Chapter 6

Digital and Media Literacy in Teacher Education:

Preparing Undergraduate Teachers Through an Academic Program on Digital Storytelling

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ABSTRACT

Media and digital literacy are being increasingly recognized as a fundamental competence for teachers of the twenty-first century, but academic training of future teachers is still far from full implementation of this emerging need. This chapter aims to explore how media and digital literacy education can be integrated into teacher education courses through the presentation of the results of a program on digital storytelling implemented at the University of Florence (Italy) within the framework of the European project e-MEL (e-Media Education Lab, 2014-17). The overall learning process was monitored and evaluated ex-ante, ongoing, and ex-post. This chapter illustrates and discusses the main findings of the experimentation focusing on the effectiveness of the educational activities, the sustainability of training in a blended modality, students' participation and satisfaction, and the transferability of acquired skills. It concludes with some considerations about experience and more general reflections on future research directions.

INTRODUCTION

In the last 10 years, there has been increasing interest from international bodies in elaborating comprehensive frameworks of digital and media literacy for teachers. For example, the European Union has recently released a *Proposal for a European Framework for the Digital Competence of Educators* (Redecker & Punie, 2017), which addresses six areas of competences referring to the capacities of identifying and

DOI: 10.4018/978-1-5225-4059-5.ch006

using digital resources and tools for professional engagement, digital teaching and facilitating students' digital literacy skills. At the same time, the notion of digital and media literacy is becoming part of teacher training at all levels. From university courses to professional development programs, there is increasing interest in the implementation of training actions to update teachers' literacy skills in the contemporary digital society. However, research in the field is still in its infancy (Kirschner, Wubbels & Brekelmans, 2008; Krumsvik, 2014; Meehan, Ray, Walker, Wells, & Schwarz, 2015; Tømte, Enochsson, Buskqvist & Karstein, 2015) and it shows that even the new generation of teachers is substantially unprepared to form the digital and media skills of their students since till now they have received inadequate or even no training about media and digital literacy education either in initial or in-service education (Fernández-Cruz & Fernández-Díaz, 2016; Lund, Furberg, Bakken, & Engelien, 2014; Prendes, Castañeda, & Gutiérrez, 2010; Ranieri, Bruni, Orban de Xivry, Scull, & Kupersmidt, 2011). Therefore, although there is broad consensus on the importance of digital and media literacy for twenty-first century teachers, there is a total mismatch between the digital challenges that new teachers have to face in their profession and the preparation they receive during their academic training (Gudmundsdottir, Loftsgarden, & Ottestad, 2014; Lund, Furberg, Bakken, & Engelien, 2014). Along with this and narrowing the focus to the preparation of future teachers, it is not clear how they should be trained: what contents should be part of a curriculum on digital and media literacy in teacher education? Which pedagogical approaches should form a curriculum of media literacy in higher education? What type of resources should be used?

This chapter aims at exploring how digital and media literacy education can be integrated into teacher education courses through the presentation and discussion of the results of a program on digital storytelling implemented at the University of Florence (Italy). The program was developed within the framework of the project e-Media Education Lab (e-MEL, http://e-mediaeducationlab.eu, 2014-17), a European initiative funded by the Erasmus Plus program and involving six countries (Belgium, Finland, France, England, Italy and Portugal) in the design and testing of educational resources for pre- and in-service teacher training in the area of media literacy education.

In this chapter, we shall focus on the experimentation carried out in Italy where a digital storytelling program was delivered in 2015-16 in the Laboratory of Educational Technology for teacher education in Primary School. This program aimed at enabling students to understand and manage the whole process of Digital Storytelling (DS) in educational settings. The chapter illustrates and discusses the main findings of the experimentation focusing on the effectiveness of educational contents and activities, the satisfaction, the sustainability of the DS program, the levels of student participation and the transferability of acquired skills. Firstly, it introduces the theoretical and methodological framework of the study, then it describes and discusses the results with some recommendations for practice, and finally it concludes with more general considerations on the role of media and digital literacy in teacher education and future research directions¹.

LITERATURE REVIEW

Understanding Digital and Media Literacy for Teachers' Preparation

One of the most relevant models for media and digital literacy is the *Media and Information Literacy* (MIL) Curriculum and Competency framework developed by UNESCO in 2011 with the aim of providing teacher education systems with "a framework to construct a program for turning out teachers

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