLE concept and its advantages.

KEYWORDS

Greece, PLE, Schools, SRL, Students, Teachers

INTRODUCTION

Personal Learning Environments (PLEs) describe the tools, the communities and the services which are recommended by individual educational platforms and which are used by students, in order for them to direct their learning and pursue their learning goals (Castañeda, Dabbagh, & Torres-Kompen, 2017). PLEs, unlike Learning Management Systems (LMSs), tend to be student-centred. They facilitate learners to access, collect, manage and share the digital objects of their ongoing learning experiences. Instead of integrating different services into a centralised system, PLEs provide students with a variety of services and with control, in order for students to select and use these services in the way they consider appropriate (Chatti, Jarke, & Frosch-Wilke, 2007; Wilson, 2008; Kop & Fournier, 2014; Castañeda, Cosgrave, Marin, & Cronin, 2016).

The appearance of PLE has significantly facilitated the usage and the common use of open and reusable online learning resources. The PLE is more than ever the paradigm for supporting new learning models for the digital times according to Castañeda, Dabbagh, & Torres-Kompen (2017). Students can access, download, restructure and republish a great variety of learning materials via open-access services, which are provided in the cloud. Open Educational Resources (OERs) can be described as the “teaching, learning, and research resources that reside in the public domain or have

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been released under an intellectual property license that permits their free use or re-purposing by others, depending on the Creative Commons license in use” (Atkins, Brown, & Hammond, 2007).

Self-regulated learning is a substantial aspect of PLE, as it allows learners to become “meta-cognitively and behaviourally active and motivated participants in their own learning process” (Zimmerman, 1989). Although psycho-pedagogical theories about self-regulated learning date long before the arrival of the PLE, self-regulated learning is a significant feature of the latter. Self-regulated learning is activated in the PLE and is focused on connecting independent resources in a way that fulfils a particular learning goal. Following this example, self-regulated learning allows learners to regulate their learning; thus, learning outcomes are significantly increased (Steffens, 2006; Fruhmann, Nussbaumer, & Albert, 2010; Mikroyannidis, Connolly, & Law, 2012; Armakolas, Panagiotakopoulos, & Massara, 2015).

The present paper aims to research the perceptions of secondary education teachers who have obtained the A-level certification in the use and application of Information and Communication Technologies (ICT), regarding the following:

- How do teachers understand the concept of the PLE?
- How do they perceive the advantages and disadvantages of using a PLE?
- How does a PLE assist teachers and students and what potential does it have?
- How are teachers using PLEs in their everyday teaching?

In order to receive answers to the above questions, this paper presents the results of interviews conducted among secondary education active teachers in the prefecture of Achaia, Greece. In relation to the teachers’ expertise, all the respondents were teachers of a particular expertise: 2 philologists, 2 biologists, 2 English language teachers, 2 physicists and 2 sociologists. The only criterion for the selection of the teachers was their ‘A-level’ certification in the use and application of ICT (basic ICT skills).

On the other hand, students in Greece have relatively low levels of access to computers compared to other countries. More positively, broadband provision and connectivity are almost universal because bandwidth is generally lower than the EU average. Despite the infrastructure obstacles, encouragingly high percentages of students are in schools where teachers and students frequently use ICT. Both teachers’ and students’ confidence in their ICT skills is below EU means, and professional development in ICT is patchy, as is the presence of an ICT coordinator in school (European Schoolnet and University of Liège, 2012).

The remainder of this paper is structured as follows. First, PLEs are introduced in conjunction with different e-learning methods and tools. Subsequently, the methodology we have used for collecting data and evaluating the results of the present investigation is presented. This is followed by a discussion on the results of the investigation and the key take-away messages. Finally, the paper is concluded and the next steps of this work are outlined.

**LITERATURE REVIEW**

**Learners’ Engagement**

The PLE is founded on social media and is constantly gaining ground in the e-learning field as an effective teaching platform. Martindale and Dowdy (2010) mention that PLE are the outcome of the tools that the social media have offered to learners, enabling them to create, organise and share
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