Video Production and Video Tutorials in Professional Health Education: A Mobile Learning Experience

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ABSTRACT

Motivated by the significant increase in the presence of mobile devices in the classroom and the opportunity to use these resources to improve and streamline the process of teaching and learning, this paper proposes a pedagogical use of mobile technologies, specifically, tablets in the class. The proposal was developed under LabsMóveis, a subproject of the LabTEAR Project, and applied in an undergraduate program of the Health area. The use of tablets in the University classroom contributed to the expansion of general and specific cognitive abilities, stimulating creativity and leadership for the learners, while enhancing their initiatives to solve problems.

Keywords: Education, Health Professionals, Mobile Devices, Seminar, Video Production

1. INTRODUCTION

Cisco (2013) purports that the number of smartphones, tablets, laptops and phones with Internet access will be greater than the number of people in the world by the end of 2013. In recent years, we observe a significant increase in the presence of mobile devices in the classroom. Given such a scenario, we believe it is necessary to include the use of these resources in differentiated pedagogical proposals in order to stimulate the development of learners’ abilities, such as research skills, leadership, dialogue and collaboration.

The development of tools to accompany mobile devices is an emerging trend. Pedro et al. (2012) present the study, planning and development of an Interactive Geometry tool

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to be used in mobile devices based on Android. Isotani and Orlandi (2012) describe an authoring system for generating lists of exercises that can be accessed via smartphones and tablets. Other authors have worked on the use of mobile devices in different areas of education. Batista et al. (2012) present a study on the use of mobile phones in the discipline of Calculus I using the plug-in MLE-Moodle. Forte et al. (2011) present challenges and considerations about the proposed use of mobile devices in the field of Medicine.

This article presents a pedagogical proposal for the use of tablets, which aims to promote collaborative learning and develop abilities such as research skills, leadership and dialogue. According to Moraes (2012), students learn through research, engaging in group work to reconstruct knowledge and practices. Therefore, it is necessary that students play the role of protagonists in this process and share their research with colleagues through dialogues and exchanges. Moreover, according to Fontes and Freixo (2004), Vygotsky believes that social relations between individuals allow the development of a number of skills such as voluntary attention, logical memory and abstract thinking. In this sense, a dialogue in which cognitive development occurs can be drawn from both the established interaction between the subjects with the environment, and among the subjects themselves. Furthermore, the use of Information and Communication Technologies (ICTs) in health is not just information science for health professionals, but comprises the theoretical and practical aspects of information processing and communication based on knowledge and experience derived from processes in medicine and health care. Information-technology skills are needed for good healthcare practice (Parry, 2001).

The proposal presented here was developed within the LabsMóveis and applied in an undergraduate program of the School of Nursing, Nutrition and Physiotherapy at Pontifícia Universidade Católica do Rio Grande do Sul. The organization of this paper is as follows: Section 2 briefly describes the LabTEAR Project and one of its subprojects, LabsMóveis; Sections 3 and 4 present two developed pedagogical proposals; and Section 5 presents some final considerations.

2. PROJECT LABTEAR AND SUBPROJECT LABSMÓVEIS

The use of technological resources in University classrooms can contribute to the improvement of educational actions. However, equipping classrooms with technological resources is not enough, there needs to be a consistent pedagogical proposal that is in accordance with the Institutional Pedagogical Project (IPP). In this sense, LabTEAR Project is an institutional proposal to address the inherent challenges in the integration of emerging technologies and teaching in higher education.

The LabTEAR Project aims to align the possibilities of technological resources uses to support teaching; to create ICT laboratories to qualify classes at the University; to develop pedagogical proposals for the use of ICTs, aligned with the IPP and the strategic objectives of the University; and to investigate the impact of the expansion of the developed pedagogical proposals. In order to achieve these goals and to enable the execution of the project and the research in different areas of knowledge, a study group with members of the Schools of Education; Law; Nursing, Nutrition and Physical Therapy; Physics; Social Communication; and Engineering was formed. This group is responsible for the execution of the first subproject of LabTEAR: the LabsMóveis.

The LabsMóveis Project aims to develop, implement and evaluate the appropriate use of mobile technologies in the University classroom. To reach this goal, each School involved with the study group was awarded a mobile laboratory. This laboratory consists of a rack that can be equipped either with notebooks or tablets, or both. This choice depends on the expressed needs of each School based on the different pedagogical practices to be adopted and the resources of hardware and software.
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