

# Influencing Factors for Adopting Technology Enhanced Learning in the Medical Schools of Punjab, Pakistan

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## ABSTRACT

As the successful establishment of technology supported educational systems requires wide investment in terms of finances and faculty time, this study explores the influencing factors in the adoption of Technology Enhanced Learning (TEL) and the main barriers encountered during the use of TEL in Punjab, Pakistan. Semi-structured interviews were conducted with medical educators and thematic analysis was carried out using Nvivo-10. The study participants were well aware of educational technologies and stated that the influencing factors for adoption of TEL were self-effort, motivation, a personal positive approach and departmental policy. The institutions were well equipped with resources but the main problem was the lack of faculty training and institutional support. The study concludes that pedagogy is the main driver for the use of educational technologies. At the national level, it is suggested that governing bodies can provide definite policies and guidelines for the implementation of TEL. Therefore, it is advocated that recognizing online courses can enhance potential learners' interest to enroll for e-learning programmes. At the institutional level, it is proposed to encourage the establishment of institutional policies and the organization of workshops for faculty training. At an individual level, it is stressed that there is a basic requirement to develop a technology-oriented culture partly by sharing the power and expertise among the department heads and faculty members.

## KEYWORDS

Developing Countries, Educational Technologies, E-Learning, Technology Enhanced Learning, TEL, TEL Guidelines, TEL in Medical Education

## INTRODUCTION

In the modern era, the widespread accessibility of technologies has opened the door for the feasible delivery of education and to provide great opportunities for knowledge exchange worldwide. The rapidly proliferating technical support in education systems has made learning and teaching more accessible, practicable and portable. The sense of sharing ideas and optimizing learning opportunities has pushed educators to adapt those teaching methods that can help ensure the quality of education and enhance the learning process. In order to meet the evolving standards of higher education, many institutions have moved forward to reshape educational policies by integrating TEL.

There is a vast array of terms related to TEL: technology enhanced education; technology enabled learning and e-learning have been used interchangeably in the literature. In the last decade, 'e-learning' was the term used for technology as pedagogical support and it gradually took an evolutionary change

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for TEL to become the accepted term (Guri-Rosenblit & Gros, 2011). Technology enhanced learning is generally described as being the way learning is supported by electronically designed instructional content, delivered through the use of internet or synchronously delivered web-based/online learning resources (Bates, 2005).

The successful establishment of an educational system that is supported by technology demands an extensive investment in terms of finances and faculty time. It necessitates the planned implementation of standard policies and educational strategies at national, institutional and individual levels. The whole process requires the involvement of stakeholders including educators, students and administrators in order to obtain their ideas about the usage of TEL. It is crucial to know what factors promote and foster the integration of TEL in pedagogy.

The aim of this study is to acquire medical educators' views about TEL in Punjab province in Pakistan. Pakistan is a sovereign country in South Asia and a federal parliamentary republic consisting of four provinces. Punjab is the most developed and populous province of Pakistan with approximately 80 million people, which is 56% of the country's total population (Livingston & O'Hanlon, 2011). Pakistan has 136 universities in total, of which 74 are public universities and 62 are private universities (Usman, 2014).

In Punjab, there are 18 public and 24 private medical schools. All medical schools are regulated by the provincial department of health and recognized by the Pakistan Medical and Dental Council (PMDC), which is both a regulatory authority and a governing body PMDC (2014). The public sector universities are funded by the provincial finance department, whereas the private sector universities are self-funded and a few are part of private organizations (Börzel & Risse, 2005).

The study explores the reasons for the use of different educational technologies in medical educators' professional practice. The purpose is to seek the extent to which they view TEL as an effective support to pedagogy and how they could develop the use of TEL in the future. The exploration of barriers and impeding factors will enhance the potential to overcome those factors that slow the process of TEL integration. Therefore, this study aims to explore in-depth the views and suggestions of medical educators in order to help to successfully establish educational technologies within medical education.

The introduction of educational technology is likely to be disruptive to existing institutional processes. It can compel a change in the current educational system and multiple factors can make it complex, depending upon the culture and context of a particular institution. Consequently, it affects the infrastructure and function of an institution at different levels. It not only affects the learning and teaching at departmental level, but potentially has a strong impact on a university's culture.

## **RESEARCH METHODOLOGY**

The focus of my research questions was to explore the reasons behind adopting TEL (influencing factors) by asking "why" and resolving the problem by inquiring "how" people think about the impeding/enabling factors for using TEL. Moreover, my concern was to investigate in-depth the participants' points of view regarding TEL in their social context. The research used semi-structured interviews for data collection. Human perceptions can be quite variable, so the interpretation of their views was analyzed using an interpretivist approach (Creswell & Clark, 2007).

The main research question is, "What are the influencing factors for adopting Technology Enhanced Learning in the medical schools of Punjab, Pakistan?" There are three sub-questions under this main heading.

1. What are the medical educators' perceptions about TEL in their professional practice?
2. What are the difficulties in integrating TEL in the medical educational system?
3. How can the process of adoption of TEL be enhanced in the future?

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