

Teachers' Pedagogical knowledge for Technology-Enhanced Learning

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Abstract

The inexorable growth of technological use amidst the pandemic of COVID 19 has strengthened the emerging new paradigm in education and has accelerated the need for technology supported-pedagogical knowledge. The purpose of this paper is to develop a pedagogical framework to help teachers align their pedagogy and teaching methods with technology. To achieve this goal, a review is conducted to survey relevant literature concerning learning theories, pedagogical models, and web 2.0 tools. This review relies on three major bibliographic databases; Science Direct, Scopus, and Web of Science, through which a large number of articles are identified. Thirty-eight articles are selected according to the scope of the study. Then, a qualitative analysis is conducted to identify the four learning theories; behaviorism, cognitivism, constructivism, and connectivism as they are applied to the online learning environment. Pedagogical models and various web 2.0 tools are also classified within the framework of each learning theory. It has been found that the technology-enhanced learning environment is suitable for the implementation of the principles of the four learning theories. It also gives rise to new pedagogical models through various web 2.0 tools. The proposed pedagogical framework in this paper aims to guide teachers' pedagogical practices in a technology-enhanced learning environment. It also provides policymakers with constructive insights to enhance the focus on the pedagogical application of digital tools in future training programs.

Key Words: framework, learning theories, pedagogy, review, technology