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The Role Of Artificial Intelligence in Enhancing The Quality Of Educational and Administrative Practices in Government Schools (5-10)

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ABSTRACT
This study aimed to identify the role of artificial intelligence in enhancing the quality of educational and administrative practices in government schools (Grades 5–10) in Al Dakhiliyah Governorate, Sultanate of Oman, and to examine differences in respondents' perceptions according to the variables of gender, educational qualification, and years of service. The study employed the descriptive survey approach. A questionnaire consisting of two main dimensions was used: educational practices and administrative practices. The study sample comprised 234 teachers.
The findings indicated that the role of artificial intelligence in enhancing the quality of educational practices was at a moderate level. The domain of Professional Educational Development ranked first among the educational practice's domains, whereas the domain of Quality of Assessment and Feedback ranked last. The results also showed that the role of artificial intelligence in enhancing the quality of administrative practices was at a moderate level. The domain of Professional Ethics and Administrative Commitment ranked first, while the domain of Support for Teachers' Self-Quality and Self-Assessment ranked last.
Furthermore, the findings revealed statistically significant differences in some study domains attributable to the variables of gender, educational qualification, and years of service. Based on these findings, the study recommended strengthening the application of artificial intelligence in government schools through specialized training programs that contribute to the development of educational and administrative practices and improve the quality of school performance.

Keywords: Artificial intelligence, quality of educational practices, quality of administrative practices, government schools.

Introduction

Digital transformation has become one of the most influential forces reshaping contemporary education systems around the world, rapid advances in information and communication technology, artificial intelligence, big data, and cloud computing, have radically changed all aspects of educational processes, including teaching, learning, assessment, and management, and educational institutions are increasingly adopting digital tools to enhance the effectiveness of Teaching, improving learning outcomes, and responding to the changing needs of learners in the 21st century.
One of the most prominent changes witnessed in the education sector in light of the digital revolution in the field of teaching and teaching practices is the shift from teacher-centered educational curricula to learner-centered curricula, which encourage critical thinking, problem-solving, and self-learning, taking into account diverse learning styles and individual needs (Attia, 2013), and the digital revolution has significantly affected educational management, as digital management systems have replaced many manual and paper-based processes, which has led to Increased efficiency, accuracy, and transparency, as educational institutions now rely on digital platforms to manage student information, schedule classes, communication, monitor performance, and make decisions, enhancing organizational effectiveness and reducing administrative workload (Al-Sharif et al., 2013).

In this context, Abdul-Samad and Ahmed (2020) pointed out that pointed out that artificial intelligence has emerged as one of the most influential technologies in the modern era, which refers to systems designed to perform tasks that typically require human intelligence, including learning, inference, problem solving, perception, and language understanding. Rapid in computing, data analysis, and machine learning capabilities, AI is increasingly being integrated into educational systems to improve teaching, learning, and management processes, and understanding the concept of AI and its educational applications is critical for educators, policymakers, and researchers seeking to improve the quality and efficiency of education.

AI contributes to the process of improving the teaching and learning process, as AI-powered tutoring systems provide instant guidance, explanations, and feedback, which simulates one-on-one teaching, and this is especially useful for consolidating concepts outside of study times, and it also supports active and interactive learning, as AI-powered tools, such as adaptive learning platforms, educational games, and interactive simulations, increase student interaction and motivation, and also facilitates collaborative learning, as AI supports collaborative learning from Through smart learning platforms that recommend peer interactions, group activities, and collaborative projects based on learners' strengths and needs (Mounkoro et al., 2024).

AI also plays a pivotal role in improving the quality of assessment and feedback in education, as its systems can correct objective assessments, such as multiple-choice questions, quizzes, and structured answers, with high accuracy, and advanced AI tools can evaluate short answers and essays based on pre-defined criteria, ensuring consistency and reducing human bias in correction (Khader, 2022). As well as its ability to provide instant feedback, Students receive instant feedback on their performance, which helps them understand their mistakes, reinforce their correct answers, adjust learning strategies without delay, analyze each student's performance data individually to create personalized feedback that matches each learner's strengths and weaknesses, and enables continuous assessment by tracking students' progress over time instead of relying solely on final exams, this supports formative assessment practices, and allows teachers to monitor learning progress throughout the learning process (Al-Balkasi, 2025).

Daoud (2025) emphasizes that artificial intelligence works to address individual differences between students, as artificial intelligence systems analyze students' abilities, previous knowledge, and speed of learning to design individual learning paths, and this ensures that each student receives content and activities appropriate to their specific educational needs, and artificial intelligence works to display content in multiple formats, such as text, audio, video, and interactive simulations, and this supports different learning styles and enhances the understanding of students with diverse backgrounds, and artificial intelligence provides teachers with detailed insights About each student's performance individually, helping them design personalized support strategies.

Al-Matari et al. (2023) emphasize that artificial intelligence contributes to the professional and educational development of teachers, as it provides teachers with detailed analyses about student performance, which helps them think about their teaching strategies, and adopt more effective teaching methods, and access to smart educational resources saves them time and improves the quality of lessons, and by integrating AI tools into daily teaching practices, teachers develop their digital skills and gain hands-on experience in modern educational technologies, which Enhances their teaching efficiency

On the other hand, AI can significantly contribute administrative and personal efficiency by automating routine administrative tasks, as well as resource allocation, as AI can suggest the best way to distribute employees, materials, and technology based on data analysis, and AI tools can enhance communication efficiency and this helps school leaders focus more on strategic, educational, and student-related activities, improving both productivity and educational outcomes (Al Manji et al., 2024).

Ashraf (2024) points out that AI has become an effective tool in the process of supporting educational decision-making, as it provides accurate data analysis, predictive insights, and personalized recommendations that help administrators make informed decisions, such as identifying students at risk of underperforming or dropping out of school, monitoring the effectiveness of teaching strategies and curriculum, tracking the impact of school programs or interventions, predicting students who may need additional academic support, and suggesting individual learning paths for students based on Their strengths and weaknesses, providing strategic guidance for administrators to make policy or program decisions, and AI can also integrate data from different stakeholders – teachers, students, parents, and administrators – to provide a unified view of collaborative decision-making.

AI systems can track and analyze multiple aspects of teaching performance over time, monitor student interaction within the classroom through video or audio analysis, track student responses and learning outcomes to evaluate the effectiveness of teaching methods, identify student performance patterns that reflect teacher influence, and recommend strategies to diversify teaching styles based on student learning gaps. Artificial intelligence takes over a large part of the data collection and analysis automatically, so teachers spend less time collecting data, more time on self-reflection and improving the quality of teaching (Tarawneh and Hassan, 2025).

A teacher can also maintain professional ethics and administrative commitments while practicing AI by balancing superior AI capabilities with responsible and transparent student-centered practices, such as protecting student privacy and data security, validating their outputs, using AI in ways that enhance learning rather than replace effort, verifying AI-derived insights before working on them, avoiding over-reliance on AI, treating it as a complement, rather than a substitute, for the teacher's experience, and participating in the Training courses to responsibly integrate AI into education, and encourage students to critically evaluate AI outcomes (Adams et al., 2022).

Many researchers have conducted studies that addressed the role of artificial intelligence in the quality of educational and administrative practices in public schools, where Al Matari et al. (2023) conducted a study that aimed to determine the role of artificial intelligence in the future of education in higher education institutions, represented by Sharqiyah University in the Sultanate of Oman as a model, and the researchers used the qualitative curriculum through interviews with four teachers with technical competence and experience in employing artificial intelligence in teaching, and the results showed that artificial intelligence can be used To personalize learning, automate correction, provide virtual assistance, and analyze data, however, there has been a divergence of opinions on how to leverage AI to enhance education, and the researchers have recommended a set of recommendations, the most important of which is to emphasize the importance of employing AI in education, and to consider the ethical aspects that regulate its use.

The study of Mounkoro et al. (2024) aimed to identify the role of artificial intelligence in enabling effective classroom management, by identifying the relationships between the use of artificial intelligence tools, their effectiveness, and users' satisfaction with them, and the study used the descriptive-analytical method, and the questionnaire tool was relied upon, and the sample size reached (60) teachers, and the results showed that artificial intelligence tools are generally preferred by teachers, and that they are likely to be used in all stages of improving classroom management, and even Workflow, however, is unlikely to be related. Other variables, including the type of AI tool, and possibly how it is applied, may affect how well AI tools work.

While the study of Llangari et al. (2024) aimed to identify teaching strategies and good practices in preparatory education in Ecuador, with the aim of identifying effective curricula and areas for improvement, the study used the mixed curriculum, and the questionnaire and interview tool was relied upon, and the sample size reached (34) teachers and (467) students, and the results showed that solid teacher training and the use of innovative technologies are of utmost importance to improve the quality of education and promote an inclusive and equitable learning environment, and the study recommends the necessity of Combining traditional methods with digital methods and techniques, while respecting the diversity and learning preferences of each student, this adaptation ensures that every student receives the support needed to reach their full potential.

It is also consistent with the study by Al-Mashrafiyya and Al-Nuaimiyya indicated (2024) , which aimed to investigate the level of awareness of the use of ChatGPT, an artificial intelligence application, among social studies teachers in the Sultanate of Oman considering selected variables. The study employed the descriptive-analytical approach, using a questionnaire administered to a sample of 350 male and female teachers from government schools across the governorates of the Sultanate of Oman. The findings indicated that the participants' level of awareness regarding the use of ChatGPT was moderate. Furthermore, no statistically significant differences were found with respect to gender or subject specialization, whereas statistically significant differences were identified according to technological skills, years of experience, and participation in training courses.

The study of Al-Obaidaniyah and Al-Shanfari pointed out (2024) aimed to identify the effectiveness of the application of artificial intelligence in promoting education and its challenges according to the opinions of teachers of the first stage of basic education in the Sultanate of Oman, as well as highlighting the most important applications of artificial intelligence in education, its benefits and disadvantages, and to achieve the goal of the study, the descriptive-analytical method was followed, and the questionnaire tool was relied on, and the study sample consisted of (200) female teachers of the first cycle of basic education in schools in Dhofar Governorate, and the results of the study showed that there is a low level of effectiveness of applying female teachers The first episode of basic education for artificial intelligence in education, and as the results resulted in a high level of challenges in the application of artificial intelligence skills in enhancing education, the study recommended conducting a study on the application of artificial intelligence skills and its relationship to some demographic variables such as gender, specialization, educational qualification, and professional experience.

The study also aimed to identify the level of professional development of teachers and their teaching practices, and the important relationship between them, and the study used the descriptive-relational approach, and the questionnaire tool was relied upon, and the sample size reached (12) male and female teachers, and the results showed that the professional development of teachers was at a very high level, and that their teaching practices were also very high, and there was also an impact of teachers'

professional development on their practices, and that professional development Teachers are essential for achieving best practices, and the study recommends that regular or ongoing training courses, seminars, mentoring and mentoring should be provided to teachers.

Abu Eisha and Al-Maqoussi (2025) conducted a study that aimed to investigate a forward-looking vision for the future school in light of the practices and standards that must be available in the elements of the educational process for leaders in Jordan, and to achieve this, the researcher followed the qualitative approach, and an intentional sample consisting of (7) teachers studying at Al-Omaria School and Al-Rowad International Academy School in Jordan was selected, and interviews were conducted with them that included open-ended questions, and the data was analyzed according to qualitative data analysis methods, and the results showed that the teachers unanimously agreed that the most prominent skills The skills that should be available to teachers of the School of the Future are the ability to deal with technology, and the skill of effective communication, whether with students, parents, or the school administration, and the study recommended the need to develop teachers' digital skills in learning and teaching by subjecting them to training courses and workshops.

The study of Al-Nasiri and Al-Najjar (2025) also aimed to reveal the reality of Omani teachers' use of artificial intelligence applications, and the difficulties of employing them as educational assistants, and to achieve the research objectives, the mixed curriculum was adopted, and the study consisted of two tools, namely the questionnaire and the interview, and the study sample consisted of (385) male and female teachers in public education schools in the Sultanate of Oman, and the results revealed that the reality of teachers' use of artificial intelligence applications as an educational assistant was at an intermediate level and recommended the need to prepare schools to integrate smart technologies by providing requirements Basic auxiliary.

Finally, the study of Cheah et al. (2025) aimed to study the readiness and practices of teachers for the process of integrating artificial intelligence in primary and secondary education, and to achieve the objectives of the research, the descriptive approach was adopted, and the study tool consisted of a questionnaire, and the study sample consisted of (89) teachers in public education schools in the state of Idaho, USA, and the results revealed that teachers were generally not sufficiently prepared to integrate artificial intelligence, as only less than half of them integrated it into their practices Contrary to the common patterns of classroom integration observed with general instructional technologies, teachers in this study tended to use AI for tasks outside the classroom (such as lesson preparation, assessment, and administrative tasks) rather than using it for real-time teaching and learning

In response to the previous studies, it is noted that most of the studies share with the current study the use of the descriptive method for the study, with the exception of the study of Al-Matari et al. (2023) and the study of (Abu Aisha and Al-Maqousi, 2024) and Al-Maqousi (2025), which used the qualitative method. As well as the study of Al-Nasiri and Al-Najjar (2025) and the study of Llangari et al. (2024), which used the mixed method, and the current study shares with all previous studies that used the descriptive method in its tool, which is the questionnaire, and the current study agreed in its sample, which is teachers, except for the study of Llangari et al. (Llangari et al., 2024), in which the study sample consisted of teachers and students.

Based on the researchers' conviction that employing smart technologies in education is no longer a technical option as much as it is an educational necessity imposed by the changes of the times, and in view of the diversity of educational environments and the professional challenges faced by teachers in public schools in the Governorate of Al-Dakhiliyah, this study came in response to an urgent research need to monitor the reality of employing artificial intelligence, and reveal its role in enhancing the quality of educational and administrative practices from the perspective of teachers themselves. Through this study, the researchers seek to provide a scientific understanding Deepen these practices in their real-world context, contributing to supporting development efforts, guiding evidence-based improvement pathways, and enhancing the quality of school performance in the Omani educational environment. In this research, the researcher will prepare a questionnaire to identify the role of artificial intelligence in enhancing the quality of educational and administrative practices in public schools in Al-Dakhliyah Governorate.

Study Problem

Despite the potential benefits of artificial intelligence in enhancing the quality of educational and administrative practices, the study of Al-Obaidaniyah and Al-Shanfari (2024) recommended the necessity of preparing and training the category of teachers on the application of artificial intelligence in education, emphasizing the importance of technology and technologies in education, and employing artificial intelligence applications in education to create an attractive environment and support the teacher and learner. The process of employing artificial intelligence applications in schools faces some difficulties such as the cost and abundance of applications, lack of experience in employing them, lack of acceptance from the educational field, data integrity and lack of technical support, weak networks, and lack of availability of modern devices, so there is a need to provide technical support to teachers and school principals in this

field (Rajab and Al-Qurainiyah, 2024), as the study of Al-Nasiri and Al-Najjar (2025) recommended that there is a need to develop effective strategies and programs from In order to enhance the use of artificial intelligence applications in education and address the difficulties of employing them by continuing to enhance the readiness of school infrastructure and build capacities for various segments.
On the other hand, the study of Al-Rahbiyah and Al-Ruqaishi (2024) indicated the need to pay more attention to the employment of artificial intelligence in education in general and school administration in particular, as it provides greater opportunities for the educational institution to achieve a distinct competitive advantage, as well as to develop and provide training programs for teachers and administrators on the skills required to apply new artificial intelligence technologies in their current practices. Administrative practices related to the integration of AI are often characterized by a lack of strategic planning and support from educational authorities, so there is a need for comprehensive policies in line with national educational goals, such as Vision 2040, to facilitate the effective use of AI in schools AlManji et al., 2024), hence the problem of the study stemming from the fact that it fills a clear research gap related to the study of AI in basic education in public schools. Especially in the governorate of Al-Dakhliyah, considering the limited local studies, and in this context, the problem of the study emerges by answering the role of artificial intelligence in enhancing the quality of educational and administrative practices in public schools in the governorate of Al-Dakhliyah.

Study Questions

The present study seeks to answer the following questions:
1.What is the role of artificial intelligence in enhancing the quality of educational practices in government schools (Grades 5–10) in the Al Dakhiliyah Governorate in the Sultanate of Oman from the teachers' point of view?
2.What is the role of artificial intelligence in enhancing the quality of administrative practices in public schools in the Al Dakhiliyah Governorate in the Sultanate of Oman from the perspective of teachers?
3.Are there any statistically significant differences in the averages of the estimates of the study sample members about the role of artificial intelligence in enhancing the quality of educational and administrative practices in public schools in the governorate of Al-Dakhiliyah in the Sultanate of Oman from the teachers' point of view according to the variables (gender, qualification, years of experience)?

Objectives of the study

The present study aims to:
1.Identify the role of artificial intelligence in enhancing the quality of educational practices in public schools in the Al Dakhiliyah Governorate in the Sultanate of Oman.
2.To identify the role of artificial intelligence in enhancing the Quality of Administrative Practices in Public Schools in the Governorate of Al-Dakhiliyah in the Sultanate of Oman.
3.To examine whether there are any statistically significant differences in the averages of the estimates of the study sample members about the role of artificial intelligence in enhancing the quality of educational and administrative practices in public schools in the Governorate of Al-Dakhiliyah in the Sultanate of Oman according to variables (gender, qualification, years of experience).
The importance of studying
1.Theoretical Importance: This study contributes to enriching the educational literature related to the use of artificial intelligence in the field of improving the quality of educational and administrative practices in public schools, an area that still needs further studies in the Omani environment. In doing so, it provides a conceptual framework that links artificial intelligence and the quality of educational practices, thereby enhancing the theoretical understanding of the relationship between smart technologies and the transformation of teacher roles and school administration. It contributes to building a theoretical basis that can be used in subsequent studies that address other relevant variables, such as digital leadership, institutional innovation, or the quality of school performance.
2.Practical Significance: The results of the study benefit decision-makers at the Ministry of Education by providing scientific indicators on the reality of employing artificial intelligence in public schools, and its impact on improving educational and administrative practices, and it also helps public school administrations to develop school administrative processes, by benefiting from the applications of artificial intelligence in supporting teachers by highlighting the role of artificial intelligence in improving teaching, diversifying learning strategies, and taking into account individual differences among students. The study tool can also be used to evaluate the reality of educational and administrative practices in other schools or different educational governorates.

Study Terminology
The study included the following terms:

Artificial Intelligence: Procedurally: The set of digital applications and systems used by the teacher in his educational and administrative work, capable of analyzing data, supporting decision-making, improving teaching, evaluation, and organizing school tasks, and is measured through the responses of the sample members to the questionnaire paragraphs designated for that.
Quality of Educational Practices: Procedurally defined as the level of effectiveness of the teacher's teaching practices in the classroom, including the improvement of teaching and learning, the quality of assessment and feedback, the support of student learning and the consideration of individual differences, and educational professional development, as measured by the score obtained by the teacher in the themes of the questionnaire on educational practices.
Quality of Administrative Practices: It is procedurally defined as the level of efficiency of a teacher's administrative practices related to educational work, and includes personal administrative competence, support in educational decision-making, quality support and self-evaluation, and commitment to professional ethics, and is measured through teachers' responses to the questionnaire items related to administrative practices.

Limitations of the study
The limitations of the current study are as follows:
- Objective limitation: The study was limited to addressing the role of artificial intelligence in enhancing the quality of educational practices and administrative practices in public schools.
- Time limit: The study was applied during the academic year (2025-2026).
- Human limit: The study was limited to teachers working in government schools (Grades 5–10)
- Spatial limit: The study was applied in public schools (05-10) in the Governorate of Al-Dakhiliyah inthe Sultanate of Oman.

Method and Procedures

Study Methodology
The current study adopted the descriptive survey method in determining the role of artificial intelligence in enhancing the quality of educational and administrative practices in public schools in Al-Dakhliyah Governorate, and after this methodology, it is appropriate for the nature of the current study, where in this study, the data related to its native community is collected and analyzed and described in quantity and quality during a certain period of time.
Study population
The present study consisted of (879) teachers at public schools for grades (10-12) in Al-Dakhiliyah Governorate, which are (523) teachers and (356) teachers. (Yearbook of Educational Statistics, 2025).
Study Sample
The sample of the current study was selected by the convenience sampling, by distributing the questionnaire to public school teachers for grades (5-10) in the governorate of Al-Dakhliyah, where all schools were targeted, and (234) male and female teachers, including (135) teachers, and (99) female teachers, and the sample represents (99) from the original community of the current study, according to the Krejcie and Morgan (1970) table. The optimal sample is (269) and Table (1) shows the distribution of the responses of the study sample.

Table 1. Frequencies and Percentages of the Study Sample According to the Study Variables

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	135	57.7
	Female	99	42.3
Educational Qualification	Bachelor's Degree or Below	207	88.5
	Postgraduate Studies	27	11.5
Years of Service	Less than 10 Years	100	42.7
	10 Years or More	134	57.3
Total		234	100.0

Table (1) shows that the distribution of the study sample members was different according to the study variables, where males constituted the largest percentage of the sample by (57.7%) compared to (42.3%) for females, and it is also noted that the vast majority of the sample members are bachelor's degree holders or less with a high percentage of (88.5%), while the postgraduate category constituted a limited percentage (11.5%), which reflects the weak representation of this group in the sample. As for the years of

service, the highest percentage of employees with experience of (10 years and more) was (57.3%), compared to (42.7%) for those with less than (10 years) experience.

Study Tool

The researchers prepared a questionnaire, after referring to the theoretical literature and previous studies on the role of artificial intelligence in enhancing the quality of educational and administrative practices in public schools in the governorate of Al-Dakhiliyah in the Sultanate of Oman, and the researcher relied on previous studies in developing the questionnaire such as the study of (Al Matari et al., 2023), (Al-Mashrafiyya and Al-Nuaimiyya, 2024), (Al-Obaidaniyah and Al-Shanfari, 2024), (Sacote-Labadan & Tantiado, Accordingly, the current study tool consisted of three parts: the first part included the demographic data of the members of the current study sample (gender, educational qualification, and years of experience), and the second part consisted of two scales: the first measure was the role of artificial intelligence in enhancing the quality of educational practices in public schools, which consisted of (20) items divided into four areas. The second criterion, the role of artificial intelligence in enhancing the quality of administrative practices in public schools, consists of (20) paragraphs divided into four areas.

The five-member Likert Scale (strongly agree = 5, agree = 4, neutral = 3, disagree = 2, strongly disagree = 1) to determine the role of artificial intelligence in enhancing the quality of educational and administrative practices in government schools in the governorate of Al-Dakhliyah in the Sultanate of Oman

Authenticity of the tool:

After building the questionnaire, its validity was calculated in two ways: apparent honesty, and calculating the validity of the questionnaire paragraphs, to calculate the degree of correlation of each paragraph of the questionnaire to the axis to which it belongs, in addition to calculating the Pearson correlation coefficient, to calculate the correlation of the tool's axes with its total score.

Apparent honesty:

The questionnaire was presented in its initial form to a group of (7) arbitrators from different universities inside and outside the Sultanate of Oman in order to obtain their opinions and observations regarding the validity and appropriateness of the paragraphs, the extent of their relevance to the axes in each part, and the appropriateness of the linguistic formulation of the paragraphs. The quality of educational and administrative practices in public schools is a proposal to amend the wording of some paragraphs, namely: paragraph (1, 5, 21, 23, 24), and no paragraph has been deleted, so the questionnaire in its final form consists of two parts, the first part is the demographic data represented by (gender, qualification, years of service), and the second part consists of two scales, the first is the role of artificial intelligence in the quality of educational practices, and it has 20 paragraphs divided into areas (improving teaching and teaching, quality of assessment and feedback, and supporting learning). Students and individual differences, educational professional development) and the second scale consists of (20) items divided into areas (personal administrative competence, educational support and decision-making, quality support and teacher self-evaluation, professional ethics and administrative commitment).

The truth of the construction of the paragraphs

Constructing Truthfulness: Educational Practices

In order to extract the significance of the construct validity of the Educational Practices Scale, the correlation coefficients of each item and the total score, between each item and its relation to the field to which it belongs, and between the domains and the total score, were extracted in a survey sample from outside the study sample consisting of (30) participants, and the correlation coefficients of the paragraphs with the tool as a whole ranged between (0.67-0.94), with the range (0.73-0.96) and Table (2) between that.

Table (2): Correlation Coefficients Between the Item, the Total Score, and the Domain to Which It Belongs for the Educational Practices Scale

Item No.	Correlation with Domain	Correlation with Instrument	Item No.	Correlation with Domain	Correlation with Instrument	Item No.	Correlation with Domain	Correlation with Instrument
1	0.89**	0.85**	8	0.91**	0.87**	15	0.84**	0.86**
2	0.94**	0.94*	9	0.88**	0.81**	1	0.93*	0.93**

		*				6	*	
3	0.73**	0.67**	10	0.92**	0.84**	17	0.95**	0.91**
4	0.89**	0.91**	11	0.95**	0.89**	18	0.96**	0.91**
5	0.91**	0.93**	12	0.96**	0.92**	19	0.95**	0.88**
6	0.89**	0.88**	13	0.93**	0.91**	20	0.95**	0.88**
7	0.78**	0.80**	14	0.84**	0.82**	—	—	—

**Statistically significant at the significance level (0.05). **Statistically significant at the significance level (0.01).*

It should be noted that all correlation coefficients were statistically acceptable scores, and therefore none of these paragraphs were deleted.

The coefficient of the correlation of the domain with the total score was also extracted, and the correlation coefficients between the domains were extracted, and Table (3) shows this.

Table 3. Correlation Coefficients Among the Domains and the Total Score of the Educational Practices Scale

Domain	Improving Teaching and Learning	Quality of Assessment and Feedback	Supporting Student Learning and Individual Differences	Professional Educational Development	Educational Practices (Total Scale)
Improving Teaching and Learning	1	0.930**	0.956**	0.915**	0.966**
Quality of Assessment and Feedback	0.930**	1	0.921**	0.858**	0.960**
Supporting Student Learning and Individual Differences	0.956**	0.921**	1	0.852**	0.967**
Professional Educational Development	0.915**	0.858**	0.852**	1	0.943**
Educational Practices (Total Scale)	0.966**	0.960**	0.967**	0.943**	1

**Statistically significant at the significance level (0.05). **Statistically significant at the significance level (0.01).*

Table (3) shows that all correlation coefficients between the domains of the Educational Practices Scale

were positive and statistically significant at the significance level (0.01), and the values of the correlation coefficients reached high and statistically acceptable scores, where correlation coefficients greater than (0.30) are considered indicative of the existence of an acceptable correlation in educational and psychological studies according to common statistical criteria such as the (Cohen, 1988) criterion, which indicates that correlation values of (0.50) or more are relatively strong correlation indicators in behavioral studies. These results indicate that there is a high internal consistency between the scale domains and the overall score, which enhances the measurement having an appropriate degree of construct truthfulness.

Consistency of the Educational Practices Scale

In order to ensure the stability of the study tool, the stability coefficient was calculated by the internal consistency method according to Cronbach's alpha equation, and Table (4) shows the internal consistency coefficient according to Cronbach's alpha equation for the domains and the total score, and these values were considered appropriate for the purposes of this study.

Table 4. Cronbach's Alpha Internal Consistency Coefficients for the Domains and the Total Score of the Educational Practices Scale

Domain	Cronbach's Alpha (Internal Consistency)
Improving Teaching and Learning	0.92
Quality of Assessment and Feedback	0.92
Supporting Student Learning and Individual Differences	0.94
Professional Educational Development	0.95
Educational Practices (Total Scale)	0.96

Table (4) shows that the study tool has good degrees of stability, as the internal consistency coefficients ranged between (0.92-0.96), which indicates that it enjoys a high level of stability.

Honesty of Construction: Administrative Practices

In order to extract the significance of constructive honesty for the Administrative Practices Scale, the correlation coefficients of each item and the total score, and between each paragraph and its relation to the field to which it belongs, and between the domains together and the total score, were extracted in a survey sample from outside the study sample consisting of (30) participants, and the correlation coefficients of the paragraphs with the tool as a whole ranged between (0.71-0.91), and with the range (0.74-0.96), and Table (5) shows this.

Table 5. Correlation Coefficients Between Each Item, the Total Score, and Its Corresponding Domain for the Positive Practices Scale

Item No.	Correlation with Domain	Correlation with Instrument	Item No.	Correlation with Domain	Correlation with Instrument	Item No.	Correlation with Domain	Correlation with Instrument
1	0.88**	0.76**	8	0.92**	0.87**	15	0.75**	0.87**
2	0.80**	0.82**	9	0.74**	0.84**	16	0.92**	0.79**
3	0.96**	0.83**	10	0.94**	0.87**	17	0.79**	0.81**
4	0.95**	0.84**	11	0.89**	0.71**	18	0.95**	0.76**
5	0.96**	0.83**	12	0.91**	0.84**	19	0.95**	0.77**

6	0.87**	0.89**	13	0.96**	0.91**	20	0.79**	0.81**
7	0.93**	0.87**	14	0.91**	0.84**	—	—	—

**Statistically significant at the significance level (0.05). ** Statistically significant at the significance level (0.01).*

It should be noted that all correlation coefficients were statistically acceptable scores, and therefore none of these paragraphs were deleted. The coefficient of correlation between the domains and the total score was also extracted, and the correlation coefficients between the domains were extracted, and Table (6) shows this.

Table 6. Correlation Coefficients Among the Domains and the Total Score of the Administrative Practices Scale

Domain	Administrative Personal Competence	Support in Educational Decision-Making	Support for Teachers' Self-Quality and Self-Assessment	Professional Ethics and Administrative Commitment	Administrative Practices (Total Scale)
Administrative Personal Competence	1	0.824**	0.862**	0.607**	0.890**
Support in Educational Decision-Making	0.824**	1	0.863**	0.906**	0.978**
Support for Teachers' Self-Quality and Self-Assessment	0.862**	0.863**	1	0.712**	0.931**
Professional Ethics and Administrative Commitment	0.607**	0.906**	0.712**	1	0.882**
Administrative Practices (Total Scale)	0.890**	0.978**	0.931**	0.882**	1

**Statistically significant at the significance level (0.05). **Statistically significant at the significance level (0.01).*

Table (6) shows that all the correlation coefficients between the domains of the Administrative Practices Scale were positive and statistically significant at the significance level (0.01), and the values of the correlation coefficients reached high and statistically acceptable scores, where the correlation coefficients greater than (0.30) are considered an indication of an acceptable correlation in educational and psychological studies according to common statistical criteria such as the (Cohen, 1988) criterion, which indicates that correlation values of (0.50) or more are relatively strong correlation indicators in behavioral studies, and these results indicate that there is a high internal consistency between the domains of the scale and the total score, which enhances the enjoyment of an appropriate degree of

constructivity by the scale.

Consistency of the Managerial Practices Scale

In order to ensure the stability of the study tool, the stability coefficient was calculated by the internal consistency method according to Cronbach's alpha equation, and Table (7) shows the internal consistency coefficient according to Cronbach's alpha equation for the domains and the total score, and these values were considered appropriate for the purposes of this study.

Table 7. Cronbach's Alpha Internal Consistency Coefficients for the Domains and the Total Score of the Administrative Practices Scale

Domain	Cronbach's Alpha (Internal Consistency)
Administrative Personal Competence	0.95
Support in Educational Decision-Making	0.93
Support for Teachers' Self-Quality and Self-Assessment	0.92
Professional Ethics and Administrative Commitment	0.93
Administrative Practices (Total Scale)	0.96

Table (7) shows that the study tool has good degrees of stability, as the coefficients of internal consistency ranged between (0.92-0.96), which indicates that it enjoys a high level of stability.

Study Results and Discussion

Question 1: What is the role of artificial intelligence in enhancing the quality of educational practices in public schools in the Governorate of Al-Dakhiliyah in the Sultanate of Oman?

To answer this question, the arithmetic averages and standard deviations of the role of artificial intelligence in enhancing the quality of educational practices in public schools in the Al Dakhiliyah Governorate in the Sultanate of Oman were extracted, and Table (8) shows this.

Table 8. Means and Standard Deviations for the Role of Artificial Intelligence in Enhancing Educational Practices in Government Schools in Al Dakhiliyah Governorate, Sultanate of Oman, Ranked in Descending Order by Mean Scores

Rank	No.	Domain	Mean	Standard Deviation	Level
1	4	Professional Educational Development	3.56	0.61	Moderate
2	1	Improving Teaching and Learning	3.53	0.54	Moderate
3	2	Quality of Assessment and Feedback	3.43	0.55	Moderate
4	3	Supporting Student Learning and Individual Differences	3.43	0.58	Moderate
		Educational Practices (Total Scale)	3.49	0.54	Moderate

Table (8) shows that the level of the role of artificial intelligence in enhancing the quality of educational practices in public schools in the Governorate of Al-Dakhiliyah in the Sultanate of Oman came at an average level, with an arithmetic average of (3.49) and a standard deviation of (0.54).

As for the fields, the arithmetic averages ranged between (3.43-3.56), where the field of educational professional development came in first place with the highest arithmetic average of (3.56), a standard deviation of (0.61), and an average level, while the fields of evaluation quality, feedback, student learning support, and individual differences came in the last place, with an arithmetic average of (3.43) each, and a standard deviation of (0.55) and (0.58) respectively, with an average level.

This may be explained by the recent use of artificial intelligence and its applications in Omani schools, which may lead to the disparity in the level of digital skills and competencies among teachers, in addition to the lack of training programs dedicated to addressing the systematic use of artificial intelligence in

education, and the emergence of the field of educational professional development may be attributed to the first place. This may also be attributed to the ease of access to AI platforms and the variety of content and means they provide, which has made their use in professional development more common compared to other uses.The advent of student learning support and individual differences in the last rank may explain that some teachers do not have the necessary skills to use AI applications in assessment, which requires them to keep pace with these developments in order to benefit from the applications of AI tools in the design of assessment tools.

This finding is consistent with the study of Al-Mashrafiyya and Al-Nuaimiyah (2024), which found that the level of awareness of artificial intelligence (ChatGPT) applications among social studies teachers in the Sultanate of Oman was at a moderate level, and it is also consistent with the study of Al-Nasiri and Al-Najjar (2025), which showed that the reality of Omani teachers using artificial intelligence applications as a teaching assistant was at a medium level. This agreement can be explained by the fact that the employment of artificial intelligence in the Omani educational environment is still in the stage of gradual spread, limiting its reach to levels the results are also partially consistent with the study of Cheah et al. (2025) which indicated the limited readiness of teachers to integrate artificial intelligence in teaching, which explains the level of educational practices remaining within the intermediate level, on the other hand, this result differed with the study of Al-Obaidania and Shanfari (2024) which showed a low level of effectiveness of the application of artificial intelligence in education, and also differed with the study of Sacot-Labadan and Tantiado (2025) that found that practices The teaching was very high, and this difference may be due to the different educational environments, the nature of the sample, and the level of technical support and training available to teachers.

Question 2: What is the role of artificial intelligence in enhancing the quality of administrative practices in public schools in the Governorate of Al-Dakhiliyah in the Sultanate of Oman?

To answer this question, the arithmetic averages and standard deviations of the role of artificial intelligence in enhancing the quality of administrative practices in public schools in the Governorate of Al-Dakhiliyah in the Sultanate of Oman were extracted, and Table (9) shows this.

Table 9. Means and Standard Deviations for the Role of Artificial Intelligence in Enhancing Administrative Practices in Government Schools in Al Dakhiliyah Governorate, Sultanate of Oman, Ranked in Descending Order by Mean Scores

Rank	No.	Domain	Mean	Standard Deviation	Level
1	4	Professional Ethics and Administrative Commitment	3.64	0.53	Moderate
2	1	Administrative Personal Competence	3.56	0.49	Moderate
3	2	Support in Educational Decision-Making	3.45	0.56	Moderate
4	3	Support for Teachers' Self-Quality and Self-Assessment	3.44	0.58	Moderate
—	—	Administrative Practices (Total Scale)	3.52	0.48	Moderate

Table (9) shows that the level of the role of artificial intelligence in enhancing the quality of administrative practices in public schools in the Al Dakhiliyah Governorate in the Sultanate of Oman came at an average level, with an arithmetic average of (3.52) and a standard deviation of (0.48).

As for the fields, the arithmetic averages ranged between (3.44-3.64), where the field of professional ethics and administrative commitment came in first place with the highest arithmetic average of (3.64), a standard deviation of (0.53), and an average level, while the field of quality support and teacher self-evaluation came in the last place with an arithmetic average of (3.44), a standard deviation of (0.58), and an average level.

This finding may be attributed to the fact that some teachers do not give importance to AI applications due to the novelty of AI applications in schools and their use in teaching, the varying degree of knowledge and familiarity with digital skills among teachers, and the potential for limited specialized training that focuses on the administrative uses of AI.

The advent of the field of professional ethics and administrative commitment in the first rank may explain the keenness of teachers to use artificial intelligence applications safely and responsibly and protect digital privacy, as well as the interest of school administrations in the Sultanate of Oman in the ethical aspects of digital transformation and artificial intelligence, and the accompanying educational directives and regulatory legislation that emphasize the safe and responsible use of modern technologies, and may explain the emergence of the field of quality support and teacher self-evaluation In the last rank, the use of artificial intelligence in this field requires advanced technical skills and specialized expertise that still needs more training.

This result is consistent with the study of Mounkoro et al. (2024), which concluded that artificial intelligence tools contribute to improving classroom management and the progress of administrative and educational work, but the effectiveness of these applications and programs is affected by the methods of application and the type of tool used, and it is also consistent with the study of Al-Nasiri and Al-Najjar (2025) which showed that the application of The applications of artificial intelligence in the educational environment came at a moderate degree, and this result is also in line with the findings of the study of Cheah et al. (2025), which concluded that artificial intelligence is applied to a greater degree in administrative, planning, and evaluation work compared to teaching, and is also consistent with the study of Al-Matari et al. (2023). It stressed the importance of using artificial intelligence in data analysis and automating some educational and administrative work.

Discussion of the sex variant

Question 3: "Are there any statistically significant differences (= 0.05) in the averages of the estimates of the study sample members about the role of artificial intelligence in enhancing the quality of educational and administrative practices in public schools in the governorate of Al-Dakhiliyah in the Sultanate of Oman according to variables (gender, educational qualification, and years of experience)?

To answer this question, the arithmetic averages and standard deviations of the role of artificial intelligence in enhancing the quality of both educational and administrative practices in public schools in the governorate of Al-Dakhiliyah in the Sultanate of Oman were extracted according to the variables of gender, educational qualification, and years of experience, and to show the statistical differences between the arithmetic averages, the "Independent Samples t-test" was used.) due to the effect of gender, and years of experience due to the convergence of the number of members of the groups in each group, as for the educational qualification variable, the Mann–Whitney U test was used as one of the non-parametric tests suitable for independent groups, due to the large variation and clear imbalance in the number of members of the educational qualification groups, which makes the use of non-parametric tests more appropriate. The following tables illustrate the results of this.

First: Gender

Table 10. Means, Standard Deviations, and Independent Samples t-Test Results for the Effect of Gender on the Role of Artificial Intelligence in Enhancing the Quality of Educational and Administrative Practices in Government Schools in Al Dakhiliyah Governorate, Sultanate of Oman

Variable	Gender	n	Mean	SD	t	df	p
Improving Teaching and Learning	Male	135	3.56	0.545	0.887	232	.376

	Female	99	3.50	0.526			
Quality of Assessment and Feedback	Male	135	3.49	0.586	2.003	232	.046
	Female	99	3.35	0.478			
Supporting Student Learning and Individual Differences	Male	135	3.48	0.576	1.445	232	.150
	Female	99	3.37	0.577			
Professional Educational Development	Male	135	3.57	0.604	0.499	232	.618
	Female	99	3.53	0.609			
Educational Practices (Total Scale)	Male	135	3.53	0.559	1.260	232	.209
	Female	99	3.44	0.501			
Administrative Personal Competence	Male	135	3.65	0.472	3.603	232	<.001
	Female	99	3.42	0.492			
Support in Educational Decision-Making	Male	135	3.52	0.585	2.303	232	.022
	Female	99	3.35	0.505			
Support for Teachers' Self-Quality and Self-Assessment	Male	135	3.56	0.550	3.833	232	<.001

	Female	99	3.28	0.571			
Professional Ethics and Administrative Commitment	Male	135	3.67	0.557	0.872	232	.384
	Female	99	3.61	0.478			
Administrative Practices (Total Scale)	Male	135	3.60	0.483	2.970	232	.003
	Female	99	3.41	0.455			

Table (10) shows the following:
-There were no statistically significant differences at the level of significance (α = 0.05) attributed to the effect of gender in all areas of educational practices and in the overall score, except for the field of evaluation quality and feedback, as the results showed that there were statistically significant differences, where the value of statistical significance was (0.046), which is less than (0.05), and the differences came in favor of males whose arithmetic average reached (3.49) compared to females whose arithmetic average reached (3.35) in the axis of educational practices. This result is partially consistent with the study of Al-Mashrafiyya and Al-Nuaimiyya (2024), which did not find any statistically significant differences attributed to the gender variable in the level of awareness of artificial intelligence applications, which is consistent with the lack of differences in most areas of educational practices in the current study. The difference in some administrative respects in favor of males may be due to the different nature of administrative responsibilities or opportunities to deal directly with digital systems and technical programs within schools.
-The existence of statistically significant differences at the level of significance (α = 0.05) attributed to the effect of gender in all areas of administrative practices and in the overall score, except for the field of professional ethics and administrative commitment, where no statistically significant differences appeared, where the value of statistical significance was (0.384), which is greater than (0.05), and the differences came in the areas where statistically significant differences appeared, as well as in the total score of administrative practices, in favor of males who achieved higher arithmetic averages than females in The reason for the difference in some administrative aspects in favor of males may be due to the different nature of dealing with administrative responsibilities or the males' view of dealing with digital systems and technical programs within schools and giving them importance.

Second: Educational Qualification

Table 11. Mann–Whitney U Test Results for Differences in the Role of Artificial Intelligence in Enhancing the Quality of Educational and Administrative Practices in Government Schools in Al Dakhiliyah Governorate, Sultanate of Oman, According to Educational Qualification

Variable	Educational Qualification	n	Mean Rank	Sum of Ranks	Mean	Mann–Whitney U	Z	p
Improving Teaching and Learning	Bachelor's degree or below	207	124.15	25,699.50	3.58	1417.500	-4.400	<.001
	Postgrad	2	66.	1,795.	3.2			

	uate studies	7	50	50	0			
Quality of Assessment and Feedback	Bachelor's degree or below	207	123.37	25,537.50	3.50	1579.500	-3.747	<.001
	Postgraduate studies	27	72.50	1,957.50	2.93			
Supporting Student Learning and Individual Differences	Bachelor's degree or below	207	123.96	25,659.00	3.50	1458.000	-4.147	<.001
	Postgraduate studies	27	68.00	1,836.00	2.93			
Professional Educational Development	Bachelor's degree or below	207	123.20	25,501.50	3.63	1615.500	-4.004	<.001
	Postgraduate studies	27	73.83	1,993.50	3.00			
Educational Practices (Total Scale)	Bachelor's degree or below	207	124.15	25,699.50	3.55	1417.500	-4.200	<.001
	Postgraduate studies	27	66.50	1,795.50	3.02			
Administrative Personal Competence	Bachelor's degree or below	207	116.74	24,165.00	3.55	2637.000	-0.514	.607
	Postgraduate studies	27	123.33	3,330.00	3.60			
Support in Educational Decision-Making	Bachelor's degree or below	207	123.96	25,659.00	3.50	1458.000	-4.244	<.001
	Postgraduate	27	68.00	1,836.00	3.07			

	studies							
Support for Teachers' Self-Quality and Self-Assessment	Bachelor's degree or below	207	125.52	25,983.00	3.51	1134.000	-5.453	<.001
	Postgraduate studies	27	56.00	1,512.00	2.93			
Professional Ethics and Administrative Commitment	Bachelor's degree or below	207	125.52	25,983.00	3.70	1134.000	-5.787	<.001
	Postgraduate studies	27	56.00	1,512.00	3.20			
Administrative Practices (Total Scale)	Bachelor's degree or below	207	123.37	25,537.50	3.56	1579.500	-3.820	<.001
	Postgraduate studies	27	72.50	1,957.50	3.20			

Table (11) shows the following:

-The existence of statistically significant differences at the level of significance ($\alpha = 0.05$) attributed to the variable of scientific qualification in all areas of educational practices and in the total grade, where the statistical significance values reached (0.000) for all fields, and the differences came in favor of bachelor's degree holders and below who achieved higher arithmetic averages than postgraduate holders in all fields, as the arithmetic average of the total score of educational practices reached (3.55) for bachelor's degree holders and below, compared to (3.02) for postgraduate holders in the axis Educational practices.

-The existence of statistically significant differences at the level of significance ($\alpha = 0.05$) attributed to the variable of educational qualification in all areas of administrative practices and in the overall degree, except for the field of personal administrative competence, where no statistically significant differences appeared, where the value of statistical significance was (0.607), which is greater than (0.05). The differences in the areas in which statistically significant differences appeared, as well as in the total score of administrative practices, came in favor of holders of a bachelor's degree or less who achieved higher arithmetic averages than holders Postgraduate studies, where the average of the total score for administrative practices reached (3.56) for holders of bachelor's degrees or less, compared to (3.20) for postgraduate holders in the axis of administrative practices.

This result can be explained by the fact that holders of a bachelor's degree constitute the largest percentage of workers in the educational field, which makes them more likely to use artificial intelligence applications, as most

of them are from the youth group, which is the most used group of these applications, and the result of this study differs from the study of Llangari et all. (2024) and the study of (Abu Aisha and Al-Maqousi, 2024) and Al-Maqousi (2025), which stressed the importance of training, professional development and advanced digital skills in improving educational practices, which in theory may lead to higher levels of higher education expectations.

Third: Years of Service

Table 12. Means, Standard Deviations, and Independent Samples t-Test Results for the Effect of Years of Service on the Role of Artificial Intelligence in Enhancing the Quality of Educational and Administrative Practices in Government Schools in Al Dakhiliyah Governorate, Sultanate of Oman

Variable	Years of Service	n	Mean	SD	t	df	p
Improving Teaching and Learning	Less than 10 years	100	3.59	0.495	1.348	232	.179
	10 years or more	134	3.49	0.564			
Quality of Assessment and Feedback	Less than 10 years	100	3.55	0.451	2.786	232	.006
	10 years or more	134	3.35	0.595			
Supporting Student Learning and Individual Differences	Less than 10 years	100	3.60	0.453	4.027	232	<.001
	10 years or more	134	3.31	0.628			
Professional Educational Development	Less than 10 years	100	3.66	0.438	2.372	232	.018
	10 years or more	134	3.48	0.696			
Educational Practices (Total Scale)	Less than 10 years	100	3.60	0.431	2.791	232	.006
	10 years or more	134	3.41	0.590			
Administrative Personal Competence	Less than 10 years	100	3.55	0.485	-0.118	232	.906
	10 years or more	134	3.56	0.500			
Support in Educational Decision-Making	Less than 10 years	100	3.48	0.557	0.740	232	.460
	10 years or more	134	3.43	0.559			
Support for Teachers' Self-Quality and Self-Assessment	Less than 10 years	100	3.49	0.543	1.147	232	.253

	10 years or more	134	3.40	0.597			
Professional Ethics and Administrative Commitment	Less than 10 years	100	3.80	0.390	4.252	232	<.001
	10 years or more	134	3.52	0.578			
Administrative Practices (Total Scale)	Less than 10 years	100	3.58	0.442	1.657	232	.099
	10 years or more	134	3.48	0.502			

Table (12) shows the following:
-The existence of statistically significant differences at the level of significance (α = 0.05) attributed to the effect of years of service in all areas of educational practices and in the overall grade, except for the field of teaching and learning improvement, where no statistically significant differences appeared, where the value of statistical significance was (0.179), which is greater than (0.05). The differences came in the areas where statistically significant differences appeared, as well as in the total degree of educational practices, in favor of employees with less than 10 years of service, as it reached the arithmetic average of their total score is (3.60) compared to (3.41) for employees with years of service (10 years or more) in the Educational Practices axis.
-There were no statistically significant differences at the level of significance (α = 0.05) attributed to the impact of years of service in all areas of administrative practices and at the overall level, except for the field of professional ethics and administrative commitment, as the results showed that there were statistically significant differences in this field, where the value of statistical significance reached (0.000), and the differences came in favor of workers whose years of service were less than (10) years, as their arithmetic average reached (3.80) compared to (3.52) for workers whose years of service reached (10 years and more)
This can be explained by the fact that teachers with less than ten years of service are young men and women who are more open to modern digital technologies and more willing to experiment with AI tools and employ them in educational practices compared to those with long experience who are accustomed to more stable traditional work patterns.
This result is consistent with the study of Al-Mashrafiyya and Al-Nuaimiyya (2024), which found statistically significant differences according to the variable of years of experience, and also corresponds to the general trend indicated by the study of Cheah et al. (2025) regarding the association between the integration of artificial intelligence and the extent to which teachers are ready to deal with modern technologies.

Recommendations
Based on the results of the study, it recommends the following:
1. The Ministry of Education implements training programs for teachers in employing artificial intelligence in assessment, feedback, and analysis of student outcomes.
2.The need for the General Directorate of Information Technology to develop educational artificial intelligence applications that consider individual differences and provide therapeutic and enrichment programs for students.
3. School administrations offer professional learning workshops and communities for teachers to share experiences in employing AI in teaching and learning.
Proposals
Based on the results of the study, the following future studies can be proposed:
4.The Effectiveness of a Training Program Based on Artificial Intelligence Applications in Developing E-Assessment Skills among Public School Teachers in the Sultanate of Oman.

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Appendices A: Means and Standard Deviations for the Role of Artificial Intelligence in

Enhancing the Quality of Educational Practices in Government Schools in Al Dakhiliyah Governorate, Sultanate of Oman

No.	Item	Mean	Standard Deviation
Dimension 1: Improving Teaching and Learning			
1	I use artificial intelligence to improve the quality of instruction and simplify academic concepts for students.	3.54	0.58
2	I use artificial intelligence to design more interactive learning activities during class.	3.31	0.82
3	Artificial intelligence contributes to improving the efficiency of classroom time management.	3.66	0.48
4	I benefit from artificial intelligence in diversifying teaching methods to align with lesson objectives.	3.58	0.57
5	Artificial intelligence helps me improve the effectiveness of learning in the classroom.	3.58	0.58
Dimension 2: Quality of Assessment and Feedback			
6	I use artificial intelligence to develop assessment tools that align with learning outcomes.	3.27	0.66
7	Artificial intelligence contributes to analyzing students' results and identifying their strengths and weaknesses.	3.50	0.58
8	Artificial intelligence helps me provide clear and timely feedback to students.	3.58	0.57
9	I use artificial intelligence to support continuous assessment during instruction.	3.43	0.58
10	Artificial intelligence improves the accuracy and fairness of student performance assessment.	3.38	0.69
Dimension 3: Supporting Student Learning and Individual Differences			
11	Artificial intelligence helps me address individual differences among students in the classroom.	3.27	0.66
12	I use artificial intelligence to provide appropriate	3.38	0.79

	educational support for struggling students.		
13	Artificial intelligence contributes to developing enrichment activities for high-achieving students.	3.50	0.64
14	Artificial intelligence supports increasing students' motivation toward learning.	3.62	0.56
15	I benefit from artificial intelligence in monitoring students' learning progress on a regular basis.	3.39	0.69
Dimension 4: Professional Educational Development			
16	I use artificial intelligence to develop my teaching skills through self-directed learning.	3.62	0.57
17	Artificial intelligence contributes to improving the quality of my educational practices.	3.58	0.63
18	I benefit from artificial intelligence in exploring modern teaching strategies.	3.58	0.64
19	Artificial intelligence helps me exchange educational experiences with fellow teachers.	3.50	0.64
20	Artificial intelligence supports my commitment to continuous improvement in my teaching practice.	3.50	0.64

Appendix B. Means and Standard Deviations for the Role of Artificial Intelligence in Enhancing the Quality of Administrative Practices in Government Schools in Al Dakhiliyah Governorate, Sultanate of Oman

No.	Item	Mean	Standard Deviation
Dimension 1: Administrative Personal Competence			
1	Artificial intelligence contributes to organizing my administrative tasks related to teaching.	3.62	0.56
2	I use artificial intelligence to reduce the time and effort required for daily administrative tasks.	3.66	0.48
3	Artificial intelligence helps me prepare classroom reports and records accurately.	3.46	0.75
4	Artificial intelligence improves my management of students' academic records.	3.43	0.75
5	Artificial intelligence contributes to enhancing my administrative competence as a teacher.	3.62	0.50
Dimension 2: Support in Educational Decision-			

Making			
6	Artificial intelligence helps me make educational decisions based on students' data.	3.35	0.69
7	I use artificial intelligence to analyze students' performance and make appropriate instructional decisions.	3.50	0.57
8	Artificial intelligence contributes to selecting the most appropriate instructional strategies for students.	3.58	0.58
9	Artificial intelligence helps me determine priorities for instructional work in the classroom.	3.43	0.75
10	Artificial intelligence enhances the quality of my decisions related to teaching and assessment.	3.38	0.69
Dimension 3: Support for Teachers' Self-Quality and Self-Assessment			
11	I use artificial intelligence to evaluate my teaching performance through self-assessment.	3.35	0.78
12	Artificial intelligence contributes to identifying the strengths of my educational practices.	3.47	0.64
13	Artificial intelligence helps me identify areas for improvement in my work.	3.38	0.69
14	I benefit from artificial intelligence in monitoring my professional progress on a regular basis.	3.47	0.58
15	Artificial intelligence contributes to improving the overall quality of my educational performance.	3.54	0.57
Dimension 4: Professional Ethics and Administrative Commitment			
16	I ensure that I use artificial intelligence responsibly to support the educational process.	3.54	0.70
17	I adhere to ethical principles when using artificial intelligence in my educational work.	3.73	0.45
18	I verify the accuracy and credibility of artificial intelligence outputs before using them.	3.62	0.69
19	I safeguard students' data privacy when using artificial intelligence applications.	3.58	0.69
20	I use artificial intelligence in a manner that is consistent with the professional values of the teaching profession.	3.74	0.45