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# Reflective Practices and Level of Technological Acceptance and their Relationship to Developing Teaching Performance of Arabic Language Teachers in The Light of Digital Transformation

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Abstract: The current research aimed at identifying the reflective practices of Arabic language teachers in the light of digital transformation and estimating the level of technological acceptance and their relationship to developing the teaching performance of Arabic language teachers. This research adopted the analytical descriptive approach. The procedures followed by the two researchers to apply this approach are represented in using the Reflective Practice Scale for Arabic language teachers in the light of digital transformation, and the Technological Acceptance Scale for Arabic language teachers, as well as using the teaching Performance Development Observation Card To identify the relationship of each of the reflective practices and the level of technological acceptance to the development of the teaching performance of Arabic language teachers in the light of the digital transformation, the current research was delimited to selecting a simple random sample of Arabic language teachers (412) who represent 30% of the research group in the city of Dammam. The research concluded that reflective practices apply to Arabic language teachers to a (large) degree. The most reflective practice that applies to Arabic language teachers in the light of digital transformation is "to ensure that the information is correct before transmitting it to students". The level of technological acceptance of Arabic language teachers is (medium). The most technologically acceptable level for Arabic language teachers is their confidence in using electronic platforms. There is a positive, statistically significant correlation at the significance level (0.05) of the reflective practices in developing the teaching performance of Arabic language teachers in the light of digital transformation. The most correlative relationship was between reflective practices and evaluation, and the least relationship was between reflective practices and development. There was a positive, statistically significant correlation at the significance level (0.05) of technological acceptance in developing the teaching performance of Arabic language teachers in the light of digital transformation. The most correlative relationship was between the level of technological acceptance and evaluation, while the least relationship was between the level of technological acceptance and development.

Keywords: Reflective practices- technological acceptance- teaching performance- digital transformation.

#### 1 Introduction

With the rapid development in the world of technology and the attitude of governments and institutions towards digitization in all their services, the Kingdom of Saudi Arabia has been keen to adopt the concept of government digital transformation by replacing traditional processes with digital ones. The government has developed five-year plans and strategies to ensure the achievement of its goals with quality and efficiency, as it aims to reach an integrated digital government that facilitates all services for beneficiaries.

The Kingdom of Saudi Arabia had received the Government Leadership Award granted by the International Federation of Mobile Telecommunications Sector, which aims to adopt the best policies and regulations that support the digital

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economy, stimulate investment and innovation, and contribute to achieving sustainable development goals. Developing the teaching performance of teachers is one of the most important areas of sustainable development. Within this framework, the Kingdom of Saudi Arabia launched a project of optimal investment programs for educational cadres in 1443 AH, which achieves the goals of the Kingdom's vision of 2030, and that emphasizes the importance of improvement and development in teacher preparation policies, and the development of human capabilities to suit the renewable and accelerating needs at the local and global levels.

Reflective practice is the ideal entrance to teacher preparation, as it puts teachers at the center of developing themselves. Practitioners may be able to develop and evaluate their practices, and it is a means of self-awareness that achieves finite professional growth.

The current research is concerned with studying reflective practices and the level of technological acceptance and their relationship to developing the teaching performance of Arabic language teachers.

The feeling of the problem stemmed from what was recommended by many studies such as the study of Al-Yafei and Al-Nazir (2022) which recommended the need to pay attention to publishing the culture of reflective practice among teachers and training them to implement it; as it affects teachers' professional development and improves their understanding of their teaching practices. It also recommended conducting more scientific studies on reflective practices in different disciplines and academic levels. In another study Al-Omari et al. (2018) recommended the importance of conducting more research studies in the field of reflective teaching. In addition, Shawky (2022) stressed the need to study students' and teachers' acceptance of the use of technology and technological innovations in their learning, in addition to what was emphasized by the International Conference on Education (2022) entitled "Education in the face of crises: opportunities and challenges" and discussed educational policies in the light of digital transformation and innovation in education and e-learning.

Studies, conducted on the subject of reflective practices and their relationship to the development of teaching performance, indicate the importance of studying the relationship in the light of digital transformation.

The research problem can be stated in the following questions:

- 1) What are the reflective practices of Arabic language teachers in the light of digital transformation?
- 2) What is the level of technological acceptance of Arabic language teachers in the light of digital transformation?
- 3) What is the relationship between reflective practices and developing the teaching performance of Arabic language teachers in the light of digital transformation?
- 4) What is the relationship between the level of technological acceptance and developing the teaching performance of Arabic language teachers in the light of digital transformation?

#### Research aim

The current research aims at identifying the reflective practices of Arabic language teachers in the light of digital transformation, in addition to estimating their level of technological acceptance and its relationship to developing the teaching performance of those teachers.

# **Research Significance**

The importance of this research can be stated in the following considerations:

- 1- Responding, through the research data, to recent trends to develop the teaching performance of teachers and activate professional reflective practices.
- 2- Emphasizing the importance of involving reflective teaching within the programs of preparing prospective teachers.
- 3- Knowing the effect of reflective practices and the level of technological acceptance in developing the teaching performance of Arabic language teachers

#### Research delimits

The current research is delimited to identifying the reflective practices and the level of technological acceptance and their relationship to developing the teaching performance of Arabic language male and female teachers in Dammam during the second semester of the academic year 1443 AH.



# **Operational definitions of terms**

Reflective practices: the two researchers operationally define them as the activities that Arabic language teachers practice in their teaching tasks, their professional development, and their professional practice in general.

Technological acceptance: it is defined as those behavioral factors that affect the extent of Arabic language teachers' satisfaction with technological innovations and their relationship to reflective practices and the development of their professional performance.

## 2 Theoretical Frameworks

# First: The reflective practices

# The concept of reflective practices

The first thing that comes to mind, when the term reflective practice is mentioned, is a mental image such as the reflection of an image in the mirror, or a reflection of a picturesque landscape on the water of a stagnant lake, or, at its best, it may be a mental process of retrieving or recalling certain events that occurred in the past for the individual related to a specific situation.

However, in the educational field, specifically with regard to educational rehabilitation and development, the term refection has a special connotation related to a specific stage of the teacher's personal professional growth. It includes a set of complex and organized mental processes that the teacher practices for knowledge and analyzes of a specific teaching practice in a specific teaching context in order to reach a deep understanding of the reality of this practice in particular and develop a creation of a new conception of how this practice could be developed in the future (Kolb, 1984; Budd et al., 1985). Accordingly, the process of reflection in educational practice, specifically teaching, is seen not as an abstract reflection, but rather as a professional thinking process that is practiced in the form of an intentional procedure practiced in an orderly manner through certain stages, starting with participation in the context of practice, passing through the stage of partial change during this practice, leading to the development of practice after completing the reflection process (Al-Wadi, 2018). Therefore, it is necessary to improve the educational process to link it to reflective thinking, as it develops and enhances the critical thinking ability of both teachers during their professional development, and students through their learning activities. (Al Rayyan, 2014)

## Reflective teaching skills

Schon (1989) suggested three reflective teaching stages that the teacher may consider:

- Reflection on planning for teaching: in this stage, the teacher follows mental methods through which he
  becomes aware of the activities to be organized, the educational behaviors desired to be followed, and the
  outcomes to be achieved.
- Reflection during the implementation of teaching: in this stage, the teacher follows mental methods through
  which he becomes aware of the reality of his educational practices, and these results in making appropriate
  decisions.
- Reflection on teaching evaluation: at this stage, the teacher follows mental methods through which he becomes aware of the results of his educational behaviors which results in self-criticism of these behaviors that help him develop better perceptions.
- Several studies have shown the importance of reflective practices and their role in the teacher's professional development process, such as Said's (2016), the study of Al-Harbi (2018), the study of Al-Khalaf (2020), and the study of Al-Yafie; Al-Nazir (2022).



# Importance of reflective teaching

Reflective practice leads to a change in the teaching style of teachers, which in turn leads to a better level of performance by clarifying, observing, and analyzing the convictions and beliefs that teachers hold about their professional roles and responsibilities since reflective teaching provide a base for developing individuals mentally. This requires teachers and researchers present whatever related to the nature of thinking and learning to students to improve their cognitive abilities. Atari et al (2005) clarified the importance of reflective teaching as:

it increases thinking about improving education and knowing new ideas.

it increases awareness of students' needs, educational capabilities, and materials.

it reinforces teachers' positive beliefs about teaching, as well as toward their own self-esteem.

it enriches orientation towards problem solving.

# Reflective teaching activities

- 1) Group discussions
- 2) Attending training programs
- 3) Peer observation
- 4) Writing notes
- 5) Teaching recording and self-observation.

#### Second: technological acceptance

The rapid changes and successive technological developments have casted their shadow on all areas of life in general and the educational process in particular, and the acceptance of teachers became necessary to absorb and benefit from this technology.

#### The concept of technological acceptance

Teo (2009) defined technology acceptance as the user's willingness to employ technology in tasks that are designed in this way in order to support it.

Also Al-Fraih and Al-Kandari (2014) defined technological acceptance as the extent to which the user accepts any new technology through an assigned tool with specific factors included in it, through which the extent to which that technology is used in the future is judged.

The operational definition of technological acceptance is those behavioral factors that affect the degree of satisfaction of Arabic language teachers with technological innovations and their relationship to reflective practices and the development of their professional performance.

Technological acceptance expresses the psychological state of the individual, which indicates the degree of voluntary or compulsory use of technology. Many studies have addressed the level of technological acceptance and its importance for teachers and learners. (Shawki, 2022)

#### **Technology Acceptance Models**

Shaimaa Muhammad (2018) indicated that there are many proposed models to predict the use of technology in individuals, and many models have emerged to explain the dynamics of technology acceptance such as Dillon and MacLean model (1992), Sidon model (1997), and Dilum and McLean modified model (2003), TAM technology acceptance model that will be discussed in some detail.

## **Components of the Acceptance Model (TAM)**

- 1- Expected ease of use which is defined as the degree to which a person believes that his use of a particular system will be with minimal effort.
- 2- The expected benefit, which is defined as the degree of a person's belief that using a particular system will improve his job performance, or expectations, and that his use of technology will benefit in improving and developing the performance of his tasks.



- 3- Attitude towards use.
- 4- Real use.

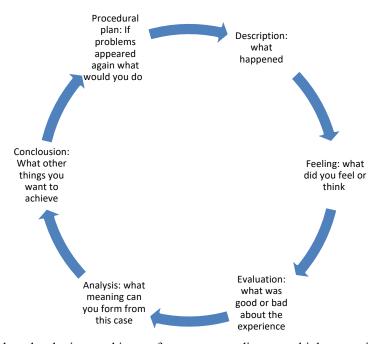
Previous studies indicate the relationship between the technological acceptance variable and technological innovations in general and educational innovations in particular. The current research seeks to determine the level of technological acceptance and its relationship to the reflective practices of Arabic language teachers in the light of digital transformation, and this is what distinguishes the current research from other researches.

# Third: Developing teaching performance of Arabic language teachers:

There is a strong relationship between professional development and reflective practices; good professional development must include the development and activation of reflective practices. Shulman and Shulman (2004) stressed that the occurrence of professional development for teachers requires the availability of several characteristics: willingness, desire, ability, and reflective practice. Accordingly, the reflective curve in professional development is considered a new direction because it helps teachers to bridge the gap between theory and practice.

A number of studies have indicated that the concept of reflective practice helps teachers before and during service to clarify their ideas about their own teaching practices. Many models of reflective thinking have appeared; among them was Gibbs's reflective circle model (Gibbs, 1988).

#### Gibbs's reflective circle model (Gibbs, 1988)



Many studies have focused on developing teaching performance according to multiple strategies. Among them was the study of Al-Shammari (2019) which aimed at developing the teaching performance of Arabic language teachers at the secondary stage in the light of the strategic teaching approach. It applied the descriptive analytical approach to achieve its goals where a list of teaching performance standards was built in the light of the foundations and principles of strategic teaching. Also the study of Al-Shaya and Baabdallah (2019) that aimed at enhancing the professional development of physics teachers in the secondary stage. This was also confirmed by the study of Abdul-Sami' Salem and Zaidan (2022) which studied the educational practices of reflective dialogue, in addition to recognizing their role in improving the teaching performance of faculty members in Faculties of Education, through an analytical vision of the concept and literature of educational practices of reflective dialogue in terms of principles, philosophy, and objectives on which reflective dialogue is based.



#### **Fourth: Digital Transformation**

Saudi Arabia has a strong digital infrastructure that has accelerated its digital transformation. This structure enabled the Kingdom to face crises that disrupted all services in the public and private sectors, and also contributed to the continuity of business and educational processes and all the requirements of the daily life of citizens and residents in the light of the Corona pandemic (Covid-19). The Kingdom has been ranked among the top 10 developed countries in the world due to its robust digital infrastructure.

The Kingdom's achievement of the title of "the most advanced country" among the twenty countries in digital competitiveness was due to the comprehensive government support for digital transformation in the Kingdom as part of Vision 2030, and the Kingdom has worked on developing a national strategy for digital transformation in three stages to reach the concept of smart government, which is the plan of 2020-2024.

Many studies have dealt with digital transformation in university and pre-university education in the light of crises. Among them were: the study of Al-Mutrif (2020) which aimed at investigating the possibility of digital transformation in public and private universities in the Kingdom of Saudi Arabia, in addition to monitoring the reality of digital transformation between them in the light of global crises, and the study of Halim (2021) which aimed at identifying the digital transformation in the Kingdom of Saudi Arabia and the extent of its readiness to carry out the process of distance education and confront the Corona pandemic and the future role of this transformation and its importance in improving and developing the performance of universities. The study adopted the descriptive and analytical method and it reached a number of results, the most important of which was that digital transformation and e-learning have become an important and basic requirement, and that attention to the technological infrastructure and the work to update it have become one of the important issues that everyone must take into account during the next stage.

The study stressed on a number of important recommendations for decision-makers including: adopting continuous training projects for faculty members on the use of modern technology, overcoming the challenges facing the use of elearning such as the poor level of Internet networks, the poor level of students in dealing with modern technologies, and the absence of their motivation and response to this type of education from by supporting the digital culture in society. It also recommended providing the necessary funds and working towards increasing investments in technological infrastructure and its continuous updating, establishing partnerships and agreements with advanced universities to provide training and developing e-learning tools and applications, linking Saudi universities to a unified communication network and linking universities to a network of communication among them to exchange knowledge, expertise, and information to contribute to the development of the members of the teaching staff and to see all that is new and the latest technology in these universities.

The great increase in informatics, scientific and technological progress has led to a digital knowledge revolution that has casted a shadow over all parts of the educational system, especially the teacher, who is facing a great challenge. How can he face these digital transformations in the educational process? How to transform from a traditional teacher to a digital teacher? How does he address the challenges posed by the digital age?

Therefore, it has become necessary for education to develop its own training and professional development systems for the teacher to be able to respond to these challenges with skill and distinction. These challenges, which are represented in the ability to manage information technology, achieve digital security and digital citizenship, provide students with life skills, and train them in critical scientific thinking and others, require a continuous electronic professional development process for the teacher to match those challenges within a framework of educational quality. Thus, the working paper aims to shed light on: the digital age and its transformations, the teacher of the digital age and its skills, challenges facing the digital age teacher, and ways and means of confrontation (Hamed, 2019). Hence, the interest of the current study in developing the teaching performance of Arabic language teachers in the light of digital transformation has aroused.

# 3 Previous Studies

## First: reflective practices

Fadlallah; Qinawy; Taha s' study (2011): the problem of the study was the prevalence of folkloric teaching practices,



resulting from the previous beliefs and ideas of students/teachers. Since researchers assumed that teachers' beliefs affect their practice in their classrooms, they studied teachers' beliefs and practices trying to modify these beliefs and practices through reflective teaching. The study showed that the program, based on reflective teaching that was used in the research, was effective in modifying cognitive beliefs of Arabic language teachers and students. It was also effective in developing creative teaching of Arabic language teachers and students.

Mahmoud's study (2017): this study aimed to prepare a training program to develop analytical thinking skills and measure its effect on improving the level of reflective practice of the student counselor in Saudi Arabia. The research sample was 19 student counselors. The researcher used the reflective practice scale, and a training program for the development analytical thinking skills (prepared by the researcher). The results showed that the training program had an effective effect in improving the level of reflective practice of the female counselors.

Al-Harbi's study (2018): this study aimed to investigate the level of professional reflective practice and its relationship to self-efficacy among science teachers at the intermediate stage in the city of Riyadh. The data was collected through two questionnaires; the first was to measure professional reflective practice, and the other was to measure self-efficacy, on a purposive sample of 190 middle school teachers in the city of Riyadh. The validity and reliability of the two tools were verified. The study showed two important results: first, the practices of professional reflective science teachers were high in general, and there were no statistically significant differences between the study samples in their professional reflective practices according to their years of teaching experience; second, the self-efficacy of science teachers in general was medium. The results showed that the statements describing the personal effectiveness of the female teacher got high means, while the statements that got an average rate were related to the expectation of the outputs.

Al-Shaya and Baabdallahs' study (2019): the study aimed to enhance the professional development of physics teachers at the secondary stage. To achieve this, a proposed program was presented in two stages: the first stage included preparing the study sample for the program, using discussion and dialogue, after providing guided readings to reinforce educational beliefs, and the second phase of the program was the application of the proposed teaching model of reflective practices on the study sample to improve their classroom practice. The proposed model was also developed after observing the application of the study sample, and conducting an interview. The qualitative approach was used. The design of the case study was based on collecting data with multiple qualitative tools (the most important of which were an interview and an observation). One physics teacher participated in the application of the program. The implementation of the program took ten weeks in the year 1439-1438. The results of the study showed a positive change in the teacher's educational beliefs, increased awareness of teaching practices, self-regulation, decision-making, and a tendency for female learners to learn more than to teach. The study came up with a professional development program that included a teaching model for reflective practices. The model included six steps: planning and teaching, then analysis and self-assessment, followed by formation and construction of meaning, then response and planning, and finally modification and development.

Al-Khalaf's study (2020): this study aimed to identify the degree of reflective practices of female teachers of Sharia sciences in the stages of general education in the Riyadh region from their point of view in the light of the qualification and experience variable. To achieve the aims of the study, the descriptive approach was used. A list of reflective practices of 41 skills distributed on 3 axes (reflection on planning procedures, reflection on implementation procedures, and reflection on evaluation procedures) was applied on the study sample of 185 female teachers of forensic sciences. The general arithmetic mean for the axis as a whole was 2.35, while sometimes they practice the skills of reflection of the implementation procedures, where the general arithmetic mean of the axis as a whole was 2.26. They also sometimes practice the skills of reflection of the evaluation procedures, where the general arithmetic mean of the axis as a whole was 2.10. The results also indicated that there were statistically significant differences due to the effect of qualification and experience on the level of reflective practices. Among the most important recommendations, offered by the researcher, were holding courses for female teachers of Islamic sciences in the stages of public education, providing them with the concept of reflective teaching and its fields of application in the planning, implementation and evaluation stage, in addition to the importance of including in teacher preparation programs modern educational experiences related to reflective teaching and its requirements.

Al-Khathami, Al-Ghamdi, and Al-Muntasharis' study (2020): the study aimed at determining the appropriate educational basis for reflective teaching practice from the point of view of a sample of education experts. The research



sample was 6 experts. and the results reached forty educational basics distributed on four axes represented in those related to the teacher's thought and convictions, the basics related to the social and cultural context, the basics related to the professional performance of the teacher, and the basics related to the management of the learning environment. The study recommended a number of procedural recommendations that might employ the basics mentioned in the results of the study and activate them to improve the reflective teaching practice: the inclusion of the concepts and elements of the appropriate educational basics of reflective teaching practice within the syllabus of teacher preparation courses in all concerned faculties, writing a clear scientific plan to implement the skills of reflective teaching practices among graduate students of faculties of education through practical education, directing the qualitative development program (experiences) towards countries that are interested in orientation towards reflective teaching practice, after implementing a comprehensive scientific survey of the educational systems in those countries, and finally, including the research priorities in the Ministry of Education and its related sectors the subject of reflective teaching practice and the basics on which it is based and encouraging researchers to study the pioneer international experiences in this field.

Abdul-Sami and Salem; Zeidans' study (2022): the aim of this study was to identify the educational practices of reflective dialogue, in addition to identifying their role in improving the teaching performance of faculty members in Faculties of Education, through an analytical vision of the concept and literature of educational practices of reflective dialogue in terms of principles, philosophy and objectives on which the reflective dialogue is based. The study adopted the descriptive analytical approach in order to describe and analyze the literature of reflective dialogue and to identify the most important educational practices adopted and emanating from that concept, which faculty members should do in their teaching performance because of their role in improving performance and refining practices. The research showed some important results: identifying a list of the most important educational practices of reflective dialogue related to the teaching performance of faculty members in Faculties of Education, which in turn works to improve the teaching performance of faculty members, and identifying the most important features of the teaching performance of faculty members when they use educational practices of reflective dialogue in classrooms and discussion with students and colleagues.

#### **Comments on previous studies**

The current study agrees with previous studies on the importance of reflective practices and their relationship to the professional development of teachers.

#### Second: technological acceptance

Saleh's study (2020): The aim of this study was to identify the effect of the two patterns of roaming (free, directed) within an e-learning environment on developing skills for solving digital citizenship problems and the level of their technological acceptance for students of the General Diploma in Education. To achieve the research aim, the researcher built a list of skills to solve digital citizenship problems and designed an e-learning environment in the light of the Abdul Latif Al-Jazzar's model of educational design. This study followed the descriptive approach in the analysis stage, and it used the quasi-experimental design to design the e-learning environment. The basic research sample was 24 students of the General Diploma in Education, the e-learning system. They were divided into two groups (12 students each). One group was exposed to the pattern of free-roaming and the other was exposed to the pattern of guided wandering. The tools of the study were the experimental treatment tool (e-learning environment) and the measure tool (cognitive test for the dimensions of digital citizenship), a situation test of solving digital citizenship problems, and finally, a Technological Acceptance Scale.

The researcher concluded that the guided wandering pattern had the greatest effect on developing solving digital citizenship problems. The results also showed a high level of technological acceptance for the students of the two experimental groups. There was no significant difference between their mean scores after applying the Technological Acceptance Scale.

Mansour's study (2021): this study aimed at studying the effect of designing an electronic adaptive structural test with (corrective/interpretive turn) in the computer course on the technological acceptance of second-year students at the Faculty of Education - Assiut University. The steps of producing a constructivist electronic adaptive test with reference (corrective/ explanatory turn) were defined as follows: the procedures for collecting all the items of the question bank using the Google Form application in preparing an achievement test, building the question bank by preparing two files



Book1, Test1, using Excel program, and grading the bank's paragraphs based on difficulty coefficient using the Bilog-MG program, choosing the appropriate ability assessment method, determining the strategy for selecting and presenting paragraphs and clusters in the adaptive test, determining the adaptive test finishing rule, and producing the adaptive electronic adaptive test with a reference (corrective/ explanatory turn) using the Wondershare Quiz Creator program. The research experiment was applied on two experimental groups; the structural electronic adaptive test (with a corrective feedback) was applied on the first experimental group, and the structural electronic adaptive test (with an explanatory feedback) was applied on the second experimental group. The results showed that there were statistically significant differences at the level (0.01) between the mean scores of the first experimental group (a constructive electronic test with a corrective feedback) and the second experimental group (a constructive electronic adaptive test with an explanatory feedback), in favor of the second experimental group (a constructive electronic test with an interpretation feedback) in each dimension of the Technological Acceptance Scale and in the scale as a whole. It was also evident that the value of the Etta coefficient (m2) for the scale as a whole was 0.81, which is a large size, meaning that the structural electronic adaptive test with an explanatory feedback had a significant effect on technological acceptance.

Abu Younis's study (2021): this study aimed at investigating the effect of teaching according to the gamification strategy on mathematical thinking and technology acceptance among seventh grade students in mathematics in public schools in Tulkarm Governorate. The study attempted to answer the following main question: What is the effect of teaching according to the gamification strategy on mathematical thinking and technology acceptance among seventh grade students in mathematics in governmental schools in Tulkarm Governorate?

to answer this question and test the hypotheses of the study, the experimental method was used with a quasi-experimental design. The study was applied on a sample of (60) seventh-grade students at Al-Quds Basic School in Tulkarm Governorate. They were divided into two groups: an experimental group of 29 female students who were taught the algebra unit from the mathematics book according to the gamification strategy, and a control one of 31 students who were taught the content of the same unit in the usual way, during the second semester of the year (2018-2019).

The researcher prepared a teaching guide for the algebra unit according to the gamification strategy, in which she used the experimental group to teach the algebra unit according to the strategy. For the purpose of measuring the equivalence between the control and experimental groups, the researcher used the pre-test and the students' achievement in the first semester and she used the school grades as a measure for that, and knowledge of the students' achievement in the subject they studied. In addition to that, she also used a questionnaire for technological acceptance that was pre-port applied on the control group, in addition to the post-mathematics thinking test that was applied on the two experimental groups through a gamification strategy using Kahoot. Whereas, for the control group, the test was applied through the usual way by distributing test papers to the students, receiving them and correcting them.

The validity of the two tools was verified through administering them to a jury, and calculating the reliability coefficient of the mathematical test. The test reliability coefficient was (0.75), and the reliability coefficient of the mathematical thinking was (0.75), and the reliability of the technological acceptance questionnaire was (0.78) through (Cronbach's alpha) formula. The researcher used the accompanying one-way analysis of variance (ANCOVA) to test the hypotheses of the study. The results of the study showed that there was a statistically significant difference at the significance level (05.0) between the arithmetic means of the scores of the students of the two study groups on the dimensional mathematical thinking test. This difference was attributed to the educational program based on the strategy. The results also showed a positive correlation between mathematical thinking and achievement. It showed a statistically significant difference at the significance level ( $\alpha = 0.05$ ) between the mean scores of the students in the experimental group in the technological acceptance questionnaire. This difference was attributed to teaching based on the gamification strategy, in favor of the experimental group that studied according to the strategy. This means that the female students who studied using the gamification strategy had more technological acceptance than those who studied through the usual method. In the light of these results, the researcher recommended the importance of using gamification in academic stages and educational courses, especially mathematics, because of its positive effect on students' achievement and on activation of self- learning based on technology. The researcher also stressed the necessity of developing students' mathematical thinking ability because of its prominent role in addressing poor achievement in mathematics, in attrition to taking advantage of educational games that deal with the gamification strategy, and urge mathematics teachers to activate the



gamification strategy, in classrooms and computer laboratories in various branches of mathematics.

Shawki's study (2022): this study aimed to identify the design of motivational digital games (individual and collective) and its effect on the development of basic computer skills and technological acceptance of mentally disabled students who were able to learn in inclusion classes. The experiment was conducted on a sample of 40 mentally disabled students who were able to learn in the inclusion classes in primary schools in Sharkia Governorate. The research sample was randomly divided into two experimental groups: the first experimental group studied individually, and the second experimental group studied collectively. Three research tools were: a cognitive achievement test associated with skills, a performance card for those skills, and a measure of technological acceptance of motivational digital games. After a pre-post application of the research tools and an application of the motivational digital games environment to the sample members, the results indicated that there was a statistically significant difference at the level (0.05) between the mean scores of the sample students as a whole in the pre-application and the post-application of the cognitive achievement test, the observation card, and the Technological Acceptance Scale in favor of the post application. The research concluded that there was a difference between the two groups in favor of the group that studied collectively.

## **Comment on previous studies**

The current study agrees with previous studies in identifying the level of technological acceptance, while it differs in its treatment of the level of technological acceptance of Arabic language teachers. The previous studies were for students of different levels of education, and the researchers benefited from them in building a Technological Acceptance Scale, and in strengthening the research results regarding the relationship between professional development and technological acceptance in the light of digital transformation.

The current research is characterized by identifying the relationship between reflective practices and the level of technological acceptance, and its reflection on the development of the professional performance of teachers in general and teachers of Arabic language in particular.

# Third: developing teaching performance of Arabic language teachers

Gabriel's study (2017): this research aimed at identifying the effectiveness of a program based on contemporary professional standards in developing the teaching performance of Arabic language teachers at the secondary stage. The research sample consisted of 27 male and female Arabic language teachers, at the secondary level, and who were divided into two groups: an experimental group of fourteen teachers (7 males 7 females), and a control group of thirteen teachers (7 males and 6 females).

The experimental treatment of the research was applied during the summer vacation of the academic year 2015/2016. It was represented in the experimental design with two groups and a pre and post measurement. The dependent variables of the research sample were measured before and after the field application through three research tools: a check list card of lesson preparation, an observation card, and an achievement test. The results of the research showed that there were statistically significant differences at the level of significance (0.01) between the mean scores of the experimental group teachers and the control group in favor of the teachers of the experimental group in the post application of the research tools. This result was due to the effectiveness of the program based on contemporary professional standards.

Abdel-Fattah's study (2018): There is an increasing concern for the professional growth of the teacher to reach the highest levels of quality in the functional roles of the teacher, especially the teaching performance of the Arabic language teacher. This research sought to improve the teaching performance of Arabic language teachers in the preparatory stage in the light of the future directions of curricula and teaching methods research.

The research followed the descriptive analytical approach and the quasi-experimental method. The two research tools were a content analysis tool for preparing Arabic language lessons for preparatory stage teachers, and a teaching performance appraisal card for Arabic language teachers in the preparatory stage. The research sample consisted of 40 Arabic language teachers from 28 public preparatory schools affiliated to Belqas Educational Administration in Dakahlia Governorate. The results of the research confirmed that there were statistically significant differences in favor of the post application. This result was due to the program's interest in developing teaching strategies that were based on the student's activity to which teaching research was directed, such as concept maps, educational games, role-playing strategy, and educational story, all of which are based on student effectiveness.

Al-Roqi's study (2018): This study aimed at preparing a proposed training program to develop the teaching performance of Arabic language teachers at the secondary stage in the light of the Kingdom's 2030 vision. To achieve this aim, a list of professional standards for the quality of performance, which included five areas under which (46) the skills fall, was



prepared. The researcher also prepared an observation card which was applied on 40 teachers.

The results showed that there was a discrepancy in the level of teaching performance of Arabic language teachers in professional standards. It ranged between 0.35-1.63 and in the total score for all fields with an arithmetic mean of (1.15), which is a weak level of performance in general. There were also statistically significant differences between the frequencies of availability of the levels of teaching performance for Arabic language teachers at the secondary level on the dimensions of the performance quality standards observation card in the light of the Kingdom's 2030 vision.

The study also found that there were no significant differences between teachers' performance levels in the areas of professional standards as a result of years of experience and the share of weekly classes. As for class density, the study concluded that there were no significant differences in all fields, except for the field of planning teaching which showed statistically significant differences. In the light of the results of the study, a proposed training program was prepared, and some recommendations and suggestions were presented.

Al-Shammari's study (2019) this research aimed at developing the teaching performance of Arabic language teachers at the secondary stage in the light of the strategic teaching approach. It relied on the descriptive and analytical approach to achieve its goals. A list of teaching performance standards was built in the light of the basics and principles of strategic teaching. It consisted of 6 criteria: planning for strategic teaching, taking into account the basic teaching variables (the characteristics of the learner - content - goals - educational strategies), taking into account the stages of strategic teaching (preparation for learning - presentation and presentation of content - application - integration), explicit teaching of organizational strategies and patterns, seeking independent learning for students, evaluating and following up student learning outcomes.

A list of performance indicators for strategic teaching was also designed consisting of 51 measurable indicators, in the light of which an observation card was prepared for the teaching performance of Arabic language teachers. It was applied on 45 teachers of various qualifications and years of experience, in the city of Hail.

The research concluded that the level of teaching performance of Arabic language teachers was weak in all standards of teaching performance. There were no statistically significant differences between the mean performance scores of Arabic language teachers at the secondary stage attributed to the two variables (academic qualification, number of years of experience) in the teaching performance observation card in the light of performance indicators for strategic teaching. Developing the teaching performance of Arabic language teachers at the secondary stage in the light of strategic teaching performance indicators requires training teachers to employ it in the teaching process, including pre-service teacher preparation programs with how to plan strategic teaching, use strategies and organizational patterns, implement and evaluate it, and prepare an integrated guide explaining how to employ strategic teaching in lesson planning, implementation and evaluation.

Al-Zahrani's study (2019) The study aimed at: highlighting the reality of the teaching performance of Arabic language teachers at the intermediate stage in the light of reflective teaching skills in Jeddah Governorate, identifying their teaching performance from the point of view of the study sample, identifying the reflective teaching skills of those teachers from the point of view of the study sample, and finally, showing if there were statistically significant differences at the level of significance (a  $\leq 0.05$ ) from the perspective of Arabic language teachers in the intermediate stage of the reality of teaching performance.

The study used the descriptive analytical method as an appropriate method. The sample of the study was 125 Arabic language teachers in the middle school in Jeddah governorate. One of the most important findings of the study was that the level of teaching performance of Arabic language teachers in Jeddah governorate was at a high level. There were no statistically significant differences between the arithmetic means in the total score of the level of teaching performance of Arabic language teachers. Among the most important recommendations of the study were: improving the equipment for the teaching environment in the schools of Jeddah Governorate, providing incentives to help the presence of these factors and contribute to improving the teaching performance of Arabic language teachers, and finally conducting inservice training sessions, workshops, and scientific meetings to increase the awareness of Arabic language teachers.

Abdullah's study (2021): The study aimed at evaluating the teaching performance of Arabic language teachers at the primary stage in Qena Governorate in the light of lateral thinking skills. The study sample consisted of (25) teachers. A list of lateral thinking skills, necessary for Arabic language teachers in the sixth grade, and an observation card to measure teachers' lateral thinking skills in the three stages of the teaching process (planning, implementation, and evaluation) were prepared. The results of the study manifested the weak use of lateral thinking skills by Arabic



language teachers in the sixth grade in the teaching process. It recommended the necessity of holding training sessions for teachers before and during service to train them to use various thinking skills, including lateral thinking.

Al-Maqati's study (2021): The study aimed at evaluating the teaching performance of "My Beautiful Language" course teachers in the light of reading fluency skills, and preparing a suggested vision for developing the teaching performance of "My Beautiful Language" course teachers in teaching reading fluency skills.

To achieve the aim of the study, the researcher used the descriptive approach where a list of reading fluency skill for fifth grade students and an observation card for the teaching performance of the teachers were prepared and applied on a random sample of 58 teachers of "My beautiful Language" fifth grade course in the Holy City of Makkah.

The analysis of results showed that the level of "My Beautiful Language" course teachers of fifth primary grade in the Holy Makkah City of the skills of teaching reading fluency was at an average degree, with an arithmetic mean of 2.28. The pronunciation skill came at the top of the skills in which the teachers of "My Beautiful Language" course for the fifth grade of primary were able to teach reading fluency skills, with an arithmetic mean (2.36). It was followed by the reading accuracy skill, with an arithmetic mean (2.34), then the reading rate and speed skill with an arithmetic mean (2.28), and finally the expressive reading skill in performance with comprehension with an arithmetic mean (2.20). Based on the results of the study the researcher offered some recommendations represented in: providing the teachers of "My Beautiful Language" course with language kills which included correct pronunciation and recitation, quality in performance, reading fluency, and training on correct reading free from spelling errors, by adjusting the shape of letters and sentences and correcting the pronunciation of letter exits, and developing teaching skills for the course "My Language" in order to enhance the quality of their professional performance in general and in the field of improving their skills in teaching reading fluency.

# **Comment on previous studies**

The current study agrees with previous studies on the importance of developing the teaching performance of Arabic language teachers according to the different strategies used in the development; whereas, it differs from them in dealing with the development of the teaching performance level through the reflective practices in the light of digital transformation culture. The two researchers benefited from previous studies in building research tools and strengthening the research results regarding the relationship between the development of teaching performance and the reflective practices of Arabic language teachers.

## 3 Research procedures

This part of the research deals with a description of the method and procedures for designing and applying research tools. It includes: the research method, a description of the research group and its sample, the method of selecting the sample, a presentation of the research tools and procedures, and the statistical methods that were used in data processing in order to answer the research questions and draw conclusions.

#### First: research methodology

This research adopted the descriptive-analytical approach which depends on studying the phenomenon as it is in reality. It is concerned with describing it accurately, expressing it qualitatively by describing and clarifying its properties numerically, clarifying its size or degrees of connection with other phenomena (Obeidat, and others, 2004: 187-188). It is considered the most appropriate approach for diagnosing reflective practices and the level of technological acceptance and their relationship to developing of the teaching performance of Arabic language teachers in the light of digital transformation.

The procedures that the two researchers followed to apply this approach are represented in using the Reflective Practice Scale for Arabic language teachers in the light of digital transformation, the Technological Acceptance Scale for Arabic language teachers, as well as using the teaching performance development observation card to identify the relationship of each of the reflective practices and the level of technological acceptance to the development of the teaching performance of Arabic language teachers in the light of the digital transformation, and then analyzing the data to reach and discuss results, and make recommendations and suggestions in the light of the results

#### Second: research variables

The variables of the current research were:

1- The independent variable: it is the variable that depends on, or causes another variable or variables (Jay; Mills and Ayrisian, 2013: 235). The independent variables in this research are reflective practices, and the level of technological acceptance.



2- The dependent variable: it is the variable that the research seeks to explain, find out its causes, and to determine the extent to which it can be expected (Al-Qasas, 2007: 54). The dependent variable in this research is developing the teaching performance of Arabic language teachers in the light of the digital transformation.

### Third: research group

Research group is a systematic scientific term intended for all those to whom the results of the research can be generalized, whether they are a group of individuals, books, school buildings ... etc. (Al-Assaf, 2010: 19). The current research group consisted of all Arabic language teachers (male and females) in Dammam, whose number was 1363, as well as all Arabic language supervisors in the eastern region (males and females), whose number was 57, according to official statistics in the during the second semester of the academic year 1443 AH.

# Fourth: research sample

Sampling means selecting a part of the subject matter under investigation so that this part represents the whole group. In other words, it searches for the state of a certain part or a certain percentage of the members of the original group, and then generalizes the results of the research to the whole group (Al Nabhan, 2004: 80). The current research was limited to selecting a simple random sample of Arabic language teachers, whose number reached 412 male and female teachers, and who represented 30% of the research group, distributed according to their response to the research tools as follows:

Tool	Research Sample			Response
				articipation)
	No.	Percentage of the sample	No.	Percentage of
		to the group		response
				(participation)
Reflective practice scale	185	14 %	178	96 %
Technology Acceptance Scale	142	10 %	139	98 %
Observation card	85	6 %	81	95 %
Total	412	30 %	398	97 %

**Table 1:** Distribution of Male and Female Sample Teachers.

All members (57) of the group of male and female educational supervisors majoring in Arabic language were selected as a sample for the research in order to answer the observation card. Twenty seven educational supervisors responded (with a percentage of 47%) that each of them used the observation card to evaluate the teaching performance of three teachers.

A pilot sample of 20 Arabic language teachers (males and females) was selected from outside the research sample to control the research tools. In addition, five supervisors were selected to observe the pilot sample, with one supervisor for every 5 teachers.

# Fifth: research tools

Research tools are defined as the means, method, or procedure by which researchers collect specific information and data on a specific topic or problem (Bakhit Muhammad et al. 2012: 145). In this part, the researchers present the procedures that were followed in preparing and controlling research tools and resources noting that these tools would answer a number of research questions in preparation for the presentation of the final results that were reached. Three research tools were:

- 1. The Reflective Practice Scale.
- 2. The measure of technological acceptance.
- 3. Performance Development Observation Card

# Sixth: Steps of designing research tools

To design the aforementioned research tools, the two researchers carried out the construction procedures according to the following steps:

# The first tool: Reflective Practice Scale

The aim of preparing the scale was to identify the reflective practices of Arabic language teachers and their relationship to developing their teaching performance in the light of digital transformation. These practices were in an initial list consisting of 20 phrases. (See Appendix (2): The scale in its initial form.)

To control the initial form of the scale, it was presented to a number of specialized jury members (5), (See Appendix No. (1) a list of jury members), which included an introduction that introduced the purpose of preparing the scale, and the procedures required by the jury in expressing their opinion about the scientific and linguistic accuracy of the vocabulary of the scale, and the appropriateness of the scale for teachers of the Arabic language, and finally to write appropriate suggestions whether deletion, modification, or addition of certain items.

Based on the opinions of the jury, the initial form of the scale was modified by rephrasing and adding some of the phrases, and deleting others that the jury preferred to dispense. The number of scale phrases after the modifications made by the jury was 33 phrases.

In preparing the scale, the closed form of questions, that determine the possible responses to each question, was adopted. A five-point Likert scale was used, and each statement was matched with a list of options (strongly applicable to me, applicable to me, not sure, not applicable to me, and strongly not applicable to me). Each option was given a specific score through which statistical processing was carried out. Each option corresponded to the following score (strongly applies (5 scores), applies to me (4 scores), not sure (3 scores), does not apply to me (2 scores) strongly does not apply to me (1 score).)

To identify the extent of the validity of the internal consistency of the scale, and the extent to which the phrases contributed to the reliability coefficient, the researchers calculated the correlation coefficient (Pearson) between the degree of each phrase and the total score of the scale, and the results came as shown in the following table.

Item No.	Correlation	Item	Correlation	Item	Correlation
	coefficient	No	coefficient	No	coefficient
1	0.645	12	0.659	23	0.848
2	0.776	13	0.481	24	0.771
3	0.650	14	0.658	25	0.535
4	0. 711	15	0.527	26	0.760
5	0. 752	16	0.681	27	0.750
6	0. 699	17	0.685	28	0.724
7	0. 531	18	0.735	29	0.713
8	0. 629	19	0.555	30	0.824

0.719

0.595

0.760

31

32

33

0.800

0.614

0.458

20

21

22

Table 2: Correlation Coefficients between the Degrees of Reflective Practices and Total Score of the Scale.

#### Significant at the 0.01 level and less

0.678

0.727

0.706

9

10

11

It is clear from Table (2) that all the specific terms for the values of the correlation coefficient between each phrase and the total score of the scale are statistically significant at the level (0.01), which indicates the internal consistency of the Reflective Practice Scale, and that all the phrases that make it up contribute to increasing its reliability.

To ensure the reliability of the scale, the two researchers depended on the scores of the pilot sample and estimated the reliability by using Cronbach's Alpha method as follows.

Table 3: Reliability of Reflective Practice ScaleUsing Cronbach's Alpha Coefficient.

Reflective	Number of Items	Mean	Standard	Variance	Reliability
Practice Scale			deviation		coefficient
Total score	33	136.42	14.350	205.917	0. 923

Table (3) shows that the value of Cronbach's alpha reliability coefficient for the Reflective Practice Scale is 0.923, which is a high value that indicates the validity of the scale.

After confirming the validity and reliability of the Reflective Practice Scale, the same 33 phrases were kept. (See Appendix 3: the scale in its final form.)



#### The second tool: Technology Acceptance Scale.

The aim of preparing the scale was to identify the level of technological acceptance of Arabic language teachers and its relationship to developing the teaching performance of those teachers in the light of the digital transformation (see Appendix 4): Technology Acceptance Scale). The axes are:

The first axis: ease of use of technological innovations.

The second axis: expected benefit from the use of technological innovations.

The third axis: quality of service available through electronic platforms.

The fourth axis: quality of the system within the electronic platforms.

The fifth axis: confidence in the use of electronic platforms.

The sixth axis: real use of electronic platforms.

The seventh axis: satisfaction with electronic support via electronic platforms.

To control the initial form of the scale, it was presented to a number of (5) specialized jury (see Appendix No 1: a list of jury). The scale included an introduction for the purpose of preparing the scale, and the procedures required by jury to express their opinion on scientific and linguistic accuracy of the scale items and the appropriateness of the scale for Arabic language teachers to add, delete, or modify whatever they see necessary for the scale.

Based on the opinions of the jury, the initial form of the scale was modified. The modification was limited to rephrasing some phrases. Accordingly, the scale retained the same number of axes and phrases after the modifications of the jury.

The scale was designed in a form of closed questions which specify the possible responses to each question. A five-point Likert scale was used and each of the statements was matched with a list of the following options (strongly agree, agree, neutral, disagree, strongly disagree). Each option was given a specific score to be processed statistically, and each of the options corresponded to the following scores: strongly agree (5 scores), agree (4 scores), neutral (3 scores), disagree (2 scores), and strongly disagree (1 score).

In order to identify the extent of the internal consistency of the scale and the extent to which the constituent phrases contribute to the reliability coefficient, the researchers used the scores of the pilot sample and calculated the correlation coefficient (Pearson) between the score of each phrase and the total score of the scale. The results are presented in the following table:

Table 4: C	Correlation Coefficients	between Degreeso	of Technological Acc	ceptance and Total	Score of Scale.
em No	Correlation	Item No	Correlation	Item No	Correlation

Item No.	Correlation	Item No.	Correlation	Item No.	Correlation
	Coefficient		Coefficient		Coefficient
1	0.671	11	0.548	21	0.865
2	0. 711	12	0.662	22	0.528
3	0.697	13	0.645	23	0.807
4	0.648	14	0.548	24	0.538
5	0.675	15	0.683	25	0.734
6	0.622	16	0.560	26	0.663
7	0.623	17	0.866	27	0.720
8	0.743	18	0.836	28	0.708
9	0.843	19	0.893		
10	0.815	20	0.813		

#### Significant at 0.01 level

It is clear from Table (4) that all the specific terms for the values of the correlation coefficient between each phrase and the total score of the scale are statistically significant at the level (0.01), which indicates the internal consistency of the Technological Acceptance Scale, and that all the phrases constituting it contribute to increasing its reliability.

To ensure the reliability of the scale, the two researchers relied on the scores of the pilot sample and estimated the reliability using Cronbach's Alpha method as follows.



Table 5: Reliability of the Technological Acceptance Scale Using Cronbach's Alpha Coefficient.

Technological	Number of	Mean	Standard	Variance	Reliability
Acceptance Scale	items		Deviation		Coefficient
Total score	28	87.05	10.126	102.526	0.945

Table (5) shows that the value of Cronbach's alpha reliability coefficient for the Technological Acceptance Scale is 0.945, which is a high value that indicates the validity of the scale.

After confirming the validity and reliability of the Technological Acceptance Scale, the same (28) phrases were kept. (See Appendix 4: the scale in its final form)

#### The third tool: Performance Improvement Observation Card

The goal of preparing the observation card was to reveal the relationship between reflective practices and technological acceptance by developing the teaching performance of Arabic language teachers in the light of digital transformation. (See Appendix 5: Performance Development Observation Card in its initial form.) The performances were as follows:

- (1) Planning and it included 14 sub-performances.
- (2) Implementation and it included 15 sub-performances.
- (3) Evaluation and it included 12 sub-performances.
- (4) Development and it included (5) sub-performances.

In order to control the initial form of the observation card, it was administered to a number of (5) specialized jury. (See Appendix No 1: a list of jury). It included: introduction of the purpose of the observation card, the procedures required by the jury to express their opinion about the consistency of the sub-performances with the basic performances, the extent of the scientific and linguistic accuracy of the items of the list, and finally, the suitability of the list for Arabic language teachers. The members of the jury were kindly required to add, delete, or modify whatever they see appropriate for the scale.

In the light of their opinions, necessary modifications were made, most of which focused on deleting some sub-performances, rephrasing some items, and rearranging some others. The number of sub-performances, after the modifications made by the jury, was 32 sub-performances distributed as follows:

- (1) Planning and it included 8 sub-performances.
- (2) Implementation and it included 12 sub-performances.
- (3) Evaluation and it included 9 sub-performances.
- (4) Development and it included 3 sub-performances.

In preparing the observation card, the closed form of questions that specify the possible responses to each question was adopted. A three-point graded Likert scale was used, and the sub-performances were matched by a list of the following options (good, suitable, not suitable). Each of these options was given a specific score for statistical treatment, and each of the options corresponded to the following scores: good (3 scores), appropriate (2 scores), and inappropriate (1score). In order to identify the extent of the reliability of internal consistency of the observation card, and the extent of the contribution of the sub-skills constituting each sub-skill to the reliability coefficient, it was applied on the pilot sample and the correlation coefficient (Pearson) between the degree of the sub-performances and the total score of the main performances to which they belong was calculated as shown in the following table.

Table 6: Correlation Coefficients between the Sub-Performances and the Total Score of the Main Performances.

Plant	ning	Impleme	entation	Evalu	ation	Develo	pment
Performance	Correlation	Performance	Correlation	Performance	Correlation	Performance	Correlation
No.	coefficient	No.	coefficient	No.	coefficient	No.	coefficient
1	0.745	1	0.634	1	0.868	1	0.877
2	0.582	2	0.838	2	0.647	2	0.592
3	0.709	3	0.808	3	0.836	3	0.812
4	0.836	4	0.778	4	0.894		
5	0.855	5	0.776	5	0. 779		
6	0.822	6	0.621	6	0. 824		



7	0.480	7	0.585	7	0.710	
8	0.787	8	0.849	8	0.840	
		9	0.624	9	0.502	
		10	0.424			
		11	0.681			
		12	0.734			

It is clear from Table (6) that all the specific performances of the correlation coefficient values between the sub-performances and the total score of the main performances are statistically significant at the level (0.01), which indicates the internal consistency of the observation card, and that all the sub-performances constituting it contribute to increase its reliability.

To validate the reliability of the observation card, the researchers relied on the scores of the pilot sample and estimated the reliability by using two methods as follows:

#### 1- The first method: Consistency by split half

**Table 7:** Reliability of the Observation Card by Split-Half Method.

	· · · · · · · · · · · · · · · · · · ·	J 1	
Sub-performances	No	Correlation coefficient	Spearman coefficient
Total score	32	0.872	0.932

It is clear from Table 7 that the overall reliability coefficient of the observation card by the split-half method is 0.932. This indicates that the card enjoys a high degree of reliability that reassures the researchers to apply it to the research sample.

#### 2- The second method: reliability by Alpha Cronbach method

Table 8: Observation Card Reliability Using Cronbach's Alpha Coefficient.

Digital Tec.	No. of Skills	Mean	Standard	Variance	Reliability
Skills			Deviation		coefficient
Total score	32	77.01	14.985	224.537	0.960

Table (8) shows that the value of Cronbach's alpha reliability coefficient for the observation card is 0.960, which is a high value that indicates the validity of the card to achieve the objectives of the current research by answering its questions.

After verifying the validity and reliability of the performance development observation card, the same number of subperformances (32) was kept. (See Appendix 6: the performance development observation card in its final form.)

#### **Seventh: Statistical treatment**

To analyze the research data statistically, the statistical program (SPSS) was used through the following statistical methods:

- 1) Pearson's coefficient.
- 2) Alpha-Cronbach coefficient.
- 3) Spearman-Brown coefficient.
- 4) Frequencies, arithmetic means, standard deviations, and percentages.

# 4 Research results and interpretation

In this part, the researchers present the results that were obtained after applying the research tools, and the statistical treatment of the data obtained, by presenting the research questions and results associated with each question, and then interpreting and discussing the results in the light of previous studies and literature.

To answer the first research question stated: "what are the reflective practices of Arabic language teachers in the light of the digital transformation? and to facilitate the interpretation and discussion of the results of the stated question, the weighted arithmetic means, and the standard deviations of the responses about the reflective practices of the research sample (Arabic language teachers) were calculated in the light of the digital transformation. Then the phrases were arranged in a descending order according to the highest values of the weighted arithmetic mean, and according to the lowest values of dispersal, which was represented by the standard deviation. The results of the Reflective Practice Scale were evaluated as follows:



 Table 9: Criterion of Weighted Arithmetic Means of Reflective Practice Scale.

No.	Weigh	ited arithmetic mean	Gradation	Score
	from To			
1	1	Less than 1.80	It does not strongly apply to	Very weak
2	1.80	Less than 2.60	Does not apply to me	Weak
3	2.60	Less than 3.40	Not sure	Medium
4	3.40	Less than 4.20	Applies to me	Large
5	4.20	5.00	Strongly applies to me	Very large

**Table 10:** Frequencies and Arithmetic Means of Reflective Practices of Arabic Language Teachers in the Light of Digital Transformation ( N = 178).

No.	Phrase	Arithmetic	Standard	Degree	Rank
		Mean	Deviation		
1	I work on diversifying my teaching practices	4.40.	0.63	Very large	7
	to pick the best ones.				,
2	I reflect on learning outcomes in light of	4.27	0.59	Very large	14
	their own criteria.				11
3	I reflect on the appropriateness of teaching	4.33	0.63	Very large	12
	methods for the intended learning outcomes.				12
4	I reflect on the appropriateness of the chosen	4.39	0.66	Very large	
	teaching aids for the targeted learning				8
	outcomes.				
5	I reflect on the appropriateness of the	4.22	0.76	Very large	
	educational activities to the elements of the				18
	educational situation.				
6	I reflect on the appropriateness of the	4.27	0.71	Very large	
	selected evaluation techniques for the				15
	intended learning outcomes.				
7	I make sure to ask questions that require	4.35	0.66	Very large	10
	reflection.				10
8	I suggest suitable alternatives to overcome	4.25	0.63	Very large	16
	weaknesses in future teaching practices.			very large	10
9	I put students on real problems and issues	3.94	0.84	Large	25
	that require reflection.				23
10	I read research papers and articles on	3.65	1.05	Large	31
	practices related to teaching Arabic.				31
11	I work on developing my teaching practices.	3.45	0.58	Very large	5
12	I always think about my feelings and	4.65	0.52	Very large	2
	behavior towards my students.				2
No.	Phrase	Arithmetic	Standard	Degree	Rank
		Mean	Deviation		
13	I do not waste my time reflecting or	3.88	1.09	Large	26
	evaluating the work of others.				20
14	I think deeply about my teaching practices	4.18	0.81	Large	22
	that I feel inappropriate.				22
15	I feel the need to constantly change my	3.82	0.97	Large	28
	teaching practices.				20
16	I write about some of the successful	4.08	0.88	Larga	24
	experiences of others in teaching practices.			Large	∠ <del>4</del>



17	I discuss my teaching practices with my other colleagues.	4.21	0.77	Very large	20
18	I consider all possible possibilities before making any judgment or decision regarding my teaching practices.	4.22	0.77	Very large	19
19	I let fellow teachers watch me while I teach.	4.16	0.69	Large	23
20	I seek to see the experiences of Arabic	3.85	0.01		
	language teachers in other schools to choose the appropriate ones.			Large	27
21	I make sure the information is correct before	4.66	0.52	Very large	
	passing it on to students.				1
22	I enjoy searching for new information.	4.48	0.64	Very large	3
23	I use feedback from others to improve my teaching skills.	4.46	0.65	Very large	4
24	I think about the expected teaching problems and avoid them.	4.34	0.63	Very large	11
25	I keep my annual business records (plans - meansetc).	4.20	0.83	Very large	21
26	I seek to explore the best ways to provide outstanding education to students.	4.41	0.62	Very large	6
No.	Phrase	Arithmetic Mean	Standard Deviation	Degree	Rank
27	I make sure to attend class sessions conducted by other teachers of Arabic language.	3.80	1.05	Large	29
28	I self-evaluate my performance.	4.37	0.63	Very large	9
29	I analyze the results of the students to use them in the evaluation of my performance.	4.28	0.66	Very large	13
30	I compare the class periods I am performing with the previous ones I have performed.	4.25	0.81	Very large	17
31	I participate in professional groups for teaching Arabic.	3.67	1.15	Large	30
32	I Conduct procedural research on Arabic language teaching.	2.94	1.13	Medium	33
33	After attending a training program in teaching skills, I feedback to my previous	2.98	1.29	Medium	32
	practices despite the new ideas I gained.				

It is clear from Table (10) that the weighted arithmetic means of the views of Arabic language teachers about reflective practices in the light of the digital transformation ranged from 2.94-4.66, and the general arithmetic means reached 4.13 from five points in the light of the distribution of the lengths of the categories according to the gradient used in the scale. This indicates that the reflective practices apply to Arabic language teachers to a (large) degree.

It is also clear from the previous table that the most reflective practice that applies to Arabic language teachers, in the light of the digital transformation, is "to ensure the correctness of the information before transmitting it to students". It comes in the first rank, followed by "they always announce thinking about their feelings and behavior towards students" in the second rank, the in the third rank comes "their enjoyment of searching for new information", after that comes, in

the fourth rank "to benefit from feedback provided by others to develop their teaching skills", and finally in the fifth rank comes "to read research and articles on practices related to teaching Arabic". It is also clear from the previous table that the least reflective practice that applies to Arabic language teachers in the light of the digital transformation is "conducting procedural research on Arabic language teaching".

The two researchers agree with the teachers' point of view about ensuring the correctness of the information before transmitting it to the students due to the importance of this in their growth, development and professional excellence. They believe that the teachers' weakness in conducting procedural research on teaching Arabic may be due to their lack of training in scientific research curricula, and consequently their weak knowledge of the procedural steps to apply scientific research. It is also due to the method of selecting the appropriate tools, which negatively affects the stages of the teacher's personal professional growth, especially since the process of reflection in educational practice, specifically teaching, is seen as not an abstract reflection, but rather as a professional thinking process that is practiced in the form of an intentional procedure practiced in an organized manner through certain stages.

The previous results are consistent with the findings of Abdul-Sami; Salem; Zaidan (2022), which aimed to identify the educational practices of reflective dialogue, and to identify their role in improving the teaching performance of faculty members in the Faculties of Education. The research reached important results including: defining a list of the most important educational practices for reflective dialogue related to the teaching performance of a faculty member in faculties of education, and determining the most important features of the teaching performance of faculty members when they use educational practices for reflective dialogue in the classroom and discussion with students and colleagues.

It also agrees with the results of Al-Harbi study (2018) which aimed to investigate the level of professional reflective practice and its relationship to self-efficacy among middle school science teachers in the city of Riyadh.

The previous results differ with the results in Al-Khalaf's Study (2020) which aimed to identify the degree of reflective practices of female teachers of Sharia sciences in the stages of general education in the Riyadh region.

To answer the second question stated "what is the level of technological acceptance of Arabic language teachers in the light of digital transformation?", and to facilitate the interpretation and discussion of the results of the second question, the weighted arithmetic means of the Technological Acceptance Scale were calculated as follows:

No.	Weighted arithmetic men		Gradient	Degree
	From	То		
1	1	Less than 1.80	Strongly opposed	Very weak
2	1.80	Less than 2.60	Opposed	Weak
3	2.60	Less than 3.40	Neutral	Medium
4	3.40	Less than 4.20	Agree	Large
5	4.20	5.00	Strongly Agree	Very Large

Table 11: Criterion on the Weighted Arithmetic Means of Technological Acceptance Scale.

To answer the second question, the weighted arithmetic means, and the standard deviations of the responses of the research sample members, were calculated around each of the axes of technological acceptance of Arabic language teachers in the light of the digital transformation. Then, the phrases were arranged in a descending order according to the highest values of the weighted arithmetic mean, and according to the lowest values of the dispersion, which is represented by the standard deviation. The results were as follows:

**Table 12:** Frequencies and Arithmetic means of the Ease of Use of Technological Innovations (n = 139).

No.	Phrase	Mean	S.D.	Degree	Rank
1	I face difficulty while using technological innovations in	2.32	1.39	Weak	4
	education		1.39		
2	I accomplish the assigned tasks with ease and flexibility	3.91	1.28	Large	1
	through technological innovations		1.20		
3	I face difficulty controlling all components of technological	2.43	1.20	Weak	3
	innovations		1.20		
4	I find it easy to deal with technological innovations without	3.53	1.19	Large	2



the need for electronic support				
General arithmetic mean	3.05	0.73	Medium	

It is clear from Table (12) that the weighted arithmetic means of the views of Arabic language teachers about the ease of use of technological innovations ranged from 2.32 - 3.91 and that the general (total) arithmetic mean reached 3.05 from five points in the light of the distribution of the lengths of the categories according to the gradation used in the scale. This indicates the ease of use of technological innovations by Arabic language teachers at a (medium) degree.

It is also clear from the previous table that the most easily used technological innovations from the viewpoint of Arabic language teachers are "to carry out the tasks assigned to them easily and flexibly through technological innovations" which comes in the first rank, followed by "the presence of ease in dealing with technological innovations without the need for electronic support", then "the difficulty in controlling all components of technological innovations", after that "the difficulty while using technological innovations in education" that comes in the fourth rank.

The two researchers agree with the findings that the ease with which Arabic language teachers use technological innovations. It may be due to their excellent training as well as the fact that it has become familiar to teachers, especially in the light of the spread of digital technology and its uses in all areas of life in general and the educational process in particular, and teachers' acceptance has become necessary to absorb and benefit from this technology.

**Table 13:** Frequencies and Arithmetic Means Of Expected Benefit from Using Technological Innovations (N = 139).

No.	Phrase	Mean	S.D.	Degree	Rank
5	I see that my use of technological innovations increases the	4.53	0.87	Very large	1
	level of my teaching performance.		0.87		
6	I see that my use of technological innovations is not useful	1.56	1.06	Very weak	4
	in accomplishing teaching tasks.		1.00		
7	I see that my use of technological innovations solves my	4.31	0.88	Very large	2
	educational problems		0.00		
8	I see that my use of technological innovations reduces my	1.82	1.17	Weak	3
	motivation to complete tasks		1.1/		
	General arithmetic mean	2.99	0.58	Medium	

It is clear from Table (13) that the weighted arithmetic means of the opinions of Arabic language teachers about the expected benefit from the use of technological innovations ranged from 1.56-4.53, and the total arithmetic mean reached 3.05 from five points in the light of the distribution of the lengths of the categories according to the gradation used in the scale. This indicates that the expected benefit from the use of technological innovations among Arabic language teachers is at a (medium) degree.

It is also clear from the previous table that the most expectations for benefiting from the use of technological innovations, from the point of view of Arabic language teachers, are that "their use of technological innovations increase the level of their teaching performance", which comes in the first rank, followed by the fact that "their use of technological innovations solves their educational problems". Then, in the third rank comes "their use of technological innovations reduces their motivation to complete tasks", followed by the fourth rank that "their use of technological innovations is not useful in completing the teaching tasks".

The two researchers agree with the results that the Arabic language teachers' use of technological innovations increases the level of their teaching performance; This is because most modern teaching strategies are based on e-learning and its branches of integrated and distance education, especially since the prevailing trend among most educational experts tends towards modern theories that depend on technology in all educational activities. This requires the teachers to deal with this technology and its innovations to fulfill their assigned roles in the educational process, and to develop their teaching performance in line with technological innovations.

**Table 14:** Frequencies and Arithmetic Means of Service Quality Available through Electronic Platforms (n = 139).

No.	Phrase	Mean	S.D.	Degree	Rank
9	I see that the interface of electronic platforms is suitable for	3.98	0.97	Large	2
	my abilities and meets my ambitions		0.97		
10	I see that the services of electronic platforms are	4.06	1.01	Large	1
	characterized by diversity and effectiveness		1.01		



11	I see that the services of electronic platforms do not suit my interests and do not meet my needs	1.86	1.08	Weak	4
12	I see that the services of electronic platforms do not provoke my interaction or participation in use	2.06	1.27 Weak		3
	General arithmetic mean	2.99	0.58	medium	

It is clear from Table (14) that the weighted arithmetic means of the opinions of Arabic language teachers about the quality of service available through electronic platforms ranged from 1.86 - 4.06. The general arithmetic reached 2.99, from five points in the light of the distribution of the lengths of the categories according to the gradient used in the scale. This indicates that the quality of service available through electronic platforms for Arabic language teachers is at a (medium) degree.

It is also clear from the previous table that the most quality services available through electronic platforms from the point of view of Arabic language teachers are that "the services of electronic platforms are characterized by diversity and effectiveness" which comes in the first rank, followed by "the interface of the electronic platforms interaction was suitable for their abilities and met their aspirations" in the second rank. In the third rank comes "the services of electronic platforms did not provoke their interaction or participation in use", followed by "the services of electronic platforms did not suit their interests and do did not meet their needs" in the fourth rank.

The two researchers agree with the results that the online platform services are characterized by diversity and effectiveness. This, in turn, leads to the interaction of Arabic language teachers with the interface of electronic platforms. They are also characterized by being suitable for their interests and abilities and meet their aspirations. This may be due to the good design and outstanding content of these platforms and their technical and technical capabilities that help in understanding them and the speed of learning to use them.

No. Phrase Mean S.D. Degree Rank 13 I see that the steps to accomplish the task within the 3.94 Large 1.08 electronic platforms are arranged logically I see that the tools of electronic platforms are not enough to 14 2.81 Medium 1.30 manage learning I see that navigating and navigating within electronic Weak 15 2.38 1.13 platforms is difficult 16 I see that the electronic support system within the 2.61 Medium 1.19 electronic platforms is not good 2.94 General arithmetic mean 0.65 Medium

**Table 15:** Frequencies and arithmetic means of system quality within electronic platforms (n = 139).

It is evident from Table (15) that the weighted arithmetic means of the views of Arabic language teachers about the quality of the system within the electronic platforms ranged from 2.38 - 3.94. The general arithmetic mean reached 2.94 from five points in the light of the distribution of the lengths of the categories according to the gradient used in the scale. This indicates that the quality of the system within the electronic platforms for Arabic language teachers is at a (medium) degree.

It is also clear from the previous table that the most quality systems within electronic platforms from the point of view of Arabic language teachers are that "the steps to accomplish the task within the electronic platforms are arranged logically", which comes in the first rank followed by "the tools of the electronic platforms are insufficient to manage learning" in the second rank. Then "the electronic support system within the electronic platforms is not good" comes in the third rank; whereas, in the fourth rank comes "the difficulty of navigating and navigating within the electronic platforms.

The researchers believe that the results are consistent with the tangible reality in the electronic educational environment in terms of logically arranging the steps to complete the task within the electronic platforms, which contributes greatly to facilitating the completion of the performing tasks assigned to the Arabic language teacher. This in turn contributes to the development of the teachers' performance, and leads to their acceptance of any new technology in the future.



**Table 16:** Frequencies and Arithmetic means of confidence in using electronic platforms (n = 139).

No.	Phrase	Mean	S.D.	Degree	Rank
17	I see that my use of electronic platforms in general made	3.43	1.23	Large	4
	me enjoy teaching		1.23		
18	I see that electronic platforms are difficult to use in	3.66	1.07	Large	1
	teaching Arabic		1.07		
19	I see that my colleagues will use electronic platforms to	3.63	1.20	Large	2
	teach Arabic		1.20		
20	I advise my colleagues not to use electronic platforms in	3.47	1.31	Large	3
	education		1.31		
	General arithmetic mean	3.55	0.99	Large	

It is clear from Table (15) that the weighted arithmetic means of the opinions of Arabic language teachers about confidence in the use of electronic platforms ranged from 3.43-3.66, and that the general arithmetic mean was 3.55 from five points in the light of the distribution of the lengths of the categories according to the gradation used in the scale. This indicates that the confidence in the use of electronic platforms by Arabic language teachers was (large).

It is also obvious from the previous table that the most trusted uses of electronic platforms by Arabic language teachers from their point of view is that "the quality of service in the electronic platforms and it is better than their expectations" which comes in the first rank followed by the second rank that "the use of electronic platforms make them reassured about the success of the teaching position". It is followed in third rank by "the use of electronic platforms in education is better than traditional education", followed in the fourth rank by "they will teach all their courses through electronic platforms".

The two researchers believe that technological innovations and the accompanying development in platforms, applications, software and systems made them more quality. This made it easier for Arabic language teachers to use them, and thus it was more than their expectations and gained their trust. This may also be attributed to the educational outcomes and the results of students' achievement in the courses they teach, in addition to the fact that all of the above will necessarily lead them to accept these technological innovations and develop their performance through working and interacting with them.

**Table 17:** Frequencies and Arithmetic means of "the Real Use of electronic platforms (n = 139)

No.	Phrase	Mean	S.D.	Degree	Rank
21	I see that my use of electronic platforms in general made me enjoy teaching  3.82		1.25	Large	2
22	I see that electronic platforms are difficult to use in teaching Arabic	electronic platforms are difficult to use in teaching Arabic 2.22 Weak		3	
23	I see that my colleagues will use electronic platforms to teach Arabic	3.83	1.01	Large	1
24	I advise my colleagues not to use electronic platforms in education	1.73	1.15	Very weak	4
	General arithmetic mean	2.90	0.59	Medium	

It is clear from Table (17) that the weighted arithmetic means of the opinions of Arabic language teachers about the real use of electronic platforms ranged between 1.73-3.83, and the general arithmetic mean reached 2.90 from five points in the light of the distribution of the lengths of the categories according to the gradient used in the scale. This indicates that the real use of electronic platforms by Arabic language teachers is at a (medium) degree.

It is also clear from the previous table that the most real uses of electronic platforms for Arabic language teachers from their point of view is that "their colleagues will use electronic platforms in teaching Arabic" which comes in the first rank. In the second rank comes "their use of electronic platforms in general make them enjoy teaching", followed by third rank that "electronic platforms are difficult to use in teaching the Arabic language", and finally in fourth rank comes "advising their colleagues not to use electronic platforms in education".

From the researchers' point of view, the results of the real use of electronic platforms necessitate the need for teachers to use electronic platforms in teaching Arabic. This is because the developments that have occurred in the field of teaching depend mainly on technology in all educational activities, which requires the teacher to interact with technological innovations, including electronic platforms, so that he can play his role in the educational process, and develop his



teaching performance in accordance with them.

**Table 18:** Frequencies and Arithmetic Means of Satisfaction with Electronic Support across Electronic Platforms (n = 139).

No.	Phrase	Mean	S.D.	Degree	Rank
25	I see the need for electronic support on	4.47	0.84	Very large	1
	electronic platforms		0.64		
26	I see that electronic support in the experience of	4.05		Large	2
	using electronic platforms is fruitful and		1.04		
	effective				
27	I see that electronic support via electronic	2.32	1.17	Weak	3
	platforms is ineffective		1.1/		
28	I see that electronic support via electronic	2.29	1.16	Weak	4
	platforms hinders my ability to solve problems		1.10		
	General arithmetic mean	3.28	0.59	Medium	

It is clear from Table (18) that the weighted arithmetic means of the views of Arabic language teachers about satisfaction with electronic support through electronic platforms ranged between 2.29- 4.47. The general arithmetic mean reached 3.28 from five points in the light of the distribution of the lengths of the categories according to the gradient used in the scale. This indicates that the satisfaction with the electronic support through the electronic platforms of the Arabic language teachers is at a (medium) degree.

It is also clear from the previous table that the most satisfactory electronic support through electronic platforms for Arabic language teachers from their point of view is "the need for electronic support in electronic platforms" which comes in the first rank, followed by "electronic support in the experience of using electronic platforms is fruitful and effective" in the second rank. In the third rank comes "electronic support via electronic platforms is ineffective", then "electronic support through electronic platforms hinders their ability to solve problems" in the fourth rank.

From the researchers' point of view, the results that came about the satisfaction with electronic support through electronic platforms necessitate the presence of electronic support in electronic platforms, because of the rapid technical development and the continuous improvement of electronic platforms. Also, the presence of technical support specifically for electronic platforms leads to finding immediate solutions to technical problems that happen to Arabic language teachers while using these platforms. This in turn leads to the completion and smooth running of the educational process which makes the teacher feel satisfied with it and thus satisfied with his teaching performance.

The level of technological acceptance of Arabic language teachers can be summarized from their point of view, as shown in the following table:

**Table19:** Arithmetic Means and Relative Importance of Level of Arabic Language Teachers of Technological Acceptance (n= 139).

	·	eceptance (	137).			
No.	Phrase	Mean	S.D.	Relative	Degree	Rank
				importance		
1	Ease of use of technological innovations	3.05	0.73	61.0%	Medium	4
2	The expected benefit from the use of	3.05	0.50	61.0%	Medium	3
	technological innovations		0.30			
3	Quality of service available through	2.99	0.58	59.%	Medium	5
	online platforms		0.38			
4	System quality within electronic	2.94	0.65	58.7%	Medium	6
	platforms		0.03			
5	Confidence in the use of electronic	3.55	0.99	71.0%	Large	1
	platforms		0.99			
6	Real use of online platforms	2.90	0.52	58.0%	Medium	7
7	Satisfaction with electronic support via	3.28	0.59	65.7%	Medium	2
	electronic platforms		0.59			
	General arithmetic mean	3.11	0.36	62.2%	Medium	

It is clear from Table (19) that the general arithmetic means of the opinions of Arabic language teachers about the level



of technological acceptance ranged between 2.90-3.55. The general arithmetic mean reached 3.11 from five points in the light of the distribution of the lengths of the categories according to the gradation used in the questionnaire with relative importance (62.2%), and this indicates that the level of technological acceptance of Arabic language teachers is at a (medium) degree.

It is also clear from the previous table that the most technological acceptance of Arabic language teachers is represented in the confidence in the use of electronic platforms", which comes in the first rank followed by "the satisfaction with electronic support through electronic platforms" in the second rank. Then comes "the expected benefit from the use of technological innovations" in the third rank, followed by "the ease of use of technological innovations" in the fourth rank, and "the quality of service available through electronic platforms" in the fifth rank, followed by "the quality of the system within the electronic platforms", in the sixth rank, and finally "the real use of electronic platforms" in the seventh rank.

From the point of view of the researchers, the results about the level of technological acceptance indicate that the average level of technological acceptance of Arabic language teachers may be due to the recent use of technology mainly in education in general and in teaching performance in particular despite the confidence in the use of electronic platforms by teachers. From the point of view of the researchers, the continuous use of technology and its innovations in the educational process, as it has become one of the basic tools and means, will make it familiar and acceptable to teachers to a large extent in the near future, because it cannot be dispensed with, either by the teacher or by the learner. The previous results are consistent with what came from the results of Saleh's study (2020), which aimed at identifying the effect of the two patterns of wandering (free, directed) within an e-learning environment on developing skills for solving digital citizenship problems and the level of their technological acceptance for students of the general diploma

in education. The research found that the guided wandering pattern had the greatest effect in developing solving digital citizenship problems, and the results also showed a high level of technological acceptance for students of the two experimental groups.

The previous results are also consistent with the results of Abu Younis's study (2021), which aimed to investigate the effect of teaching according to the gamification strategy on mathematical thinking and technology acceptance among

seventh grade students in mathematics in government schools in Tulkarm Governorate. The results of the study showed that there was statistical significance between the mean scores of students in the experimental group in the technological

acceptance questionnaire. The difference was attributed to the teaching method based on the gamification strategy, in favor of the experimental group that studied according to the strategy.

The previous results are also consistent with the results of Mansour's study (2021), which aimed to study the effect of designing an electronic adaptive structural test with regression (corrective/ explanatory) in a computer course on the technological acceptance of second-year students at the Faculty of Education, Assiut University. The results showed that there were statistically significant differences at the level (0.01) between the mean scores of the first experimental group (a structural electronic adaptive test with an explanatory reference) and the second experimental group (a structural electronic adaptive test with an explanatory feedback), in favor of the second experimental group (a structural electronic adaptive test with an explanatory feedback) in each dimension of the Technological Acceptance Scale and in the scale as a whole.

To answer the third question of the research stated "what is the relationship of reflective practices to developing the teaching performance of Arabic language teachers in the light of the digital transformation?", and to find out the significance of the correlation of reflective practices in developing the teaching performance of Arabic language teachers in the light of digital transformation, the scores of the performance development observation card and the scores of the Reflective Practice Scale were used. Then, the hypothesis that "there is a statistically significant correlation at the (0.05) level between the reflective practices and developing teaching performance" was tested.

To test the previous hypothesis, Pearson's equation was used to find the Pearson's coefficient, and the results were as follows:

**Table 20:** Results of the Test of Correlation of Reflective Practices in Developing the Teaching Performance of Arabic Language Teachers in the Light of Digital Transformation (N = 81).

Relation	Correlation	Level of	Significance	Decision
	Coefficient	Significance		



Reflective Practices * Planning	0.646	0.00	Significant	There is a correlation
Reflective Practices * Implementation	0.657	0.00	Significant	There is a correlation
Reflective Practices * Calendar	0.730	0.00	Significant	There is a correlation
Reflective Practices *Development	0.538	0.00	Significant	There is a correlation
Reflective practices * Teaching performance development	0.727	0.00	Significant	There is a correlation

## Significant at the 0.01 level

It is clear from Table (20) that the value of the correlation coefficient (Pearson) for the reflective practices in developing the teaching performance of Arabic language teachers under the digital transformation reached (0.727). This value is statistically significant at the (0.05) level. This indicates that there is a positive statistically significant correlation relationship at the (0.05) level for the reflective practices in developing the teaching performance of Arabic language teachers in the light digital transformation.

It is clear from the previous table that all values of the correlation coefficient (Pearson) for the relationship of reflective practices to developing the teaching performance of Arabic language teachers in the light of digital transformation are statistically significant at the significance level (0.05). This indicates that there is a positive, statistically significant correlation between reflective practices and each of (planning, implementation, evaluation and development). The most correlative relationship is between reflective practices and evaluation, whereas, the least correlative relationship is between reflective practices and development.

The researchers believe that the existence of a correlation of reflective practices with the development of the teaching performance of Arabic language teachers in the light of the digital transformation, may be due to the fact that reflective practices of Arabic language teachers are carried out through the activities organized by the teachers, the educational behaviors they follow, and the results they achieve. It is reflected in the development of their teaching performance to an appropriate degree, as the results show.

The previous results coincide with the results of Al-Zahrani's study (2019), which aimed to highlight the reality of the teaching performance of Arabic language teachers at the intermediate stage in the light of reflective teaching skills in Jeddah Governorate. Among the most important findings of the study was that the level of teaching performance of Arabic language teachers in Jeddah was at a high level.

The results also coincide with the results stated in Gabriel's study (2017), which aimed to identify the effectiveness of a program based on contemporary professional standards in developing the teaching performance of Arabic language teachers in the secondary stage. The dependent variables were measured in the research sample before and after field application through three research tools, represented in the lesson preparation examination card, the observation card, and the achievement test. The results showed statistically significant differences at the level of significance (0.01) between the mean scores of the teachers of the experimental group and the control group in favor of the teachers of the experimental group in the post application of the research tools. The result was due to the effectiveness of the program based on contemporary professional standards.

The current results also agree with the results stated in Al-Maqati's study (2021), which aimed to evaluate the teaching performance of "My Beautiful Language" course teachers in the light of reading fluency skills, and to prepare a proposed conception to develop the teaching performance of "My Beautiful Language" course teachers in teaching reading fluency skills. The results of the study showed that the level of mastery of "My Beautiful Language" course teachers for the fifth grade of primary school in the Holy Makkah with the skills of teaching reading fluency was moderately high.

The previous results are also consistent with the results of Abdel-Fattah's study (2018), which sought to improve the teaching performance of Arabic language teachers in the preparatory stage in the light of future directions for research in curricula and teaching methods. The post application of the research sample indicated the program's interest in developing teaching strategies that were based on the student's activity, to which the teaching research was directed.

To answer the fourth question stated "what is the relationship of the level of technological acceptance to developing the



teaching performance of Arabic language teachers in the light of the digital transformation?, and to find out the significance of the correlation between the level of technological acceptance and the development of the teaching performance of those teachers in the light of the digital transformation, the scores of the performance development observation card and the degrees of the Technological Acceptance Scale were used. And hence the following hypothesis was tested: "there is a statistically significant correlation at the level (0.05) of the level of technological acceptance in developing the teaching performance of Arabic language teachers in light of the digital transformation".

To test the previous hypothesis, Pearson's equation was used to find out the Pearson's coefficient, and the results were as follows:

**Table 21:** The Results Correlation Test of Level of Technological Acceptance and the Development of Teaching Performance of Arabic Language Teachers in The Light 0f Digital Transformation (N = 81).

	~ 1 :	- 10	a: :a:	
Relation	Correlation	Level of	Significance	Decision
	Coefficient	Significance		
Technology Acceptance *	0.585	0.00	Significant	There is a
Planning		0.00	_	correlation
Technology Acceptance *	0.606	0.00	Significant	There is a
Implementation		0.00		correlation
Technology Acceptance *	0.643	0.00	Significant	There is a
Calendar		0.00		correlation
Technology acceptance *	0.476	0.00	Significant	There is a
development		0.00		correlation
Technology acceptance *	0.652		Significant	There is a
Teaching performance		0.00		correlation
development				

### Significant at the level 0.01 or less

It is clear from table (21) that the value of the correlation coefficient (Pearson) for the level of technological acceptance in developing the teaching performance of Arabic language teachers in the light of the digital transformation reached (0.652), and this value was statistically significant at the significance level (0.05). This indicates that there is a statistically significant positive correlation at (0.05) level of the level of technological acceptance in developing the teaching performance of Arabic language teachers under the digital transformation.

It is also clear from the previous table that all values of the correlation coefficient (Pearson) for the relationship between the level of technological acceptance and the development of the teaching performance of Arabic language teachers in the light of digital transformation are statistically significant at the (0.05) level, and this indicates that there is a statistically significant positive, correlation at the significance level (0.05) between the level of technological acceptance and each of (planning, implementation, evaluation and development). The most correlative relationship is between the level of technological acceptance and evaluation, whereas the least correlative relationship is between the level of technological acceptance and development.

The researchers believe that the existence of a correlation between the level of technological acceptance and the development of the teaching performance of Arabic language teachers in the light of the digital transformation, may reflect the extent to which Arabic language teachers accept technological innovations through their use of many technological tools such as electronic platforms, applications, software and associated systems. It is reflected in the development of their teaching performance to an appropriate degree, as the results show.

The previous results are consistent with the results of (Al-Shammari's study (2019), which aimed to develop the teaching performance of Arabic language teachers in the secondary stage in the light of the strategic teaching approach. The research reached a set of results through the teaching performance observation card. Among those results was; in the light of strategic teaching performance indicators, developing the teaching performance of Arabic language teachers at the secondary stage requires training teachers to employ it in the teaching process. It also requires the following items to be included in pre-service teacher preparation program: planning strategic teaching, using strategies and organizational patterns, implementing and evaluating it, and preparing an integrated guide showing how to employ strategic teaching in lesson planning, implementation and evaluation.

They previous results differ from the results of Abdullah's study, (2021) which aimed to assess the teaching



performance of Arabic language teachers in the primary stage in Qena Governorate in the light of lateral thinking skills. An observation card to measure the lateral thinking skills of teachers in the three stages of the teaching process (planning, implementation and evaluation) was prepared. The results of the study found weak use of lateral thinking skills by Arabic language teachers in the sixth grade of primary school in the stages of the teaching process.

They also differ from the results of Al-Roqi's study (2018), which aimed to prepare a proposed training program to develop the teaching performance of Arabic language teachers at the secondary level, in the light of the Kingdom's 2030 vision. The results showed that there was a discrepancy in the level of teaching performance of Arabic language teachers in professional standards; it ranged between (0.35-1.63), and in the total score for all fields with an arithmetic mean of (1.15), which is a poor level of performance in general.

## Summary, findings, recommendations, and suggestions

This part deals with a summary of the research results, the most important recommendations, and the proposed research.

## First: summary of results

- The reflective practices apply to Arabic language teachers to a large degree.
- The most reflective practice that applies to Arabic language teachers in the light of the digital transformation is "to ensure that the information is correct before transmitting it to students".
- The least reflective practice that applies to Arabic language teachers in the light of the digital transformation is "conducting procedural research on Arabic language teaching".
- The level of technological acceptance of Arabic language teachers is (medium).
- The most technological acceptance of Arabic language teachers is represented in "the confidence in using electronic platforms".
- The ease of use of technological innovations by Arabic language teachers is at a (medium) degree.
- The easiest technological innovation in use is to "carry out the assigned tasks with ease and flexibility through technological innovations".
- The expected benefit from the use of technological innovations for Arabic language teachers is at a (medium) degree.
- The most expectation for benefiting from the use of technological innovations is that their use of technological innovations increases the level of their teaching performance.
- The quality of service available through electronic platforms for Arabic language teachers is at a medium degree.
- The most quality services available through electronic platforms are that the services of electronic platforms are characterized by diversity and effectiveness.
- The quality of the system within the electronic platforms for Arabic language teachers is at a medium degree.
- Confidence in using electronic platforms among Arabic language teachers is a large degree.
- The most trusted use of electronic platforms by Arabic language teachers is that the quality of service in electronic platforms is better than their expectations.
- The real use of electronic platforms by Arabic language teachers is at a medium degree.
- The most real use of electronic platforms for Arabic language teachers is that their colleagues will use electronic platforms in teaching Arabic.
- Satisfaction with electronic support via electronic platforms among Arabic language teachers is at a medium degree.
- Electronic support through electronic platforms is the most satisfactory for Arabic language teachers, which is the need for electronic support on electronic platforms.
- There is a statistically significant positive correlation at the (0.05) level of significance of the reflective practices in developing the teaching performance of Arabic language teachers in the light of digital transformation.
- The most correlative relationship is between reflective practices and evaluation, and the least relationship is between reflective practices and development.
- There is a statistically significant positive correlation at the (0.05) level of significance of technological acceptance in developing the teaching performance of Arabic language teachers in the light digital transformation.



- The most correlative relationship is between the level of technological acceptance and evaluation, and that the least relationship is between the level of technological acceptance and development.

#### **Second: Recommendations**

In the light of the results of the current research, the researchers recommend the following:

- 1. Holding training session for teachers in the field of procedural research on teaching Arabic.
- 2. enhancing the teaching skills of Arabic language teachers, to practice what they have acquired of new ideas, is an urgent necessity.
- 3. Urging Arabic language teachers to view research papers and articles on practices related to Arabic language teaching.
- 4. Encouraging Arabic language teachers to participate in professional groups for teaching Arabic.
- 5. Encouraging teachers to attend class sessions conducted by other teachers in the Arabic language.
- 6. Reducing difficulties that Arabic language teachers face in controlling all components of technological innovations.
- 7. Linking the evaluation of the teaching performance of Arabic language teachers to mastering the use of technological innovations.
- 8. Seeking to make the services of electronic platforms characterized by diversity and effectiveness to assist Arabic language teachers in developing their teaching performance.
- 9. Caring to make the use of electronic platforms enjoyable in teaching Arabic.
- 10. Arranging the steps to complete the task in a logical manner within the electronic platforms.
- 11. Developing plans to teach all courses in the Arabic language through electronic platforms.
- 12. Having an electronic support on the electronic platforms used by Arabic language teachers.

# Third: Suggestions for further research

To complement what the current research started, the researchers suggest conducting the following future studies:

- 1. The effect of reflective thinking on developing the performance of Arabic language teachers
- 2. The effectiveness of a proposed program based on technological innovations in developing the performance of Arabic language teachers.
- 3. Using e-learning tools and their role in developing the technical skills of Arabic language teachers.

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