Technical Training for School Teachers and its Relationship to Future Trends Towards Digital Education in Palestine

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Abstract:- **The study aimed to identify: "Technical training for school teachers and its relationship to future trends towards digital education in Palestine". A sample of (30) male and female teachers from schools in the West Bank. The analysis was conducted using the statistical analysis program Spss. The study concluded that there is a significant relationship between technical training and the orientation toward digital education in Palestinian schools, as the response rate on the first axis was 72% by individuals The sample and the second axis with an average score of (67.82) and with a large degree for all axes amounted to (70.064), and the results showed an average response on paragraphs (2-6) and the lowest response rate on the second paragraph was about the existence of applications that facilitate the training of teachers on digital education, as the percentage reached The response was (62%), and the response to the paragraph related to preparing training efficiency was also moderate, as it amounted to (62.2%), and the presence of sufficient equipment for training inside the school amounted to (63%), and the results showed that weakness Incentives and work pressures affect technical training, which in turn is reflected in the trend towards digital education. The results showed that the lack of technical applications in the Arabic language in training reduces the motivation of teachers toward digital education. Based on the previous results, the researcher offers the following recommendations: The need to work on developing technical training mechanisms within clear methodologies and plans, taking into account the work pressures of teachers and giving them sufficient space to benefit from technical training, the need to follow up training with teachers and complete training programs, support training and provide incentives to trainees, the need to analyze training needs in the technical field and diversify training programs.**

Keywords: Technical Training, School Teachers, Education Digital.

I. INTRODUCTION

Future scientific competencies, on which the standard of development in different societies depends. The required change and the human element are considered one of its most important components, and therefore constitute the most prominent basic pillars for achieving this, in a way that guarantees its continued preservation and development, leading to excellence in achieving the set goals, as school teachers represent the most vital and important element in the field of school work**.**

Al-Sharif (2021), in his study "A proposed vision for developing the role of public school teachers in the southern governorates of Palestine in preparing their students for the information society," indicates the need to instruct the Palestinian Ministry of Education to focus on the capabilities of teachers, and develop their technological practices in line with the requirements of the digital age, with the aim of achieving Educational goals. Al-Shammari (2019) indicates that the promotion of digital education in schools needs a digital teacher who keeps pace with developments in this era, which requires him to work hard and continuous effort.

➢ *Problem Statement:*
The international shift towards digital education imposed many challenges on educational institutions in the Arab countries in general and Palestine in particular, the most important of which is the poor level of technical training that teachers receive in the field of digital education. As a society, it has become imperative for the state with all its institutions to play an active role in inculcating the principles of information culture in education and application among these students, depending on qualified and technically trained teachers, and therefore the need to integrate students with teacher preparation and training programs, and training and equipping the learner, as well as with curricula and curricula education, educational management programs, and so on, which is called for short "the transition to digital education", since digital education

has become an important requirement, and an urgent necessity for an era that the world has come to call the "digital age", which requires a change in the roles, tasks and functions of the teacher, so that the teacher becomes a facilitator and advisor of information; By encouraging students to engage in various educational activities based on the various means of displaying educational activities offered by the Internet, away from stagnation, routine, and traditional systems in presenting activities, and exchanging experiences related to educational activities.

Based on the above, the study comes to answer the following question: What is the relationship between technical training for teachers in Palestinian schools and future trends toward digital education in Palestine?

- *This Study also Aims to:*
✓ Exposing the relationship between technical training for teachers in Palestinian schools and the future orientation toward digital education.
✓ Identifying the training gaps of teachers in Palestinian schools and their relationship to the future orientation toward digital education.
✓ To identify if there are statistically significant differences at ($\alpha \leq .05$) for the role of technical training for teachers in Palestinian schools and the future orientation towards digital education from the point of view of school teachers due to the following demographic variables (sex, academic qualification, specialization, years of service, age, school place).

➢ *Significance of the Study:*

This research acquires importance due to the direct link between the technical training of Palestinian teachers in finding future directions towards the application of digital education in Palestinian schools, with the aim of change, renewal, and modernity in the methods of teaching and learning, and that creativity has become a goal sought by all educational institutions to improve the quality of education by raising the level of performance of the educational institution and creating a global competitive advantage by the standards of globalization and modern industrial revolutions.

➢ *Previous Studies:*

Among the studies that showed the importance of training and the optimal use of digital educational technologies is the study of Al-Sharif (2018), which emphasized the importance of making use of and optimal use of digital educational technologies in all stages of education, to provide theoretical and practical courses and attention to planning, design and development of curricula and courses in the stages of education in a digital way to transform attitudes Education into digital, as Ahmed's study (2018) showed, the importance of employing information technology and the Internet in training and education, which is considered one of the most important indicators towards the transformation of society into an information society, because this will contribute to increasing the efficiency and effectiveness of education systems and teachers, and in

spreading information awareness, and thus will contribute In building informatics cadres that societies seek in the current era, after cognitive empowerment invaded various fields, and educational institutions were not isolated from that (Patton & Santos 2018) indicated that the promotion of digital education in schools needs a teacher who is proficient in dealing with digital education strategies, and is convinced of the necessity of continuous education.

As for the study (2019, Dolfi), it was clear that digital education requires education and training programs that focus on communication skills, decision-making, self-direction, leadership skills, teamwork skills, and continuous self-learning that help maintain the impact of learning and make the learning process more enjoyable.

As for the study of Ali, Wael (2019), "the researcher indicated that the current era is called the era of revolution or (the digital age), as this era witnesses a revolution in the production, manufacture, and innovation of digital technologies: the nanotechnology revolution, silicon chips, and mobile phone devices.", fax machines, video cameras, computers, means of communication and what they use of fiber optic technologies, satellites, information storage media, and networks around the world, especially the World Wide Web (the Internet). Employing this information correctly, applying it, controlling it, and producing new knowledge, which makes the learner bear the responsibility of his learning. Good employment is a basic requirement in all activities of daily life, especially in the field of teaching and learning, and the research paper relied mainly on previous studies. Ismail (2020), the most important updates of digital education in the Arab world through an original vision, in an attempt to face these challenges from an intellectual standpoint closer to the Islamic roots and backgrounds of the Arab nation, especially since the variable of knowledge and digitization - as a contemporary reality characterized by modernity - imposes many challenges in various axes that require A transformation, transformation, and addition in the formulation of educational assets in this era, and the researcher used the inductive and deductive approaches because they are appropriate to the nature of the subject of the study. The ethical axis There are challenges related to scientific integrity, evaluation, and some ethical controls in dealing with digital education, which is revealed in the system of Islamic values in the field of education, and in the material axis, the view must be comprehensive that accommodates the spiritual norms in Islamic law. The researcher recommended facing and dealing with these challenges by adopting original visions based on the revelation of God Almighty. In the study of Markoun, Heba (2018), "Digital Education and the School of the Future," the researcher indicates in her research paper that in light of the developments that the world is witnessing today, the Arab learner must ask himself where his position is in the midst of these scientific and industrial revolutions. Traditional teaching methods are not compatible with modern life and the thinking of the learner and teacher in the era of technology and development. The researcher also points out

that traditional education at the present time did not add anything new to the educational content of generations because it alone cannot keep pace with modern thought, and the Arab world needs a shift in quantity and quality for learners of the twenty-first century, as the level of education is very low compared to global countries. This is not limited to a few in particular, but it includes all countries in the region, so I found that the tendency to implement educational mechanisms that support traditional education, such as digital education, has the ability to improve, support and build a distinguished generation is one of the most important challenges that we must work on. As for the study of Hamid, Suhair (2019), "Digital Education: A Conceptual and Theoretical Introduction," the researcher indicates in her research paper that the Arab world adopts traditional teaching methods that are not compatible with modern life and the thinking of the student and teacher in the era of technology and development. Also, traditional education at the present time did not add anything new to the educational content of the generations because it alone cannot keep pace with modern thought, just as the Arab world needs a shift in quantity and quality for the students of the twenty-first century, as the level of education is very low compared to international countries, so I found that the tendency to Implementing supportive educational mechanisms for traditional education, such as digital education, that have the ability to improve, support and build a distinguished generation is one of the most important challenges that we must work on.

Al-Sharif Bassem's study (2018) showed the importance of measuring and determining the extent of awareness of digital and smart educational technologies for faculty members in Saudi universities and their attitudes toward them.The research followed the descriptive approach, and used two research tools, namely: a questionnaire of the extent of awareness of faculty members in Saudi universities about digital and smart educational technologies, and a measure of attitudes towards the use of digital educational technologies. Digital and smart in education. The research sample was (15) faculty members from three Saudi universities. The current research has reached several results, the most important of which are: There are no statistically significant differences in the degree of awareness of faculty members in Saudi universities about educational technologies. digital and smart; is due to the main effect of the academic degree, or gender, and the results also found that there are statistically significant differences in the attitudes of faculty members in Saudi universities due to the main effect of the academic degree, while there were no statistically significant differences in the attitudes also due to the primary effect of the gender factor for the members of the research sample. The research also made several recommendations, including the need to make optimal use of digital educational technologies in the university and pre-university education stages in providing theoretical and practical courses.

What distinguishes this study is that it came to link the practical experiences of the researcher in the field of digital education to overcome the gap between theory and application and to support and transfer the education process from mere indoctrination by the teacher and the storage process by the student to the interactive dialogue process and discussion between the two parties by focusing on the teacher as a main focus in the educational process. This provides a supportive environment for creating a spirit of creativity and stimulates thinking and taking responsibility for the learners, and the diversity of the topics raised and their comprehensiveness, for essential topics in the field of transformation towards digital education, gives the current study its own characteristics and advantages.

Currently, digital education technologies control various political, economic, and social fields and their various aspects. This technology has been invested in facilitating and improving the learning and teaching process. It has been gradually introduced into the educational process to stand side by side with the teacher and the book. This is in order to contribute effectively to the delivery of knowledge to students easily and with high quality through the introduction of computers and their applications, including the World Wide Web, and electronic curricula, to the educational process. It is achieved by technology from devices, starting from the use of electronic display means to teach lessons in traditional classes, and the use of multimedia in teaching and self-learning processes, discussions, and open dialogues through technical means (Salim and Salih, 2020).

➢ *Study Methodology and Procedures:*
In pursuit of the objectives of the study, the researcher will follow the analytical descriptive (quantitative) approach, as it is the appropriate approach for this research, due to its suitability to the nature and objectives of the research. A descriptive approach, it is also commensurate with studies related to social and human studies, and the researcher's use of the analytical descriptive approach describes the reality of cognitive empowerment of teachers, in addition to describing the level of progress in the field of digital education in Palestinian schools, and by referring to previous literature and what was published on the subject during the past years In books, reports, periodicals, the Internet, and official websites. The research will also provide information and facts about the social phenomena associated with the study community and the methods and methods of quantitative statistical analysis to analyze the study data, because quantitative research is able to develop theories and models and accurately answer the study questions, to achieve the goals, and verify the hypotheses. The use of statistical analysis in the quantitative methodology with high reliability, being more appropriate to the nature of the study, and the ability of quantitative methods to validate the study hypotheses and verify the correlations within the study variables.

> *Study Population:*
  The study population consisted of 150 male and female teachers in schools in the central West Bank in Palestine and and they have advanced technical training.

> *Study Sample:*
  The study sample included 30 teachers and teachers and the sample was selected intentionally and based on the recommendations of their managers.

> *Field study:*
  The researcher chose an intentional sample consisting of (30) male and female teachers from public schools in the northern Palestinian governorates, who have received advanced training in the field of technical training, in order to identify the relationship between technical training and the future orientation toward digital education in the Palestinian public schools in the West Bank (provinces). North), the researcher built the research tool - the questionnaire - based on the relevant literature and previous studies directly related to the subject, and based on the

technical training scale and the orientation scale towards digital education in order to formulate the questionnaire paragraphs in line with the scientific research literature.

> *Tool validity*
  To ensure the validity of the tool, the researcher presented the study tool to (7) arbitrators specialized in the fields of education and the Arabic language, and the opinion of the majority was taken into account. As for the validity of the internal consistency of the tool, this was done by calculating the correlation coefficients for each paragraph in its domain, which shows the tables for calculating the correlation coefficient for all the correlations of the paragraphs.

  The stability coefficient was extracted using the Cronbach alpha equation, where the total stability was more than (0.91), which is a strong stability coefficient, which makes the tool suitable for scientific research purposes. It's connected to the results.

> *Study Variables:*

Table 1 Shows the Distribution of the Sample, According to the Demographic Variables of the Study

Demographic variables	Level	Repetition	Percentage %
Sex	Male	13	43
	Female	17	57
Age	Less than 25 years	2	6,7
	25-Less than 35 years old	6	20,0
	45-35years old	13	43,3
	Older than 45 years	9	30,0
Degree	Bachelor	16	53,3
	Higher Diploma	2	6‹7
	Master	12	40,0
Specialization	scientific	14	7.46
	Literary	16	3.53
Years of service	Less than 5 years	7	23,3
	5-less than 15 years	9	30,0
	15years and above	14	46,7
Total		30	%100

II.   RESULTS OF THE STUDY

This study aimed to identify: "Technical training for school teachers and its relationship to future trends towards digital education in Palestine".

> *Results Related to the Main Question of the Study:*
  It states the following: What is the relationship between technical training for teachers in Palestinian schools and future directions toward digital education in Palestine?

  To answer the question, the researcher used the arithmetic averages for each paragraph and the total score of the tool for the sample, and Table (2) shows that.

In Order to Interpret the Results, the Following Approved Arithmetic Averages Were Adopted for the Response to the Items as Follows:

- (80%) or more is a very large impact score.
- (from 70% - 79.99%) a significant degree of impact.
- (from 60%-69.99%) medium effect.
- (from 50%-59.99%), the degree of impact is small.
- (less than 50%) very low impact score.

Table 2 Arithmetic Averages and Degree of Impact of Paragraphs and the Total Degree of Technical Training for School Teachers and its Relationship to Future Trends Towards Digital Education in Palestine.

No.	Paragraphs	Standard Deviation	Average Response	Response %
Area I: Technical Training				
1	There is a training plan for teachers on modern technologies to promote digital education.	0.87	3.87	77.3
2	There are applications that facilitate the training of teachers on digital education.	1.43	3.32	62
3	There is continuous technical training for teachers according to the modernity of technical educational programs.	1.33	3.39	67
4	There are sufficient equipment for technical training within the school.	1.31	3.21	63
5	Teachers are involved in internal programs to keep pace with the development of modern technologies in teaching.	1.26	3.14	63.6
6	Reports are prepared on the efficiency of technical trainings for teachers in schools	1.00	3.05	62.2
7	The school has technicians specialized in technical educational programs	0.84	4.49	88.2
8	The number of halls is sufficient to implement technical training in the school	0.90	4.40	89.0
9	School principals follow up on the results of technical training for teachers	0.75	4.45	87.5
10	Principals encourage teachers to conduct technical training in schools	1.12	3.11	62.5
The total score of the first		1.08	3.64	72.0
Future Trends Towards Digital Education.				
11	Teachers' teaching load reduces their motivation towards digital education training.	0.96	3.55	71.1
12	The great effort required to prepare digital educational content reduces teachers' motivation towards training in digital education.	1.08	3.47	69.3
13	The lack of obligation for teachers to train from the school leadership reduces their motivation to use digital education.	0.78	3.14	67.5
14	The difficulty of applying digital education in some practical subjects reduces teachers' motivation towards training and digital education.	0.78	3.75	75.3
15	The lack of technical applications in Arabic in training reduces teachers' motivation towards digital education.	0.87	3.14	60.7
16	Promotes the provision of incentives technical training and orientation towards digital education	0.73	3.12	65.8
17	Teachers' lack of conviction in the importance of training reduces motivation to move towards digital education.	1.06	3.45	69.1
18	The need for continuous training reduces teachers' motivation towards digital education	1.11	3.14	62.7
19	Too many students reduce teachers' motivation towards training in digital education in schools.	0.98	3.54	59.5
20	Lack of training capabilities reduces teachers' orientation towards digital education	0.88	3.25	77.3
The total score of the second field		0.921	3.354	67.82
The overall score of all paragraphs of the tool		1.001	3.494	70.064

* Maximum response score (4) degrees.

➢ *First: Results of the First Field:*

It appears from the previous table (2) that the response to the eighth paragraph was large and amounted to (89.0), it was medium to paragraphs 2-6 and the tenth paragraph and it amounted to (2.63), and it was very large to paragraphs (7,8,9) and the average response was It was approved by the sample (88.8), and the average response was great on all paragraphs of the first field, amounting to (72.0).

➢ *Second: Results of the Second Field: Orientation Towards Digital Education:*

It appears from the previous table (2) that the average response is large in paragraphs (11, 14, 20), and the average response to it by the sample was between (4, 75), and the response was medium in paragraphs (12, 13, 15, 16, 17, 18) The average response to it by the sample ranged between (65.85). The response was low in paragraph (19) and the average response to it was (59.5). The response rate on the total score for all paragraphs of the second field was medium and amounted to (67.82%), while the average response on all paragraphs was large and amounted to 70,064. Regarding trends toward digital education, this shows the seriousness of dealing with the issue of digital education in Palestinian schools.

➢ *Results of the Study Hypotheses:*

• *Results Related to the First Hypothesis:*

The first hypothesis states the following: "There are no statistically significant differences at the level (α ≤ 0.05) for technical training for school teachers and its relationship to future trends towards digital education in Palestine, due to the gender variable.

To test the first hypothesis, the researcher used the T-test for two independent groups to indicate the differences in the total score of the tool according to the gender variable.

The results of the (t) test for two independent groups indicate differences in the total score of the tool according to the gender variable.

* Statistically D at (≤0.05). It is clear from the previous that there were no statistically significant differences at the level of significance (α≤ 0.05) on the total score of the tool according to the gender variable. Thus, the first hypothesis was accepted for the sample in this study.

• *Results Related to the Second Hypothesis:*

The second hypothesis states the following: "There are no statistically significant differences at the level of (α≤ 0.05) attributed to the variable of scientific qualification. To examine the hypothesis, the researcher used the arithmetic averages of the total score of the tool according to the variable of scientific qualification. As shown Arithmetic averages of the total score of the instrument according to the variable of academic qualification.

The second hypothesis was also examined using Single Variance Analysis (ANOVA) to extract the significance of the differences on the total score of the instrument according to the variable of scientific qualification at the sample, Results of Single Variance Analysis (ANOVA) to extract the significance of differences on the total degree of the instrument according to the variable of academic qualification at the sample.

* Statistically D at (≤0.05). shows that there are no statistically significant differences at the level of significance ((≤ 0.05) on the total degree of the tool according to the variable of scientific qualification, and therefore the first hypothesis was accepted in the current study.

• *Results Related to the Third Hypothesis:*

The third hypothesis states the following: "There are no statistically significant differences at the level of (α≤ 0.05) for technical training for school teachers and its relationship to future trends towards digital education in Palestine, attributed to the variable of years of service To examine the third hypothesis, the researcher used the arithmetic averages of the total score of the tool according to the variable of years of service. As shown Arithmetic Averages of the Total Score of the Instrument by Years of Service Variable.

The third hypothesis was also examined using Single Variance Analysis (ANOVA) to extract the significance of differences on the total score of the instrument according to the sample years of service variable. Results of Single Variance Analysis (ANOVA) to extract the significance of the differences on the total degree of the instrument according to the variable of years of service at the sample.

* Statistically shows that there were no statistically significant differences at the level of significance ((≤ 0.05) on the total score of the tool according to the variable of years of service. Thus, the third hypothesis was accepted in the present study. Results related to the fourth hypothesis: The fourth hypothesis states the following: "There are no statistically significant differences at the level of (α≤ 0.05) for the role of the security institution in preserving cultural heritage and tourism security is due to the variable of scientific qualification to examine the fourth hypothesis. As shown Results of (T) test for two independent groups to indicate differences in the total score of the instrument according to the gender variable

* Statistically D at (≤0.05). It is clear from the previous that there are no statistically significant differences at the level of significance (α≤ 0.05) on the total score of the tool according to the variable of academic qualification. Thus, the fourth hypothesis was accepted for the sample in this study.

III. DISCUSSION OF THE RESULTS

➢ *The results also showed an average response in paragraphs (2-6), and the lowest response rate was in the second paragraph about the existence of applications that facilitate teacher training on digital education, as the response rate reached (62%).*

➢ *The response to the paragraph related to preparing training efficiency was also moderate, amounting to (62.2%), and the presence of sufficient equipment for training within the school amounted to (63%).*

➢ *The results showed that weak incentives and work pressures affect technical training, which in turn is reflected in the trend toward digital education. The results showed that the lack of technical applications in the Arabic language in training reduces teachers' motivation toward digital education.*

RECOMMENDATIONS

➢ *Based on the Previous Results, the Researcher Makes the Following Recommendations:*

• The need to work on developing technical training mechanisms within clear methodologies and plans.

• Taking into account the work pressures of teachers and giving them enough space to benefit from technical training.

• The need to follow up on the training of teachers and complete the training programs.

• Supporting training and providing incentives to trainees

• The necessity of analyzing training needs in the technical field and diversifying training programs.

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