

E-Teaching: An Essential Prerequisite for Networked E-Learning

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Abstract

The discourse on the implementation of the digital technologies and networked learning in higher education settings focuses mainly on students' learning and their ability to connect to information and/or other students rather than on professors' teaching. The little attention paid to the crucial role of teachers in online settings results in a restricted and moderate adaptation of the technologies in higher education worldwide. It is quite clear nowadays that, for e-learning and networked learning to become a dominant learning pattern, technology alone will not suffice. In order to overcome the reluctance of many professors to use extensively the digital technologies, there exists a burning need to develop appropriate incentives and support systems. The little attention paid to the crucial role of teachers in digital networks and online settings results in a restricted and moderate adaptation of the technologies in higher education so far. Of particular importance is an ongoing and just-in-time support. Many institutions acknowledge nowadays the need to recruit in the future a broader range of personnel to complement academic staff in order to implement the technologies more effectively. The roles of teachers in an online environment differ meaningfully from their traditional roles in a classroom setting. To equip professors with tools to use the wide range of capabilities enabled by the new technologies necessitates a conceptual redefinition of the teachers' roles, a well designed training, and ongoing support systems for both students and teachers. The new technologies require the academic faculty to assume new responsibilities and to develop a range of new skills. Academics will have to become in the future reconciled to collaborating with other colleagues and professionals in designing materials and in the teaching process. They will need to learn how to collaborate in a team framework with tutors, editors, instructional designers, television producers, computer experts, graphic production personnel, etc. in developing and delivering their courses, as well as guiding their students to utilize efficiently networked learning. At the same time, teachers will have greater flexibility to choose the teaching styles better suited for their personal strengths and individual preferences. University leaders will have to deliberate how to prepare the new generations of academic faculty to operate in a world where blended courses, shared or dual diplomas, online teaching and networked learning are an integral part of the academic teaching responsibilities. Unquestionably, e-teaching constitutes an essential prerequisite for achieving efficient and fruitful networked learning and e-learning, and it provides multiple domains of investigation that have not been explored yet.

Keywords

e-teaching, networked learning, e-learning

Introduction

The discourse on the implementation of the digital technologies in higher education settings focuses mainly on students' learning and their ability to connect to information and/or other students rather than on professors' teaching. The little attention paid to the crucial role of teachers in online settings results in a restricted and moderate adaptation of the technologies in higher education worldwide. This paper aims to highlight the importance of defining clearly the roles of teachers in networked learning and various online study environments and set appropriate training mechanisms for that purpose. It starts with explaining the problematics of focusing mainly on student-centered learning in online settings and in networked learning; examines the main reasons for the reluctance of many academics to utilize the technologies more fully in their teaching; and concludes with emphasizing the importance of e-teaching as a prerequisite for effective and

efficient networked learning and e-learning, in order to utilize more fully the huge array of the technologies' capabilities in higher education.

The problematics of focusing on student-centered e-learning

The new electronic media were introduced into the academic world as a sudden thunderstorm without having sufficient time to define what are the purposes and functions that they are to fulfill or substitute (Andrews & Haythornthwaite, 2009; Bates & Sangra, 2011; Guri-Rosenblit, 2009, 2010; Harasim, 2000; Huba & Freed, 2000; Khan, 2005). The impact of the technologies on learning and teaching in general, and in higher education in particular, is still unclear and open to much debate and research. The discourse on the implementation of the digital technologies in higher education settings focuses mainly on student-centered e-learning rather than on professors' teaching. Many policy papers, academic publications and research studies on the digital era highlight the importance of putting the students in the center of the teaching/learning process, and of designing student-centered programs (Gradinarova, 2015; Huba & Freed, 2000; Pappas, 2017). Even in the literature related to networked learning the focus is put on students' interaction with other peer students and their ability to connect and utilize relevant Internet resources (such as Open Source data bases and MOOCs) (Conole & Siemens, 2011; Duke et al., 2013; Dircknick-Holfeld et al., 2009; Siemens, 2005). There is a noticeable scarcity of discussion on the essential role of teachers in the relevant literature on online and networked learning. The underlying assumption in many publications dealing with the potential advantages of employing the digital technologies in higher education is that the role of teachers should be reduced from a "sage on the stage" to a "guide on the side", and that such a transformation takes place naturally and automatically in online settings. Many define the young generation of students who were born into the digital age as "digital natives", "millennial students" or "Homo Zappiens" (Dede, 2005; Oblinger, 2003). Young students are described as possessing a natural inclination towards studying through the web and take more responsibility for their personal and educational activities (Pappas, 2017). Many assume that today's students are willing and able to design their own study programs based on their interests, talents and inclinations, and control their own study process by reaching out to relevant resources and interacting with other students.

However, reality shows that many of the young students use the new technologies for various purposes, such as downloading music files, chatting with friends, playing complex video games and even preparing fancy PowerPoint presentations, but most of them do not know how, or do not want, to study extensively through the electronic media (Guri-Rosenblit, 2009, 2010).

Part of the misconception related to the ability of students to become autonomous learners and design their own programs in the online era stems from the confusion between access to information and knowledge construction. The Internet enables access to boundless information of any nature, but there is an immense difference between imparting information versus constructing knowledge. The traditional role of educational establishments at all levels, from kindergarten up to university, has been to assist their students to construct knowledge through guidance, tutoring and personal attention, and not merely to impart information. Children could have studied at home from encyclopedias and books, at the pre-digital era, instead of going to school, if the main purpose of education was to acquire pieces of information. For most students, accessible information does not turn automatically into meaningful knowledge without the assistance of a teacher or an expert guide. Novices in any educational framework, be it an elementary school or undergraduates at a university, need the ongoing support and guidance of expert teachers in the process of constructing new information into meaningful knowledge (Andrade, 2015; Benson & Brack, 2009; Guri-Rosenblit, 2009, 2010). Networked learning by forming learning communities is most efficient at graduate and professional upgrade programs.

The new development of the massive open online courses (MOOCs) in the last decade exemplifies the difficulty of self-study and networked learning. MOOCs aim at distributing open online courses to hundreds of thousands, and even millions of students (Bonk et al., 2015). Clearly, MOOCs offered by reputable and enthusiastic professors at elite universities might assist greatly academics in higher education institutions worldwide in designing and upgrading their courses, and might benefit professionals willing to update their knowledge in specific areas, or individuals eager to gain knowledge on themes of interest to them. They might also assist in providing a taste of introductory courses to potential students who wish to explore potential areas of study or be accredited on a limited basis in some academic programs. But it seems quite unlikely that MOOCs can replace fully undergraduate programs. Many students lack the ability of constructing their programs and managing their studies independently (Guri-Rosenblit, 2009, 2010). The dropout rates of students registering for MOOCs are very high. Less than 10% complete MOOCs (Bonk et al., 2015). Most students, particularly at the undergraduate level, need substantive guidance, support and counselling throughout their study. Duke et al. (2013) in analyzing

connectivism as a digital age learning theory emphasize that there is always a certain amount of core knowledge that is required to be able to understand any information presented. If a person with limited core knowledge accesses Internet information beyond his or her ability to understand, then the information is useless. Mainly for novices, the role of expert teachers and tutors is crucial in any educational setting, including networked and e-learning frameworks.

Reluctance of academics to adopt intensively online and networked teaching

Many studies point to the fact that the applications of the advanced technologies in higher education settings worldwide are currently quite limited in higher education, and most online applications are used mainly as add-on functions to classroom teaching (Andrews & Haythornthwaite, 2009; Bates & Sangra, 2011; Guri-Rosenblit, 2010; Power & Gould-Morven, 2011). There are several major reasons for the reluctance of academic faculty to utilize the wide spectrum of possibilities embedded in online teaching and participate more actively in networked teaching: (1) Unbundling of the professional responsibility; (2) Work overload and burnout; (3) Lack of ongoing support systems; (4) Intellectual property concerns.

Unbundling of the professional responsibility

One of the challenging demands of online teaching is associated with the unbundling of the professional responsibility of teaching in any given course into discrete tasks undertaken by an array of academic, technical and administrative staff (Bates & Sangra, 2011; Guri-Rosenblit, 2010). Within conventional classroom teaching, academics are responsible for the entire development and delivery process of their courses - they plan the content of their course and its relevant literature, they teach the course, decide on the nature of the relevant assignments and exams, and are usually also responsible for checking and grading the students' work. In large classes they are often supported by teaching assistants, who work under their close supervision and guidance.

When the large distance teaching universities were established in Europe in the early 1970s, Peters, the founding president of FernUniversität in Germany, argued that academics in the new distance teaching universities form a new species of professors, and that the traditional roles of professors have been challenged drastically:

"It is a difficult task to switch from oral teaching to teaching by means of the written word and by merging traditional teaching techniques and modern technological ways of communication... The result is revolutionary in the sense that an academic teaching tradition of several hundred years had to be changed radically at once" (Peters, 1997, 71).

The distributed teaching responsibility characterizes nowadays also comprehensive online teaching both in distance and in campus-based universities. Academics who teach online or are engaged in networked teaching (either by collaborating with other colleagues or guiding their students to network with other students and data bases) are frequently required to collaborate in a team framework with tutors, editors, instructional designers, computer experts, graphic production personnel in developing and delivering their courses. Such working conditions differ immensely from the sole and overall responsibility of professors of their courses which has characterized the academic teaching for over 900 years. Clearly, in a team framework and in networked learning settings, the professors' academic freedom in teaching is reduced in comparison to their being responsible for designing the overall learning/teaching process.

Work overload and burnout

An additional important reason explaining the reluctance of many academics to engage in networked and online teaching relates to the fact that to design such study programs constitutes a complicated and demanding task. Teaching online, or even preparing some materials for networked and online teaching, requires faculty to devote much more time to the preparation of study materials and learning assignments than they would for a face-to-face classroom presentation (Bates & Sangra, 2011; Khan, 2005; Larremendy-Joerns & Leinhardt, 2006; Power & Gould-Morven, 2011).

Many studies highlight the fact that academic faculty find that teaching online is time consuming, is more isolated and requires specialized skills (Bates & Sangra, 2011; Guri-Rosenblit, 2010; Johnston, 2012). Stanford professors who have offered Coursera courses in 2012 claimed that it took a lot of time and effort to get them up

and running. As Prof. Chris Turning, offering one of his courses as a MOOC, put it: "This is clearly being propelled through a lot of extra faculty sweat" (Johnston, 2012, 52).

The overload put on professors who teach extensively online has been found in several studies to result in a higher burnout rate as compared to professors that do not teach online. Hislop & Ellis (2004) as well as Lacritz (2004) found that teaching online becomes a major workplace stressor leading to burnout symptoms.

Lack of ongoing support systems

There is plenty of accumulated evidence that indicate that many professors most commonly use the new technologies for administrative tasks, such as record keeping, lesson plan development, information presentation, basic information searches on the Internet, but overall are less competent in using the technologies compared to their students. Many academics report that they do not feel confident in utilizing the advanced technologies, and this lack of confidence affects to great extent the way in which the learning/teaching processes are conducted. Ongoing and just-in-time support systems have been recognized as crucial for the use of technology in instructional delivery (Bates & Sangra, 2011; Benson & Brack, 2009; Guri-Rosenblit, 2010).

Intellectual Property Concerns

Concerns about intellectual property rights may also be seen as a barrier for the implementation of online teaching in academic environments. 'Copyright' is a legal concept, enacted by governments, giving the creator of an original work of authorship exclusive rights to it, usually for a limited time (of fifty to hundred years) after which the work enters the public domain.

The development of the Internet, the digital media and the computer networked technologies, have introduced numerous difficulties in enforcing copyright and prompted reinterpretation of the meaning of 'fair use' in online teaching and networked learning. Academics confront several dilemmas in relation to copyright laws in the digital millennium. On one hand, they are concerned as to losing intellectual property over their course materials, some of which include innovative ideas and original constructs. On the other hand, the stringent copyright laws which have been initiated and formulated in the last decade as to the use of others' works in their ongoing teaching, as they do regularly in classroom teaching, deters some professors from utilizing the new technologies in their teaching. Intellectual property concerns have slowed down the development of many MOOCs and Open Source materials (Guri-Rosenblit, 2010).

Importance of e-teaching

It is quite clear nowadays that, for networked learning and e-learning to become a dominant learning pattern, technology alone will not suffice. In order to overcome the reluctance of many professors to use extensively the digital technologies, there exists a burning need to develop appropriate incentives and support systems. The little attention paid to the crucial role of teachers in online settings results in a restricted and moderate adaptation of the technologies in higher education so far. Of particular importance is an ongoing and just-in-time support. Many institutions acknowledge nowadays the need to recruit in the future a broader range of personnel to complement academic staff in order to implement the technologies more effectively (Bates & Sangra, 2011; Benson & Brack, 2009; Gradinarova, 2015).

The roles of teachers in an online environment differ meaningfully from their traditional roles in a classroom setting. To equip professors with tools to use the wide range of capabilities enabled by the new technologies necessitates a conceptual redefinition of the teachers' roles, a well designed training, and ongoing support systems for both students and teachers.

The new technologies require the academic faculty to assume new responsibilities and to develop a range of new skills. Academics will have to become in the future reconciled to collaborating with other colleagues and professionals in designing materials and in the teaching process. They will need to learn how to collaborate in a team framework with tutors, editors, instructional designers, television producers, computer experts, graphic production personnel, etc. in developing and delivering their courses as well as in guiding their students to utilize efficiently networked learning. At the same time, teachers will have greater flexibility to choose the teaching styles better suited for their personal strengths and individual preferences. University leaders will have to deliberate how to prepare the new generations of academic faculty to operate in a world where blended courses and online teaching, shared or dual diplomas, online teaching and networked learning are an integral

part of the academic teaching responsibilities. Unquestionably, e-teaching constitutes an essential prerequisite for achieving efficient and fruitful networked and e-learning, and it provides multiple domains of investigation that have not been explored yet.

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