

# Digital Platforms Importance in Enhancing Learning Outcomes and Achieving Vision 2030 at King Khalid University

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## Abstract

*The study aimed to investigate the importance and role of digital platforms in enhancing learning outcomes that fulfill labour market needs. In order to achieve the study objectives, the researchers adopt the analytical descriptive approach. A questionnaire was used to measure the importance of digital platforms in enhancing learning outcomes at King Khalid University. The study was conducted on a random sample of the teaching staff. The questionnaire included a number of statements distributed to different fields related to the importance of digital platforms and the enhancement of learning at King Khalid University. The study sample comprised (70) members of the teaching staff and students of the study population who were selected randomly. The study data were processed statistically using SPSS.*

**Keywords:** *Digital platforms, enhancement, learning outcomes.*

## 1. Introduction

Under the economic, social and cultural changes, educational institutions educational institutions have to provide a continuous flexible education that focuses on self-learning. The tremendous developments in the field of digital technology, information and communication revolution and international networks encouraged universities to move towards a complete transformation to electronic learning during the Corona pandemic as platforms played a great role in university education and training. King Khalid University is considered leading in implementing the partial and complete electronic learning as it employed the modern technology and built the blended learning system. The change towards the full electronic learning happened under the pandemic as the educational digital platforms contributed to the management of educational digital content on the Internet via a Moodle platform system that enabled teachers to publish lessons, set objectives and distribute roles among the students and the teaching staff; the platform Tamkeen is one of the best platforms at King Khalid University used as an electronic content management system.

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### Study problem

The problem of the study was represented in identifying the importance of digital platforms in enhancing learning outcomes and achieving the mission and objectives of the education programs at King Khalid University and Saudi Vision 2030.

In order to achieve the study objectives the problem was set on the following main question:

What is the importance of digital platforms in enhancing developing and improving learning outcomes at King Khalid University and achieving Vision 2030?

The main question was divided into the following sub questions:

1. To what extent do digital platforms contribute to giving graduates knowledge skills necessary for King Khalid University students?
2. To what extent do digital platforms contribute to giving graduates cognitive motor and psychological skills necessary for King Khalid University students?
3. To what extent do digital platforms contribute to increase King Khalid University students' competence in general?

### Study significance

Digital platforms perform a great role in improving developing learning outcomes in university. They also contribute to developing learning outcomes which in turn lead to fulfill labour market needs and to achieve Aseer strategy and Vision 2030. Digital platforms can contribute to establishing quality standards for learning outcomes, to clarifying the pathways insights into the conduct and improvement of educational programs, to participating in holding cooperative and competitive comparison in accordance with the local, regional and international standards and to evaluating and assessing education system performance.

### Study objectives

The study aims to:

1. Identify digital platforms role in enhancing King Khalid University vision and mission by improving learning outcomes quality 2030.
2. Determine the learning outcomes at King Khalid University that increase students' competence.
3. Propose recommendations for improving and enhancing learning outcomes at King Khalid University.

### Study hypotheses

The study verifies the following hypotheses:

1. There is no a statistically significant relationship between digital platforms and the enhancement of King Khalid University students' cognitive skills.
2. There is no a statistically significant relationship between digital platforms importance and the fulfillment and enhancement of King Khalid University students' science and life skills.

3. There is no a statistically significant relationship between learning outcomes and increasing King Khalid University students' competence.

## 2. Literature review

### 2.1 Previous studies

Yahya and Maryam (2020) study aimed to identify the fundamental concepts of virtual education and its relationship with the current changes and obstacles facing educational institutions in Algeria, under the Corona crisis challenges. The study concluded that the virtual education has become a definite necessity even without the existence of crises. Despite the advantages of the virtual education, it cannot replace the regular education. There are problems and general obstacles that face using platforms such as the availability of material and human capabilities, lack of means of communication, obstacles that are specific to individuals active in the educational process, and skill obstacles related to using technology and control.

Xi, Chen & Wang (2018) study aimed to achieve adaptive learning via digital platforms; the platform was adopted through analyzing learning behaviors on the Internet. This digital study concluded that the social networks are the main player in building the concept within these platforms as the percentage of access to the social networks via digital platforms reached (68.76%).

Maxwell et al (2018) study aimed to compare the experience of students who submit homework using digital learning platforms. The study established an electronic platform to design examination system. The study concluded that digital platforms helped students by submitting homework via the Internet. study showed that the electronic examination system can objectively and fairly reflect the true level of students and improve their examination efficiency. The study showed also the recent time witnessed an increase in using educational platforms in all educational fields. This is due to the impact of these digital platforms on education. In higher education, the platforms made student learning activities (LMS) by the adoption of learning management systems more flexible and scalable by providing a stimulating environment on the Internet without restrictions in time, distance and use.

Ezzat (2008) study investigated the relationship between the outcomes of higher education institutions and the needs of the labor market to address the causes of unemployment among graduates in the Kingdom of Saudi Arabia. The study aimed to evaluate the relationship between the outputs of higher education institutions and the needs of the labor market to address the causes of unemployment among graduates in the Kingdom of Saudi Arabia.

The study showed that there are many factors causing unemployment among educated youth and their increase in light of the global and local changes witnessed.

Obaidat (2010) study investigated whether the skills available among the outcomes of Jordanian higher education are as required by the local labor market. The study aimed to measure the degree of acquisition of life skills among students at public and private Jordanian universities, and was limited to studying communication skills, technology skills, initiative and creativity, and foreign languages. The study concluded that there are some differences in the level of skill

acquisition according to gender and type of college (literary and scientific). The reason for this is attributed to the orientation of higher education policy makers towards improving the quality to make it more closely linked to the local economy.

## 2.2 Educational digital platform

Al-Sayed (2015) defined a digital educational platform as “an interactive educational environment with electronic content management systems, including the Moodle system. It enables teachers to publish lessons and objectives, set assignments, distribute roles, and divide students into interactive groups.”

Learning outcomes: It is a statement that accurately describes the knowledge, skills and values that the learner is expected to possess during his educational experience. Learning outcomes help to identify what the student must learn and what he can do after finishing the program enrolled in.

## 2.3 Digital platforms advantages

According to Weston et al (2018) and Heggart & Yoo (2018), the digital platforms are characterized by the following:

Digital platforms, through tools, enable to create digital classes via Internet networks, which reduces high costs for students.

They provide flexibility in the electronic learning environment and exchange experience in curricula developed between universities and therefore stimulate innovation.

They improve the educational environment by providing sufficient space to store digital content and retrieve and manage documents electronically through the Internet.

They facilitate the process of interaction between students and provide with the opportunity to employ many digital resources in teaching and learning activities.

They increase the possibility of communication between university students through the Internet, as these tasks motivate students to participate and interact with the topics at hand.

They facilitate the ease of access to the teacher through using digital platforms within the virtual classroom, or when there is an inquiry at any time that cannot be postponed.

They help the teacher provide diverse and modern information methods for constructing, distributing and classifying quickly and easily.

# 3. Study methodology

## 3.1 Study method and tools

The analytical and descriptive approach was used to measure the relationship between the digital public relations and the enhancement of learning outcomes at King Khalid University, through collecting primary and secondary data from previous literature (previous research and studies) in addition to preparing a study tool a questionnaire designed to an electronic link and directed to a random sample of the teaching staff at the colleges of King Khalid University. The link

was also distributed to a number of a pilot sample of the teaching staff. It was also sent to a number of specialized experts to benefit from their opinions and suggestions, in order to verify the validity and reliability of the questionnaire. The validity and reliability of the tool was confirmed using the Cronbach Scale.

### 3.2 Study population

The population of the study consisted of from the teaching staff including a number of the colleges at King Khalid University located in Abha city west south of the Kingdom of Saudi Arabia. It was established in 1419 AH during the visit of the Custodian of the Two Holy Mosques King Abdalla bin Saud when he was the Crown Prince on 1/9/1419 AH as he issued a decision to merge the two branches of Imam Mohammed bin Saud Islamic University and King Saud University in Aseer under King Khalid University.

### 3.3 Study sample

The study sample was (190) individuals. (150 ) of the questionnaires which have been distributed to a random sample of the teaching staff members were answered by (79%) of the study sample.

### 3.4 Study limits

Spatial limits: King Khalid University.

Time limits: 2022/2023.

## 4. Study results

### 4.1 Data analysis

The Statistical Package for Social Science SPSS was adopted to conduct the statistical process using the percentage. Chi-square was also used to measure to find out whether there are differences among the study sample individuals' responses to the questionnaire. The researchers adopted the descriptive approach to conduct the study as they refer to books, research and studies. This approach does not stop at describing the phenomenon, but also analyzes its reality and explains its results through the analysis of the study data in order to obtain interpretations that can be generalized so that the knowledge about the phenomenon increases; the descriptive approach depends on collecting facts and information, comparing and analyzing them to reach results.

### 4.2 Hypothesis one:

There is no a statistically significant relationship between digital learning platforms and the enhancement of King Khalid University students' cognitive skills.

Table (1): The mean, chi-square, degree of freedom and t-test for the statements of the hypothesis one

	Statement	Mean	DF	Chi-Square	T-test	Degree of agreement
1	Digital platforms (learning outcomes) at the university aim to	4	4	82.85	50.93	Agree

	make the local community institutions and individuals more aware of the university role in achieving the development in the region and Vision 2030.					
2	Digital platforms build tight relations with publishing and advertizing media to highlight the university role in achieving Vision 2030.	4	4	66.92	45.68	Agree
3	Digital platforms encourage the spirit of creativity, connection and communication among the university employees.	4	4	58.64	45.49	Agree
4	Digital platforms provide the university employees with information about the university, its objectives and the achievement of Vision 2030.	4	4	59.35	44.14	Agree

Source: Prepared by the researcher based on the field study data using SPSS-2023

The table (1) above shows values of the mean, degree of freedom, chi-square and t-test of the study sample answers for the statements as follow:

1. The mean was (4), degree of freedom (4), chi-square (82.857<sup>a</sup>) and t-test (50.938) for the statement (Digital platforms (learning outcomes) at the university aim to make the local community institutions and individuals more aware of the university role in achieving the development in the region and Vision 2030). This result indicates that the degree of agreement was (agree).

2. The mean was (4), degree of freedom (4), chi-square (66.929<sup>a</sup>) and t-test (45.686) for the statement (Digital platforms build tight relations with publishing and advertizing media to highlight the university role in achieving Vision 2030). This result indicates that the degree of agreement was (agree).

3. The mean was (4), degree of freedom (4), chi-square (58.643<sup>a</sup>) and t-test (45.491) for the statement (Digital platforms encourage the spirit of creativity, connection and communication among the university employees). This result indicates that the degree of agreement was (agree).

4. The mean was (4), degree of freedom (4), chi-square (59.357<sup>a</sup>) and t-test (44.149) for the statement (Digital platforms provide the university employees with information about the university, its objectives and the achievement of Vision 2030). This result indicates that the degree of agreement was (agree).

#### 4.3 Hypothesis two:

There is no a statistically significant relationship between digital platforms importance and the fulfillment and enhancement of King Khalid University students' science and life skills.

Table (2): The mean, chi-square, degree of freedom and t-test for the statements of the hypothesis two

	Statement	Mean	D F	Chi- Square	T-test	Degree of need
1	Digital platforms adopt a strategy to build a positive image of the university among community and market sectors.	4	4	76.64	42.90	Great
2	Digital platforms contribute to managing crises that faced by universities and to preparing campaigns to confront them.	4	4	63.21	41.81	Great
3	Digital platforms continuously communicate with external environment members and public to identify their requirements.	4	4	58.00	42.56	Great
4	Digital platforms use technological programs to make university employees aware of the importance and role of digital platforms in spreading the culture of hardworking, perseverance and excellence.	4	4	51.71	38.83	Great
5	Digital platforms use social media to spread the culture of spirit of competition among university employees.	4	4	39.07	35.81	Great
6	Digital platforms use digital media in their operation.	4	4	45.35	37.83	Great
7	Learning outcomes contribute to increasing students' awareness of the importance of acquiring knowledge and theoretical concepts of their specializations.	4	4	59.21	42.83	Great
8	Learning outcomes determine the quality of students' communication skills.	4	4	57.42	43.33	Great
9	Learning outcomes clearness makes local community institutions and individuals more aware of that graduates are able to fulfill labour market requirements.	4	4	67.21	44.68	Great
10	Learning outcomes include students' cognitive skills.	4	4	58.57	41.55	Great

11	Learning outcomes show university students' psychological and motor skills.	4	4	63.78	43.69	Great
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Source: Prepared by the researcher based on the field study data using SPSS-2023

The table (2) above shows values of the mean, degree of freedom, chi-square and t-test of the study sample answers for the statements as follow:

1. The mean was (4), degree of freedom (4), chi-square (76.64) and t-test (42.90) for the statement (Digital platforms adopt a strategy to build a positive image of the university among community and market sectors). This result indicates that the degree of need was (great).
2. The mean was (4), degree of freedom (4), chi-square (63.21) and t-test (41.81) for the statement (Digital platforms contribute to managing crises that faced by universities and to preparing campaigns to confront them). This result indicates that the degree of need was (great).
3. The mean was (4), degree of freedom (4), chi-square (58.00) and t-test (42.56) for the statement (Digital platforms continuously communicate with external environment members and public to identify their requirements). This result indicates that the degree of need was (great).
4. The mean was (4), degree of freedom (4), chi-square (51.71) and t-test (38.83) for the statement (Digital platforms use technological programs to make university employees aware of the importance and role of digital platforms in spreading the culture of hardworking, perseverance and excellence). This result indicates that the degree of need was (great).
5. The mean was (4), degree of freedom (4), chi-square (39.07) and t-test (35.81) for the statement (Digital platforms use social media to spread the culture of spirit of competition among university employees). This result indicates that the degree of need was (great).
6. The mean was (4), degree of freedom (4), chi-square (45.35) and t-test (37.83) for the statement (Digital platforms use digital media in their operation). This result indicates that the degree of need was (great).
7. The mean was (4), degree of freedom (4), chi-square (59.21) and t-test (42.83) for the statement (Learning outcomes contribute to increasing students' awareness of the importance of acquiring knowledge and theoretical concepts of their specializations). This result indicates that the degree of need was (great).
8. The mean was (4), degree of freedom (4), chi-square (57.42) and t-test (43.33) for the statement (Learning outcomes determine the quality of students' communication skills). This result indicates that the degree of need was (great).
9. The mean was (4), degree of freedom (4), chi-square (67.21) and t-test (44.68) for the statement (Learning outcomes clearness makes local community institutions and individuals more aware of that graduates are able to fulfill labour market requirements). This result indicates that the degree of need was (great).
10. The mean was (4), degree of freedom (4), chi-square (58.57) and t-test (41.55) for the statement (Learning outcomes include students' cognitive skills). This result indicates that the degree of need was (great).



11. The mean was (4), degree of freedom (4), chi-square (63.78) and t-test (43.69) for the statement (Learning outcomes show university students' psychological and motor skills). This result indicates that the degree of need was (great).

#### 4.4 Hypothesis three:

There is no a statistically significant relationship between learning outcomes and increasing King Khalid University students' competence.

Table (3): The mean, chi-square, degree of freedom and t-test for the statements of the hypothesis three

	Statement	Mean	DF	Chi-Square	T-test	Degree of need
1	Digital learning platforms define the means of increasing the spirit of creativity among students.	4	4	37.28	37.61	Great
2	Digital learning platforms clarify the methods of enhancing students' abilities to take responsibility.	4	4	46.78	40.46	Great
3	Digital learning platforms explain to students how to analyze and solve problems.	4	4	52.57	40.71	Great
4	Digital learning platforms define methods of making correct decisions.	4	4	52.21	40.67	Great
5	Digital learning platforms clarify the methods of teaching students to analyze and predict behavioral problems.	4	4	53.35	40.65	Great
6	Digital learning platforms define the means of self learning.	4	4	48.35	39.39	Great
7	Digital learning platforms contribute to clarifying the methods of teaching students critical thinking.	4	4	70.000	46.186	Great
8	Digital learning platforms enhance independence.	4	4	69.214	43.749	Great

Source: Prepared by the researcher based on the field study data using SPSS-2023

The table (3) above shows values of the mean, degree of freedom, chi-square and t-test of the study sample answers for the statements as follow:

1. The mean was (4), degree of freedom (4), chi-square (37.28) and t-test (37.61) for the statement (Digital learning platforms define the means of increasing the spirit of creativity among students). This result indicates that the degree of need was (great).

2. The mean was (4), degree of freedom (4), chi-square (46.78) and t-test (40.46) for the statement (Digital learning platforms clarify the methods of enhancing

students' abilities to take responsibility). This result indicates that the degree of need was (great).

3. The mean was (4), degree of freedom (4), chi-square (52.57) and t-test (40.71) for the statement (Digital learning platforms explain to students how to analyze and solve problems). This result indicates that the degree of need was (great).

4. The mean was (4), degree of freedom (4), chi-square (52.21) and t-test (40.67) for the statement (Digital learning platforms define methods of making correct decisions). This result indicates that the degree of need was (great).

5. The mean was (4), degree of freedom (4), chi-square (53.35) and t-test (40.65) for the statement (Digital learning platforms clarify the methods of teaching students to analyze and predict behavioral problems). This result indicates that the degree of need was (great).

6. The mean was (4), degree of freedom (4), chi-square (48.35) and t-test (39.39) for the statement (Digital learning platforms define the means of self learning). This result indicates that the degree of need was (great).

7. The mean was (4), degree of freedom (4), chi-square (70.000) and t-test (46.186) for the statement (Digital learning platforms contribute to clarifying the methods of teaching students critical thinking). This result indicates that the degree of need was (great).

8. The mean was (4), degree of freedom (4), chi-square (69.214) and t-test (43.749) for the statement (Digital learning platforms enhance independence). This result indicates that the degree of need was (great).

#### 4.5 Verification of the study hypotheses

##### Verification of hypothesis one

There is no a statistically significant relationship at the significant level (0.05) between digital platforms and the enhancement of King Khalid University students' cognitive skills.

Table (4): P-value and F-test for digital learning platforms and the enhancement of knowledge skills

Standard deviation	Coefficient of correlation value	P-value	Result
.743	.004	0.74	There is a relationship

Source: Prepared by the researcher based on the field study data using SPSS-2023

The table (4) above shows the p-value and F- test for digital learning platforms; the standard deviation for the statements was less than (1) which indicates that the study sample individuals' responses were at the positive direction. The estimation result shows that there was a direct correlation between digital learning platforms as an independent variable and the enhancement of knowledge skills as a dependent variable. The simple coefficient of correlation value was (.74) while the p-value was (0.004) which is less than the significant level (0.05); this indicates that there is a relationship between digital learning platforms and the enhancement of knowledge skills.

Verification of hypothesis two

There is no a statistically significant relationship at the significant level (0.05) between digital platforms importance and the fulfillment and enhancement of King Khalid University students' science and life skills.

Table (5): The relationship between digital learning platforms and enhancement of science and life skills

R	R Square					
		R Square Change	F Change	df1	Sig. F Change	Durbin-Watson
.073 <sup>a</sup>	.005	.005	.735	1	.393	1.888

Source: Prepared by the researcher based on the field study data using SPSS-2023

The table (5) above shows that coefficient of correlation value was (0.073) which was a weak correlation while Durbin-Watson value was (1.888) less than (2) which was an area of uncertainty therefore we could not reject or accept that there was a relationship.

Verification of hypothesis three

There is no a statistically significant relationship at the significant level (0.05) between learning outcomes and increasing King Khalid University students' competence.

Table (6): The relationship between digital learning platforms and increasing students' competence

Unstandardized Coefficients		Standardized Coefficients	t	F	Sig.
B	Std. Error	Beta			
3.613	.454		7.950		.000

Source: Prepared by the researcher based on the field study data using SPSS-2023

The table (6) above shows that there was significant relationship between digital learning platforms and increasing students' competence because the p-value was less than (0.05) and the calculated (t) value was less than tabulated value (1.83).

Therefore, there is a statistically significant relationship at the significant level (0.05) between digital learning platforms and increasing King Khalid University students' competence.

Results:

1. There is a statistically significant relationship between digital learning platforms and the enhancement of knowledge skills.
2. There is a statistically significant relationship at the significant level (0.05) between digital learning platforms and increasing students' competence.

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