Mobile Voting Systems for Creating Collaboration Environments and Getting Immediate Feedback: A New Curriculum Model of a University Lecture

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ABSTRACT

Mobile devices can enhance learning and teaching by providing instant feedback and better diagnosis of learning problems, helping design new assessment models, enhancing learner autonomy and creating new formats of enquiry-based activities. The objective of this paper is to investigate the pedagogical impact of mobile voting tools. The authors’ research demonstrated that Student Response System (SRS) supported approaches influenced not only lecture design - time management, the mode of material presentation, activity switch patterns - but also learner-teacher interaction, student collaboration and output, formats of activities and tasks. SRS-supported lectures help instructors gradually move towards flipped classrooms and MOOC lecturing. The authors’ analysis, based on qualitative and quantitative data collected from two student groups (56 undergraduate students) in the 2012-2013 academic year, showed that SRS supported lectures encouraged foreign language learners to produce more output in the target language, improved their intercultural competence and language skills and enhanced their motivation.

Keywords: Collaboration Environment, Formative Assessment, Immediate Feedback, Intercultural Competence, M-Learning, Mobile Voting Tools

INTRODUCTION

ICT integration into teaching and learning is one of the pivotal trends of modernization of higher education in the Russian Federation. The new national standards of higher education which were introduced in 2011-2012 contain several references to the use of ICT: modern technologies and web resources have to become an integral part of the curriculum; student ICT competence is included into both professional and research competencies and skills; 65% of

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all classes should be conducted in an interactive learning environment - webinars, slide presentations, round table discussions, case studies - whereas the lectures traditional for Russian universities are to constitute no more than 35% of all classes (Titova, 2012).

Without any doubt, higher education institutions and universities do not have to be driven only by imperatives, ICT procurement strategies and plans for the development of their estates. It is possible to transform institutional strategies by building continual research on student practices with technology into the practice of teaching and by creating environments where students and teachers are in ongoing dialogue (Kukulska-Hulme & Jones, 2011a). When students arrive at university they already have certain skills and competences in a variety of practices related to learning and the use of digital and networked technologies. Therefore educators have, first of all, to meet the expectations of a new generation of young learners who are commonly referred as the Net Generation (Tapscott, 2009) and Digital Natives (Prensky, 2009) whose perception of the responsibilities and roles of themselves in relation to lecturers and universities has changed drastically. Teachers who would like to make creative use of new technologies and to support collaborative, learner-oriented environments need to follow a transformational approach to the development of traditional skills alongside digital literacies (Dudeney, Hockly, Pegrum, 2013). This approach has to be viewed as the transformation of education from “a contrived performance, on a stage, to a shared experience of a contingent reality that no-one, lecturer or student, has experienced before” (Traxler, 2010, p.14).

This paper, supported by both current m-learning theory and enquiry-based learning theory, focuses on working out a new educational design of the university lecture within a high level collaboration environment.

THEORETICAL FRAMEWORK

Mobile Technologies: The Pedagogical Potential to Transform a Traditional University Lecture Design and to Create a High Level Collaboration Environment

Initially mobile technologies and digital devices were used in education just for a limited number of activities and mostly as an alternative way to get access to learning materials. Nowadays as mobile apps have become the globally dominant technology and digital devices are “curiously both pervasive and ubiquitous, both conspicuous and unobtrusive, both noteworthy and taken-for-granted in the lives of most of the people” (Traxler, 2010, p.3) we witness the proliferation of mobile learning due to numerous publications which have proved conclusively that mobile technologies can not only enhance but also transform learning/teaching experience in many ways because they help: enhance learner autonomy as they offer better opportunities to acquire skills at one’s own pace that may be missing when using shared computer facilities (Kukulska-Hulme, 2010), empower learners to work outside of the classroom with a freedom that is difficult to achieve with more traditional technologies such as desktop computers (Traxler, 2009); deliver educational experiences that would otherwise be difficult or impossible; provide new forms of content dispersion like course casts, moblogs, and Twitter feeds (Kumar, 2010); offer immediate diagnosis of learning problems and design new assessment models (Talmo, Sivertsen Korpås, Mellingsæter & Einum, 2012); create mobile networking collaboration and provide instant feedback (DeGani, Martin, Stead & Wade 2010; Voelkel & Bennett, 2013); modify educational environment of online courses (Kuklev, 2010); create new formats of problem solving tasks based on augmented reality, geo-location awareness and video-capture (Cook, 2010; Driver, 2012).
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