**Needs Analysis of English Language Teachers Towards Using Gen-AI Tools in**

**Teaching English Language**

Dr. Mohammed Tamimi: [tamimim@ppu.edu](mailto:tamimim@ppu.edu)

Dr. Zain Asqalan: [zainasqalan@ppu.edu](mailto:zainasqalan@ppu.edu)

Ms. Lara Abu Ayyash: [214714@ppu.edu.ps](mailto:214714@ppu.edu.ps)

Palestine Polytechnic University- Hebron-Palestine

**Abstract**

Integrating technology and AI-generated tools in teaching English as a Foreign Language (EFL) can be challenging, but can provide opportunities to English Language Teachers (ELT). This research project is divided into three phases: (1) Phase One: Examining the needs and the readiness of 22 English language teachers to use Gen AI tools in their teaching of English language at a selected university in Palestine in regards to knowledge, skills and attitude. Data is collected mainly through a questionnaire and semi-structured interviews (2) Phase Two: based on the results of phase one, these teachers will be supplemented with the needed knowledge and skills, and more work will be conducted to improve their attitudes towards using Gen-AI tools in their teaching- an intervention study. Pre and post questionnaires and teachers’ reflections of this intervention will be addressed. (3) Phase Three: In this phase, the English language teachers will integrate Gen-AI tools in their teaching through an experimental study using a control group and an experimental group. This study aims to examine the impact of such intervention on the experimental group. Overall, this research project aims to inspect the needs, enhance the readiness, including knowledge, skills, and attitudes, and integrate Gen-AI tools in the teaching of English language teachers at a selected university in Palestine.

This mixed-methods approach research paper deals with Phase One of the research project. This paper aims at investigating the needs and readiness of 22 English language teachers at a selected university in Palestine. Data was collected in twofold: (1) through a 45-item questionnaire that was developed to investigate the needs of the English language teachers at this university and their readiness in regards to their knowledge, skills, and attitudes. (2) semi-structured interviews were conducted with 6 of the samples to better understand their needs to use Gen-AI in their English language teaching. Initial results of Phase One of the study show that English teachers have limited knowledge of the use of Gen-AI tools in teaching and learning and limited skills on how to work with Gen-AI tools. Furthermore, the study shows the teachers’ needs for and willingness to participate in AI training programs and the integration of such tools in their teaching. The results pave the way to the Second Phase of the study in meeting the needs of the English language teachers at this university.

**The effectiveness of an electronic guide based on communicative theory to improve the skills of mothers of children with autism spectrum disorder in reducing sensory problems in their children.**

**By the researcher Dr. Alaa Ali Abdel Moneim Abu Sebaa**

**Study Abstract:**

The study aimed to investigate the effectiveness of an electronic guide based on the communicative theory in developing the skills of mothers of children with Autism Spectrum Disorder (ASD) in reducing their children's sensory and behavioral problems. To achieve the objectives of the study, the researcher employed the experimental method using a one-group pre-post design on a sample consisting of **10 mothers** of children with ASD. The study was conducted in the Dura area, located in the southern Hebron region.

The researcher developed a tool to measure both cognitive and performance skills, consisting of **46 items**, to assess the mothers' ability to reduce the sensory and behavioral problems of their children with ASD. The validity and reliability of the tool were verified using appropriate methods. To analyze the results, means, standard deviations, and effect sizes were calculated.

The results revealed statistically significant differences at the level of significance (α ≤ 0.05) in favor of the post-measurement of cognitive and performance skills among the mothers after using the electronic guide based on the communicative theory.

In light of these findings, the researcher recommended providing electronic training programs for mothers of children with ASD, as they offer easy access and ensure that a greater amount of information can be delivered by specialists on how to deal with their children. This also helps overcome the difficulties in reaching specialized centers due to barriers and distances across Palestine.

**Keywords:** Electronic Guide, Communicative Theory, Autism Spectrum Disorder, Sensory Problems, Behavioral Problems.

**Abstract**

This study aimed to investigate the effectiveness of teaching based on Gagné’s instructional steps electronically in developing conceptual understanding and performance skills among students of Electrical Installation Engineering.The researcher adopted the quasi-experimental approach with a one-group design. The study sample consisted of 19 students specializing in Electrical Installation Engineering at Al-Ummah University College in Jerusalem, Palestine, during the academic year 2024–2025. The sample was purposefully selected to be taught using Gagné’s instructional steps both face-to-face and electronically. To achieve the study objectives, tests were used as tools to measure conceptual understanding, while an observation checklist was employed to assess performance skills. The results revealed statistically significant differences at the (0.05) level in the overall score for conceptual development in favor of the post-test. The study also showed statistically significant differences at the (0.05) level in the development of performance skills among the sample, also in favor of the post-measurement.However, no statistically significant differences were found between face-to-face and electronic teaching based on Gagné’s steps, indicating the effectiveness of the model regardless of the method of delivery.Based on these findings, the researcher recommends the integration of Gagné’s instructional steps in the design of both traditional and electronic educational programs, particularly in technical courses, as well as training teachers to design and implement instruction using this model.

**The Impact of Using Digital Technology on Developing Reading Comprehension Skills among Fourth-Grade Female Students in Palestine.**

Prepared By:

.1 Rana Hmedan Juba, Al-Quds University

2. Ibrahim Jaber Al Shadafan, Al-Quds University

**Abstract:**

The study aimed to identify the impact of using digital technology on developing reading comprehension skills among fourth-grade female students in Palestine. The researcher used an experimental approach with a quasi-experimental design. A purposive sample of (56) fourth-grade female students was selected and distributed into two groups: the first was an experimental group, consisting of (28) students who studied using digital technology, and the second was a control group, consisting of (28) students who studied using the traditional method. A reading comprehension skills test consisting of (20) items was prepared. A single-sample ANCOVA was used to measure the total reading comprehension score, and a multiple-sample MANCOVA was used to measure reading comprehension skills. The study results showed statistically significant differences between the mean scores of the experimental group, which studied using digital technology, and the control group, which studied using the traditional method, in favor of the experimental group. The study made several recommendations, most notably the use of digital technology in teaching Arabic, given its importance in developing reading comprehension skills.

***Keywords:*** ***Effect, Digital technology, Skill, reading comprehension.***

**The relationship between strategic innovation and organizational agility in public basic schools in Ramallah and Al-Bireh Governorate from the teachers’ point of view**

Dr. Inas Alisa/ PAU

Dr. Rawan Siaj/ PAU

# Abstract

The study aimed to reveal the relationship between strategic creativity and organizational agility in public basic schools in Ramallah and Al-Bireh governorate, from the point of view of the teachers of these schools, in addition to measuring the level of strategic creativity in these schools through several dimensions, namely: strategic innovation management, strategic compatibility, organizational readiness, creative continuity, and measuring the level of organizational agility through the following dimensions: Agility of sensing, agility of decision-making, and agility of practice, and to achieve these goals, the researcher relied on the descriptive approach, and the study population consisted of male and female teachers in government basic schools in Ramallah and Al-Bireh governorate, whose number, according to the statistics of the Ministry of Education for the year 2023, is (3610) teachers, and a random sample of this community was selected with a size of (347) research items.

The study relied on a variety of sources to collect data, in addition to reviewing the theoretical literature and previous studies, two tools were relied on to collect data, namely the questionnaire and the interview, and the questionnaire was distributed to the study sample, and (297) correct questionnaires were retrieved, with a retrieval rate of (85.5%), and a number of interviews were conducted with teachers from Ramallah and Al-Bireh basic schools.

The study reached several results, the most prominent of which were: The existence of a statistically significant relationship between strategic creativity in its dimensions and organizational agility in government basic schools in Ramallah and Al-Bireh governorate, where the results showed that this relationship is a positive relationship, and showed that strategic creativity explains at least (72.2%) of the variation in the level of organizational agility in basic schools, and the results showed that the reality of strategic creativity in these schools was high, and the percentage of this level reached (76.8%), In addition, there is a high level of organizational agility in these schools (75.8%).

Based on the results, the study proposed a number of recommendations, the most important of which are: enhancing the role of teachers through their participation in planning to solve the problems facing the school, and finding creative solutions that would save time, effort and cost for the school, and the study also recommended the importance of coordinating the relationship with the local community and working to establish effective partnerships with its components in the interest of the school.

**Key words**: strategic creativity, organizational agility, basic schools, education, sensing agility, agility of decision-making, agility of response.

Abstract

This study aims to explore the impact of integrating generative artificial intelligence applications (GAI) on creativity in college students in Palestine. The researchers used an experimental design with experimental and control groups from college technology education students. A pre-existing creativity scale was used. A random sample of 50 students was divided into a control group who studied by traditional means, and an experimental group who studied by using generative artificial intelligence applications, during the first semester. The results of the study indicated a statistically significant difference between the average scores of the students of the control group and the average scores of the experimental group students in the post-test, in favor of the experimental group. No interaction between gender among groups and GPA was reported as statistically significant, which impacted creativity scores. There is an **interaction effect** between**digital s**kills and groups on creativity scores of college students. Recommendations include using effective teaching strategies while using GAI that motivates creative thinking.

Keywords: generative artificial intelligence (GAI), creativity, college students, technology education

**The Impact of Digital Transformation on Improving the Quality of Faculty Performance at Yarmouk University from the Students' Perspective.**

**Athir Husni Al Kouri**

**Ali Kadhem AlSandi**

**Wajud Nasser khamis Alqasmi**

**Abstracts**

The study aimed to identify the impact of digital transformation on improving the quality of faculty performance at Yarmouk University from the students' perspective. The study followed the descriptive survey method, and the study used a questionnaire consisting of (21) items in collecting its data, and it consisted of two fields: the field of digital learning in the educational process, and the field of quality in higher education, and its validity and reliability were confirmed. The study sample consisted of (156) male and female students from Yarmouk University, who were selected randomly. The results of the study showed that the impact of digital transformation on developing the quality of performance of the teaching staff at Yarmouk University, from the perspective of the study community, was (large) in all areas. The researchers also recommended "continuing to renew, develop and modernize the educational environment necessary to teach various artificial intelligence techniques and models and making a great effort to obtain quality education."

**Keywords:** Digital Transformation, Quality of Performance, Faculty, Graduate Students, Yarmouk University, Jordan.

**Abstract**

This research focused on the effectiveness of the CapCut application in creating student-produced multimedia videos on English vocabulary retention among 11th grade EFL learners in Palestinian public schools. In accordance with Kolb's Experiential Learning Theory, the research utilized a quasi-experimental design with 76 female participants, of which, an equal number formed a separate treatment and control group. The treatment group created vocabulary videos while the control group received standard vocabulary teaching. Quantitative data in the form of pre and post-tests as well as qualitative data in the form of semi-structured interviews were collected.

The experimental group showed statistically significantly higher post-test scores compared to the control group with a significant p-value (p < 0.001) and large effect sizes as confirmed by mixed ANOVA. Intra-group paired-sample t-tests confirmed significant improvement only in the experimental group while no significant change was detected in the control group. The qualitative data reinforced the finding that students exposed to the video creation were able to retain vocabulary much better due to active use and exposure through various modes and frequent practice. Students also described boosted confidence, more perceived control as learners, preference for the multimedia approach to vocabulary learning, and more autonomy, notwithstanding some limited technical and time constraints.

These findings confirm earlier studies advocating for learner-created multimedia materials and vocabulary instruction based on specific tasks, although they diverge from studies with unstructured, low-access contexts observing minimal impact from digital tools. The combination of cognitive, affective, and collaborative components included in the CapCut-based experiential learning cycle proved useful in promoting lasting vocabulary retention. The study advises EFL program planners to increase the use of engagement strategies and technology with student-created content to foster sustained mastery of vocabulary.

**Keywords** : Vocabulary retention, EFL (English as a Foreign Language), Student-generated multimedia, CapCut application, Task-based vocabulary instruction, Experiential Learning Theory, Palestinian secondary education, Technology-enhanced language learning

**The role of technology and artificial intelligence in education and innovation from the perspective of public-school teachers in Bethlehem Governorate**

**Prepared by: Dr. Bassem Ibrahim Al-Hajahja**

**Directorate of Education / Bethlehem – Palestine**

Abstract  
This study explores how technology and artificial intelligence (AI) shape education and innovation, as seen through the eyes of public-school teachers in Bethlehem Governorate. Using a descriptive approach, we surveyed 250 teachers (selected through stratified random sampling) to understand their perspectives. A custom 23-item questionnaire was designed, covering three key areas, and its validity and reliability were carefully checked.

The findings revealed strong optimism among teachers about the role of technology and AI in education, with an overall approval rating of 80% (4 out of 5). Teachers also felt confident in using these tools to enhance learning, scoring an average of 4.08 (82%) on their ability to integrate them into curricula. However, challenges like lack of training, resistance to change, and budget limits were noted, though teachers still rated potential solutions highly (3.76 average, or 81%). Personalized training and support were especially valued, with an impressive average score of 4.21 (80%).

Interestingly, age, education level, and years of experience didn’t significantly affect teachers’ views—most agreed on the importance of tech and AI in education.

Key Recommendations:

* Streamline Tasks with AI: Use AI for grading and feedback to free up teachers’ time for lesson planning and student support.
* Address Barriers: Tackle obstacles like training gaps and funding by offering hands-on AI workshops and developing structured tech-integrated curricula.

This study highlights the exciting potential of AI in classrooms while calling for practical steps to help teachers make the most of it.

Keywords: Technology, Artificial Intelligence, Learning, Innovation, Public Schools.

**Abstract**

This research aims to investigate the impact of using the Teams platform on the academic self-concept of seventh-grade students in the South Nablus Directorate. To achieve the research objective, the researcher prepared a scale for the academic self-concept, where the scale consisted of (30) items, its validity and reliability were verified using appropriate methods. The researcher followed the experimental method with a quasi-experimental design to suit the research purposes, where the research community consisted of seventh-grade students for the academic year (2024-2025) in the South Nablus Directorate. The research sample consisted of (70) seventh-grade students. The research sample was distributed into two groups: a control group consisting of (35) students, who studied using the traditional method, and an experimental group consisting of (35) students, who studied using the Teams platform program. The research results showed a statistically significant difference at the significance level (0.05 ≥ α) between the average scores of the two study groups (experimental and control) attributed to the teaching method and in favor of the experimental group. In light of the previous findings, the researcher recommended integrating interactive activities and continuous assessments across the platform, given their role in boosting students' motivation and increasing their sense of competence and academic achievement.

Keywords: Teams platform, academic self-concept, seventh grade

Abstract:

The study aimed to identify the role of artificial intelligence in developing the academic performance of Palestinian universities from the perspective of faculty members. The study population consisted of (1200) faculty members from An-Najah National University, , and Kadoorie University, Tulkarm Branch, and a sample of (110) faculty members. The study used the descriptive approach in its analytical form, and a questionnaire consisting of (43) paragraphs was applied to the study sample. The results showed that the role of artificial intelligence in developing the academic performance of Palestinian universities from the perspective of faculty members was high, and the fields were ranked as follows: service performance ranked first, followed by academic performance in second place, and research performance in third place. The results also showed that the requirements for employing the role of artificial intelligence in developing the academic performance of Palestinian universities from the perspective of faculty members were high. The results showed the presence of statistically significant differences at the significance level (α = 0.05) between the average responses of faculty members to the role of artificial intelligence in developing the academic performance of Palestinian universities and the requirements for its employment attributed to gender variables. The differences were in favor of males, years of service, and in favor of more than 10 years, while no differences were attributed to the variable of university rank.

Keywords: role, artificial intelligence, academic performance, Palestinian universities.

**Abstract:**

The study aimed to identify the reality of employing artificial intelligence tools in the learning and teaching processes from the point of view of students at Al-Quds Open University in the Nablus branch, To achieve the objectives, the researchers used the descriptive quantitative approach, and a questionnaire was constructed as a tool for quantitative data. The study sample consisted of (86) male and female students who were selected by the stratified random method based on the college variable. The results showed that the reality of employing artificial intelligence tools in the learning and teaching processes from the point of view of students at Al-Quds Open University in the Nablus branch was moderate. The results also showed that there were no statistically significant differences at the significance level (0.05 = α) between the average responses of students at Al-Quds Open University in the Nablus branch to the reality of employing artificial intelligence tools in the learning and teaching processes attributed to the variables (gender, and academic year), while the results showed differences in the college variable, in favor of colleges. Humanity, and the study recommended holding introductory meetings for Al-Quds Open University students on the areas of using artificial intelligence applications in the educational process.

**Keywords:** Artificial Intelligence, Education and Learning, Al-Quds Open University

Proposed Standards for Digital Literacy and Awareness Development Based on the Principles of a Culture of Responsibility

This study aimed to propose standards for developing digital awareness and digital literacy, empowering staff with the digital skills necessary to perform tasks accurately, with quality, and a competitive advantage, and achieving desired goals in the shortest possible time and with the least effort. This is achieved by leveraging digital technology, its applications, and software, based on the principles of a culture of responsibility. This was achieved through a comprehensive analysis of educational literature, research, and previous studies during the 2024/2025 academic year. The study focused on providing clear practical steps to enhance the digital competence, skills, and capabilities of leaders to ensure continued excellence and achieve comprehensive quality in light of rapid technological developments. What distinguishes this study from others is its reliance on an analytical approach as a basis for extrapolating and analyzing the results of previous studies to understand the challenges and threats to digital literacy. This is to build future standards for developing digital awareness and empowering individuals with the digital skills, capabilities, and expertise necessary to eradicate digital literacy. This is achieved by promoting a culture of responsibility as a cornerstone in developing sound digital awareness, enabling individuals to engage with technology and the internet in a safe, ethical, and effective manner. This culture includes a set of basic principles that form a framework for good digital citizenship. These include: Principle 1: Respect and Positive Interaction; Principle 2: Protecting Privacy and Digital Security; Principle 3: Critical Thinking and Information Literacy; Principle 4: Understanding Digital Rights and Responsibilities; Principle 5: Digital Health and Balance; Principle 6: Digital Law and Ethics; Principle 7: Digital Access and Inclusion. The study recommends the development of educational content that promotes the concepts of safe and responsible use of digital technologies, with a focus on the ethics of handling personal information and data.

Keywords: Standards, Digital Awareness, Culture of Responsibility

**Abstract**

The study problem clarifying the role of social responsibility on violet strategic consciousness governance(VSCG) enhanced by artificial intelligence in government educational organizations in Hebron. The study adopted the descriptive quantitative approach, and listed previous studies and literature related to concept ,then it addressed social responsibility dimensions according to Carroll's pyramid, and adopted these dimensions to determine the main and sub-indicators affecting  violet strategic consciousness governance enhanced by artificial intelligence. The study community consisted of government educational organizations in Hebron with arandom non-control sample, and the study tool was electronic questionnaire which distributed to (80) administrative employees in these organizations, and (74) responses were retrieved, then the researcher used Social Sciences Statistical Package (SPSS) to analyze the electronic questionnaire.

The  study results indicated that the largest percentage of the relative weight on the role of social responsibility on violet strategic consciousness governance enhanced by artificial intelligence - VSCG in educational organizations in Hebron was represented by the criterion of strongly disagree, which reached 46% of the relative weight, while the lowest percentages were respectively between the criteria of strongly agree and agree by 11% and neutral by 12%, while they increased by 1% in the criterion of agree and 5% in the criterion of disagree The awareness of administrators about the role of social responsibility in violet strategic consciousness governance enhanced by artificial intelligence in educational organizations in Hebron was low, and it was found that the largest percentage don't have  AI-enhanced violet  Consciousness knowledge, and how to implement strategies and plans within this framework, in addition to their inability to link the social responsibility of their organizations to  violet strategic consciousness governance enhanced by artificial intelligence .The study recommended increasing the consciousness of administrators in educational organizations about their social responsibility and its role in good management of violet strategic consciousness enhanced by artificial intelligence, and developing sustainable strategic implementation plans that contribute to increasing violet strategic consciousness governance enhanced by artificial intelligence, and clarifying its role in social responsibility according to Carroll's pyramid, not only in Hebron educational organizations  but in all organizations Providing administrative experts with knowledge about AI-enhanced violet consciouness to provide the necessary training to administrators, and clarifying the role of educational institutions in community development within their social responsibility.

Key words:

Social Responsibility- SR, Artificial Intelligence- AI, Violet Strategic Consciousness- VSC, Violet Strategic Consciousness Governance- VSCG.

**Academic Integrity in Mathematics Teaching and Learning: A Systematic Review in the Context of Generative Artificial Intelligence**

**Dr. Hisham Ahmad Bani-Mattar**

High school math teacher and Trainer of Mathematics teachers

Ministry of Education - Palestine

e-mail: [rnenhisham86@gmail.com](mailto:rnenhisham86@gmail.com)

**Abstract**

This study aims to conduct a systematic review of research published between 2023 and 2025 regarding the integration of generative artificial intelligence applications in mathematics teaching and learning. The review involved a qualitative and quantitative analysis of twenty selected studies, most of which employed a descriptive analytical methodology, with (85%) of them conducted in Asia. The findings revealed that (85%) of the studies indicated positive attitudes toward generative AI, and (70%) demonstrated its positive impact on students’ learning. Meanwhile, (75%) pointed to the lack of teacher training as a major obstacle, and (80%) highlighted challenges related to infrastructure and data privacy. Additionally, (65%) of the studies emphasized the necessity of ethical and pedagogical use to ensure academic integrity. These findings suggest that generative AI represents a promising educational tool that requires a well-prepared environment and supportive policies to maximize its benefits and mitigate potential risks.

**Keywords:** Generative Artificial Intelligence, Mathematics Teaching and Learning, Academic Integrity, Systematic Review.

**A proposed Conception for Developing Digital Skills among Teachers at Basic Education Level In Light of Digital Transformation:**

**(Government schools affiliated to the Directorate of Education in Bethlehem Governorate Case Study)**

**Abstract**  
**Objective**: To propose a framework for developing digital skills among lower primary school teachers in light of the digital transformation in public schools in Bethlehem Governorate.  
**Methodology**: A developmental descriptive approach was adopted, utilizing the Delphi method (three rounds) to identify essential digital skills for digital transformation. The study relied on a purposive sample of 17 experts and a random sample of 222 teachers (male and female).  
**Results**: The study identified 35 essential digital skills for lower primary school teachers in the context of digital transformation, categorized into six domains: utilizing virtual classrooms, text processing, digital assessment, digital communication and research, utilizing multimedia, and digital games. Results revealed varying levels of proficiency among teachers: virtual classroom skills ranked first (highest proficiency), while digital games received the lowest proficiency level. Consequently, a developmental framework was proposed, including tailored programs and methods to enhance skills within each domain in alignment with digital transformation.  
**Keywords**: Digital skills, digital transformation, lower primary school teachers, public schools in Bethlehem Governorate.

Abstract:

This paper examines the profound challenges posed by generative artificial intelligence—most notably ChatGPT—to academic integrity as a core ethical and value-based foundation of higher education. It argues that the advent of generative content tools has transformed the dynamics of knowledge production, giving rise to new forms of misconduct such as plagiarism, cheating, fabrication of references, and collusion, alongside technical issues such as generating false information or distorting contexts—threatening the authenticity of academic work and the credibility of assessment. Through a review of institutional policies both locally and globally, the study finds that responses have ranged from strict bans to regulated use, as well as integrative models that embed technology within an ethical and pedagogical framework, while criticizing traditional approaches for failing to keep pace with rapid technological change, widening the digital divide, and eroding trust. The paper also addresses the fundamental transformations generative AI has brought to the labor market, reshaping job roles and required skills, and necessitating the integration of technical, analytical, and creative competencies—placing a new responsibility on universities to redefine their mission, moving from rote instruction to the “university of the future” model that fosters critical thinking, problem-solving, human–AI collaboration, and the preparation of graduates capable of adapting to a fast-changing knowledge economy. It proposes a new framework for academic integrity based on ethical integration, distinguishing between intent and behavior, embedding transparency, updating standards of authenticity, and building a responsible learning environment—grounded in both Western philosophical foundations and Islamic ethics—shifting the emphasis from punitive measures to moral education and the cultivation of self-awareness. The paper concludes by calling on universities to update policies, integrate AI ethics into curricula, design AI-resilient assessment tools, train academic staff, promote transparency, and establish institutional tech–ethics support platforms, thereby ensuring the sustainability of academic values and fulfilling the university’s role in the digital transformation era.

Summary of the research

The current research aims to identify the impact of the effectiveness of a proposed strategy of Qur'an verses and its impact on the achievement of second grade middle school students in mathematics.

The researcher relied on the experimental research methodology to suit the nature and objectives of the research, and to achieve the research objectives, the researcher formulated a zero hypothesis that was subjected to experimentation, and the research sample size was (54) female students in the second intermediate grade, The researcher used the experimental design with two equal groups of experimental and control and the posttest of achievement, where the experimental group was studied according to the effectiveness of a proposed strategy for Qur'an verses and its impact on the achievement of second grade students in mathematics, and the control group according to the usual (traditional) method, and the research sample size was (54) students who were divided by (29) students in the experimental group.

. In analyzing the data statistically, the researcher used the following statistical methods (t-test for two independent samples.

Pearson's correlation coefficient, Spearman-Brown's correlation coefficient, Spearman's correlation coefficient, Kuder-Richardson's correlation coefficient, and the researcher reached the following results: -

-There is a statistically significant difference between the average achievement of the students of the experimental group who studied the effectiveness of a proposed strategy for Quranic verses and its impact on the achievement of second grade middle school students in mathematics and the students of the control group who studied in the usual way and in favor of the experimental group.

Among the most important recommendations: The Directorate of Education should add courses for mathematics teachers under the supervision of professors at the University of Mosul specializing in teaching methods to train teachers on the steps and procedures of modern teaching methods so that they can use them in teaching.

**Keywords** : Strategy, Achievement, Math

**Digital Stress Among University Students in Light of Certain Variables**

Abstract:

This study aimed to measure the level of digital stress among students at the University of Baghdad and to explore potential differences in digital stress based on gender (male - female), academic year (first - fourth), and specialization (scientific - humanities). The research sample consisted of 200 male and female students from the University of Baghdad, and a digital stress scale, specifically developed by the researcher for this study, was administered.

Using a descriptive-analytical approach, the data collected through the scale were analyzed using appropriate statistical methods. The findings revealed that university students experience a high level of digital stress. However, no statistically significant differences were found in digital stress levels based on gender, academic year, or specialization.

As a key contribution, this research developed a new scale to measure digital stress, which can serve as a valuable tool for future studies to diagnose the phenomenon and design intervention programs. Additionally, an innovative application model based on "Smart Digital Intervention" was proposed. This model includes the development of digital tools to help students manage their digital time and reduce stress through features such as reminders for breaks, promoting a healthier digital balance.

Keywords: Digital stress, university students, University of Baghdad.

**The Role of Generative Artificial Intelligence Tools in Enhancing the Educational Experience and Learning Outcomes***A Case Study of Graduate Students at Al-Quds Open University – Palestine.*

# **Abstract**

This study aimed to analyze the impact of learning to use generative artificial intelligence (AI) tools on enhancing the educational experience and learning outcomes of graduate students. It also examined the opportunities and challenges associated with integrating these tools and explored their implications for the quality and effectiveness of higher education.

The study adopted a qualitative research methodology grounded in the principles of grounded theory, aiming to provide a deep and systematic analysis of the data. A purposive sample of 36 students from the Master's programs in Human Resource Management and Digital Business Administration at Al-Quds Open University was selected. The data collection instrument was designed using Google Forms and included five sections comprising semi-structured questions (both open- and close-ended) to capture students' opinions and experiences. Data were analyzed using MAXQDA software, which ensured methodological rigor and accuracy in organizing the findings.

The results revealed that generative AI tools play a significant role in enriching the educational experience and improving learning outcomes. These tools, along with other digital resources, contributed to easier access to information and supported learning processes. However, the study also highlighted several challenges associated with their integration.

In light of the findings, the study presented a set of recommendations, including the development of a framework for adopting generative AI tools in graduate colleges at Al-Quds Open University and similar academic institutions, as well as the implementation of training programs for faculty members as a first step, followed by students.

Keywords: Artificial Intelligence, Generative AI Tools, Educational Experience, Learning Outcomes.

**Abstract**

This study aimed to investigate the impact of a training program based on artificial intelligence on enhancing instructional design skills and improving mathematics teachers' attitudes toward integrating technology in the educational process. The researcher employed a quasi-experimental one-group pretest-posttest design. The study sample consisted of (25) male and female mathematics teachers from the Directorate of Education in South Hebron, Palestine.

Two tools were developed for the study: an observation checklist consisting of 18 items to measure instructional design skills, and a questionnaire consisting of (23) items to assess attitudes. Appropriate statistical methods were used to verify the validity and reliability of the tools.

The results revealed statistically significant differences at the (α ≤ 0.05) level in favor of the post-test in both variables. The effect size was 0.77 for instructional design skills and 0.18 for attitudes. The study concluded that the training program enhanced the integration of artificial intelligence in instructional design, and promoted both cognitive awareness and affective attitudes among teachers.

Accordingly, the researcher recommends adopting the training program, providing the necessary resources, and offering continuous training to support digital transformation in education.

**Keywords:** Artificial Intelligence, Instructional Design, Attitudes

**The degree of inclusion of the dimensions of the knowledge economy in the mathematics textbook for the fourth grade in Palestine**

**Abstract:**

The study aimed to determine the degree of inclusion of the dimensions of the cognitive economy in the mathematics textbook for the fourth grade in Palestine, where the descriptive analytical approach was used in the style of content analysis, and the idea was adopted as the unit of analysis. The sample of the study consisted of the mathematics textbook for the fourth grade in Palestine in its two parts, and a form was prepared to analyze the content of the books. Mathematics for the fourth grade to identify the extent to which it includes the dimensions of the cognitive economy, which are: (the cognitive dimension, the mental dimension, the economic dimension, the social dimension, and the evaluation dimension). It was concluded that the content of the mathematics book for the fourth basic grade includes the dimensions of the cognitive economy to varying degrees, where the evaluation dimension obtained the highest score at (32.83%). It is followed by the mental field with a rate of (31.84%), followed by the cognitive field with a rate of (22.98%), followed by the economic field with a rate of (7.76%), and finally after the social field with a rate of (4.57%). The study recommended paying attention to all cognitive economic skills when developing the mathematics curriculum for the fourth grade. Basic in Palestine.

**Keywords:** cognitive economy, mathematics, fourth grade, Palestine

**Dr. Naaila Jeries Haddad**

Abstract

The current study focuses on digital competencies among teachers and their relationship with the motivation of primary school students in the Northern District towards education, from the teachers' perspective. Amid rapid technological changes, education increasingly relies on modern technologies, which requires teachers to possess digital competencies that contribute to enhancing students' motivation toward education and learning. Previous studies highlight the importance of digital competencies in improving teachers' performance and raising students' academic achievement. However, there is an urgent need to understand the relationship between these competencies and students’ motivation in primary schools, especially in northern areas facing increasing educational challenges. In light of this, the current study adopted a mixed-methods approach, developing two research instruments and verifying their validity and reliability, targeting teachers in primary schools in the Northern District. The sample included 362 male and female teachers. The results showed a high level of digital competencies among teachers, as well as a high level of motivation among students. Additionally, the results revealed a significant positive correlation between teachers’ digital competencies and students’ motivation. The interview findings also presented a set of developmental suggestions.

**Keywords**: Digital Competencies, Motivation, Developmental Suggestions, Primary Schools.

**Dr. Naaila Jeries Haddad**

Abstract

The current study focuses on digital competencies among teachers and their relationship with the motivation of primary school students in the Northern District towards education, from the teachers' perspective. Amid rapid technological changes, education increasingly relies on modern technologies, which requires teachers to possess digital competencies that contribute to enhancing students' motivation toward education and learning. Previous studies highlight the importance of digital competencies in improving teachers' performance and raising students' academic achievement. However, there is an urgent need to understand the relationship between these competencies and students’ motivation in primary schools, especially in northern areas facing increasing educational challenges. In light of this, the current study adopted a mixed-methods approach, developing two research instruments and verifying their validity and reliability, targeting teachers in primary schools in the Northern District. The sample included 362 male and female teachers. The results showed a high level of digital competencies among teachers, as well as a high level of motivation among students. Additionally, the results revealed a significant positive correlation between teachers’ digital competencies and students’ motivation. The interview findings also presented a set of developmental suggestions.

**Keywords**: Digital Competencies, Motivation, Developmental Suggestions, Primary Schools.

Abstract

In light of the rapid technological advancement witnessed globally, artificial intelligence (AI) has emerged as a leading tool that has revolutionized various sectors, including education and knowledge production. Modern education is increasingly characterized by a shift towards digital transformation and the adoption of intelligent technologies, which poses new challenges while offering innovative opportunities to enhance the educational process and improve academic outcomes.

This study aims to analyze the impact of AI on knowledge production among faculty members in the Department of Sharia, by investigating their awareness of AI technologies and tools, and how these are employed in both teaching and research activities. The research focuses on the transition from traditional education—based on classical methods of instruction and knowledge transmission—to a digital learning model that leverages AI to enhance interaction with academic content and tailor it to meet the needs of both instructors and students.

Through this modest inquiry, we also seek to examine how such technologies influence the quality of scholarly output, whether by facilitating access to sources, enabling data analysis, or accelerating research processes. Moreover, the study underscores the challenges faced by Sharia faculty members in utilizing these technologies, such as lack of training or deficiencies in technical infrastructure, while also highlighting potential opportunities—such as improved teaching methods, increased academic collaboration, and the development of innovative curricula aligned with the demands of the digital age.

Ultimately, this study aims to present a comprehensive vision of the importance of integrating AI into Islamic legal education, by providing an in-depth analysis of the factors influencing knowledge production and proposing practical strategies to enhance the academic performance of Sharia faculty in the context of digital learning.

Keywords: Education – Traditional – Digital – Knowledge – Artificial Intelligence

**A Play-Based Approach: Using Sorting Games to Improve English Speaking and Listening Skills Among Second Graders**

Ahmed Raba, and Ayat Tarazi

Methods of Teaching Department, Faculty of Humanities and Education, An-Najah National University, Nablus, Palestine; ahmedm@najah.edu; ayat.terazi@najah.edu

Abstract: Capturing younger learners' attention is not easy, and finding the best ways to motivate and engage them in all class activities is the key to a teacher's success. Given the value of sorting games in creating an engaging environment, it is necessary to increase young learners' English vocabulary and improve their ability to listen and speak fluently. To that end, this study investigated the role of sorting games in improving second-grade students' English speaking and listening skills from the points of view of EFL teachers in Palestinian public schools. To reach this goal, the researchers used a mixed approach to investigate 30 teachers' points of view toward utilizing sorting games to promote English speaking and listening skills among second graders. The questionnaire results show that sorting games improve students' speaking and listening skills, motivate them, and increase their engagement and participation. The results of the open-ended questions emphasize that sorting games can be time-consuming, and English teachers may find it difficult to design or get suitable sorting materials. Considering these results, the researchers recommend providing teachers with specific training on effectively integrating sorting games into their lesson plans, including strategies for differentiation, classroom management, and addressing potential challenges.

*Keywords*: sorting games, improve English speaking skills, English listening skills, EFL teachers’ perspectives, play-based approach, second graders

**Abstract**

The research aimed to address the low level of digital skills in mathematics among sixth- and ninth-grade female students in the blended learning phase using the Math Type program.

The researcher used the procedural approach and administered pre- and post-achievement tests to a sample of (25) sixth- and ninth-grade female students who were intentionally selected. The results showed that the percentage of sixth- and ninth-grade female students after using the Math Type program exceeded the acceptable success rate, reaching( 85%) for sixth grade and( 82%) for ninth grade. This indicates a very clear improvement in the overall achievement of the sample students in electronic tests as a result of using this program.

In addition, the results showed a clear improvement in all digital skills required for sixth- and ninth-grade female students after using the Math Type program.

The percentage of students who passed each question requiring a digital skill in sixth and ninth grades in the post-test increased compared to the percentage of students who passed each question in sixth and ninth grades in the pre-test.

The researcher noted that there are digital skills that still need time to master better, such as the skill of inserting the Cartesian plane among ninth-grade students, whose success rate in the post-test reached( 55%).

The same applies to sixth-grade students, as the skill of inserting roots, whether square or cubic, and applying them was the most difficult, and whose success rate in the post-test reached( 46%).

ABSTRACT

The study aimed to measure the impact of artificial intelligence on the future of human creativity among secondary school students in Palestine, and to present proposals and recommendations based on the results. The study's problem was represented by the question: To what extent do secondary school students in Palestine use artificial intelligence tools in creative activities? What are the possible proposals for this? The descriptive analytical approach was used. The study community consisted of secondary school students in Palestine. The sample was stratified random, with a number of (128) students from government schools in the governorates of Palestine. The sample also included (15) responses to the interview questions. The study tools were a questionnaire consisting of four axes and an interview that included five questions. One of the researcher's most important findings was that artificial intelligence is a powerful tool that can enhance creativity among secondary school students in Palestine if used properly. Key recommendations include developing local platforms in Arabic that are appropriate for the Palestinian context (such as AI that generates stories about Palestinian heritage), raising students' awareness of the ethics of using artificial intelligence and intellectual property rights, and training teachers to integrate artificial intelligence into curricula while encouraging critical thinking.

Keywords: artificial intelligence, human creativity, secondary school students.

**Abstract**

This study aimed to explore the role of educational supervision in improving teachers’ professional performance in the use of digital technology, from the perspective of educational supervisors working in the Directorate of Education in Tulkarm Governorate. The study also sought to analyze the impact of certain demographic variables such as gender, academic qualification, years of experience, and the educational level supervised on the evaluation of this role.

The researchers adopted the descriptive method, as it is most suitable for analyzing the studied phenomenon in its real context. A research tool in the form of a questionnaire was developed, consisting of 35 items distributed across three main areas: digital teaching methods, digital classroom management, and the development of the use of modern technologies in education.

The questionnaire was applied to a random sample of 33 supervisors, drawn from the study population of 40 supervisors. The instrument was reviewed and modified to ensure its validity and reliability, and the data were analyzed using several statistical tools including means, ANOVA, and T-tests.

The results revealed that the role of educational supervision in enhancing teachers’ professional performance in digital technology use was high. The domain of digital classroom management ranked first, followed by the development of modern technology use, and lastly, digital teaching methods. These findings reflect supervisors' awareness of the importance of supporting teachers in integrating technology into the classroom, especially amid growing trends toward digital education.

Regarding the demographic variables, no statistically significant differences were found based on gender, years of experience, or the educational stage supervised. However, significant differences were observed in favor of supervisors with a master’s degree or higher, indicating that academic qualification contributes to better recognition of the supervisory role in the digital context.

The study concluded with several recommendations, including assigning a technology supervisor in each school or school cluster to monitor teachers' use of digital technologies and provide immediate support and solutions to daily problems, instead of relying entirely on traditional supervisory visits. It also recommended establishing a unified digital resource bank supervised by the Directorate of Education, containing lesson plans, interactive tests, educational videos, and links to digital tools that teachers can benefit from and further develop. In addition, it proposed launching a “Distinguished Digital Teacher” initiative at the directorate level, including incentive awards and the publication of success stories, to create a positive competitive environment among teachers in the use of digital tools in classrooms.

**Keywords**: Educational supervision, professional performance, digital technology

**Digital Skills among Al-Aqsa University Students Amid the War on the Gaza Strip: A Descriptive Study of Awareness and Practice**

**Abstract:**   
The Gaza Strip has been experiencing severe humanitarian and educational conditions due to the ongoing war since October 7, 2023, which has directly impacted the educational environment, particularly the use of digital technologies in higher education institutions. Al-Aqsa University is among the most affected universities, facing significant challenges in providing a stable digital learning environment. This has negatively reflected on the level of digital skills among its students.

This descriptive study aims to explore the current state of digital skills among Al-Aqsa University students during the war on the Gaza Strip, through an analytical review of relevant literature and previous studies. The research focuses on challenges related to the lack of technological resources, continuous electricity and internet outages, and the psychological pressures experienced by students — all of which affect their ability to effectively and safely employ technology in learning.

The researcher found clear gaps in students’ acquisition and application of digital skills and recommended the adoption of practical solutions to enhance these skills. These include updating digital learning programs and providing both technical and psychological support, in alignment with the emergency conditions facing higher education institutions in the Gaza Strip.

**Keywords:** Digital skills, Al-Aqsa University, War on Gaza Strip.

**Assessing the Pros and Cons of AI-Supported Learning in Education**

**(Position Paper)**

**Dr. Aysha Abd-Rabo**

**Alrawdah University College,** **Palestine**

**Dr. Sherine Hashaikeh**

**Ministry of Education and Higher Education, Palestine**

**Abstract**

This paper deconstructs the application of Artificial Intelligence (AI) in education, acknowledging difficulties in improving teaching and learning processes as well as transformative potential of the technology. By giving personalized learning experiences and improving student engagement and performance, artificial intelligence completely changes the education sector. Teachers are more of learning engineers who create experiences for individual learners rather than just providing information in a standard way. According to the study there is ‘classical AI’ which deals with data processing and decision making then there is ‘generative AI’ which creates original materials; understanding these distinctions is important for effective implementation across several sectors. One of the major benefits of artificial intelligence in education includes improved data processing capabilities, increased efficiency, and personalized learning. There are however demerits associated with integrating AI into education systems such as privacy concerns, security risks, fairness & bias issues as well as job displacement problems. In order to effectively use AI in education, the study highlights the necessity for balanced approaches that consider both technological breakthroughs and ethical and practical implementation tactics. This paper employs a systematic literature review methodology to explore the role of artificial intelligence (AI) in education by analyzing previous studies that have examined this topic. The data for this study were gathered from peer-reviewed academic journals, books, and research reports, the literature was systematically categorized based on key themes, including AI’s role in enhancing learning experiences, improving educational administration, and addressing ethical concerns.

**Abstract**

The study aims to demonstrate the contributions of artificial intelligence to the educational process, and to highlight opportunities that can improve the learning and teaching experience in particular and the development of the educational system in general, in addition to mentioning the challenges facing the use of artificial intelligence applications in the educational process and the obstacles they face in achieving the goals of educational institutions. The study followed the descriptive and original approach as well as the inductive approach, where the researcher explained the concepts of the study, and also touched on the most important main aspects of it, so that the study was divided into four main axes. The research tools of the study were to collect data and information from various sources, such as: books, references, scientific research and studies, scientific journals and periodicals, proceedings of specialized conferences and seminars, in addition to various websites. The study reached the most important results: Artificial intelligence applications contribute significantly to the educational process, in terms of achieving its goals, improving the quality of its outputs, and providing support in all its forms to all parties to the educational process at all levels, and in return, whatever the process of relying on technology.

**Keywords:** Artificial intelligence, artificial intelligence applications, the educational process, opportunities, challenges.

**Harnessing AI for Knowledge Production and Innovation in the Digital Age**

Asma Sbaih[kisspng-orcid-research-object-digital-object-identifier-5ae485c35b9af3](http://orcid.org/0000-0002-5870-9384)1, Sameh Taqatqa[kisspng-orcid-research-object-digital-object-identifier-5ae485c35b9af3](http://orcid.org/0000-0002-5870-9384)2

1Engineering department, Faculty of Engineering and Information Technology, Palestine Ahliya University, Bethlehem, Palestine

2IT department, Faculty of Engineering and Information Technology, Palestine Ahliya University, Bethlehem, Palestine

🖂 asma\_sbeih@paluniv.edu.ps

🖂 sameh@paluniv.edu.ps

**Abstract:**

Artificial Intelligence (AI) has been advancing at an incredible pace, reshaping fields like education, healthcare, industry, and the way we handle knowledge. In our current digital world, building an environment where new ideas and insights can thrive means finding fresh ways to use AI—ways that spark creativity, bring people together, and make sharing information smoother than ever. In this paper, we’re really digging into how certain AI tools—like natural language processing, machine learning, and intelligent tutoring systems—can be woven into the worlds of education and research to make the whole process of building knowledge not only easier but also more dynamic. We’re also exploring how AI-driven platforms can encourage collaboration among learners, automatically generate content, and personalize the way people absorb information, which, honestly, shows just how much these tools can fast-track innovation. What stands out from our research is that embracing AI for creating knowledge doesn’t just boost efficiency—it also throws the doors wide open, inviting a diverse range of people to get involved in the next wave of groundbreaking discoveries.

**Keywords:** *Artificial Intelligence, Knowledge Production, Innovation, Digital Age, Intelligent Systems, Machine Learning, Natural Language Processing, Collaborative Learning, Personalized Learning.*