

THE ROLE OF ARTIFICIAL INTELLIGENCE APPLICATIONS IN PERSONALIZED LEARNING AND MOTIVATING FEMALE STUDENTS IN SECONDARY SCHOOLS WITHIN THE GREEN LINE FROM THE POINT OF VIEW OF FEMALE TEACHERS

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Abstract

The current study aims to explore the role of artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers. The research tool consisted of a questionnaire consisting of (23) statements divided into (3) axes: The first axis relates to the use of artificial intelligence applications. Planning the lesson, numbering (7) statements, while the second axis relates to the effectiveness of artificial intelligence applications in implementing the lesson, numbering (8) statements, and the third axis relates to using artificial intelligence applications to evaluate the lesson, numbering (8) statements. The questionnaire was distributed to (1250) female teachers, and the results revealed that the degree of availability of abilities for employing artificial intelligence applications in secondary schools within the Green Line was strong, as most teachers believe that these programmes provide several opportunities to customize learning based on the unique needs of each student. Secondary school teachers believe that artificial intelligence applications help to significantly increase students' motivation and participation in the educational process by providing interactive and stimulating learning activities that pique students' interests. However, some teachers are concerned about the influence of artificial intelligence applications on administrative and instructional tasks, including changes to the teacher's role and control over learning content. The findings also revealed statistically significant variations at the 0.05 level in the degree of using artificial intelligence applications in education from the perspective of secondary school teachers related to variables (school gender, years of experience, and The Educational level), and the field of problems of artificial intelligence applications in education from the perspective of secondary school teachers, received a high score with an arithmetic mean of (98.2) and a deviation of (15.8). As a result, the study suggests creating awareness opportunities and ongoing training for teachers. About AI applications in personal learning and how to use them effectively in the classroom. Schools should give teachers with the technical support they need to deploy artificial intelligence programmes efficiently. Schools should create instructional tools to facilitate the usage of artificial intelligence applications in the classroom. Teachers should promote cooperation and involvement among female pupils while using artificial intelligence technologies in the classroom. It is also recommended that female teachers undertake frequent follow-up and evaluations on their use of artificial intelligence technologies in the classroom. Using these guidelines, schools along the Green Line can improve instructors' interactions with artificial intelligence programmes and, hence, the learning experience. Personal profiles for students.

Keywords: Artificial Intelligence, Personal Learning, Motivating Female Students, Secondary Schools, Within Green Line.

INTRODUCTION

The defining characteristic of the present era lies in the advancements made in the realm of information systems and its associated disciplines, which evolve in accordance with the characteristics of the period. The infrastructure that supports diverse information systems is

essential in the current era (Tatnall, 2023). Fields such as communications, networks, information technology, cybersecurity, and artificial intelligence are considered crucial aspects of the current industrial revolution (Benvenuti, M., Cangelosi, A., Weinberger, A., Mazzoni, Benassi, Barbaresi, & Orsoni, 2023). These modern technologies offer remarkable capabilities that aim to provide faster, smarter, more efficient, and accurate services in various domains (Blagorazumnaya, & Israeli (2023). The various fields, including education, personal learning, and the motivation of female students in secondary schools within the Green Line, are now confronted with the necessity of incorporating artificial intelligence (Seo, Tang, Roll, Fels, & Yoon, 2021). This also applies to sectors such as medicine, industry, commerce, economics, and others.

Artificial intelligence made its debut at the Dar Tamut conference in 1956, and since then, it has undergone significant advancements that hold great promise for the future of humanity (Lama 2023). Artificial intelligence is a field within computer science that focuses on the development of machines capable of imitating human behavior (Jayousi, 2023). Hence, it encompasses the field of creating computers and computer programmes that possess the ability to emulate the cognitive processes of the human mind, acquiring knowledge and skills through learning, making choices through decision-making, and exhibiting behavior akin to that of humans (Hussein, 2022). Artificial intelligence is a procedural phenomenon (Tatnall, 2023). Emulating the cognitive powers of the human mind via computer systems (Benvenuti, M., Cangelosi, A., Weinberger, A., Mazzoni, Benassi, Barbaresi, & Orsoni, 2023).

Observers of the utilization of artificial intelligence in education, individualized learning, and the encouragement of female students in secondary schools within the Green Line will notice a significant and incomprehensible growth (Blagorazumnaya, & Israeli (2023). Artificial intelligence has transitioned from a mere fantasy to a tangible reality, yielding substantial and beneficial impacts in various domains, encompassing The field of education has successfully incorporated artificial intelligence to address various educational challenges (Benvenuti, M., Cangelosi, A., Weinberger, A., Mazzoni, Benassi, Barbaresi, & Orsoni, 2023). By creating an educational environment that emphasizes planning, design, motivation, and effective development, AI enables the creation of educational situations that facilitate student learning and achievement of educational goals and simplicity (Lama 2023).

The utilization of artificial intelligence in education, fostering, individualized learning, and inspiring female students in secondary schools located within the Green Line have garnered significant interest and are now considered a pressing requirement (Tatnall, 2023). The exponential expansion of knowledge and the dynamic transformation of various elements of life have created a rich domain for the study, investment, and development of the knowledge economy (Tapalova, & Zhiyenbayeva, 2022)

Artificial intelligence applications are expected to be a crucial aspect of educational technology in the next two decades (Yang, Ogata, Matsui, & Chen, 2021). These applications, which include tools, services, and software based on artificial intelligence, have great potential and capabilities in various educational areas such as personal learning and motivating female students in secondary schools within the Green Line (Su, Zhong, & Ng, 2022).

The integration of artificial intelligence in education will greatly enhance the educational process and bring (Benvenuti, M., Cangelosi, A., Weinberger, A., Mazzoni, Benassi, Barbaresi, & Orsoni, 2023).

The "artificial intelligence family" encompasses a range of applications and technology that can be utilized in the scientific and educational domains (Tapalova, & Zhiyenbayeva, 2022). The key domains in which artificial intelligence can be applied are as follows: - Robotics Applications, such as visual perception, intelligent agents, and neural networks. Applications of natural interfaces encompass many technologies such as natural languages, speech recognition, and virtual reality (Lama 2023). Cognitive science applications encompass the utilization of expert systems, algorithms, and learning systems (Tatnall, 2023).

Given the information provided, numerous applications of artificial intelligence have surpassed expectations in their effectiveness and innovation (Blagorazumnaya, & Israeli (2023). These ongoing and successful efforts to incorporate intelligent systems and applications in the education sector have resulted in significant contributions and benefits for both educators and students (Jayousi, 2023) Artificial intelligence has the potential to enhance the educational process by providing faster, smarter, and more accurate methods (Seo, Tang, Roll, Fels, & Yoon, 2021). By investing in these capabilities, learners can benefit from a more efficient and effective learning environment that caters to their individual characteristics and abilities (Lee, & Lee, 2021). This can be achieved through the provision of educational techniques and tools. Appropriate for their requirements (Chiu, & Chai, 2020).

The research problem

The research problem arises from the following factors: After reviewing various studies and research on artificial intelligence applications, it is evident that there is a dearth of studies focusing on the impact of these applications on personal learning and motivation of female students in secondary schools located within the Green Line. Specifically, there is a lack of research from the perspective of teachers and in terms of providing recommendations.

Several studies, spearheaded by Al-Jayousi (2023), have consistently advocated for the imperative of broadening the utilization of artificial intelligence (AI) applications. These studies emphasize the importance of exploring novel technologies, implementing them in educational institutions, and equipping teachers with the necessary competencies to effectively integrate AI into the educational process, aligning with their specific requirements.

The Conference on Artificial Intelligence and Education, Challenges and Stakes (2019) recommended that professors and teachers be trained to work in education using artificial intelligence. They also emphasized the importance of equipping them with the necessary digital skills for academic, educational, and administrative applications of artificial intelligence. Similarly, the conference on "Educational Technology and the Industrial Revolution" (2022) made relevant recommendations.

The Egyptian Educational Computer Society advocates for the utilization of artificial intelligence in the educational system. As a result, the role of teachers has evolved in the era of

artificial intelligence. They now serve as designers of the educational environment and developers of teaching and learning processes. Given the acquisition of these new abilities by the instructor, it has become imperative to possess them. Fundamental principles for implementing these methodologies in the field of education. The use of artificial intelligence in education has garnered significant interest, particularly in its applications for personalized learning and the motivation of female students in secondary schools located along the Green Line. Given the recent advancements, the exponential increase in information, and the constant rate of change. The various dimensions of life provide ample opportunities for doing research, making investments, and contributing to the knowledge-based economy.

The Research Questions:

The research problem is united by answering the following main question:

The main question: **What is the reality of using artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers?**

The following questions arise from it:

- 1 What is the extent of the availability of skills for using artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers in terms of lesson planning - lesson implementation - lesson evaluation?**
- 2 Are there statistically significant differences at the level (0.05) regarding the degree of employing artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers, due to the variables of school gender, years of experience, and The Educational level).**

Research objectives:

The current research aims to:

- ❖ Identify the reality of using artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of female teachers.
- ❖ Revealing the presence of statistically significant differences at the level (0.05) regarding the degree of employing artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers, attributed to the variables of school gender, years of experience, and The Educational level).
- ❖ Identify the most important challenges of applying artificial intelligence in personal learning and motivating female students in secondary schools within the Green Line from the point of view of female teachers.

The significance of study:

It is possible to highlight the importance of the current research in the following points:
Theoretical importance:

- Keeping pace with contemporary trends in using the new educational system for personal learning and motivating female students in secondary schools within the Green Line
- Opening the way for researchers and specialists to become interested in artificial intelligence and try to benefit from it in...

Increasing efficiency in different areas of education.

- Future skills and improving the educational environment to ensure the achievement of these goals. 4- This research may help to conduct future research and studies based on artificial intelligence
- It helps develop new curricula for personal learning and motivate female students in secondary schools within the Green Line

Practical importance:

- Providing ways to activate the role of artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line.
- This research may contribute to providing decision-makers in the educational field and future plan makers by shedding light on the extent to which female teachers possess the skills to use artificial intelligence applications.
- Drawing the attention of officials in the Ministry of Education to the importance of teachers' possession of artificial intelligence applications in education.

Definition of Terms:

(Artificial intelligence): Reese, (2020) defines it as that field of computer science that focuses primarily on creating such kind of intelligent machines that operate and give reactions similar to humans. Signorelli, (2018) define it as the computer or machine's attempt to reach the capabilities and capabilities of the human mind, and sometimes surpass it". The researcher defines it procedurally as hardware, computer programs, and applications on smart phones and tablets that simulate the ability of the human mind, and have the ability to act, make decisions, and work in the same way that the human mind works, with the aim of benefiting from them and employing them in education in order to achieve the desired educational goals.

Skills in using artificial intelligence applications:

In the current research, what is meant is the skills possessed by secondary school teachers in using some artificial intelligence applications, such as smart content, smart systems, and robots in the educational situation of planning, teaching, evaluating, and selecting educational methods, to achieve more efficient and effective learning.

Theoretical framework and previous studies, the concept of artificial intelligence

The term artificial intelligence (AI) consists of two words: intelligence and artificial intelligence. What is meant by intelligence is the ability to understand changing and new situations or circumstances (Benvenuti, Cangelosi, Weinberger, Mazzoni, Benassi, Barbaresi, & Orsoni, 2023). That is, the ability to understand, realize, and learn modern circumstances or situations. The elements of intelligence are learning, perception, and understanding. As for the word artificial, it is linked to the verb “to create” or “to make.” The word artificial refers to all things that are formed and arise as a result of the action or activity that is carried out by it. The way of forming and creating things that are distinct from things that actually exist and that are generated and exist naturally without human intervention. Therefore, artificial intelligence in general means the intelligence that a person creates or creates in a computer or machine. On this basis, what is meant by artificial intelligence is machine science. Known as the American scientist John McCarthy 1965.

The term new or modern artificial intelligence Tatnall, (2023) means that it is the science and engineering of creating intelligent machines, especially intelligent computer programmes. It is one of the branches of computer science and its goal is to create intelligent machines. Intelligent intelligence as a concept is difficult to define precisely, and it can be considered the computational part that gives. Therefore, there is no Wisskirchen, 2017 Gunning, 2017 ability to achieve goals. There is a specific and codified concept of the term artificial intelligence, which has helped this field to grow and prosper, and to increase steadily to a large extent. However, in this regard, researchers in the field of artificial intelligence have provided many definitions, including: activity developed to make machines intelligent and intelligent, and that artificial intelligence is characterized by the quality that supports an entity to perform its function in an appropriate manner with the insight of sensing its environment.

Artificial intelligence is considered part of computer science and its goal is to simulate cognitive capabilities to replace humans in performing appropriate tasks and functions, in certain contexts that require intelligence” (Yang, Ogata, Matsui, & Chen, 2021). From the above, we can say that artificial intelligence (AI) is one of the modern computer sciences that aims to design and innovate intelligent computer systems that work to simulate the way human intelligence understands, thinks, and makes decisions. In order for these systems to do work The tasks replace the human being, and simulate his abilities and functions in a logical way (Benvenuti, M., Cangelosi, A., Weinberger, A., Mazzoni, Benassi, Barbaresi, & Orsoni, 2023).

AI goals:

The goal of artificial intelligence in general is to understand the nature of human intelligence through implementing computer applications that have the ability to imitate human behavior that is characterized by intelligence. This means the ability of computer programs to make decisions in a specific situation or solve specific issues, and these programs have the ability to find a method that follows (Seo, Tang, Roll, Fels, & Yoon, 2021).

The goals of artificial intelligence are in the following points:

A- The ability of machines to process data and information in a way that is closer to the human mind in solving problems, meaning parallel processing, where it is possible to execute a number of commands at the same time, and this is one of the closest ways to humans in solving problems (Lama 2023). Parallel Processing. B: Understanding what human intelligence is by unlocking the secrets of the brain so that we can emulate it, as the most complex organs are the human brain and the nervous system, as they work interconnected and continuously to recognize things (Chiu, & Chai, 2020). From the above, we find that the goals of artificial intelligence differ depending on the purpose of employing its techniques. They may be goals that serve the technological field, the educational field, the medical field, or the agricultural field (Tapalova, & Zhiyenbayeva, 2022).

Types of artificial intelligence:

A - Weak AI

This type is considered one of the simplest types of artificial intelligence at all, and it relies on programming in order to perform and carry out a variety of specific functions, in specific environments and within a limited scope, and the actions of narrow artificial intelligence are usually limited to the ability to show reactions to specific situations, and within specific conditions. , available in an environment, and one of those examples of this type is what IBM came up with, which is the creation of a robot called Deep Blue, which was programmed to be able to defeat the world chess champion, Garry Kasparov (Benvenuti, M., Cangelosi, A., Weinberger, A., Mazzoni, Benassi, Barbaresi, & Orsoni, 2023).

B - Strong Artificial Intelligence Strong AI

This type is characterized by its ability to collect data, analyze it, and benefit from acquired experiences. This has helped make this type capable of making a set of autonomous decisions independently. Some examples include current chatbots and the self-driving car.

C - Super AI artificial intelligence

It is considered a model of the supernatural that enables it to compete with the human mind in terms of thinking, but it is still constantly being updated and experimented with. This type attempts to comprehend human nature, and the reactions and emotions it displays, and among its characteristics is communication with others, the ability to interact, and Social relations (Tapalova, & Zhiyenbayeva, 2022).

Advantages of artificial intelligence in the field of education

By reviewing the literature related to artificial intelligence, including Ismail, 2017, Badawi (2022), Wisskir chen, 2017, and Caferra, 2011, it was possible to conclude the following advantages of artificial : **Intelligence in Education:** Artificial intelligence (AI) is transforming education by digitizing many fundamental activities. AI systems can now identify student grades and classify them within the educational system (A). This frees up teachers' time and allows for a more data-driven approach to education. But AI's impact goes far beyond

classification. AI can personalize learning experiences by adapting educational programs to individual student needs and learning styles (B). Students can receive additional support tailored to their specific weaknesses (C). AI-based software can also provide learners and teachers with valuable feedback, guiding them towards improvement (D). This allows for a more interactive and dynamic learning environment.

The role of teachers is also evolving with AI. While AI won't replace teachers, it will act as a powerful tool to enhance their capabilities. AI can help teachers find and support learners more effectively through data and information analysis (E). This allows teachers to personalize their instruction and cater to individual student needs. AI can also make trial-and-error learning less risky (G). By providing simulations and safe learning environments, AI can empower students to explore and experiment without fear of failure (Tapalova, & Zhiyenbayeva, 2022). This fosters a deeper understanding and a more engaging learning experience. The results of many previous studies have emphasized the importance of using intelligence applications artificial intelligence in achieving a number of educational process goals.

AI Applications in Education: Personalization and Beyond

The integration of artificial intelligence (AI) in education is revolutionizing the way we learn. E-learning systems that leverage AI, the internet, computers, and interactive tools are creating a fertile digital environment for fostering new and innovative learning methods. One of the most significant applications of AI in education is personalized learning (A). AI can analyze a student's responses and tailor educational materials, resources, and activities to their specific needs. Imagine computer algorithms that adjust the difficulty of lessons, suggest relevant resources, or provide immediate feedback – all based on a student's individual progress. This not only personalizes the learning experience but also frees up teachers' time, allowing them to focus on more complex areas. However, AI's impact in education extends far beyond personalization. Future applications may include:

- **Intelligent tutoring systems:** AI-powered virtual tutors can provide additional support and guidance to students, acting as a constant learning companion.
- **Automated assessment:** AI can streamline the grading process, allowing teachers to focus on providing constructive feedback.
- **Gamification:** AI can personalize learning journeys through gamified experiences, making learning more engaging and interactive.

These are just a few examples of how AI is transforming the educational landscape (Tapalova, & Zhiyenbayeva, 2022). As AI technology continues to evolve, we can expect even more innovative applications that will further personalize and enhance the learning experience for students of all ages.

Applications of Artificial Intelligence in Education: A Comprehensive Overview

Artificial intelligence (AI) is rapidly transforming the landscape of education, introducing a plethora of innovative tools and techniques that enhance and personalize the learning experience for students of all ages.

Let's delve into some of the key applications of AI in education:

1. Personalized Learning:

AI algorithms can analyze student data, including their responses, progress, and learning styles, to tailor educational content, activities, and resources to their individual needs. This personalized approach ensures that students receive optimal instruction that matches their pace and abilities, maximizing their learning potential (Chiu, & Chai, 2020).

2. Intelligent Tutoring Systems:

AI-powered tutoring systems act as virtual guides, providing students with personalized support and feedback throughout their learning journey. These systems can adapt to individual learning styles, offering explanations, answering questions, and suggesting practice problems in real-time.

3. Automated Assessment and Feedback:

AI can automate the grading process, freeing up teachers' time to focus on more meaningful interactions with students. AI-powered assessment tools can provide detailed feedback, identifying areas of strength and weakness, allowing students to target their efforts effectively.

4. Gamification:

Gamification techniques, enhanced by AI, can transform learning into an engaging and interactive experience. By incorporating game mechanics like points, badges, and leaderboards, AI can motivate students, encourage participation, and make learning more enjoyable.

5. Smart Educational Games:

AI-powered educational games are designed to promote learning through interactive and challenging activities. These games can adapt to individual skill levels, providing appropriate scaffolding and support to help students progress and achieve their learning goals (Chiu, & Chai, 2020) ...

6. Distinguish and Read Letters:

AI-based tools can assist individuals with visual impairments or reading difficulties. These tools can convert printed text or handwritten documents into digital formats, making them easier to read and access. Additionally, AI can provide text-to-speech functionality, allowing users to listen to the converted text.

7. Summarize Texts:

AI can automatically summarize lengthy texts, extracting key information and presenting it in a concise and easily understandable format (Tapalova, & Zhiyenbayeva, 2022). This can be particularly useful for students who need to quickly grasp the main points of complex articles or research papers.

8. Augmented Reality (AR):

AR overlays digital information onto the real world, creating an immersive and interactive learning experience. Students can explore virtual objects, interact with 3D models, and visualize abstract concepts through AR applications, enhancing their understanding and engagement.

9. Virtual Reality (VR):

VR creates simulated environments that students can explore and interact with, providing them with firsthand experiences that may not be possible in the real world. VR can be used for virtual field trips, historical simulations, and scientific experiments, bringing learning to life.

10. Audio Industry:

AI can convert text into high-quality audio, enabling the creation of audiobooks, e-learning materials, and accessible content for individuals with visual impairments (Chiu, & Chai, 2020). This technology can personalize the narration style and speed, further enhancing the learning experience (Blagorazumnaya, & Israeli (2023).

11. Expert Systems:

AI-powered expert systems can emulate the knowledge and decision-making abilities of human experts in specific domains (Sarker, (2022). These systems can provide guidance, answer questions, and offer solutions to complex problems, supporting both students and teachers (Lourdusamy, & Gnanaprakasam, 2023).

The integration of AI in education is still in its early stages, but the potential is immense. As AI technology continues to evolve, we can expect even more innovative applications that will revolutionize the way we teach and learn, making education more personalized, engaging, and effective for all (Tapalova, & Zhiyenbayeva, 2022).

Applications of Artificial Intelligence in Education: A Comprehensive Overview

12. Robotics:

Referring to Wang, Sang, Huang, Li, & Guo, (2023) Educational robots can be used to enhance learning in various ways:

- **As Teaching Tools:** Robots can demonstrate concepts, provide hands-on activities, and personalize instruction based on individual student needs.
- **As Learning Companions:** Robots can act as interactive companions, providing support, motivation, and feedback throughout the learning process.
- **As Learning Tools:** Students can learn about robotics itself, developing programming, engineering, and problem-solving skills.

13. Chatbots:

Based on Lakshmi, Brindha, Divya, & Shobhanali, (2022, March) AI-powered chatbots can provide students with:

- **Personalized Support:** Chatbots can answer questions, provide feedback, and offer assistance with assignments.
- **24/7 Availability:** Chatbots can be accessed anytime, anywhere, providing students with consistent support.
- **Personalized Learning:** Chatbots can adapt to individual student needs, offering tailored support and guidance.

Additional AI Applications in Education:

- **Adaptive Learning Platforms:** These platforms use AI to personalize learning paths, providing students with the right content at the right time.
- **Predictive Analytics:** AI can analyze student data to predict potential problems and provide early intervention.
- **Automated Grading and Feedback:** AI can automate grading tasks, freeing up teachers' time for more meaningful interactions with students.
- **Personalized Learning Recommendations:** AI can recommend relevant resources, activities, and courses based on individual student interests and needs.

Green line context:

The Green Line is regarded as a symbolic and political dividing line within Israel, separating regions under Israel's control prior to the 1967 war from those occupied during the conflict (Blagorazumnaya, & Israeli (2023). In this regard, public secondary schools along this corridor play a significant role in addressing the specific issues associated with its cultural and linguistic diversity (Lama, 2023). Jayousi, (2023) reports that the Green Line brings distinct problems and opportunities. School administrators must be sensitive to the varied ethnicities and cultural backgrounds of their students, guaranteeing equal access to resources and encouraging inclusive teaching approaches. Furthermore, understanding policy frameworks and government directives unique to the Green Line environment necessitates strong advocacy abilities and the ability to bridge the gap between official instructions and the lived experiences of their school communities (Hussein, 2022).

Cultural diversity is a major difficulty for these schools, as the Green Line comprises varied groups of Arabs and Jews from various cultural and religious origins (Verkuyten, Yogeewaran, & Adelman, 2019). Furthermore, linguistic issues at many levels, as Arabic and Hebrew are official languages, must be addressed efficiently (Shahin, 2024). In addition to cultural and language problems, the ongoing political situation and the Israeli-Palestinian conflict have an impact on the education environment within the Green Line, putting additional strain on teachers and school administrators (Tapalova, & Zhiyenbayeva, 2022). As a result, school

principals play an important role in increasing teacher job performance and educational quality. Their purpose is to facilitate communication amongst the school's diverse cultural and language components, as well as to provide a secure and inclusive educational environment for all (Abu Khait, 2019). They must also assist teachers in incorporating smart advancements into the educational process, give appropriate training, and promote innovation and creativity (Lee, & Lee, 2021). In light of smart advancements, contemporary smart development tools represent a significant chance to improve education inside the Green Line by creating a more dynamic and comprehensive educational environment (Abu Assab-Agbariya, 2022). In short, the work of public secondary school principals inside the Green Line is critical to improving educational quality and rising teacher job performance (Abu Khait, 2019). School administrators can help the process of accomplishing educational goals within this particular context by understanding and effectively dealing with the obstacles of cultural and linguistic diversity, as well as leveraging technological tools in novel ways (Hussein, 2022).

Empirical study:

Tedre, Toivonen, Kahila, Vartiainen, Valtonen, Jormanainen, & Pears, (2021) study Machine learning techniques have shown potential in various computing fields, leading to their inclusion in higher education and K-12 computing education. Understanding how intuition and agency are developed in machine learning systems is crucial for research. However, integrating traditional computational thinking and artificial intelligence into curricula is challenging, especially in the K-12 curriculum space. Despite the central position of machine learning and AI in modern computing, there is a lack of studies on how people learn to train, test, improve, and deploy machine learning systems. This article charts emerging trajectories in educational practice, theory, and technology related to teaching machine learning in K-12 education, situating existing work in the context of computing education and identifying differences that K-12 computing educators should consider. The article focuses on key aspects of the paradigm shift required to successfully integrate machine learning into the broader K-12 computing curricula, including abandoning the belief that rule-based programming is a central aspect of developing next-generation computational thinking.

In a study conducted by Al-Rashidi (2021), the objective was to assess the extent of digital management implemented by assistant school principals in middle schools in Kuwait. Additionally, the study aimed to identify any significant differences in the responses of the sample group based on variables such as gender, academic background, academic specialization, and years of experience. The study employed the descriptive survey approach, where an online questionnaire consisting of thirty-one items was administered to 188 assistant directors. The results indicated that the assistant directors possessed moderate proficiency in digital management and encountered significant obstacles. Based on the results, the study suggested several actions, such as giving preference to females and highlighting the variations in the level of expertise between academic and humanities specializations. It also emphasized the impact of different years of experience, favoring those with more skills. Lack of experience.

The study conducted by Abu Jaoude and Hosni (2022) aimed to determine the level of effectiveness of smart e-learning in public schools within the Madaba education system, as evaluated by instructors. The study data was collected by a questionnaire that was developed and conducted using a descriptive survey methodology. The overall number of items was 48, which were divided into four categories: parent, student, instructor, and principal. The study sample consisted of 300 male and female teachers. The results demonstrated a significant level of adoption of smart e-learning, as evidenced by the following components in the specified order: student, teacher, principal, and parent. The study revealed significant gender differences ($\alpha = 0.05$) in the amount of intelligent employment in e-learning throughout government schools in the Madaba educational zone, as perceived by instructors. Teachers' perceptions of the utilisation of smart e-learning in government schools in the Madaba region showed no significant variation ($\alpha = 0.05$) based on their years of experience or academic qualifications. The study revealed that effective supervision and administration of the Ministry of Education's implementation of e-learning in all schools across the Kingdom is crucial.

In his 2023 study, Al-Jayousi examined the utilization of virtual reality applications in Palestine's vocational education and training institutions, while also exploring the influence of school management in promoting their use. Furthermore, variations in teacher reactions were also noted. The study sample consisted of 177 teachers, and the researcher utilized the descriptive field method. Furthermore, I will be serving as an instructor at Palestine's training and vocational institutions for the entire academic year of 2021-2022. The participants were assigned to twenty-two schools through a random allocation process. In order to achieve the goals of the study, a questionnaire consisting of fourteen items was created. The study's results indicate that school administration had a moderate impact on enhancing the acceptance of virtual reality apps. Moreover, the study revealed that variables such as educational district, respondent gender, school gender, field of specialization, educational degree, and years of experience did not have a statistically significant influence on the role of school administration in promoting the adoption of virtual reality applications. The study's findings suggest that VET school principals would benefit from targeted training to enhance their utilization of virtual reality in educational instruction. The local community is required to attend meetings in order to familiarize themselves with the technical applications used at the school and to continue getting development programmes. A comprehensive examination of artificial intelligence techniques and their potential applications in the field of teacher training and professional education.

Method and Procedures

The descriptive correlational approach was used to the role of artificial intelligence applications in personalized learning and motivating female students in secondary schools within the Green Line from the point of view of female teachers, as well as the correlation between them, due to the suitability of this approach to achieve the objectives of the current study. He is interested in studying the reality or phenomenon as it exists in reality, and as an accurate description that expresses it qualitatively or quantitatively, so that it gives a numerical description that shows the amount or size of this phenomenon.

Participants and Variables of the Study

The study population consisted of all the female teachers of secondary schools within the Green Line, which numbered (3650) male and female teachers. In order to select the study sample, (1250) electronic questionnaires were distributed to female teachers by the simple random method, with a rate of approximately (30%) of the study population. Table (1) shows the distribution of the study sample according to the intermediate variables (school gender - Educational level, and years of experience).

Table 1: The sample was distributed according to the intermediate variables

Percentage	NO	Variable Levels/Categories	Variable
%17	207	Single-Gender	School Gender
%83	1043	Mixed-Gender	
%100	1250	Total	
%75	943	Bachelor and less	Educational level
%25	307	Higher Education	
%100	1250	Total	
%36	456	Less than 10 years	Years of Experience
%74	794	More than 10 years	
%100	1250	Total	

Table (1) shows that 17% (number = 207) of the study sample were Single-Gender school, and 83% (number = 1043) were Mixed-Gender school. 75% (number = 943) of bachelor's degree holders or less, and 25% (number = 307) of graduate students. 36% (n = 456) had experience of less than 10 years, and 74% (n = 794) had experience of 10 years or more.

RESULTS OF THE STUDY

A presentation of the findings of the study, which aimed to reveal The role of artificial intelligence applications in personalized learning and motivating female students in secondary schools within the Green Line from the point of view of female teachers, as follows:

The results related to the answer to the first question, which states: " What is the extent of the availability of skills for using artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers in terms of lesson planning - lesson implementation - and lesson evaluation?"

To answer this question, the arithmetic means and standard deviations of the study sample's estimates of the availability of skills for using artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers in terms of lesson planning - lesson implementation - and lesson evaluation and Table (2) shows this.

Table 2: The arithmetic means and standard deviations of the study sample's estimates for the fields of personal learning

Scale	Rank	Standard deviation	Means	Domain
Moderate	1	.92	3.56	lesson planning
Moderate	2	.88	3.53	lesson implementation
Moderate	3	.821	3.36	lesson evaluation
Moderate		.82	3.48	TOTAL

The results related to Table (2) show that the arithmetic mean of the estimates of the study sample for the fields of personalized learning and motivating combined is (3.48) and the standard deviation is (0.82) at a Moderate level, and the arithmetic means for the fields of personal learning ranged between (3.36) and (3.56) at a Moderate level, where the estimates of the field of lesson planning came in the first rank With an arithmetic mean (3.56) and a standard deviation (0.92) at a Moderate level, the estimates for the field of lesson implementation came in the second rank with an arithmetic mean (3.53) and a standard deviation (0.88) and at a Moderate level. The estimates for the field of lesson evaluation came in the second rank with an arithmetic mean (3.53) and a standard deviation (0.88) and at a Moderate level

The arithmetic means and standard deviations of the study sample's estimates on the areas of personalized learning and motivating were calculated separately, and tables 3 to 4 show this.

Domain of lesson planning:

Table (3) shows the arithmetic means and standard deviations of the study sample's estimates in the field of lesson planning.

Table 3: Arithmetic means and standard deviations of the study sample estimates in the field of lesson planning

Scale	Rank	Standard deviation	Means	Item	No
Moderate	1	1.08	3.53	Explain the course using the educational robot as a means of instruction.	
Moderate	2	.96	3.50	I aid pupils in understanding the material by using expert systems programmes.	
Moderate	2	1.04	3.50	Answer questions about the course from female students by using intelligent chatbots.	
Moderate	4	1.00	3.47	Use applications for augmented reality in well-explained course lectures.	
Moderate	5	1.03	3.44	For the course, use audio creation software to turn written text files into audio files.	
Moderate	6	1.06	3.42	I make decisions using applications of artificial intelligence.	
Moderate	7	1.10	3.39	I use apps using artificial intelligence to get fundamental information about female students.	
Moderate		.93	3.46	Total	

The results related to table (3) showed that the total arithmetic mean of the estimates of the study sample for the field of lesson planning was (3.46) and the standard deviation was (0.93) at a Moderate level, and the arithmetic means for the field of lesson planning ranged between (3.39) and (3.53) at a Moderate level, as paragraph (7) came Its text “Explain the course using the educational robot as a means of instruction.” ranked first, with an arithmetic mean (3.53) and a standard deviation (1.08), at a Moderate level, while paragraph (1) and its text “I use apps using artificial intelligence to get fundamental information about female students.” came in the last rank, with an arithmetic mean (3.39) and a standard deviation (1.10). , and at a Moderate level.

Domain of lesson implementation

Table (4) shows the arithmetic means and standard deviations of the study sample's estimates in the field of lesson implementation.

Table 4: Arithmetic means and standard deviations of the study sample estimates in the field of lesson implementation

Scale	Rank	Standard deviation	Means	Item	No
Moderate	1	.96	3.56	Use intelligent chatbots to elucidate course material.	
Moderate	2	.96	3.55	Through the use of virtual reality technologies, the students were able to interact in the course.	
Moderate	3	1.01	3.52	Play clever educational games to generate interest as you teach the subject.	
Moderate	4	.98	3.48	I prepare lessons using artificial intelligence techniques.	
Moderate	5	1.01	3.40	Encourage kids to find information on their own by using augmented reality apps.	
Moderate	6	1.02	3.35	To explain course material, use intelligent learning technologies.	
Moderate	7	1.00	3.34	Create digital courses using intelligent programmes and incorporate audio and visual elements.	
Moderate	8	1.04	3.28	Utilize apps using artificial intelligence to assist those with specific needs.	
Moderate		.89	3.43	Total	

The results related to table (4) showed that the total arithmetic mean of the study sample's estimates for the field of lesson implementation was (3.43) and the standard deviation was (0.89) at a Moderate level. "Innovates solutions to deal with problems" ranked first, with an arithmetic mean (3.56) and a standard deviation (0.96), and a Moderate level, while paragraph (8) and its text "avoids routine teaching methods" came in the last rank with an arithmetic mean (3.28) and a **standard deviation (1.04), And at a Moderate level.**

Domain of lesson evaluation, Table (5) shows the arithmetic means and standard deviations of the study sample's estimates in the field of lesson evaluation.

Table 5: Arithmetic means and standard deviations of the study sample estimates in the domain of lesson evaluation

Scale	Rank	Standard deviation	Means	Item	No
Moderate	1	1.00	3.41	Use Smart Evaluation apps to identify the strengths and weaknesses of female students in the course.	1
Moderate	2	1.02	3.36	Use expert systems programmes to create course questions with varying levels of difficulty based on student ability.	2
Moderate	3	1.07	3.30	Smart Evaluation tools will help to identify the strengths and weaknesses of female pupils in the course.	3
Moderate	4	1.05	3.24	Use sophisticated programmes to prepare multilevel tests.	4
Moderate	5	1.03	3.23	I use artificial intelligence to analyses student feedback answers.	5
Moderate	6	1.05	3.20	Integrate AI technologies to automate student grading and assessment.	6
Moderate	7	1.03	3.19	Use artificial intelligence to identify materials that students find difficult to understand.	7
Moderate	8	.94	3.14	I conduct remote tests and implement artificial intelligence-based control systems.	8
Moderate		.82	3.26	Total	

The results related to table (5) showed that the total arithmetic mean of the study sample's estimates for the field of lesson evaluation was (3.26) and the standard deviation was (0.82) at a Moderate level. Its text "Use Smart Evaluation apps to identify the strengths and weaknesses of female students in the course" ranked first, with an arithmetic mean (3.41) and a standard deviation (1.00), at a Moderate level, while paragraph (8) and its text "I conduct remote tests and implement artificial intelligence-based control systems" came in the last rank with an arithmetic mean (3.14). And a standard deviation (0.94), at a moderate level.

The results related to the answer to the second question, which stated: "Are there statistically significant differences at the level (0.05) regarding the degree of employing artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers, due to the variables of school gender, years of experience, and The Educational level,).

To answer this question, the arithmetic means and standard deviations of the study sample's estimates about the degree of employing artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line were calculated, according to the intermediate variables from the point of view of teachers, and Table (6) shows that.

Table 6: The arithmetic means and standard deviations of the study sample's estimates about personal learning and motivating female students in secondary schools within the Green Line, according to the intermediate variables.

Standard deviation	Means	Variable Levels/Categories	Variable	Domain
.84	3.15	Single-Gender	School Gender	Lesson Planning
.75	3.47	Mixed-Gender		
1.03	3.43	Bachelor and less	Educational level	
.81	3.25	Higher Education		
.87	3.26	Less than 10 years	Years of Experience	
.80	3.25	More than 10 years		
.92	3.36	Single-Gender	School Gender	Lesson Implementation
.93	3.67	Mixed-Gender		
1.21	3.55	Bachelor and less	Educational level	
.92	3.46	Higher Education		
.98	3.52	Less than 10 years	Years of Experience	
.91	3.44	More than 10 years		
.89	3.32	Single- Gender	School Gender	Lesson Evaluation
.85	3.64	Mixed-Gender		
1.08	3.53	Bachelor and less	Educational level	
.88	3.42	Higher Education		
.89	3.53	Less than 10 years	Years of Experience	
.88	3.38	More than 10 years		
.83	3.28	Single- Gender	Gender	Total
.80	3.59	Mixed- Gender		
1.06	3.50	Bachelor and less	Educational level	
.82	3.37	Higher Education		
.87	3.43	Less than 10 years	Years of Experience	
.82	3.35	More than 10 years		

The results related to table (6) showed that there are apparent differences between the arithmetic means of the study sample's estimates about the level of personal learning and motivating female students in secondary schools within the Green Line in the three domains and the totality, according to the intermediate variables. To determine the statistical significance of the differences between the arithmetic averages of the study sample's estimates about the level of personal learning and motivating female students in the three domains (linear combination), according to the intermediate variables, four-way MANOVA was used, using the Hotelling's Trace test, and the table (7) shows that.

Table 7: The results of the (Hotelling's Trace) test for the effect of the intermediate variables on the study sample's estimates on the level of personal learning and motivating female students in secondary schools within the Green Line in the three domains (linear structure)

Eta Squared	statistically significant	Degree of freedom for error	Degree free (df)	F	Multiple Test Type	Impact
.033	.035	259.000	3.000	2.903	.034	School Gender
.004	.792	259.000	3.000	.347	.004	Educational level
.022	.119	259.000	3.000	1.970	.023	Years of Experience

The results related to table (7) showed that there is a statistically significant effect of the variables of gender and job title in the estimates of the study sample about the level of personal learning and motivating female students in secondary schools within the Green Line in the three domains (linear combination), and it explained 3.3%, 4.8% of the variance in estimates. While there is no statistically significant effect of the educational qualification and experience variables in the estimates of the study sample about the level of personal learning and motivating female students in secondary schools within the Green Line in the three domains (linear combination).

To determine the statistical significance of the differences between the averages of the study sample's estimates for the areas of personal learning and motivating female students in secondary schools within the Green Line, according to the intermediate variables, the quadruple analysis of variance was used, and Table (8) shows this.

Table 8: The results of the quaternary analysis of variance for the comparison between the arithmetic means of the study sample's estimates about the level of personal learning and motivating female students in secondary schools within the Green Line in the three domains individually, according to the intermediate variables

Eta Squared	statistically significant	F	Middle square	Degree free (df)	Total Squared	Domain	Impact
.030	.005	8.111	5.163	1	5.163	Lesson Planning	School Gender
.024	.012	6.339	5.330	1	5.330	Lesson Implementation	
.028	.007	7.486	5.569	1	5.569	Lesson Evaluation	
.002	.464	.539	.343	1	.343	Lesson Planning	Educational level
.000	.821	.051	.043	1	.043	Lesson Implementation	
.000	.764	.090	.067	1	.067	Lesson Evaluation	
.001	.537	.382	.243	1	.243	Lesson Planning	Years of Experience
.006	.218	1.525	1.282	1	1.282	Lesson Implementation	
.014	.059	3.585	2.668	1	2.668	Lesson Evaluation	
.035	.002	9.394	6.989	1	6.989	Lesson Planning	Error
			.637	261	166.139	Lesson Implementation	
			.841	261	219.475	Lesson Evaluation	
			.744	261	194.181	Lesson Planning	
				266	3002.469	Lesson Planning	Total
				266	3424.469	Lesson Implementation	
				266	3335.469	Lesson Evaluation	

The results related to table (8) showed that there are statistically significant differences between the arithmetic means of the study sample's estimates about the level of personal learning and motivating female students in secondary schools within the Green Line in the three domains individually, due to the Mixed-Gender school variable. Accordingly, the School Gender variable has a statistically significant effect that explains 3%, 2.4%, and 2.8% of the variation in the estimates of Lesson Planning, Lesson Implementation, Lesson Evaluation, respectively. And there are statistically significant differences between the arithmetic means of the study sample's estimates about the personal learning and motivating female students in secondary schools within the Green Line in the three domains individually. While there are no statistically significant differences between the arithmetic means of the study sample's estimates of the study sample's estimates about the personal learning and motivating female students in secondary schools within the Green Line in the three domains individually due to the variables of educational qualification and experience. To determine the statistical significance of the differences between the arithmetic averages of the study sample's estimates about the level of personal learning and motivating female students in secondary schools within the Green Line in the three domains combined (total), according to the intermediate variables, Four-way ANOVA was used, and Table (9) shows that.

Table 9: The results of the quaternary analysis of variance for the comparison between the arithmetic means of the study sample's estimates about the level of personal learning and motivating female students in secondary schools within the Green Line in the three domains combined (total), according to the intermediate variables

statistically significant	F	Middle square	Degree free (df)	Total Squared	Domain	Impact
.030	.005	8.158	5.354	1	5.354	School Gender
.001	.660	.194	.127	1	.127	Educational level
.007	.182	1.791	1.175	1	1.175	Years of Experience
			.656	261	171.276	Error
				266	3223.416	Total

The results related to table (9) showed that there is a statistically significant difference between the two arithmetic averages of the study sample's estimates about the level of personal learning and motivating female students in secondary schools within the Green Line in the three fields combined (total), according to Accordingly, the School Gender variable, in favor of Mixed-Gender school, and explains 3% of the variance in estimates. Accordingly, the School Gender variable has a statistically significant effect that explains 3%, 2.4%, and 2.8% of the variation in the estimates of Lesson Planning, Lesson Implementation, Lesson Evaluation, respectively. There are statistically significant differences between the arithmetic means of the study sample's estimates about the personal learning and motivating female students in secondary schools within the Green Line in the three domains individually. The results also showed that there were no statistically significant differences in the estimates of the study sample about the level of personal learning and motivating female students in secondary schools within the Green Line due to the impact of the educational qualification and experience variables.

❖ Discussion of the Results and Recommendations

Discussing the results related to answering the first question: "What is the extent of the availability of skills for using artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers in terms of lesson planning - lesson implementation - lesson evaluation?"

To answer this question, arithmetic means, standard deviations, and rankings were calculated for the study sample's estimates of the level of personal learning and motivating female students in secondary schools within the Green Line.

The results showed that all domains came with a moderate degree, where the estimates for the field of Lesson Planning came in first place with a medium degree, and the estimates for the field of Lesson Implementation came in second place with a medium degree, and the estimates for the field of Lesson Evaluation came in third place with a medium degree, and the arithmetic average of the estimates of the study sample for the fields of personal learning and motivating female students combined was a degree Medium.

The researcher ascribes these findings to the influence of the school and cultural milieu, which plays a substantial role in shaping the utilisation and valuation of technology. Preferences and needs of students and teachers vary throughout different high schools and locations. The efficacy and aptitude of teachers to achieve personalized learning and encourage pupils are influenced by their proficiency and expertise in utilising artificial intelligence technologies. Furthermore, the presence of resources and support is not the only determining factor for the successful implementation of artificial intelligence applications in personal learning. The availability of technology and suitable technical and administrative assistance also play a crucial role. The researcher ascribes this phenomenon to the fact that certain teachers possess knowledge and expertise in utilising intelligent educational games and augmented reality technology when delivering lectures. While some individuals lack this information, it is necessary to provide training to teachers in order to equip them with these skills.

Beliefs and attitudes significantly influence instructors' assessment of artificial intelligence applications in personalised learning and the motivation of female pupils in secondary schools, according to the study. They influence the inclination of instructors to utilise and value artificial intelligence applications in the context of technology and education. The researcher suggests that schools may encounter technological or organisational obstacles that impede the implementation of artificial intelligence in personalised learning, such as issues with Internet connectivity or constraints imposed by the educational system.

The researcher ascribes this outcome to the correlation between the capacity to modify one's cognitive state through altering the circumstances, and the presence of varied or distinct ideas held by the innovative individual. This correlation may have developed into a learned proficiency for numerous educators, owing to advancements in technology, the proliferation of computer science, and the convenience of accessing information via the Internet. Additionally, these innovations facilitated teachers in implementing a wider range of innovative techniques, departing from conventional indoctrination-based approaches, and deviating from inherited

patterns in delivering knowledge and presenting study materials. Nevertheless, the existence of certain veteran educators, particularly those who continue to employ conventional approaches, particularly those that they have personally experimented with. Furthermore, their disinterest in contemporary technical methods significantly impacts the accuracy of resilience field estimations, resulting in a moderate level of certainty.

The study relates the field of originality being in last position to the duties that instructors are required to do, such as finishing courses and exams. These tasks may cause teachers to rely on old approaches that have been proven successful, and avoid implementing new ideas.

This finding aligns with the findings of Al-Shadaifat's (2020) study, which demonstrated a moderate impact of artificial intelligence applications on personal learning and motivation among female students. Similarly, Al-Anazi's (2018) study revealed a moderate level of influence of artificial intelligence applications on personal learning and motivation among female students in Al-Kharj Governorate. It was subject to change. This finding is consistent with the research conducted by Al-Harr (2022), Al-Khatib (2021), Karakoz and Polat (2020), and Al-Sarayrah and Abu Hamid (2016), all of which demonstrated that there were mean scores on the instrument as a whole.

Discussing the results related to the answer to the second question: Are there statistically significant differences at the level (0.05) regarding the degree of employing artificial intelligence applications in personal learning and motivating female students in secondary schools within the Green Line from the point of view of teachers, due to the variables of school gender, years of experience, and The Educational level)?

The results related to this question showed that there was a statistically significant difference between the two arithmetic averages of the study sample's estimates of the role of artificial intelligence applications in personalized learning and motivating female students in secondary schools within the Green Line from the point of view of female teachers

The researcher states that there are several reasons that may lead to an increase in the interest of female teachers in mixed-Gender schools in the areas of artificial intelligence applications in personal learning and motivating female students compared to teachers in single-Gender schools, including that there is a greater exchange of ideas and experiences between male and female teachers, which can enhance interest in technology and exchange of knowledge about Artificial intelligence applications.

In mixed-Gender schools, teachers are exposed to diverse challenges to meet the needs of students of different nationalities and backgrounds, making them look for diverse and innovative educational tools such as artificial intelligence applications.

The researcher adds that female teachers in mixed-Gender schools are more open and oriented towards technological development and the use of technology in education in general, which encourages them to explore and use artificial intelligence applications. Mixed-Gender schools provide various educational resources and tools, including artificial intelligence applications, which makes it easier for female teachers.

Learn about them and use them in the classroom. The researcher states that the diversity of teaching and learning methods in mixed-Gender schools leads to enriching the learning experience and enhancing the search for motivational and personal methods that suit the needs of female students, and that The results related to this question showed that there are no statistically significant differences between the arithmetic means of the study sample's estimates of the study sample's estimates about the personal learning and motivating female students in secondary schools within the Green Line in the three domains individually due to the variables of educational qualification and experience.

The researcher attributes this result to the fact that all teachers, regardless of their experience, receive the same training on using artificial intelligence applications in the classroom. All teachers are enthusiastic about using new technologies to improve students' learning. All teachers receive the same level of support from the school administration and their colleagues, regardless of their years of experience. The researcher attributes these results to the fact that the needs of female students are similar regardless of who they teach. Teachers have time to experiment with different AI applications and determine what works best.

The researcher adds that there may be some subtle differences between experienced and less experienced teachers in how they use artificial intelligence applications. For example, experienced teachers may be more confident using these apps, or they may have more creative ideas for how to use them. The researcher attributes this result to the fact that all teachers, regardless of their level of education, receive the same training on using artificial intelligence applications in the classroom.

All teachers are enthusiastic about using new technologies to improve students' learning. All teachers receive the same level of support from the school administration and their colleagues, regardless of their level of education. The researcher attributes these results to the fact that the needs of female students are similar regardless of who teaches them. Teachers have time to experiment with different AI applications and determine what works best.

This finding aligns with the findings of Al-Khawaldeh and Ali's (2015) study, which aimed to determine the impact of variables such as school gender, years of experience, and educational background on the utilisation of artificial intelligence applications for personalised learning and motivation of female students in private secondary schools in the Jordanian Capital Governorate.

This information was gathered via essential reports. In contrast to the study conducted by Abdel-Bari and Shatat (2019), which aimed to examine the influence of secondary school principals on the implementation of e-learning from the perspective of teachers in Amman Governorate, this result presents differing viewpoints based on factors such as years of experience, gender, specialisation, academic background, and authority. Supervisory.

The study's aims were accomplished by employing experiential methods and the descriptive survey methodology. This outcome aligns with the conclusions of the investigation done by Abu Jaoude and Hosni (2022), which aimed to validate the effectiveness of smart e-learning in public schools within the Madaba education system, as perceived by instructors.

A descriptive survey methodology was employed to develop and distribute a questionnaire for the purpose of gathering research data. This finding contradicts the findings of Al-Rashidi's (2021) study, which aimed to determine the extent to which assistant principals at middle schools in Kuwait utilise digital management. The study also examined if there were statistically significant differences in the responses of the participants depending on various criteria. Factors to consider include gender, years of experience, and academic major.

CONCLUSION

To conclude, it can be confidently stated that artificial intelligence applications are effective instruments for improving personalised learning and motivating female students in secondary schools. From the perspective of educators, these applications provide novel options to tailor education to the specific requirements of each student, thereby enhancing the learning experience and fostering active and participatory participation in the educational process.

Nevertheless, it is crucial to exercise prudence and maintain a harmonious equilibrium between these applications and conventional educational approaches. The primary objective should be to augment interpersonal engagement and facilitate efficient communication between educators and learners. When technology is utilised in a balanced and harmonic manner, it can effectively enhance the learning experience and academic achievement of female students in secondary schools located inside the Green Line.

Teachers perceive artificial intelligence applications in personalised learning and motivation for female students in secondary schools within the Green Line as revolutionary in education, as they offer valuable tools for teachers. Artificial Intelligence enhances instructors' productivity and engagement in their teaching and pedagogical activities by assisting with administrative tasks, enhancing resource accessibility, offering valuable educational development insights, and facilitating effective classroom management.

Additionally, it offers individualized academic assistance. In order to ensure that AI complements human education rather than replacing it, it will be imperative to meticulously incorporate AI and closely monitor ongoing educational development as technology advances. AI can enhance educators' ability to handle the intricacies of modern education, leading to a more optimal learning environment and improved student performance.

Artificial intelligence applications in personalised learning and motivation of female students in secondary schools inside the Green Line, as perceived by female teachers, have a range of impacts on the performance of secondary school teachers. Artificial intelligence (AI) has the potential to revolutionize education by improving classroom management, personalising learning, supporting administrative tasks, enriching educational resources, and enhancing educational progress.

However, there are barriers and moral concerns associated with the utilisation of AI in education that require resolution. Striking a balance between keeping the essential human elements of education and utilising AI to assist instructors is imperative. AI plays a crucial role in enhancing the quality of teaching and learning in secondary schools. To ensure that teachers

continue to be the focal point of the educational process as AI advances and becomes more integrated into education, it is imperative to implement it carefully and provide ongoing educational development.

Recommendations

The integration of AI technologies in education signifies a fundamental change with significant revolutionary consequences. AI can boost student engagement, encourage autonomy, and foster academic achievement by customizing learning experiences based on individual aptitudes, preferences, and interests. In addition, AI-powered personalized learning programmes have the ability to target the specific requirements and motivations of female students. This has the potential to reduce disparities in educational achievement between genders and enable girls to pursue academic and professional paths that have historically been dominated by males.

Practically speaking, the results of this research can be used to develop and put into action effective tactics that utilize AI in educational environments. This study aims to gather the viewpoints and knowledge of female teachers, who have valuable first-hand experience and a deep understanding of the specific details and complexities involved in their students' learning process. By doing so, the study will provide practical suggestions that are specifically tailored to the requirements and circumstances of secondary schools located within the Green Line.

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