

Proceeding Paper

# The Role of Educational Technology and Open-Access Resources in Accessible Quality Learning and Teaching: An Exploratory Field Study on Academics, Students, and Administrators in Kuwait †

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**Abstract:** This research is in response to a Kuwait Foundation for the Advancement of Sciences (KFAS) call for basic and applied research proposals in education for Kuwait. The Kuwait tertiary sector requires a better understanding of the role of educational technology and open access resources. This research proposal outlines the systematic collection of data from academics, students and administrators to enable better decision making within tertiary institutions and across the tertiary sector.

**Keywords:** teaching technology; teaching and learning; academic engagement; online learning; smart learning environments



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## 1. Objectives

This research explores existing and emerging information technology and its effectiveness in supporting tertiary academic communities in Kuwait. The research will identify the likely avenues to promote motivations for adopting and building the knowledge and skill sets of students, teachers, and administrative staff. The research will also identify the strategies that institutions and the state may adopt to support the transition to innovative, efficient technologies as a platform for improvement in pedagogy and educational outcomes.

## 2. Methodology

The research data are derived from three national embedded mixed method [1] voluntary survey instruments that were administered online (Qualtrics). The qualitative and quantitative data will be collected from all the 11 tertiary institutions, enabling a qualitative thematic (NVivo) and quantitative statistical analysis (SPSS) within and across the tertiary sector. Combining the quantitative and qualitative analyses affords an opportunity to triangulate the results from multiple perspectives, increasing the accuracy and confidence in the conclusions [2].

## 3. Results

The results will determine whether the cultural, technical, and contextual issues identified by Alfelaj [3] and Al-Ali [4] still inhibit the integration of teaching technology in Kuwait. The rapid implementation of online learning in response to COVID-19 will be considered against the perceptions of educators [5], students [6], and other stakeholders [7]. Finally, whether smart learning environments [8] afford a path forward will also be determined.

#### 4. Implications

This study provides an exploration of the following research questions:

1. What are the emerging teaching and learning needs of higher education academic communities in Kuwait?
2. What factors influence the academic engagement with evaluating, implementing, and resourcing educational technologies?
3. How can the future teaching and learning needs of higher education communities be met?
4. How has the pandemic, the adoption of online learning, and the decline in practical training impacted higher education communities?
5. How would Kuwait embrace smart learning environments?

#### 5. Originality Value

The prior literature will be tested against the current COVID-19 environment to see whether cultural, technical, and contextual factors remain constraints to the adoption of educational technology. Insights will be gathered on potential new technologies, such as smart learning environments, and the factors that may inhibit their adoption. The data set will be both unique and extensive. This is particularly important, as more traditional educators retire and are replaced by more tech-savvy staff.

#### 6. Contributions

This research if funded will provide institutions with a data set to understand their current capabilities and expectations from academic staff, students, and administrative staff, benchmarked against other institutions in the Kuwait tertiary sector. This will enable institutions to better plan for and implement educational technology, resourcing, and training. If repeated at defined intervals, the data set will provide a longitudinal study of the changing educational technology needs and requirements in Kuwait.

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**Informed Consent Statement:** Informed consent will be obtained from all participants.

**Data Availability Statement:** The data has not yet been collected and is subject to KFAS funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

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