The Role of School Principals in Employing Digital Learning from the Point of View of Teachers in Basic Education Schools in North Al Batinah Governorate, Sultanate of Oman

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Abstract

This study sought to identify the role of school administrators in employing digital learning from the point of view of teachers in basic education schools in the governorate of North Al Batinah in the Sultanate of Oman , and the researchers followed the descriptive analytical curriculum because it is the most suitable for such studies, and the study community consists of teachers of schools in the governorate of North Al Batinah, and a random sample of (502) teachers from the study community was selected, and the researchers used the questionnaire as a tool for her study, and this study has reached several results, the most important of which are: The researchers recommends working on developing the skills of school principals, their abilities to use digital technology, activating the community partnership between the school and the community to increase the culture of digital learning among community members, the need to train teachers and students on the use of digital tools, and conducting more field research related to the activation of digital learning.

Keywords: Role, School Principal, Basic Education, Digital Learning.

Introduction

Accelerated developments in the world in recent years have brought a dramatic qualitative shift in the diversity of areas, particularly in the field of education ", the use and integration of digital technology into the educational process has increased in importance of creating a modern and high-quality education system education environments that usually rely on paper, pen, teacher and book as the primary source of the sweat ". with modern and sophisticated learning environments that use digital tools and rely on educational media, Which are designed according to multiple educational principles and standards, to find an active learner who interacts and learns passionately.

The Sultanate of Oman has therefore sought to achieve its future vision in 2040 for a more sustainable, inclusive and effective education. The Sultanate has moved to employ digital learning as a national culture of sustainable and inclusive learning. The statistics of the "National Strategy Project for Amman Digital Society and E-Government" have referred to Digital Omnna magazine. (2022), that there have been significant developments in the level of services provided by the Government of Oman in terms of both quality and output, This development was in line with the Sultanate's guidelines in the technical sector in the recruitment of digital learning in government schools through the application of different teaching methods and methods, such as the use of digital interactive offerings, Modern teaching methods, use of sounds, images and videos that stimulate students' effectiveness in the classroom and provide them with a huge amount of information, conveniently and smoothly through the employment of digital learning (Supreme Council for Planning, 2019).

The Ministry of Education has therefore sought to be one of the first institutions to employ digital learning in its institutions to keep pace with modern digital

transformation. One of the most important projects recently adopted by the Ministry is the Educational Portal Project, which serves as a link between educational institutions and society. The Ministry has also launched new electronic systems, such as a theoretical platform, Microsoft Teams, and Google Class Room, by applying virtual classes and providing online content through these platforms to broadcast tutorials. (Educational Portal, 2022).

With all that technological progress, there must be wise management of the educational process by managers. School management is a key component of the educational process. It is the main driver of the teacher's educational development and guidance. The success of the head teacher depends on the administrative and leadership patterns of his management of the school and on his continued professional development. Conscious of the gravity of his mission and his propensity for renewal, development, and creativity in the field of work, they have the greatest reliance on applying the Oman Vision 2040 to the use of digital learning in educational institutions and addressing challenges that impede the activation of digital learning in educational institutions. (psychotic and others, 2021).

So hiring digital learning is a modern trend in the education system and this digital transformation could lead to the production of large and new amounts of information that could contribute to decision-making and strategic planning, As a result of the rapid change in the information and communication revolution, the use of digital learning has become a necessity in teaching and can be used to prepare students with diverse experiences to be prepared with a high degree of competence to meet modern-day challenges. The Sultanate's digital transformation initiative is to provide an official gateway to government services enables teachers to enter the student's data, and also enables parents to access this information by using these programs as a guardian program that allows the guardian to access all student data such as the achievement level and quarterly grades for all subjects, final grades and others in respect of the student. (Oman Gate website, 2022).

Despite the importance of digital learning and its role in the educational process, there are many obstacles to its application in public schools. s role and the extent to which they apply this type of learning, through this study, the researchers sought to identify the role of school administrators in activating digital learning. by raising teachers' skills in the use of digital learning tools, the establishment of the school's digital structure in order to improve the educational level of students, providing a fertile educational environment, so the head teacher must invest every opportunity to develop the educational process. Improve the quality of educational outputs, so that the school has a fingerprint and a competitive advantage known among other schools, the extent to which principals of basic education schools employ digital learning in their schools must therefore be measured from the perspective of teachers in the governorate of North Batinah, Sultanate of Oman.

Study Problem

Digital learning has become, in light of the rapid changes the world is witnessing, a necessary requirement, especially in the educational field. Therefore, we find that educators are constantly looking for development and innovation in educational methods, in order to provide an interactive learning environment to attract students' attention. Innovation and development has become one of the most important tasks and roles of principals schools in the educational process.

And because the researchers work in the educational field, she had the idea of conducting this study after she noticed some shortcomings in the interest in employing digital learning in her field of work, and after returning to the theoretical framework and previous studies, it actually shows that there are positive trends towards digital learning by teachers and students. This was confirmed by the study of Al Balushi and others (2020), and despite these positive trends, there is still a shortcoming in the use of digital learning and the need to develop it, according to what was indicated by the mechanism of the study of Al-Dahli (2020). During the

study of Hadhrami and Al-Saeediya (2021), and the study of Al-Badi (2020), the existence of weaknesses in the application of digital learning, such as modernizing the infrastructure of technology and technical support for educational institutions, spreading the culture of digital learning in society, and the need to conduct training workshops for teachers on the use of digital tools and technologies Modern application of digital learning in various educational institutions in the Sultanate of Oman.

For further validation, the researchers carried out an exploratory study (Interview) with Some of the 11 teachers of basic education schools to verify the role of principals of basic learning schools in the recruitment of digital learning in their schools. The results of the survey showed the Sultanate's need to employ digital learning in Omani schools in general and basic education schools in particular. The study focused on the role of school principals in the use of digital learning from the point of view of teachers in basic education schools in the governorate of North Al Batinah, Sultanate of Oman.

Study Questions

This study seeks to identify the role of principals of basic education schools in North Batinah governorate.

Key question: What is the role of school administrators in the use of digital learning from the point of view of teachers at basic education schools in North Batinah Governorate, Sultanate of Oman?

Sub-questions:

- Question 1: How far are the principals of basic education schools employed to learn digitally in schools in the northern governorate of Batinah, Sultanate of Oman?
- Question II/Is there a statistically significant difference at the indicative level ($\alpha \leq$ 0.05) in the role of principals of basic education schools in the use of digital

learning from the point of view of teachers in the North Batinah Governorate to condone the gender variability, years of experience and scientific qualification?

Objectives of the Study

This study aims to:

- Recognize the roles of principals of basic learning schools in the governorate of North Batinah, Sultanate of Oman.
- Recognize the degree of digital learning employment in basic learning schools in North Batinah governorate.
- Reveal statistical differences attributable to gender variability, scientific qualification and years of experience.

The Importance of the Study

The importance of this study comes from the fact that it highlights a very important topic and stems from the important role played by the principals of basic education schools in North Al Batinah, Sultanate of Oman, in the recruitment process of digital learning through the teachers' perspective, and there are many studies that have adopted this aspect such as the study of Al Saadi. (2021), warfare (2020), and 2019. The importance of this study stems from the active investment of the technical and digital revolution, which is a feature of the times, especially after the coronavirus pandemic and its impact. This has led to the importance of activating the digital component of the school administration simultaneously with its operationalization in the education process. The importance of the study is divided into two parts:

(1) Theoretical Significance (Scientific)

- This study contributes to raising awareness of the importance of the role of school principals in the field of education.

- Enrich the Arab Library with current scientific and research material on what has been presented in the theoretical framework, which includes the importance of using digital learning in basic education schools.
- Clarify the concept, role, relevance and areas of principals in the recruitment of digital learning.
- The researchers 's desire to show how effective digital learning is in basic learning schools in the North Batinah governorate from the teacher's point of view.

(2) Operational Relevance (Operation)

- It is hoped that this study will reveal to the Ministry of Education the degree to which the principals of basic education schools in North Batinah governorate are employed to learn digital in their schools and work to reduce the gap between reality and hope.
- It is hoped that this study will help government school principals and educational supervisors understand the advantages and disadvantages of using digital learning.
- It is hoped that this study will benefit the principals of the Sultanate's schools to learn about the strengths and weaknesses of the application of digital learning in their schools.
- This study is expected to reveal to educational quality developers (Academic Accreditation Authority) of the Ministry of Education the reality of digital learning employment in basic education schools in North Batinah governorate.
- It is hoped that school administrators will benefit from appropriate training courses on digital learning.

Study Limits

- Objective limits: This study was limited to the role of school administrators in the recruitment of digital learning.
- Institutional boundaries: State basic education schools in North Batinah governorate.
- Human boundaries: teachers of basic education schools.
- Spatial borders: North Batinah Governorate, Sultanate of Oman.
- Time limits: This study was applied in the school year 2023-2022.

Terms of Study

The study included the following terms:

- Role: A set of expected roles, actions, and responsibilities that may be taken by a person, sector, or organization to achieve specific objectives. (Ahmed, 2018).

The researchers define it procedurally: those activities and actions by managers to recruit digital learning in basic education schools.

- The head of the school: is the person chosen by the Ministry of Education for the duty to assist teachers, raise their performance, and enable them to contribute to the improvement of the educational process in all their capacities. (Head teacher, 2022).

The researchers define him procedurally: He manages the affairs of the educational institution, seeks to improve the quality of educational outputs, and is selected by the Ministry of Education to assist teachers in the North Batinah governorate.

- Digital learning: This is an education that depends on the use of electronic media in communication between professors, students, and the entire educational institution. (Al-Shammari, 2019), Ibn Al Sayyeh (2021): also identified it as an educational method that uses modern communication mechanisms such as computers, networks, multimedia such as sound, image, and graphics, search

mechanisms, electronic libraries, and Internet portals, both remotely and in class, to communicate information to the learner in the shortest time and with the least effort and most benefit.

The researchers define it procedurally: skills in the use of digital tools such as computers, the internet, and other tools are needed in order to achieve the study's goal.

- Basic education: a term called a non-traditional education system from phases I to IV and phase II from V to X. According to an educational pattern dedicated to this class of students, which is a standardized education provided by the State with the aim of developing trends and tendencies of learners, it aims to build the learner's personality in accordance with the principles of the Islamic faith and Omani culture and instill in them belonging and love of the homeland (Educational Portal, 2022).

The first cycle of grades 1 to 4 Classes at this stage are shared between males and females. Teachers perform the teaching function at this stage. The second cycle covers grades 5 to 10. Classes are separate for males and females.

Study Limits

- Data on this study was collected and distributed to the study community through a survey developed by the researchers based on previous studies.
- This study is limited to teachers of basic education schools in North Batinah governorate and results may vary depending on the study sample.
- The results were circulated according to the properties of the (study tool).

Theoretical Literature and Previous Studies

Theoretical Literature

Digital technology and its modern tools have evolved, branched out, and pieced into all spheres of life. Every day, a new, more sophisticated digital tool emerges to contribute to the quality standards of the educational process. And to reach the quality of educational outputs, we have to keep pace with this development to achieve Oman Vision 2040. And the educational field is one of the most important of these areas that sought to transform digital, to create a digital generation with digital knowledge, in pursuit of the Foundation's objectives in all their efficiency and effectiveness.

Recently, digital learning has seen wide interest from researchers s and those interested in the field of education because it contributes to building material and human capital in a knowledge-based economy, contributes to the learning of multiple groups of members of society, and provides an opportunity for everyone who does not have the capacity to be physically present in classrooms or within educational institutions' walls. (Al-Shamri, 2019).

From the conceptual framework of the study's topic, a set of definitions of the concept of digital learning have been identified as changes caused by digital technology or affecting all aspects of human life. (Ibrahim, 2016).

Zahran (2020) and Al Atum (2020) define it as striving to realize the organization's strategy and develop innovative and flexible business and operational models by investing in technologies, developing talent, reorganizing processes and managing change to create new value and expertise for customers, employees and stakeholders.

It may mean "cultural, organizational and operational change of an organization, industry or ecosystem through the intelligent integration of digital technologies, processes and competencies across all levels and functions in a phased manner. This

helps to leverage technologies to create value for different stakeholders (customers in the broadest possible sense), innovation and adaptation to changing circumstances (Ahmed, 2018).

Previous Studies

By informing the researchers of a wide range of previous studies whether Arab or foreign studies relevant to the study's subject matter s role in digital learning recruitment, the researchers has selected a range of previous studies and arranged it from the latest to the oldest, and set the objectives of the study for each as well as statistical methods, Finally, I have identified the most important findings and recommendations of these studies. s studies and what distinguishes the current study from previous studies.

The study "Suaad and Hamza" (2022), which seeks to recognize the degree of technological leadership exercised by the principals of basic schools in Kasbah Amman in the light of the spread of the coronavirus pandemic from the point of view of teachers, consisted of a sample of 406 teachers selected by them. The simple random method, and descriptive scanning method were used to achieve the study's objective, where an identification was developed to ensure (40) A paragraph divided into five categories (leadership and vision, culture of learning in the digital age, excellence in professional practices, methodological improvement and development, social, legal and ethical issues) According to the results of the study, the level of technological leadership of the principals of basic schools in the Kasbah Oman district in the light of the outbreak of the coronavirus pandemic was high across the board and the questionnaire as a whole. The results also showed that there were no statistically significant discrepancies between the average estimates of the sample's members for the overall degree of indication.

Sa 'adi (2021) also conducted a study aimed at identifying the adequacy of the digital learning curriculum in Jordan and the availability of digital infrastructure in Jordan. The researchers used the analytical descriptive curriculum in his study. The study community consisted of a group of teachers and teachers in government schools belonging to the directorates of education and education in the Kasbah Irbid. (233) individuals, and the number of male sample members (130), as many as female (144) They were selected in a simple random manner, and the identification was used as a tool for study. One of the most important findings of the study was that the computational averages of the study areas of readiness for digital learning ranged from (3.26-4.37) at the intermediate level, while the highest in the field of curriculum suitability for digital learning, then the field of infrastructure suitability, the lowest in the abilities and skills of students in dealing with digital technology, has reached the computational average for all fields (3.64) with approval.

The AL Mabyadain study (2021), which aims to identify the role of government school principals and educational supervisors in the recruitment of e-learning skills from the point of view of English teachers in the capital Amman, shows that the researchers followed the survey descriptive curriculum. The sample individuals were selected at random and reached their number 151 An English teacher, in order to achieve the study's objectives, a 30-paragraph questionnaire was built as a study tool. The results showed: government principals and pedagogical supervisors' estimates and their role in the use of e-learning skills from the point of view of English teachers in the capital, Amman, were high by an average calculation of 3.71. The results also showed no statistically significant discrepancies in English teachers' estimates of the role of government school principals and pedagogical supervisors in the recruitment of e-learning skills in the capital Amman attributable to either of the two school variables, the service, and the educational stage.

It is clear from the Al Badi study (2020) that the aim of the study is to identify the degree of application of digital learning in the Jordanian Kasbah Al Mafraq schools from the point of view of the managers of those schools, the researchers used the descriptive curriculum in his study, adopted the identification tool to collect data, and the sample of the study consisted of 146 Director, the results of the study show that the degree of digital education employment in the educational process. The results of the absence of statistically significant differences in the reality of digital education employment in the educational process are attributable to the variable years of experience.

According to a AL Harbbi study (2020), the aim is to identify the head teacher's leadership dimensions, and to develop a proposed digital leadership scenario, where the researchers followed the analytical descriptive curriculum, and the sample of the study consisted of all the school leaders, the number of whom (50) A manager from Makkah, the researchers used the identification as a tool for his study. The results of the study showed a discrepancy in the approval of the four paragraphs of the identification. A proposal was also drawn up to apply digital leadership in the educational process in Makkah. The results of this study recommend managers to develop their skills in the use of digital technology and follow up on modern digital developments.

On the other hand, the study referred to both the Sherman and AL Kataab (2018), to recognize the degree to which high school principals exercise technological leadership, and its relationship with the degree of leadership of change in their schools from the point of view of teachers in the capital Amman, the correlative descriptive curriculum was used, and the sample of the study consisted of (370) teachers, selected in the random class manner from government and private secondary schools, the results indicated that the extent to which school principals exercise digital leadership in their schools was moderate, while managers' practice

of driving change was high, and the results of the study indicated a correlation between the extent to which high school principals exercise digital leadership and the degree to which change is led.

(ALDhuhli et al., 2021), which aims to measure the extent to which managers of Oman's schools employ digital leadership from their perspective, the study used the descriptive curriculum and a questionnaire was used as a study tool. The identification consists of 31 poverty. The sample was selected in a random manner, consisting of 207 directors and directors from various governorates of the Sultanate. The results are highly measured in the degree to which Oman's managers employ digital leadership from their point of view The results of the recruitment of the principals of the Sultanate's digital leadership schools in their schools were also attributable to the variable sex, years of scientific qualification and years of experience with an average degree, Through previous findings, researchers s recommend that classrooms should be provided with appropriate digital tools, The application of digital learning using appropriate applications in educational and administrative processes training of teachers to design computerized examinations using digital tools, to facilitate correction and follow-up processes.

As noted in the (Grace, 2020) study, which aims to develop a new tool to compare teacher and manager perceptions of the school's technological leadership, By analyzing past literature of technological leadership and developing and experimenting with the tool used to measure technological leadership and the introduction of the tool's findings and conclusions, as used in this study by the analytical curriculum of previous studies in technological leadership and included two measurement tools for managers and one for teachers where the tool was presented to 42 technology experts, The study sample also consisted of 21 directors and 60 teachers The results of this study referred to the development of the tool in five key dimensions: vision, planning, staff development and training, technology

support, school infrastructure, evaluation and research, The study's recommendations referred to a review of the tools used for technological measurement that were applicable or not and recommends a comparison between this and other tools used for the same purpose, To develop the research tool for measuring technological leadership in schools.

While it is evident from the (Lander, 2020) study, which aims to define the pillars of digital leaders the technology used in classrooms The study used the quantitative correlative descriptive curriculum, representing the school community of 7 high school principals and 251 teachers, and used the identification tool to collect data, The results of this study indicate that there are no statistically significant differences attributable to class variables, level of experience and the teacher's area of work in the use of technology The study recommends that further studies be undertaken in this aspect and that a larger eye be selected for managers and teachers.

Yusuf et al., (2019), which aims to identify and measure the behaviors of digital leaders in Malaysia, used a CT scanning method and included a tool (Resolution) consisting of five axes to measure digital driving Primary and Secondary School in Malaysia ". The results of the study showed the necessity of developing the study tool used to measure digital driving and the results contained two dimensions of digital leadership practice: climate and school communication, the study also recommends the development and improvement of this model, as this model is the initial stage for future researchers s.

The study (Raman et al., 2019) aims to recognize the impact of technology leadership for managers and its impact on teachers by integrating technology into high school classrooms in Malaysian schools. Using the analytical descriptive curriculum, the study sample consisted of 47 directors and 375 teachers from Malaysian national schools, the study used two questionnaires as tools for gathering information and data, the first to assess managers' technological leadership. The second is to measure

the use of the technology applied to the curriculum and the teachers in the same school are from the same sample of study. and the results of the study showed high levels of technological leadership and teachers' integration of technology into Malaysian classrooms, she also noted that there was no relationship between managers using technological leadership and teachers' application of digital tools in classrooms in the same schools The study recommended further professional development of managers and enhancement of teachers' use of technology in classrooms.

(Piaw & Peia, 2018), highlighted the importance of identifying the areas of digital leadership and technology innovation in education. The study used the analytical curriculum of books and research published from 2000 to 2016. The results of this study indicated a shortage of studies, if there is an urgent need for further studies and research to serve this area.

Comments on Previous Studies

By familiarizing the researchers with previous studies on the role of school principals in the recruitment of digital learning, a series of studies have been drawn, namely:

All previous studies used identification as a tool to collect data, while differing in objectives by studying Suaad and Hamza (2022), sought to recognize the degree of technological leadership practice of the principals of basic schools in Kasbah Amman in light of the spread of the coronavirus pandemic from the point of view of teachers, as conducted by Sa 'adi (2021), a study aimed at identifying the suitability of digital learning curricula in Jordan, and the availability of digital infrastructure in Jordan , It is evident from the AL Mbyadain study (2021), which aims to identify the role of government school principals and educational supervisors in the use of e-learning skills from the point of view of English teachers in the capital Amman, and from AL Baddy study (2020), the aim of the study is to identify the degree of

application of digital learning in the Jordanian Kasbah al-Mafraq schools from the point of view of the managers of those schools. AL Harrby study (2020), which aims to recognize the leadership dimensions of the school principal, develop a proposed vision of digital leadership, and on the other hand refer to the study of both the (Sharman and the AL Kattab,2018) to recognize the degree to which high school principals exercise technological leadership, as indicated by the study of Psychotropic and others (ALDhuhli et al., 2021), which aims to measure the extent to which managers of Oman's schools employ digital leadership from their point of view, the study used the descriptive curriculum, as suggested by the (Grace study, 2020), which aims to develop a new tool to compare teacher and manager perceptions of the school's technological leadership, while illustrated by the(Lander study, 2020), which aims to determine the pillars of digital leaders the technology used in classrooms, has been shown by the study (Yusuf et al., 2019), which aims to identify and measure the behaviors of digital leaders in Malaysia, where I used the CT scanning curriculum, as well as the study (Raman et al., 2019), the study aims to recognize the impact of technology leadership for managers and its impact on teachers by integrating technology into high school classrooms in Malaysian schools, and (piaw & peia, 2018), highlighted the importance of learning about the areas of digital leadership and technology innovations in the field of education.

This study agreed with the previous study:

- The present study used identification as a research tool and is therefore consistent with all previous studies.

- The current study also used the analytical descriptive curriculum and is therefore consistent with many studies as a study (Raman et al., 2019), Sa 'adi (2021), (AL Harrby ,2020).

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- The current study with a range of studies has passed away in selecting the same study sample as the teachers (Lander, 2020), (Raman et al.,2019).

As the current study differed from previous studies:

The current study differed with previous studies in the curriculum used. This study used the analytical descriptive curriculum and therefore differs with the Demon Study and AL Kattab,2018), (Grace ,2020) which used a mixture of quantitative and qualitative curriculum, while (Peia & Piaw,2018) used the content analysis methodology, while (Lander,2020) used the descriptive curriculum.

The researchers has benefited from previous studies in her current study:

- Use some Arab and foreign sources through the theoretical framework and previous studies.

- The researchers also used a series of previous studies that used the identification as a data collection tool, such as the Suaad and Hamza Study (2022) and the AL Harrby Study (2020) for the work of the study tool (identification).

The present study has distinguished itself from the rest of previous studies:

- This study was distinguished from other previous studies in that it highlighted the degree to which the principals of basic education schools applied digital learning in the governorate of North Batinah, Sultanate of Oman.

The reality of the current study from previous studies:

The current study is compatible with the majority of studies in terms of scientific methodology, because it is characterized by two things. First, it was aimed at surveying teachers in North Al-Batinah schools, and second: it came after the experience of distance education and integrated learning as a result of the outbreak of the coronavirus pandemic that blinded the entire globe two years ago.

Study Methodologies

The researchers used the analytical descriptive curriculum as the most appropriate curriculum for the study of facts, information and qualitative data of the role of school principals in the use of digital learning from the perspective of teachers in basic education schools in the Sultanate of Oman and, following the descriptive approach, the researchers can arrive at an integrated scientific description based on the scientific facts associated with the study's problem, Descriptive research is one of the most widely used methods of research in the field of human scientific research and educational scientific research ", where descriptive research method aims to collect data for the purpose of answering research questions developed at the beginning of the study phase.

Study Community

The school community is represented by teachers at basic education schools in North Batinah governorate. There are" 11,872" teachers in North Batinah governorate. (National Statistical and Information Centre, 2022).

Study Sample

It was completed Choosing a random sample of male and female teachers of basic education schools in the Al Batinah North Governorate in the Sultanate of Oman, for the year 2022/2023.And he hasnumbered"500"Male and female teacher before applying the study, distributed over"24" schoolfromOrigin"186" school for basic education in Al Batinah North Governorate.

 As shown in the table (1) below.

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Table (1): Personnel distribution The study sample according to its variables

the number	variable classes	variable
200	Male	gender
300	Female	
500	the total	
400	Bachelor's	Qualification
100	Postgraduate	
500	the total	
250	Less than 10 years	
250	More than 10 years	experience
500	the total	

Study Tool

To answer the study questions and test its hypotheses, the researchers relied on the questionnaire as a tool for her study. The questionnaire included (30) items distributed over three dimensions to measure the role of principals of basic education schools in employing digital learning from the teachers' point of view. It includes three dimensions and each dimension includes (10) items. Distributed as follows:(Strategic planning for the application of digital learning, training needs for teachers and their qualification, infrastructure and digital readiness), and the tool included two parts, the first part includes study variables and demographic information, and the second part included the paragraphs of the questionnaire according to its dimensions, as the researchers took into account that all paragraphs of the questionnaire fit And its phrases are the subject of the study, and the study tool has been developed based on the theoretical framework and previous studies, especially the study of Saadeh and Hamza (2022), the study of Harbbi (2020) and Al-Dahli et al. The paragraphs of the questionnaire should be clearly marked and avoid the ambiguity of the paragraphs. Each paragraph of the questionnaire will be given a weight listed according to the five-point Likert scale as follows: strongly agree (5), agree (4), neutral (3), disagree (2), strongly disagree (1).

Table (2): The areas of the questionnaire and the number of its paragraphs

The number of paragraphs	domains	domain number
10	Strategic planning for applying digital learning	1
10	Teacher training needs	2
10	Infrastructure and digital readiness	3

Study Variables

The independent variable (school principals):

- Gender (sex): male, female.
- Academic qualification: Bachelor's degree, postgraduate studies.
- Years of experience: (less than 10 years), (more than 10 years).

Dependent variable: Employing digital learning.

Validate the Study Tool

Virtual validity The questionnaire was presented to a group of specialized arbitrators (11) An arbitrator to show the apparent validity of the questionnaire, the clarity of the questions, their relevance to the objectives of the study, and the extent of their suitability for collecting study information.

Table (3): The instrument validity coefficient for the following dimensions:

average resolution	third dimension	The second dimension	The first dimension		
.909**	.790**	.728**	1	Pearson Correlation	The first dimension
<.001	<.001	<.001		Sig. (2-tailed)	
502	502	502	502	N	
.915**	.783**	1	.728**	Pearson Correlation	The second dimension
<.001	<.001		<.001	Sig. (2-tailed)	
502	502	502	502	N	
.933**	1	.783**	.790**	Pearson Correlation	third dimension
<.001		<.001	<.001	Sig. (2-tailed)	
502	502	502	502	N	
1	.933**	.915**	.909**	Pearson Correlation	
	<.001	<.001	<.001	Sig. (2-tailed)	
502	502	502	502	N	average resolution

Table (4): Stability coefficient dimensions of the study

Stability coefficient	The number of paragraphs	The dimension
0.972	30	The questionnaire as a whole
0.924	10	The first dimension
0.951	10	The second dimension
0.946	10	third dimension

The tool was applied to an exploratory sample from outside the study sample, and their number reached (30) teachers, and then re-applied the tool again after two weeks on the same sample, and the stability of the tool was calculated for each dimension of the questionnaire, with a coefficient of alpha Crankbach, which reached in the first test (.939) while it reached (.972) when re-testing for the same sample, and the stability coefficient is suitable for the purposes of the study.

Table (5): Coefficient of stability by repetition

Statistical function	correlation coefficient	
0.000	.939	tribal
0.000	.972	remote

It is clear from Table (5) that the correlation value was reached in the first test (.939), and when he was re-tested. The test value (.972), while the level of the statistical function for both tests was (0.000), and this indicates that the correlation is strong and has strong statistical significance between the two tests.

Statistical Processing of Data

The researchers used appropriate statistical methods for the study questions with the help of the statistical processor (spss). (T - Test) and (ONOVA) to measure the variables and their impact on the subject of the study, and to calculate Cernbach's alpha to verify the stability of the questionnaire, as well as calculate Pearson correlation coefficient to check the validity of internal consistency.

Study Results

This study aims to identify the role of principals of basic education schools in employing digital learning in the Al Batinah North Governorate in the Sultanate of Oman.

First: The results related to the first question, and the text:

What is the role of school principals in employing digital learning from the point of view of teachers in basic education schools in North Al Batinah Governorate in Sultanate of Oman?

In order to answer this question, the arithmetic mean and standard deviation were calculated for the study sample's estimate of the role of school principals in hiring Digital learning from the point of view of teachers in basic education schools in North Al Batinah Governorate in the Sultanate of Oman, according to the following dimensions:

- The degree of employment of digital learning Dimension of strategic planning for the application of digital learning.
- Digital infrastructure readiness dimension.
- Dimension of the training needs of teachers.

Table (6): Standard deviations and arithmetic averages for each of the previous dimensions

the level	arrangement	standard deviation	Arithmetic mean	the number	
middle	2	.92562	3.2768	502	**Employment degree of digital learning**
middle	1	.96164	3.3000	502	**Strategic Planning**
middle	3	1.05058	3.2675	502	**Digital infrastructure readiness**
middle	4	1.00923	3.2627	502	**Teacher training needs**

It is shown by the previous table (6), Standard deviations and arithmetic averages for each of the previous dimensions, in order to answer the first question, which reads: What is the role of School principals in employing digital learning from the point of view of teachers in basic education schools in North Al Batinah Governorate in the Sultanate of Oman?

It can be seen from the table above, that the level of role School principals in employing digital learning from the point of view of teachers in basic education schools in North Al Batinah Governorate in the Sultanate of Oman were within the level average, it ranged between (3.27 -3.26) and the standard deviation between (-

.925 1.00), the arithmetic mean of the degree of employing digital learning came first with a level of (3.27).,and standard deviation (925), and the strategic planning came In second place arithmetic mean (3.30), and a standard deviation (.961), as well as the readiness of the digital structure Third place arithmetic mean (3.26), and a standard deviation (1.050), as for the training needs of teachers, they came In fourth place at a level of (3.26), with a standard deviation of (1.00).

The following is a presentation of the results of each of the previous dimensions:

1: The strategic planning dimension to

Table (7): Arithmetic means and standard deviations of items for the strategic planning dimension

the level	arrangement	standard deviation	Arithmetic mean	the number	
middle	4	1,312	3.28	502	Q1
middle	5	1,196	3.27	502	Q2
middle	1	1,264	3.37	502	Q3
middle	2	1,258	3.36	502	Q4
middle	5	1,221	3.27	502	Q5
middle	5	1,203	3.27	502	Q6
middle	3	1,277	3.31	502	Q7
middle	2	1,235	3.36	502	Q8
middle	6	1,231	3.22	502	Q9
middle	4	1,266	3.28	502	Q10

Table (7) shows the arithmetic mean and standard deviation of the items of the strategic planning dimension. The arithmetic mean of the strategic planning dimension was (3.30), and the standard deviation (961.), and to a medium degree, and Paragraph No. (3) came, which stipulates that "supervisory reports and bulletins shall be submitted electronically." In the first place, with the highest arithmetic mean (3.37), and a standard deviation of (1.264), followed by Paragraph No. (8), which reads: "Follows up on developments that are presented in the electronic portal of the Ministry of Education," with an arithmetic average of (1.264).3.36), and a standard deviation of (1.235), and Paragraph No. (4) came with the same arithmetic mean

(3.36), and a standard deviation of (1.258), which reads: "Follows up students' achievement through the school's digital portal," while it ranked third. Paragraph No. (7), which states: "Teachers are urged to activate the digital environment in teaching," with an arithmetic mean of (3.31), and a standard deviation of (1.277).

2: Infrastructure readiness dimension

Table (8): Arithmetic means and standard deviations for the items of the infrastructure readiness dimension

the level	arrangement	standard deviation	Arithmetic mean	the number	
middle	1	1,281	3.36	502	A1
middle	2	1,231	3.33	502	A2
middle	3	1,214	3.35	502	A3
middle	4	1,227	3.31	502	A4
middle	5	1,233	3.33	502	A5
middle	6	1,261	3.23	502	A6
middle	7	1,294	3.29	502	A7
middle	8	1,289	3.13	502	A8
middle	9	1,310	3.18	502	A9
middle	10	1,279	3.15	502	A10

Table No. (8) The arithmetic mean and standard deviation of the infrastructure readiness dimension, and the arithmetic mean of the dimension (3.26), and with a standard deviation of (1.050), and it came with a medium degree. Free Internet in all school facilities", ranked first with the highest mean, reaching (3.36), and a standard deviation of (1,281), followed in second place by paragraph No. (3) It reads: "Seeks to provide a technical competence in the field of learning technology in teacher", with an average of (35,3), and a standard deviation of (1.214), followed in third place by paragraph No. (2) It reads, "He seeks To provide interactive screens for all classes of the school ", with an average of (3.33), and a standard deviation of (1.231), and came the same degree paragraph number (5) and the text "Provides a security system

to protect the data of the digital school" with an arithmetic mean (3.33), and a standard deviation of (1,233), and in the last place, Paragraph No. (4), and states that "endeavors to provide adequate technical equipment in the school", with an average my account reached (3.31), and a standard deviation of (1.227).

3: Dimension of the training needs of teachers

Table (9): Arithmetic means and standard deviations of items for the dimension of training needs for teacher

the level	arrangement	standard deviation	Arithmetic mean	the number	
middle	3	1,167	3.29	502	B1
middle	1	1,203	3.30	502	B2
middle	8	1,256	3.22	502	B3
middle	7	1,223	3.23	502	B4
middle	5	1,246	3.27	502	B5
middle	7	1,238	3.23	502	B6
middle	4	1,215	3.28	502	B7
middle	6	1,245	3.25	502	B8
middle	2	1,219	3.32	502	B9
middle	6	1,274	3.25	502	B10

It is clear from Table (9), the arithmetic mean and standard deviation of the items of the dimension of the training needs of teachers, and the arithmetic mean of the dimension of the training needs of teachers was (3.26), and standard deviation (1,009), and with a high degree, Paragraph No. (9), which states that "Teachers shall be trained to prepare exams electronically," ranked first with the highest arithmetic mean (3.32), and a standard deviation of (1.219), followed by Paragraph No. (2) in second place. And it reads: "It works to support teachers to carry out educational activities with modern multimedia files (images, audio, and video)." With an arithmetic average of (3.30), and a standard deviation of (1.203), while Paragraph No. (1) came in third place, which states, "Develops a training plan for the use of programs to protect data and information and save them in Google Drive." With an average of (3.29) and a standard deviation of (1.167).

Second: Results related to the second question:

Are there statistically significant differences at a significance level less than ($\alpha \leq$ 0.05) In the role of principals of basic education schools in employing digital learning from the point of view of teachers in North Al Batinah Governorate schools in the Sultanate of Oman due to the variables of gender, educational qualification and years of experience?

To answer this question, the data were analyzed to extract the arithmetic means and standard deviations for each dimension of the scale of the role of basic education school principals in employing be informed digital, these averages were compared using the t-test and multiple analysis of variance (ANOVA). ANOVA); To verify the significance of the differences attributed to the variables of gender, years of experience and educational qualification.

First: gender

The mean, standard deviations and t-test were extracted. To find out the impact of gender on the role of principals of basic education schools in the employment of digital learning from the point of view of teachers in the schools of North Al Batinah Governorate in the Sultanate of Oman, due to the variables of gender. Table (10) illustrates this.

Table (10): The results of a t-test of two independent samples for the role of principals of basic education schools in employing them for digital learning from the point of view of teachers in the schools of North Al Batinah Governorate in the Sultanate of Oman, due to the variable of gender

significance level	t value	degrees of freedom	standard deviation	Arithmetic mean	the number	gender	the hub
0.132	1,511	500	.91360	3.3246	316	feminine	middle the scale
			.94260	3.1955	186	male	
0.208	1,260	500	.95007	3.3415	316	feminine	Strategic Planning
			.97954	3.2296	186	male	
0.110	1,600	500	1.03769	3.3250	316	feminine	Infrastructure readiness
			1.06784	3.1699	186	male	
0.198	1,289	500	.99786	3.3073	316	feminine	Teacher training needs
			1.02654	3.1871	186	male	

It is noted from Table No. (10), that there are no statistically significant differences at the function level ($\alpha \leq 0.05$) in the estimates of the study sample on the role of principals of basic education schools in employing digital learning from the point of view of teachers in the schools of North Al Batinah Governorate in the Sultanate of Oman, according to The gender variable (male, female), and the statistical differences in it came in favor of females, while also no statistically significant differences were observed in the rest of the dimensions. Second: years of experience Arithmetic means and standard deviations were extracted; To find out the impact of years of experience on the role of principals of basic education schools in employing digital learning from the teachers' point of view in the schools of North Al Batinah Governorate in the Sultanate of Oman, and the table (11) makes it clear.

Table (11): The results of a t-test of two independent samples for the role of principals of basic education schools in their employment of digital learning from teachers' point of view Schools in North Al Batinah Governorate, Sultanate of Oman, due to the variable years of experience

significance level	t value	degrees of freedom	standard deviation	Arithmetic mean	the number	Years of Experience	the hub
0.847	0.193	500	.95622	3.2834	297	Less than 10 years	middle the scale
			.88162	3.2672	205	10 years and over	
0.910	0.113	500	.94953	3.3040	297	Less than 10 years	Strategic Planning
			.98123	3.2941	205	10 years and over	
0.753	0.315	500	1.11024	3.2798	297	Less than 10 years	Infrastructure readiness
			.95996	3.2498	205	10 years and over	
0.924	0.096	500	1.01203	3.2663	297	Less than 10 years	Teacher training needs
			1.00762	3.2576	205	10 years and over	

Table (11) shows that there are no statistically significant differences in the arithmetic means and standard deviations of the study sample's estimates on the role of principals of basic education schools in employing digital learning from the point of view of teachers in the schools of North Al Batinah Governorate in the Sultanate of Oman, due to the variable years of experience, and to ensure the significance Statistical differences between the arithmetic means, one-way analysis of variance (ANOVA) was used, and Table (9) illustrates this.

Third: Academic qualification

Table (12): The results of selecting two independent samples for the role of principals of basic education schools in employing them for digital learning from teachers' point of view Schools in North Al Batinah Governorate in the Sultanate of Oman are attributed to the educational qualification variable.

effect size	significance level	t value	degrees of freedom	standard deviation	Arithmetic mean	the number	Qualification	the hub
0.922	0.032	2,144	500	.92088	3.3289	372	Bachelor's	middle the scale
				.92642	3.1274	130	Master's	
0.960	0.044	2,020	500	.94400	3.3511	372	Bachelor's	Strategic Planning
				.99978	3.1538	130	Master's	
1.05	0.041	2,051	500	1.04366	3.3242	372	Bachelor's	Infrastructure readiness
				1.05744	3.1054	130	Master's	
,089	0.067	1,837	500	1.00856	3.3116	372	Bachelor's	Teacher training needs
				1.00190	3.1231	130	Master's	

It is clear from Table No. (12) that there are statistically significant differences at a significance level less than (0.05).For manager roles (α≤ Basic education schools in their employment of digital learning from the point of view of teachers in the schools of North Al Batinah Governorate in the Sultanate of Oman is attributed to the educational qualification variable, and in favor of teachers holding a bachelor's degree, and there are statistically significant differences at the level of significance less than (0.05).The roles of principals of basic education schools in employing digital learning in strategic planning and infrastructure readiness (α≤ Infrastructure from the point of view of teachers in the schools of North Al Batinah Governorate in the Sultanate of Oman is attributed to the educational qualification variable, and in favor of teachers holding a bachelor's degree as well. As for the training needs of teachers, the results did not show statistically significant differences in the roles of principals of basic education schools in their employment of digital learning from

the point of view of Teachers in North Al Batinah Governorate schools in the Sultanate of Oman due to the educational qualification variable.

Recommendations and Suggestions

Recommendations

Through the findings of the current study, the researchers recommend the following:

- Working on developing the skills of school principals and their abilities to use digital technology.
- The importance of planning for digital education, so that they can apply it with direct education.
- Creating an appropriate digital infrastructure for schools; for a digital learning application.
- Developing methods for designing digital content provided to students, methods for presenting it, and methods for evaluating it; To suit all educational groups.
- Diversity in presenting information and presenting activities as well as evaluation in digital education; To take into account the individual differences among the students.
- Activating the community partnership between the school and parents; To increase the culture of digital learning among parents.
- Developing digital education programs and platforms, by regulating their use and installing them on the educational system.
- Broadcasting and recording of lessons through the platforms; To make it easier for students to refer to it.
- The need to train teachers and students to use digital tools.
- Conducting more related field research on digital learning.

- Conducting more applied research related to the development of assessment tools for learners and teachers in a way that suits the nature of digital education.

Suggestions

Conducting a study similar to the current study, but from the point of view of educational supervisors and administrators, and in different environments and regions.

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