# Chapter 17 Technology Adoption in Higher Education: A Cross-National Study of University Faculty Perceptions, Attitudes, and Practices

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## ABSTRACT

This chapter presents the results of a study on faculty perceptions and practices regarding the use of videos and other technological tools in higher education. The research was developed within the scope of the EU project RELOBIE: Reusable Learning Objects in Education (2014-1-FI01-KA200-000831). Through a cross-national, in-depth survey of faculty members in four partner countries, the study has gathered some useful insights into instructors' perceptions, motivations, and experiences regarding the use of digital videos and other technologies for personal, professional, and instructional purposes. The study has also shed some light into both facilitating and inhibiting factors to the adoption and effective use of videos and other technologies in the higher education classroom.

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### INTRODUCTION

Rapid advances in information and communication technologies (ICTs) have provided the opportunity to create entirely new learning environments in higher education (HE) by significantly increasing the range and sophistication of possible instructional activities in both conventional and e-learning settings. A wide diversity of powerful and readily available technological tools, offer myriad opportunities for transforming pedagogy through the adoption of learner-centered instructional approaches. Multimedia tools incorporating video, images, and sound offer novel and creative ways of teaching that can address a variety of learning styles (Junaidu, 2008; Kahn, 1997; Mandernach, 2009). Web 2.0 tools (e.g., video-sharing websites such as YouTube, blogs, wikis, podcasts, social networks such as Facebook and Twitter, virtual worlds, RSS feeds, social bookmarking, etc.) can inspire innovative teaching methods that stimulate collaboration among learners, creation and sharing of information, and development of online learning communities (Baxter, Connolly, Stansfield, Tsvetkova, & Stoimenova, 2011; Duffy, 2008; Meletiou-Mavrotheris & Mavrotheris, 2007; Roodt & Peier, 2013; Williams & Chinn, 2010).

The research described here was developed within the scope of the EU-funded project *RELOBIE*: Reusable Learning Objects in Education (2014-1-F101-KA200-000831). The partnership of the project was established on qualities, experiences and expertise, on existing needs as well as on motivation and good reputation of each partner. Partners coming from Abo Akademi University Academy, Finland, Coimbra University, Portugal, European University Cyprus, The University of Tartu, Estonia and Samvil ehf. Fjarkennsla.com (Continuing Education Lifelong learning centre) Iceland, compose a network that covers the main areas of Europe who share very different educational experiences and at the same time very common educational considerations. The most important criteria for the election of partners in the project are their motivation and urgent need of improving the didactics with the help of videos and films. The mapping has been done by each partner by surveys, which shows the urgent needs for development and co-operation. All partners have long experiences of producing video materials as well as good knowledge about the difficulties involved. Hence, acknowledging the potential of videos and other ICTs to transform HE but also the crucial role of teachers in any effort to bring about change and innovation, RELOBIE aims to improve adult and higher education through strengthening instructors' knowledge and skills in effectively using videos and other technologies in teaching and learning. The 2-year long project (Sept. 2014 – August 2016) has integrated data from several sources to portray a comprehensive picture of the expectations and experiences of students and instructors in the participating institutions regarding the educational application of videos and other digital technologies. The main focus of the project was pedagogical. Partners will utilize findings from the study to empower educators with better tools, skills and know-how on video production and use in particular, and technology-supported learning more generally. The idea is to fill the gap between the pedagogical staff's need for more modern teaching material and existing video production.

The present study focused on investigating instructors' perceptions, motivations, and experiences regarding the use of digital videos and other technologies for personal, professional, and instructional purposes. Through a cross-national, in-depth survey of faculty members' attitudes and practices in the partner institutions, the study was designed to address the following research questions:

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