Factors that Influence Secondary School Teachers’ Acceptance of E-learning Technology in teaching in Saudi Arabia

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Introduction

The requirements for E-learning in the Saudi Arabian education system are being recognised by both the government and educators. The successful implementation of E-learning depends on a number of factors, not least of which is the teachers’ perceptions, challenges, and concerns about this type of learning. In order to successfully implement an E-learning project in secondary schools education in Saudi Arabia, it is important to find out more about the factors which influence secondary school teachers’ acceptance of E-learning technology so as to plan effectively for change.

Key words: E-learning in Secondary school. Technology Acceptance Model (TAM), E-learning in Saudi Arabia.

Aim of the Research Project

To investigate the main factors that influence secondary school teachers’ acceptance of E-learning technology in teaching and learning.

Research question

What are the factors that influence secondary school teachers’ acceptance of E-learning technology in teaching in Saudi Arabia?

Under this title the researcher investigated ten external variables using 26 different hypotheses based on the Technology Acceptance Model (TAM), which includes:
1. Teachers’ personality (gender, age, level of education, specialization and teaching experience)
2. ICT skills, which includes (teachers’ ICT skills, students ICT skills and teachers’ in-service training).
3. Facilities condition which includes (ICT infrastructure and institution policy and leadership).

Research Model

The research model was appropriate for the proposed research model and worked well in a Saudi Arabian context.

Data analysis:

The data was analysed using SPSS program which includes:
- Normality
- Outlers
- Reliability and validity of the instrument
- Factor Analysis
- Correlation
- Using some tests such as ANOVA, T-test & Chi-square
- Deviation of regression Beta coefficient & R2 values

Preliminary Results

The main factors that influence secondary school teachers’ acceptance of E-learning technology in teaching are as follows:
1) Age, Teaching experience, Teachers’ skills, Teachers’ in-service training, institutional policy and leadership, standardized curricula and courses in E-learning, students’ and teachers’ ICT skills, perceived usefulness of E-learning, perceived ease of use of E-learning, teachers’ attitude toward use of E-learning, teachers’ behavioral intention to use E-learning.

Research Methodology

The population in this research is all Secondary school ‘teachers’ in Makah City being a sample proportion of the total number of secondary school teachers both genders male and female. The technology acceptance model (TAM) was used as a base model to investigate and measure the main factors that influence secondary school teachers’ acceptance of e-learning technology in blended learning environments in teaching.

Influence secondary school teachers’ acceptance of E-learning technology in teaching and learning.

Teachers’ perceived ease of use of E-learning (PEOU) of E-learning

Teachers’ perceived usefulness (PU) of E-learning

Teachers’ attitude toward using E-learning

Teachers’ skills

Teachers’ in-service training

Facilities condition

ICT Infrastructure

Institutional policy & leadership

Research Model

To identify the main factors that influence secondary school teachers’ acceptance of E-learning technology in teaching and learning.

Teachers’ Actual use of E-learning

Teachers’ behavioral intention to use E-learning

Teachers’ attitude toward use of E-learning

Perceived Ease of Use of E-learning (PEOU)

Perceived Usefulness of E-learning (PU)

Teachers’ personality

Teachers’ Age

Teachers’ Qualification

Teachers’ Specialization

Teachers’ Teaching experience years

Teachers’ Skills

Teachers’ in-service training

Facilities condition

ICT Infrastructure

Institutional policy & leadership

Quantitative Approach

Survey Method

Simple Random Sampling

Dependent Variables

Internal Variable

Intermediate Variable

External Variable

Teachers & students ICT skills

Institution policy & leadership

ICT infrastructure

Teachers personality

Teachers’ in-service training

Facilities condition

Teachers’ skills

Teachers’ in-service training

Students’ Skills

Teacher’s Actual use of E-learning

Teachers’ behavioral intention to use E-learning

Teachers’ attitude toward use of E-learning

Teachers’ perceived usefulness of E-learning

Teachers’ perceived ease of use of E-learning

Teachers’ personality

Teachers’ Age

Teachers’ Qualification

Teachers’ Specialization

Teachers’ Teaching experience years

Teachers’ Skills

Teachers’ in-service training

Facilities condition

ICT Infrastructure

Institutional policy & leadership

7) Research methodology was validated using statistical methods, for the sample proportion of the total number of secondary school teachers both genders male and female.

8) ICT Infrastructure in both the female and male secondary schools is poor.

9) Teachers’ in-service training was sub-standard: more than 40% of teachers had not attended workshops on educational technology. More than 47% of teachers had not attended workshops on educational technology.

10) Almost 60% of respondents had not attended conferences on educational technology. Finally, more than 85% of respondents had not attended conferences on educational technology.

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