Chapter 10

Teaching Using the Cloud: The Author’s Personal Cloudy Reflections!

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ABSTRACT

Cloud computing has transformed the educational landscape and teachers need to be confident in using cloud resources to guide their students to navigate this ecosystem. The author will explore different digital literacies frameworks and give a personal reflection and practical examples on cloud technologies in education. The author will give an overview of some of the discussion points that developed from the working group innovative teacher, iTeacher, and the School on the Cloud (SoC) network and present some of the deliverables developed.

INTRODUCTION

The author will highlight some key competencies frameworks and then present a personal reflection on experiences gained from the author’s teaching and the School on the Cloud (SOC) network. The author was a member of the working group iTeacher, which was tasked to explore the impact of cloud on the role of teachers. The group used the Cloud to collaborate and to exchange knowledge and best practice from their own countries. The barriers and key competences required for using cloud technologies was discussed. The group explored teachers as innovators and aimed to provide a practical guide for teachers on the resources afforded by the cloud. The author will document some software used in her practicum and in the SOC project work. The inclusion of this practical element aligns the goals of competencies frameworks to activities and classroom examples of the potential of ICT to create, communicate and collaborate to present information and opportunity for teachers to reflect on their own ICT toolkit. The author is not representing the views of her institution or speaking on behalf of the working group or project partners.

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Background

Innovating in education and training is forefront of the agenda of Europe 2020, for example the Digital Agenda, the Agenda for New Skills and Jobs and the OPEN EDUCATION EUROPA INITIATIVE. One of the main targets established to measure the success of Europe 2020 was the modernisation of European Education and Training systems with the goals of reducing early school leaving and increasing tertiary education attainment.

The role of ICT has been highlighted as a key enabler of innovation and creativity in Education and Training. However it has been widely agreed that the full potential of ICT is not being realised despite increases in expenditure and greater uptake in formal and informal education settings. (Donert, K. 2016).

The chapter will focus on the digital literacy frameworks and the author’s personal reflections from her experience teaching. The chapter will then look at data gathered and deliverables from the School on the Cloud (SOC) Project Working Group iTeacher. SOC explored how education should respond to Cloud Computing and the consequent impact on Education stakeholders and teachers. The project consisted of a core group of 5 partners who led the project and 52 other partners who provided data requested from the lead partners. The initial survey asking all partners about their knowledge on cloud and how different countries are integrating cloud into their education ecosystem cumulated in the first State of the Art report (SOC, 2014). This report scaffolded the research that underpinned the project. Project partners divided into 4 working groups and as a teacher, the author choose the working group iTeacher. The project partners encompassed a cross section of educational settings, educators from Primary, Secondary, Third Level, Adult Education, Private Sector and NGO’s. The lead of the iTeacher working group was iGo from Belgium. iGo provided the framework for each working group member to respond to questions in a wiki format to research the state of play in each of the partner countries. This research stimulated the discussion of our first and subsequent meetings and provided the narrative path for the working group deliverables. Subsequent meetings harvested the research and allowed for a diversity of opinions from all members who actively champion ICT in their teaching and learning.

Digital Literacy Research and Personal Reflection

Education is a diverse sector encompassing many diverse views, but the commonalities all stakeholders share is a vision to provide a richer learning experience for learners. Technology has transformed the landscape of all areas of society and education is no different. The author’s philosophy of teaching is continuously evolving. In the last few years the author’s pedagogical and technological philosophies have been influenced by the TPACK (Technological Pedagogical Content Knowledge) framework (see figure 1 below). The TPACK model was conceptualised to provide a framework for teachers and teacher educators to successfully integrate educational technologies into the classroom (Koehler & Mishra, 2008; Mishra & Koehler, 2006). Mishra & Koehler’s research on the knowledge blend of Technology, Pedagogy and Content (TPC) indicating that educators need to teach effectively with technology, has informed teaching as well as the use of technology and professional development. This framework focuses on how the three cognate areas, technological knowledge, pedagogical knowledge and content knowledge complement each other and increase students’ motivation and make the educational experience more accessible. This