

# The Role of Digital Education in Improving the Quality of Education

By

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### Abstract

Smartphones have recently surged in popularity, and the Internet has transcended time and geography to become a global instructional tool. The design of educational activities for digital learning and the utilization of technology tools are the core concerns of integrated education. Students were examined and questionnaires were completed in order to better understand their perspectives on digital learning. In order to better understand students' perspectives on digital learning, they were examined and asked to fill out questionnaires. A total of 116 students from four higher education institutions were chosen as educational research subjects. The findings showed that digital learning has a bigger influence on learning stimulation than traditional teaching, as well as a greater impact on learning outcomes. In addition, learning motivation has been found to have a large beneficial impact on learning outcomes, as well as a surprisingly good impact on learning acquisition, and it plays a vital part in improving the quality of university education to develop successful teaching practices, it is anticipated to conform with current teaching trends and take advantage of the benefits of digital learning.

Keywords: digital learning, quality assuring, higher education.

### 1. Introduction

Changing technologies have advanced and evolved everyday life. Web-based training, Internet-based training, or eLearning, eLearning are some of the new titles and explanations. Technology is becoming increasingly important at all stages of 21st century learning, especially for university students. With such a large population, Iraq must cope with rapid technological innovation to improve learning [Tvengea and Martinsena, 2018; Castro, 2019]. In Iraqi educational institutions, a 21st-century model has emerged; this shift occurs when curricula are regularly revised to enable fully digital learning. Technological achievements in Iraq have changed significantly, affecting a wide range of fields including education [McLaren et al, 2022; Peters, 2000; Akyuza and Yavuza, 2017]. According to numerous studies, in the 21st century education era, the use of digital media in the learning process is likely to be tailored to each student. Younger students are more likely to use on the other hand, one of the important topics in the education industry is quality assurance [Gonzales, Rubio and Pichardo, 2015; Mantri, 2014; Martin-Garcia, Serrano and Gomez, 2014]. Institutions of higher education have been concentrating their attention on quality assurance in higher education and teacher



education to construct capacity in quality assurance among workers at all levels of the system and to accomplish the outcome of the improved quality at all levels of education. Where Iraqi universities are preparing special and good systems to control the quality system in their institutions and academic programs, there are many studies presented to improve the quality system in these universities such that [Aburizaizah, 2022; S. S. Rai, Gaikwad and Kulkarni, 2014, Sturgeon, 2020] has presented some of The part of quality assurance in higher education institutions A.N.Q. Phan [Phan, 2022, Blake et al, 2020] demonstrate that quality assurance has been recognized as one of the most important stepping stones for participation in worldwide and regional educational spaces [Rudow and Sounny-Slitine, 2015; Salmon et al, 2015, Thibaut et al, 2015, Subhash and Elizabeth, 2018, Rashed, 2021].

From here we can say the technological development in the use of digital technologies in general and educational ones in particular [Sangkur, Panchoo and Bhyoroo, 2016; Tena, Almenara and Osuna, 2016, Trotskovsky and Sabag, 2015, Nugraha and Dasim, 2022; Kuhn et al, 2022, Amhag, Hellström and Stigmar, 2019, Villa, 2020], plays a key role in increasing the indicators of the quality of education in educational institutions and universities, which in turn achieves the goals of these universities to reach a higher rank in international, regional and local classifications, as well as obtaining certificates of institutional and program accreditation from parties [Unger et al, 2016, Wood and Bilsborow, 2014, Sohrabi and Iraj, 2016].

### 2. Method

#### 2.1 Sample

Jordanian Our sample consists of persons who work at Iraqi universities. Projects of information systems (ISP), building projects (BP), software projects (SP), IT projects (ITP), administrative projects (AP), and so on were among them. Employees at various levels of seniority at their institutions of higher learning were the intended participants. and those actively working in educational projects. So that, the (sample) originally contain universities staff members and juniors and seniors of project managers. Moreover, the organizations of higher education which are local universities. There were 120 persons in the sample. This was done deliberately to get some views from several universities.

#### 2.2 Survey Tools

The tools of the survey were created based on the variables that discovered in the literature which assist learning in digitalized system. The goal is to assess how much Iraqi institutions have progressed are aware of the variables that enhance digital learning, and whether or not they stick to incorporating them into their regular operations. The variables discovered in the examined literature were classified into 3 categories.

- 1) members of employees (staff members) related.
- 2) management related.
- 3) environment related factors.

This was selected according to a survey conducted via 12 employee who discovered that the complexity in similar works was high (that means digital education) is frequently as a result of the interaction among the student, organization (university) and environment. For each category, measurement scales were created. Overall, eleven scalars of Measurement were designed to assess the reach to which these variables are integrated in regular educational



programs.

Five-point Likert Scales (LS) was used for all measurement scales such that

- 1) [Strongly Disagree].
- 2) [Disagree].
- 3) C [Neutral].
- 4) D-[Agree].
- 5) E [Strongly Agree], (see TABEL 2).

Respondents were asked to score the enquiries based on their knowledge in their universities or departments. (97) Questionnaires from project lecturers were returned (n is equal 58), and university employees (n is equal 39). This resulted in a (response rate of 79%). To certify that the study followed moral standards, contribution was voluntary and private. The obtained data was then entered and processed in Microsoft Excel before being loaded into the SPSS software, where the internal consistency was assessed using (ANOVA) and a descriptive statistical analysis was conducted.

categories	Scale of Measurement					
Employee Related	A: Employee (staff member) related elements impacting Digital Learning are assessed. 1. the employee is enthusiastic and willing to employ digital learning programs that exchange information. 2. I am excited to learn new things through digital apps. 3- I am an open-minded person who is prepared to adapt and change and who is not bound by					
	4. the employee is not ashamed to seek for assistance or acknowledge that I require assistance in completing my responsibilities utilizing digital tools.					
Management Related Student Related	<ul><li>B: Evaluate the management-related aspects that influence digital learning</li><li>5. The top management encourages us to communicate, debate, and exchange fresh information using digital applications.</li></ul>					
	<ul> <li>6. high management of university pushes us to seek information outside the workplace.</li> <li>7. Senior management supports the creation of an inclusive digital education</li> <li>anvironment. We all have the impression that we care about one another 8. When I</li> </ul>					
	wish to debate my in the workplace, I may talk to the upper management. C: Evaluation of other variables which impacting learning in DP					
	9. People participating in the task are co-located, which means they are within easy reach of one another.					
	10. No one is penalized for making errors while carrying out their duties. 11. My organization has a lot of seasoned employees that know a lot of things.					

**Table 1:** Scale Items and Measurement Categories

#### 2.3 Accuracy, Veracity and Generalizability

In total, Cronbach's the value of ( $\alpha$ ) was calculated as ( $\alpha$ ) is equal 0.895 for every measure scale which is ( $\alpha$ ) more than (0.80). As a result, the scaling exhibited high interior consistency. Because all scales employed the same of Likert Scale (LS), it was expected that the individual alphas would be the same. Furthermore, we employed face and content validity in our study, which means that the measuring scales were thoroughly examined to ensure that they accurately assessed what was intended. Given that these were fascinating questions, in general that may be few hard to obtain until in like situations.

# 3. Our Result

Our findings indicate that both staff members and managers of project are well-versed at characteristics that promote education in digitalization initiatives across all (Three) of categories,



such that, Personal, Organizational, and Environmental Factors. Moreover, the amount to which these elements are implemented varies. It was discovered that practically all staff in firms are eager and devoted to learning (over 93 percent). On the opposite, only senior management in certain firms is dedicated to fostering learning (over 65 percent). Similarly, just a few firms provide a welcoming learning atmosphere (70 percent).

Measure	Ν	SA	Α	Ν	D	SD
1	97	65	24	5	0	3
2	97	90	6	0	0	3
3	97	86	9	1	0	3
4	97	68	21	2	1	7
5	97	40	34	13	6	5
6	97	41	20	18	7	13
7	97	38	26	21	6	7
8	97	36	28	22	5	7
9	97	45	28	18	3	4
10	97	30	29	19	8	11
11	97	38	37	12	7	5

#### Table 2: Result (Answers)

All figures are expressed as percentages.

n refers to the number of Respondents

SA refers to Strongly Agree,

A refers to Agree,

N refers to Neutral,

D refers to Disagree,

SD refers to strongly disagree.

In terms of staff (employees) and related variables, the results show that 92% of contributors are excited and willing to disagree and share their skills with colleagues, 97.5% of members "agree or strongly agree" that they are willing to learn new knowledge 96% of respondents People agree or strongly agree that they are willing to learn new things and have an open mind. About 90 percent of respondents demonstrated their ability to adapt and willingness to adapt to prevent stagnation, despite their outdated beliefs. All contributors agree or strongly agree which means respondents are anxious to request assistance or acknowledge that they want help getting tasks done. When it comes to management issues, the results speak for themselves. Because 75% of respondents believe or strongly agree that their company's management encourages discussions and takes time to share new information, 61% of respondents.

### 4. Discussion

According to the findings of this study, management-controlled aspects receive less emphasis when it comes to learning in digitization initiatives. This is surprising given the emphasis on senior management's commitment to enhancing learning in DPS schools.



[Kosonen, Ilomaki and Lakkala, 2015; Lin, Chen and Liu, 2017; Liwen, Tung-Liang and Nian-Shing, 2015; McNaughton et al, 2014; Moorefielf-Lang and Hall, 2015]. Despite the importance of personnel related factors such as motivation and dedication to learning [Masterman, 2016], learning will not take place unless the upper management is dedicated to promote a culture of that. The same applies to the environment, because the environmental elements are determined by the policies of the top management [Kosonen, Ilomaki and Lakkala, 2015; Lin, Chen and Liu, 2017]. These findings go on to explain why digitization programs continue to fail [Händel et al, 2020]. However, our findings suggest that management-related elements have a strong influence on both environmental and human aspects. This is consistent with the findings of [Liyanagunawardena, Lundgvist and Williams, 2015], who discovered that the critical components of successful digitization efforts are interrelated. In addition to dependent components, management-related factors look to be the most important as they have a direct impact on personal and environmental factors. This is consistent with [Nielsen and Hoban, 2015], who recognized the commitment of senior management as a key element on which other variables could be built. However, our data reveals that this is the group that receives the least attention in organizations. All three factors must be considered in order for companies to succeed in digitization efforts. It's also worth noting that each area participates in different ways to the overall score and may need a different amount of attention. For further research, consider three results based on one category. a) Willingness to learn employees who work in a tough environment and are governed by senior executives who are less dedicated to promoting learning activities. b) Having reluctant and uncommitted employees working in a highly supportive environment and led by the dean who are less committed to supporting learning programs c) Reluctant and uncommitted employees work in a very supportive environment and are managed by senior executives who are committed to learning programs Variable (a) may have a negative effect on the employee's desire and, accordingly, affect learning. Employees may be eager to learn, but that doesn't mean they will. Employees may be motivated to learn, but if it is not well communicated, they may acquire a negative attitude about it. Variable (b) may motivate employees to learn, but the effect may be transient because employees lack internal willingness (desire) and upper management support, which will eventually have a detrimental effect on learning. In addition, variable (c) is more likely to have a positive and long-term influence on learning because the upper management has the capability to change the willingness and the environment of the employees. [Nielsen and Hoban, 2015]. This can be accomplished by financing learning initiatives [McNaughton et al, 2014], developing strategies and successfully passing them on to employees [Lau, 2014; Lin, Chen and Liu, 2017], providing motivations [Liwen, Tung-Liang and Nian-Shing, 2015, Livanagunawardena, Lundgvist and Williams, 2015], etc.

## 5. Conclusion

The methodology of the study assessed that extent to which education institutes are concerned with aspects affecting digital learning and assuring the quality of higher education. In addition, the importance of management-related elements in developing a culture of learning is broadly emphasized in the current research, it looks to be the category that receives the least amount of attention. Pay attention when compared to factors related to employees and the environment. Identification of critical components is vital, but assessments are made to locate gaps in companies so that methods for managing them can be successfully developed. Moreover, our findings illustrate the impact of these reasons on each other and argue that because Features related to management have the greatest impact, more attention should be given in business. There are many drawbacks to this study. For starters, there may be bias in



how participants score personal aspects. Secondly, this article is based on team members. For Future research may focus on identifying similarities and/or differences in the views of senior management leaders.

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