
RESEARCH ARTICLE

The Effectiveness of a Training Program Based on the Wallace Model in Developing Teaching Performance Skills among First-grade Teachers

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ABSTRACT

The study aimed to investigate the effectiveness of a training program based on the Wallace model in developing teaching performance skills among first-grade teachers. To achieve this, the researchers adopted an experimental method with a one-group pretest-posttest design. The study sample consisted of 20 first-grade teachers, who were trained according to the Wallace-based program for four weeks. The study tool was then applied, which included an observation checklist to measure teaching performance skills, consisting of three skills: implementation, learning management, and evaluation. The results of the study showed statistically significant differences between the pretest and posttest scores of the first-grade teachers on the observation checklist in all dimensions and the overall score, with the differences favoring the posttest after they underwent the training program based on the Wallace model. In light of these results, the study recommended several recommendations, most notably the design of continuous training programs for teachers based on creative models such as the Wallace model, and assessing their effectiveness in creative thinking, problem-solving, and developing innovative teaching methods. Additionally, integrating critical and creative thinking strategies and tools into the curricula was recommended to motivate teachers to apply these skills in addressing classroom challenges.

KEYWORDS

Training program, Wallace model, teaching performance skills

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1. Introduction

Countries around the world seek to improve their educational systems, realizing the importance of education as a basic means to achieve a bright future for societies, and its pivotal role in driving progress and prosperity in various economic, social and political fields. Education also represents an effective tool that enables countries to achieve leadership positions in contemporary human civilization and work to develop it. Therefore, investing in education has become one of the most important priorities, as it is a high-return investment that contributes to achieving the aspirations and ambitions of peoples. The first three grades have received special attention from countries with different philosophies and cultures.

Mustafa (2013) explained that the first three grades constitute a critical stage in the educational process, where the teacher must use appropriate educational strategies that respond to the needs and diverse characteristics of students, and must also attract the attention of students and stimulate their curiosity and excitement. In addition, the teacher should accurately define his goals before the educational class, and be prepared to start and end the lesson in a way that achieves these goals. As for the teacher of the first three grades, he must be flexible and able to adapt to emergency situations during the class, while being keen

to communicate effectively with students in a manner that is consistent with their intellectual level. It also requires diversifying the educational methods used, which increases students' interaction with the lesson and raises their concentration, especially when integrating technological methods, which have proven their significant positive impact on the educational process (Specht, 2017).

Teaching performance expresses the teacher's ability to apply teaching practices and procedures effectively, which contributes to achieving a higher educational level that appears in the final learning outcomes (Abu Shagour, 2018).

Egboka & Alike (2018) indicate that the elements of teaching performance include evaluating how teachers present educational content in classrooms, analyzing students' academic performance, in addition to monitoring teachers' attendance and absence, adherence to deadlines, and applying professional standards related to the teaching profession, in addition to effectiveness in classroom management.

To achieve sustainable improvement in teaching performance, teachers must possess basic skills that enhance the educational process. According to the Australian Institute of Teaching and School Leadership (AITSL, 2018), these requirements include using effective teaching strategies with critical and creative thinking, employing scientific content and linking it to scientific and environmental developments, and managing the educational process efficiently through active participation and effective classroom management. Teaching efficiency also requires the skillful use of technology and communication tools, in addition to diversifying assessment methods to include cognitive, skill-based and emotional aspects, while taking into account individual differences among students.

Among the teaching models that focus on creativity is the Wallas model, which explains that the creativity process goes through sequential stages that include preparation, latency, illumination, and verification. This model was applied practically for the first time by Patrick, where the creative thinking process was studied directly through artists' practices, which provided a deeper understanding of the mechanisms and dimensions of creativity (Kaufman & Sternberg, 2010).

The results of some studies that examined the impact of using some training programs in training teachers of the first three grades supported the previous intellectual trends, as they indicated that training programs are primary tools for practicing teaching and learning and have the ability to change the way teachers think about how to teach, as they affect what is taught, enrich the learning environment and make it more interesting, and allow students and teachers to focus on conceptual comprehension instead of focusing on procedures and processes (Abdullah et al., 2017).

Based on the above, the researchers moved to investigate the effectiveness of a training program based on the Wallas model in developing teaching performance skills among teachers of the first three grades.

2. Study Problem

Developed and developing countries pay special attention to the education of the first three grades, as it is an important criterion for measuring the progress and prosperity of nations. Those who have a deep understanding of the nature of this group and its educational needs, and are good at meeting those needs effectively, will have advanced opportunities that enable them to compete in the fields of science and technology. If the goal is to prepare today's students to face global challenges in the future, then empowering and qualifying first-grade teachers is a fundamental pillar in achieving students' success and creativity in the future (Al-Harbi, 2019).

Through her experience in the field of teaching and school administration, her attendance at many seminars and training courses for preparing teachers of the first three grades, her direct contact with teachers of the first three grades, and her follow-up of what the Ministry of Education approves by issuing an update to the programs for preparing teachers of the first three grades, she has noticed the scarcity and paucity of scientific studies and research that have addressed the construction of training programs for teachers of the first three grades based on the Wallace model, as attention is now directed towards preparing and developing teachers of the first three grades in developing teaching performance skills.

Several previous studies, such as Ibrahim and Yousefani (2022), recommended the necessity of building training programs for teachers based on the Wallace model, and Abdul Qader's (2023) study showed the necessity of improving teachers' teaching performance. Based on the above, the researcher's view turned to researching the effectiveness of a training program based on the Wallace model in developing teaching performance skills among teachers of the first three grades.

2.1. Study questions

The study answered the following main question:

Are there statistically significant differences at the significance level ($\alpha=0.05$) between the average performance of the experimental group members in the pre- and post-test of the level of teaching performance skills attributed to the training method (the training program based on the Wallace model)?

2.2 The importance of studying

- Detecting the existence of statistically significant differences between the average performance of the experimental group members in the pre
- and post-application of the teaching performance skills scale attributed to the training method (the training program based on the Wallace model).

2.3 From a theoretical standpoint, the following:

- The current study gains its theoretical importance as it is one of the rare Arab studies
- based on a review of available databases
- that adopts the idea of applying a training program based on the Wallace model with the aim of enhancing the teaching performance skills of teachers in the first three grades.
- This study may contribute to enriching Arab libraries and increasing the theoretical content about the variables it addressed.
- The study may also represent a new starting point for researchers to conduct more studies related to its topic, which opens new horizons for delving into this field.

2.4 The importance of the study from an applied perspective is as follows:

- The current study is expected to contribute to directing the attention of officials in the first three grades teacher preparation programs in colleges, universities and other educational institutions towards the importance of integrating the Wallace model into their programs.
- This study may motivate those responsible for training first three grades teachers in educational institutions to adopt the Wallace model in their training programs.
- The study may contribute to raising awareness of first three grade teachers of the importance of teaching performance skills when preparing their daily teaching plans and applying them in the classroom environment.
- The results of the current study may direct researchers towards designing more training programs based on the Wallace model.
- This study presents a practical model for a training program for first three grades teachers based on the Wallace model, which officials in ministries of education can rely on when developing training programs for teachers, as well as adopting it in universities, colleges and other educational institutions to build training programs dedicated to new teachers.

3. The limits of the study:

- **Spatial boundaries:** The current study was limited to private schools affiliated with the Directorate of Education for the University District in the Capital Governorate of Amman - Jordan.
- **Temporal boundaries:** The current study was limited to the first semester of the academic year 2024/2025.
- **Human boundaries:** The current study was limited to a sample of teachers of the first three grades in private schools in the University District of the Capital Governorate of Amman in Jordan.
- **Objective boundaries:** The current study was limited to the effectiveness of a training program based on the Wallace model (preparation, incubation, flash, and verification) in developing their teaching performance skills.

4. Study limitations:

Study limitations: The generalizability of the study results is determined in light of the validity and reliability of the tools, and the objectivity of the respondents.

5. Terminology of study:

The study includes a number of terms that can be defined as follows:

- **Training program:** It is "the systematic and planned efforts that aim to provide trainees with renewed knowledge, skills and experiences, with the aim of achieving continuous positive changes in their experiences, attitudes and behaviors, which contributes to improving the efficiency of their performance and developing it in a sustainable manner" (Al-Taani, 2002: 14).

- **Wallace Model:** Wallace (1926: 10) defined it as "a creative model that includes four stages of the creative process: Preparation, Incubation, Illumination and Verification, which are the basis of creative research".

- **The training model based on Wallace's model is defined procedurally as:** a set of training sessions adopted by the researchers according to specific objectives and organized content, represented in a set of experiences and activities designed according to Wallace's model, which includes four steps: Preparation, Incubation, Illumination and Verification, with the aim of developing knowledge economy skills among the experimental group of teachers in the first three grades.

- **Teaching performance:** It is "the ability to carry out an activity or task related to planning, implementing and evaluating teaching, as this activity can be analyzed into a set of behaviors and performances. Performance is evaluated using organized observation methods, and it can also be developed and improved through specialized training programs" (Ahmed, 2015: 512). It is procedurally defined as: all procedures and patterns of teaching behavior carried out by teachers of the first three grades in order to present lessons in terms of planning, implementation and evaluation, and it was measured by the score obtained by the study individuals (teachers of the first three grades) when they answered the study tool.

6. Theoretical framework:

Wallace Model

The diversity in the use of teaching models and strategies is an important factor in increasing students' interest in educational topics; this is due to its importance in facilitating the learning process, providing assistance in improving performance, and often the lasting effect of learning, which increases students' motivation towards interest in academic success and cognitive achievement.

The educational path is rich in multiple methods of transferring knowledge, which have developed effectively and actively, leading to the emergence of different educational models, and the educational model is a set of fixed rules that guide teaching, i.e. it is an educational and educational approach that determines the development of curricula (Asaad, 2018).

The educational model is defined as "a conceptual structure for drawing the elements of the system during the organization of educational experiences in order to achieve educational goals, and planning the educational process for students and teachers in a clear manner" (Al-Barbari, 2010: 53).

The educational model indicates a set of techniques that provide structure to the teaching and learning process. The method through which knowledge is presented to students is called the educational model, and this includes the students, the teacher, the content, and the method of presenting the content. The teacher's familiarity with educational models leads to achieving appropriate results in educational situations. The educational model includes a set of elements that summarize the synthesis of various educational theories and methods, which focus on guiding the teacher in organizing the preparation of educational programs. Due to cognitive and technological developments, those concerned are interested in designing new models, which has helped the emergence of educational models throughout history (Turner, 2013). Creative models are among the most prominent educational models that are compatible with the characteristics of the current era, and which express educational strategies that focus on stimulating creative and innovative thinking among students by integrating interactive educational activities and the ability to solve open problems, with the aim of developing students' skills in creative and critical thinking, encouraging them to generate new ideas, and working to link theoretical knowledge with practical application, which helps make the teaching and learning process more attractive and effective (Shaheen, 2010). The importance of creative educational models in developing students' 21st century skills, especially critical and creative thinking, and enabling them to communicate effectively and engage in group work, is evident by providing an educational environment rich in situations that stimulate creativity and interaction. It also works to increase students' motivation to learn, as students feel pleasure and a desire to integrate into the educational learning process, and improve their readiness for future professions by training them in innovation and problem-solving skills, and enhancing students' deep learning by linking the educational content in the curricula with real-life situations. Creative models have also proven their ability to raise students' levels of understanding and comprehension, and their effective role in developing deep thinking skills, which is positively reflected in cognitive progress and academic achievement, and consolidates their lifelong learning skills (Baer, 2016). Sternberg (2015) pointed out that creativity in education begins with curiosity. Based on examining the circulation and production of information in lifelong learning processes, the models of creative education, consisting of communication, content, community, communication, and interest, suggest that learning begins with curiosity that raises questions related to the subject, called communication. In this process, students, with the help of the teacher, attempt to immerse themselves in relevant knowledge, called content, and attempt to distinguish similarities between this content and what

they already know, called community. Alternative answers to the question are then proposed. At the same time, students engage in interaction and exchange with others in order to validate their opinions, called communication. Students then obtain knowledge by examining their perceptions, searching for useful relevant information, absorbing information links, and creating personal value through the experience of intellectual transformation, called interest. Accordingly, it is noted that creativity in education can be achieved through different methods such as creative teaching, in order to develop students' skills, as five basic thinking skills have been identified, which are: information processing, reasoning, investigation, creative thinking, and evaluation. Providing a stimulating environment and allocating sufficient time for exploration are essential principles in enhancing creativity. Creative education models start from curiosity, motivate students to explore educational content, link new knowledge with previous knowledge, and enhance communication and interaction with others. The Wallace model is one of the educational models that emphasize creative work and generating assumptions. The Wallace model relies on the student's position in the situation by providing activities that generate creative ideas to reach the stage of maturity that enables the student to work on studying the problem and finding new ideas or dealing with the problem or issue raised from all angles and directions, so that the subject can be seen from several sides (Soh, 2018). The Wallace model is considered one of the models whose foundations are linked to the creative process and its various stages, and it is primarily influenced by creativity and the psychoanalytic theory of creativity. The Wallace model is one of the oldest creative models. The scientist Wallace moved towards designing it in the early twentieth century, in the year (1926), during the publication of his book called *The Art of Thought*. This model is concerned with identifying the interconnected relationships between creative processes and problem solving, by studying what makes problem solving one of the creative arts. The Wallace model also showed the path that determines the initial ideas in the brain, and works to translate them into the context of words (Jalil, 2007).

Maharani and Sulestiyarno (2017) defined Wallace's model as "one of the intellectual creative models, which contains indirect intellectual processes, and creativity and analytical thinking are complementary elements of the model, and are reflected in varying degrees in other creative models." The Wallace model aims to transform theoretical knowledge into a set of skills that can be applied and implemented in various life situations. It also contributes to enabling students to divide and analyze the problem into small parts in order to enhance the ability to understand and process effectively, and to help students adopt skills that support lifelong learning by enhancing curiosity and the desire to discover knowledge (Soh, 2018). A group of educators, including Wallace, indicated that the creative process indicates a successive series of stages that the creative individual implements, starting with the individual's feeling of the problem, identifying its aspects and folds, and moving towards formulating a set of appropriate perceptions and solutions for it, considering that it is one of the relatively rapid cognitive changes, and the intellectual transformation at the moment the individual discovers the new idea, and thus creativity occurs through individuals passing through a set of stages of the creative process, and Wallace tended to clarify it within four basic stages, which are the preparation stage, incubation, verification and illumination (Runco, 2014). Wallace's theory (1926) is one of the first and oldest theories that dealt with the creative process. Wallace emphasizes the fragmentation of creativity, and the steps of this model are divided into a series of stages, including four stages, as follows:

First: The preparation stage:

This stage includes the formation of a comprehensive and in-depth cognitive background in the subject in which the individual is interested in creativity. This stage also represents the collection of information, and the consideration of searching for problems in all contexts. This stage also requires individuals to use theoretical backgrounds in order to prepare them cognitively, activate the role of memory, and provide different readings on the subject. The studied, and after that, the trend is towards making many attempts in order to work on finding solutions to the problems, but this problem remains, meaning that at this stage the individual acquires knowledge about the subject, and then begins to collect data and search for an actual solution to the problem, and the problem is identified and studied from all sides and information is collected about it (Florida, 2012).

Second: The incubation stage:

In the incubation stage, the person in charge of the solution puts the problem aside and does something else, as if he is taking a vacation. In this stage, the mind is freed from many impurities and thoughts that are unrelated to the problem. In other words, this stage is considered a state between the conscious and the subconscious. This state is known for combining anxiety, subconscious fear, and the individual's hesitation when undertaking work and trying to find appropriate solutions for it. It is also a stage of arrangement, anticipation, and waiting in order to reach creative solutions to the problem after the individual delves into thinking about all possible possibilities. The experiences of creative individuals indicate that creative achievements are made more deeply and broadly during periods in which they are interested in focusing on other topics. This confirms that many of the processes based on thinking occur during the pre-conscious level, which is one of the most difficult stages in creative thinking. One of the most important features of this stage is the great effort that the individual exerts in creativity in order to solve the

problem. This stage begins to appear before actual thinking about it, meaning that it occurs during the pre-conscious stage (Kozbrlt, Beghetto & Runco, 2014).

Third: The stage of enlightenment:

This stage is known as the creative flash or the bright spark in thinking, as it expresses the moment in which the creative spark appears, in which new ideas are generated that are presented to solve problems. It is also described as the inspiring moment. In this stage, work is done with precision and seriousness, and a sudden change in the individual's perception appears during the synthesis of new ideas. In this stage, the solution or a decisive part of it is found, as a sudden brilliance occurs in reaching creative solutions to the problem. This is also related to the individual's feeling of comfort when finding the creative flash (Florida, 2012).

Fourth: The investigation stage:

At this stage, the lighting is corrected, and the creative student at this stage must test the creative idea and reconsider it to see if it is a complete and useful idea or if it needs some polishing, meaning that the investigation stage is the experimental stage to try out the new idea, and this stage is the stage of testing the idea that has been reached and working on trying it out, in order to achieve a creative production described as social satisfaction, and accordingly, the creative process does not usually stop at reaching a solution to the problem and obtaining the creative idea, but there is a need and necessity to exert more conscious effort and follow-up in order to overcome and overcome the obstacles that may usually hinder creative ideas and translate them into creative production, as history is full of examples of many correct scientific theories that were initially rejected, but after reviewing them, their correctness was noted, and one of the most prominent examples of this is the idea of the Earth rotating around the sun, which appeared in the third century BC, and its correctness was not verified until after a period of time (Kozbrlt, Beghetto & Runco, 2010). Accordingly, it is noted that the four stages of the Wallace model are determined in the preparation stage, in which students collect data and information related to the problems they face, accurately define the problem, identify the matters related to it, and lay the foundation for the incubation stage, which includes the conscious mind distancing itself from the problem and thinking in an implicit manner, allowing the subconscious mind to deeply process the information, and the emergence of new ideas in an unexpected way during the third stage, which is enlightenment, in which creative solutions appear during the moment of inspiration, and the final stage, which is verification, in which the optimal testing of solutions or ideas is carried out in order to verify their effectiveness and validity. This may include applying the solution in reality, evaluating its results, and making the necessary adjustments to ensure its suitability to the problem. Teaching performance

To achieve educational goals effectively and with high quality, this depends to a large extent on the efficiency of the teachers who direct the teaching-learning process. Despite the technical and scientific progress that has facilitated this, as well as the presence of digital tools and educational means, the quality of the educational process is difficult to achieve except with qualified teachers who are able to perform their roles skillfully and effectively. Despite the theoretical and philosophical development in educational fields, the teacher has the decisive role in achieving the desired goals in an effective and attractive manner (Al-Ajmi, 2021).

The teaching process is a practice that requires teachers to master knowledge and many skills in the specialty and the process, and to possess educational competencies that support the teaching process. Also, preparing the teacher professionally and behaviorally in an organized manner is one of the basic determinants of the success of the teaching process, and an essential entry point for production in the educational process. This requires keeping pace with developments and professional growth before and during service (Al-Afoun and Al-Nasser, 2015).

Observing teacher performance is an essential process in teaching, with the aim of reaching specific facts or data that help analyze, understand and evaluate the teacher's performance of the work and behavior he adopts during a specific period of time, and assessing his level of professional and practical competence in order to fulfill the burdens of responsibilities and duties required of him (Aba Zaid, 2019).

Jaradat (2015) explained that teaching performance is "a set of educational activities, processes and behaviors carried out by teachers, inside or outside classrooms, and includes everything related to teaching from planning, implementation, evaluation and administrative activities, in addition to social relations within classrooms between the teacher and students." Teaching performance is "all educational activities carried out by teachers during educational situations from classroom planning and management skills, use of technological tools, educational means, evaluation methods and professional growth" (Al-Ain, Al-Mogi & Ismail, 2017). The teaching performance aims to motivate teachers to engage in participation within the classroom, direct them towards analytical thinking, ensure that the educational process is proceeding in a sound manner through practical application, help in identifying problems, finding appropriate solutions, adapting them and choosing the best, directing teachers towards evaluating teaching performance themselves and arriving at identifying strengths and weaknesses, working on developing their own ability, helping them avoid mistakes before they occur, taking the necessary measures for all questions and reactions that

may be issued by students, increasing self-confidence, and feeling the possibility of continuous progress and development (Al-Tuwaij, 2016). The teaching performance also aims to raise the level of the teacher in performing the role and tasks directed to him, especially in the twenty-first century, which has witnessed modern changes. This process is concerned with providing teachers with the knowledge, skills and competence necessary to raise their performance levels in order to face the required interaction with the requirements of the specialization that the teacher studies and modern developments. The goals also include achieving progress in the current level of the teacher to better levels, and this requires the presence of desire and interest on the part of the teacher. The teaching performance also aims to keep pace with the great and successive growth in knowledge, resulting from educational research, and to raise the level of awareness among teachers of the needs of students and the nature of the renewed society in light of these rapid changes that require an effective and rapid educational response (Al-Tamimi, 2020).

In teaching performance, teachers are expected to plan their lessons appropriately, as good planning is the basis for teaching, and planning is a number of approved measures directed by scientific decisions and procedures in order to anticipate the future, and it is one of the necessary things in implementing programs and work according to scientific foundations. The benefit of good planning also lies in paying attention to the appropriate planning of all activities, and directing them to be clear and formulated within a clear plan that shows steps and procedures that can be followed in implementing them, which increases the teacher's self-confidence before entering the classroom, as good planning gives the teacher the strength to implement the lesson (Al-Naqa, 2009). Teaching planning is one of the mental processes and psychological preparation for the educational situation within a specific period of time, with the aim of achieving organized and purposeful educational goals by identifying appropriate educational experiences, procedures and means, in addition to using appropriate evaluation activities and tools, and planning is one of the most prominent components of teaching performance; As the first steps of the teacher in teaching, and the success of teaching is based on it, and it includes many sub-skills such as identifying and classifying objectives within levels, analyzing the content, identifying evaluation methods related to the objectives, and preparing appropriate teaching methods and means (Shahata and Al-Samman, 2012). The lesson plan includes formulating brief and feasible educational objectives, organizing the content and language appropriate for teaching, and learning objectives express what the teacher intends for students to learn in terms of skills, knowledge and understanding. Learning objectives are also the basic planning tools for the teacher, because without clear and brief objectives linked to specific activities, the teacher will have little basis for clearly defining the purpose of the task for the student or evaluating it and the students' progress, with attention to noting that the presence of a very large number of objectives for any one lesson is likely to prevent a clear focus on the basic learning that the teacher intends to achieve, and emphasizing that the content of the lesson needs to be organized sequentially so as to provide educational steps that the teacher must follow so that no aspect of the lesson is overlooked (Caires, Almeida & Vieirab, 2012). Implementation is one of the teaching performance skills. Implementation of teaching begins with the application of clear educational plans, which include accurately defining educational objectives and choosing appropriate teaching strategies. Teachers must be able to distribute activities and times in a balanced manner in order to achieve the specified objectives. Actual implementation is represented in the application of various strategies such as cooperative learning, active learning, and inquiry, with a focus on taking into account individual differences between students, providing an organized and stimulating educational environment, and setting clear rules for behaviors and interaction between the teacher and students. (Janaban, 2021)

Learning management skills include how the teacher organizes work within the classroom to achieve the desired goals and provide the planned information to the students by preparing the atmosphere and the students' social and psychological needs in order for learning to occur. This includes creating a safe and organized classroom environment that enhances student participation. It includes organizing students' seating areas, providing learning tools, ensuring that the class has a comfortable and stimulating environment for learning, and the teacher's interest in distributing time between explanation, providing classroom activities, organizing discussions, and evaluation in a balanced manner in order to achieve the desired goals. This requires careful planning of the class period, while allowing sufficient time for practical activities. The teacher must pay attention to encouraging effective communication between the teacher and the students, and between the students themselves by opening the door to open dialogue, discussions, and solving problems in a cooperative manner. The teacher must provide an interactive educational environment characterized by mutual respect (Jaradat, 2015). Evaluation is also one of the skills, and it refers to the process through which judgments are issued regarding reaching the specific goals of the teaching and learning process, and achieving the desired purposes. It must be within clear plans based on a set of characteristics that determine the path, and must be characterized by objectivity, comprehensiveness, continuity, and economy. The main goal of evaluation is to provide enhanced feedback for professional growth, as well as to provide teachers, especially new ones, with clear guidance on performance levels in order to direct them towards providing further development (Al-Shammari and Ali, 2021).

Teachers of the first three grades

Dams (2015) indicated that one of the most important qualities that teachers of the first three grades should have is the academic quality, which is the ability to think academically based on logical scientific foundations. The majority of teachers hold a first university degree in addition to a degree in education. The teacher should also have the ability to pay attention and focus with all students, with the necessity of having the ability to monitor the entire class and pay attention to what is happening behind him while writing on the board. Usually, students in the first grades are very active and disturb each other. The teacher should also have a strong tone of voice to be able to control the class without resorting to punishment, reprimand or shouting, so that all students can hear him, which helps increase their focus and attract their attention.

Asad (2018) added that one of the most prominent educational competencies that teachers of this stage should have is designing useful educational programs before the start of the class, which contributes to attracting the attention of students and increasing their interaction in the classroom. It is also necessary to set precise teaching standards that are appropriate to the number of students in the class, their activity, and their level of academic progress, in addition to good planning for the entire educational curriculum, and determining appropriate objectives at the general level of the curriculum and the unit, and the specific level of a single lesson. The teacher must also be fully familiar with the subject matter, and have the ability to think about the content of the lesson effectively.

7. Previous studies:

The study of Ibrahim and Yousefani (2022) aimed to identify the effect of using the Wallace model in developing skilled thinking and geographical culture among students of the Geography Department at the College of Basic Education at the University of Mosul. The study sample included (59) male and female students randomly distributed into two experimental and control groups. To measure skilled thinking, the researchers prepared a test. And used the geographical culture scale. Using appropriate statistical treatments, the results showed the existence of statistically significant differences between the development averages of the two research groups in developing skilled thinking in its entirety and in its five areas, in addition to the existence of these differences in developing geographical culture in favor of the experimental group. The results also showed no differences between male and female students in skilled thinking and geographical culture in the experimental and control groups.

The study of Al-Ghamdi and Al-Ghamdi (2021) showed the effectiveness of a training program based on the constructivist learning model in developing realistic assessment among science teachers. To achieve this goal, the study followed the experimental approach with its quasi-experimental design based on the presence of two groups: the experimental and the control. The main study sample was selected randomly to consist of (30) teachers, who were randomly distributed equally to the two study groups, namely: the experimental group and the control group. By applying the study tools (test and observation card) before and after, the study reached a set of results, namely: the effectiveness of the proposed training program based on the constructivist learning model in developing realistic assessment among science teachers, as the results of the study revealed statistically significant differences between the average scores of the two groups in the post-measurement of the achievement test among science teachers attributed to the experimental study group, and the presence of statistically significant differences between the average scores of the two groups in the post-measurement of the observation card (to measure the skill aspect of realistic assessment) among science teachers in favor of the experimental group, attributed to the experimental study group.

The study of Al-Salem (2024) aimed to reveal the effectiveness of an electronic training program based on the TIBAK model in developing technical pedagogical knowledge of the content and teaching performance skills among Arabic language teachers in the intermediate stage. The study sample consisted of (16) teachers. A scale for developing technical pedagogical knowledge of the content and a scale for teaching performance skills were developed. To achieve the objectives of the study, the experimental method with a quasi-experimental design based on one group with a pre-test and a post-test was used. The data were analyzed using statistical analysis methods through SPSS software and tests for the significance of differences between two related samples and the effect size to measure effectiveness. The results of the study highlighted the effectiveness of the electronic training program based on the TIBAK model in developing technical pedagogical knowledge of the content and teaching performance skills among Arabic language teachers in the intermediate stage.

Abdul Qader's study (2023) aimed to build a teaching model based on scenario learning and identify its effectiveness in developing some reflective teaching performance skills and explanatory writing among student teachers in the Arabic Language Department at the College of Education. To achieve this goal, the researcher prepared a list of reflective teaching performance skills, as well as a list of explanatory writing skills. The researcher also prepared a test that measures the cognitive aspect of reflective teaching performance skills among the research sample, as well as a reflective teaching performance observation card, in addition to preparing an explanatory writing test. The researcher followed the quasi-experimental approach by dividing the research sample, which amounted to (56) male and female students, into two groups equally; an experimental group and a control group. The results showed statistically significant differences between the average scores of the experimental group and the scores

of the control group in the reflective teaching performance test, the observation card, and the explanatory writing test in favor of the experimental group in the post-application. The results also indicated the effectiveness of using the proposed teaching model based on the scenario learning approach in developing reflective teaching performance skills and explanatory writing among students in the experimental group.

Mahmoud's study (2023) aimed to identify the impact of a training program according to Blended Learning strategies for science teachers and its impact on their teaching performance. The research sample consisted of (32) male and female science teachers for the second intermediate grade from the center of Diyala Governorate and affiliated with the Diyala Education Directorate. An observation form was constructed, and an observation card was applied to the axes of the teaching performance of teachers of the experimental and control research sample groups, by the researcher visiting their schools and observing them inside the classrooms, and evaluating them according to the observation card form prepared for this. Through analyzing the research results, it became clear that the training program had an effective impact and was in favor of the experimental group in improving the teaching performance of science teachers who were trained in the training program, as there was a statistically significant difference between the experimental and control groups through the results, which showed the superiority of the experimental group over the control group with a high effect size.

Asiri's study (2021) aimed to know the impact of a proposed training program based on the theory of successful intelligence in developing higher-order thinking skills and teaching performance for secondary school mathematics teachers. The study sample consisted of 14 teachers, all of whom were twelfth grade teachers. The research materials and tools consisted of: a training program based on the theory of successful intelligence, a test of higher-order thinking skills, and a video camera to document the teacher's performance. The higher-order thinking skills test was applied and the teachers' performance was documented beforehand, followed by the application of the training program for 5 days at a rate of 4 hours per day. Upon completion of the training, the higher-order thinking skills test was applied, and then the documentation and analysis of the teachers' performance began. The results showed a statistically significant effect at the 0.05 level in favor of the post-application of the higher-order thinking skills test. The results also showed a statistically significant effect in favor of post-teaching performance. The study revealed statistically significant differences in favor of teachers who had received prior training.

Abu Al-Hamad's study (2019) aimed to identify the effect of feedback on the self-evaluation of teaching performance of eighth-grade female students (female teacher students) majoring in mathematics at the College of Arts and Sciences, Najran University. The study sample consisted of (18) female student teachers. The research used the evaluation card for teaching performance and was applied by the research group before and after the feedback sessions. The data were processed statistically using the SPSS program by calculating the means and standard deviations and the Wilcoxon test for differences between the means. The study found that there were statistically significant differences between the pre- and post-measurement in the first evaluation and no statistically significant differences in the last evaluation. There were also statistically significant differences between the evaluation of female student teachers and the supervisor's evaluation. The researchers also benefited from previous studies from the set of results that were reached, the statistical processes followed, and in developing the current study tool, as well as for the purpose of revealing the suitability of the quasi-experimental approach in the current study to reach the study results, and also benefited from previous studies in preparing the theoretical framework, and in referring to many references, books and periodicals that were used by previous studies. It is noted from the presentation of previous studies and within the limits of the researchers' knowledge that there are few studies conducted on the effectiveness of a training program based on the Wallace model in developing teaching performance skills among teachers of the first three grades, and this is what distinguishes the current study from previous studies that relied mostly on measuring one of those variables, and in choosing teachers of the first three grades as a sample, as well as applying it in the Jordanian capital, Amman Governorate. Given the sensitivity of teaching the first three grades, and in light of what previous studies have indicated about the effectiveness of a training program based on the Wallace model, and in response to what educators have called for about the need to introduce various training programs in training teachers of the first three grades, the researchers decided to investigate the effectiveness of a training program based on the Wallace model in developing teaching performance skills among teachers of the first three grades.

Study Approach:

In this study, the researchers used the experimental method with a single-group design (pre-post), which is the optimal method for revealing the effect of the training method (the effectiveness of a training program based on the Wallace model in developing teaching performance skills among teachers of the first three grades).

Study population and sample:

The current study population was selected from the teachers of the first three grades in private schools in the University District in the capital Amman Governorate from the first semester of the academic year 2024/2025.

Study sample:

The study sample was chosen intentionally for the experimental group; from those who showed cooperation with the researcher, as the study sample represented (20) teachers from the first three grades in the University District in the capital Amman Governorate from the first semester of the year 2024/2025.

Teaching Performance Observation Card

In order to measure the level of possession of the teachers of the first three grades of teaching performance skills, the researchers prepared a questionnaire on knowledge economy skills, by reviewing the theoretical literature and previous studies that addressed the topic of knowledge economy skills, and these skills were limited to (implementation, learning management, and evaluation), and among these studies are the study of Al-Salem (2024), and Abdul Qader (2023), and a list of the previous skills was prepared, and a group of paragraphs, numbering (25) paragraphs, were formulated according to the five-point Likert scale.

Validity of the Teaching Performance Observation Card

The validity of the observation card was verified in the following two ways:

First: Apparent validity:

To verify the validity of the systemic thinking test, it was presented to (18) male and female arbitrators with expertise and experience in the specialization of (teaching methods and techniques, measurement and evaluation), where they were asked to express their opinion on the test in terms of the formulation of the linguistic paragraphs, and the suitability of the questions to the sub-skills. Some matters were deleted and added in light of what they saw as appropriate, noting that none of the paragraphs were changed or deleted, as the arbitrators' modifications were limited to the method of formulating some of the sub-points; to suit the level of the teachers of the first three grades, such as the study of Al-Salem (2024), and Abdul Qader (2023).

Table (1): Correlation coefficients between the paragraph and the total score of the field to which it belongs

Evaluation		Learning Management		Implementation	
Correlation coefficient	Paragraph number	Correlation coefficient	Paragraph number	Correlation coefficient	Paragraph number
0.60*	1	0.85**	1	0.56*	1
0.74**	2	0.66**	2	0.69**	2
0.59*	3	0.72**	3	0.65**	3
0.74**	4	0.66**	4	0.69**	4
0.70**	5	0.70**	5	0.67**	5
0.57*	6	0.64**	6	0.55*	6
		0.69**	7	0.52*	7
		0.61*	8	0.52*	8
		0.69**	9	0.67**	9
				0.71**	10

*Statistically significant at the significance level (0.05).

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

It is worth noting that all correlation coefficients were acceptable and statistically significant, and therefore, none of these paragraphs were deleted.

Stability of the teaching performance observation card

To ensure the stability of the study tool, the test-retest method was verified by applying the observation card, and reapplying it after two weeks on a group outside the study sample consisting of (15) teachers, and then the Pearson correlation coefficient was calculated between their estimates in the two times.

The stability coefficient was also calculated by the internal consistency method according to the Cronbach alpha equation, and Table No. (2) shows the internal consistency coefficient according to the Cronbach alpha equation and, the retest stability of the axes and the total score, and these values were considered appropriate for the purposes of this study.

Table (2):Cronbach's alpha internal consistency coefficient, retest reliability of the axes and total score

Axis	Repetition stability	Internal consistency
Implementation	0.84	0.77
Learning Management	0.86	0.80
Evaluation	0.90	0.85

The training program is based on the Wallace model:

The objective of the program: The objective of the program was limited to identifying the effectiveness of a training program based on the Wallace model in developing the teaching performance skills of teachers of the first three grades.

The validity of the educational program based on the Wallace model:

To verify the validity of the training program, it was presented to (18) male and female arbitrators with expertise and experience in the specialization of (teaching methods and techniques, measurement and evaluation), where they were asked to express their opinion on the program in terms of the suitability of its general and specific objectives for what it was established for, and its adherence to the stages of the Wallace model, and the suitability of the methods used in the program, and the linguistic formulation.

Target group: Female teachers of the first three grades who teach in private schools in the University District in the Amman Capital Governorate for the academic year 2024/2025.

Time distribution of the training program

Time	Session Topics	Session Title	Training Session
3 hours	Introduction	Introduction and definition of the training model	First
2 hours	Introduction to the Wallace Model and Training Program Objectives	Identifying needs and setting goals	Second
2 hours	Needs Assessment and Goal Setting	Developing educational skills	Third
2 hours	Modern Teaching Strategies	Classroom management	Fourth
2 hours	Active Teaching and Learning Strategies	Using technology in education	Fifth
2 hours	Small Classroom Management Techniques	Personal planning and organization	Sixth
2 hours	E-Learning Tools and Technology in Classrooms	Performance evaluation and development	Seventh
2 hours	Integrating Technology into Education	Enhancing relationships and communication	Eighth
2 hours	Personal Planning and Organization Skills for Teachers	Final evaluation and future development	Ninth
18 hours	المجموع		

Introduction to the training program:

A training program based on the Wallace Model for teachers of the first three grades that focuses on providing a comprehensive framework for enhancing emotional and social communication in the classroom, and providing basic knowledge about the importance of communication in children's learning in the first grades. Educational resources and training courses are provided for teachers to understand the basics of the model and how to apply it in the classroom, and teachers receive intensive training on how to apply the Wallace Model in the first three grades. This includes providing specific strategies and tools to enhance emotional and social communication, such as positive play, positive reinforcement techniques, and effective negotiation

skills. The program encourages collaboration between teachers to share experiences, ideas, and resources. Periodic consultative sessions can also be encouraged to support each other and exchange experiences in applying the model.

Philosophical foundations of the training program

The training program is based on several foundations, which are:

- A deep understanding of student development in the first three grades.
- Enhancing the teacher's personal skills such as positive interaction, effective communication, and the ability to interact with students in a sensitive and appropriate manner.
- Providing evidence-based teaching strategies: The program should be based on the latest research and evidence in the field of teaching students in the first three grades, and provide teaching strategies based on this evidence to enhance emotional and social communication.
- Interaction and active participation: The program should encourage interaction and active participation among teachers, where experiences, ideas and good practice guidelines can be exchanged.
- Practical application and continuous monitoring: The program includes opportunities for practical application of acquired skills in real classrooms, with continuous follow-up and monitoring to evaluate performance and identify opportunities for improvement.

Study Procedures

To implement the study, the researchers followed the following procedures:

1. Review theoretical and educational literature, periodicals, and previous studies that addressed the subject of the Wallace model in training programs.
2. Prepare the study tool represented by (the teaching performance observation card) and verify the validity and reliability of the tool.
3. The effectiveness of the training program according to the Wallace model, and verify its validity.
4. Determine the timetable for implementing the program distributed over weeks and study periods.
5. Obtain a task facilitation book from the International Islamic University of Sciences.
6. Select study individuals and apply the pre-study tool.
7. Start training the experimental group individuals using the program prepared by the researchers, where the procedures and methods indicated in each training session were followed.
8. The program application period lasted four weeks.
9. Apply the post-tool to the study individuals.
10. Collect the results and unload them on the (Excel) software, and then analyze the results using the (SPSS) statistical packages program.
11. Discuss the results and link them with previous studies, and write the most important recommendations in light of the results reached.

Statistical processing

1. Pearson correlation coefficient; to extract the validity and reliability indications of the study tool.
2. Cronbach's alpha equation is used to extract the internal consistency coefficient.
3. Arithmetic averages and standard deviations; to answer the study question.
4. Wilcoxon Signed Ranks Test analysis to find the significance of the differences between the average ranks of the grades of the first three grade teachers in the teaching performance observation card.

Study results

In this section, the results of the study that were reached were presented, according to the study question, as follows:

- Are there statistically significant differences at the significance level ($\alpha=0.05$) between the performance averages of the experimental group members in the pre- and post-test of the level of teaching performance skills attributed to the training method (the training program based on the Wallace model)?

To answer this question, the arithmetic means and standard deviations of the scores of the teachers of the first three grades on the teaching performance observation card were extracted, and the table below shows this.

Table (3): Arithmetic means and standard deviations of the scores of the teachers of the first three grades on the teaching performance scale in the pre- and post-measurements

Dimensional measurement		Pre-measurement		Dimension	The number
Standard deviation	Arithmetic mean	Standard deviation	Arithmetic mean		
0.22	3.42	0.22	2.73	Implementation	1
0.24	3.66	0.31	2.58	Learning Management	2
0.25	3.54	0.33	2.56	Evaluation	3
0.10	3.53	0.19	2.63	Teaching Performance	

Table (3) shows that there are apparent differences between the arithmetic means of the scores of the teachers of the first three grades on the teaching performance observation card. To find out whether these apparent differences are statistically significant, the Wilcoxon Signed Ranks Test was used to find the significance of the differences between the average ranks of the scores of the teachers of the first three grades on the teaching performance observation card in the pre- and post-measurements. The table below shows this.

Table (4): Wilcoxon Signed Ranks Test results to find the significance of the differences between the average ranks of the scores of the teachers of the first three grades on the teaching performance observation card in the pre- and post-measurements

Statistical significance	Z	Total ranks	Average Rank	number		
0.000	-3.928	210.00 .00	10.50 .00	20 0 0 2	Negative ranks Positive ranks Equal ranks Total	Implementation Learning Management
0.000	-3.926	210.00 .00	10.50 .00	20 0 0 20	Negative ranks Positive ranks Equal ranks Total	Evaluation Implementation
0.000	-3.942	210.00 .00	10.50 .00	20 0 0 20	Negative ranks Positive ranks Equal ranks Total	Learning Management Evaluation
0.000	-3.923	210.00 .00	10.50 .00	20 0 0	Negative ranks Positive ranks Equal ranks	

				20	Total	
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Table No. (4) shows that there are statistically significant differences between the scores of the teachers of the first three grades on the teaching performance observation card in the pre- and post-measurements in all dimensions and the total score. The differences were in favor of the post-measurement after they were exposed to the training program based on the Wallace model.

Discussion of the results

In this section, the results were discussed, according to the results of the study question, and recommendations and proposals were formulated in light of those results.

Discussion of the results of the main question: Are there statistically significant differences at the significance level ($\alpha=0.05$) between the average performance of the members of the experimental group in the pre- and post-measure of the level of teaching performance skills attributed to the training method (the training program based on the Wallace model)?

There were statistically significant differences between the scores of the teachers of the first three grades on the teaching performance observation card in the pre- and post-measurements in all dimensions and the total score, and the differences were in favor of the post-measurement after they were exposed to the training program based on the Wallace model, and this can be explained by the fact that after implementing the training program, the teachers' scores on the teaching performance observation card improved significantly, which means that the teachers benefited from the training program. The differences in favor of the post-measurement indicate that the teachers realized how to apply creative methods in teaching, such as critical thinking, deep analysis of educational content, and employing interactive strategies with students.

This result can also be attributed to the fact that the improvement observed in the teachers' teaching performance is not a coincidence, but rather the result of implementing the training program. This reflects the effectiveness of the Wallace model in improving teaching skills, as the training program helped teachers develop creative strategies that enhance student interaction and focus in the classroom. The training program based on the Wallace model also provided teachers with the necessary tools to stimulate creative thinking and solve educational problems. After the training, teachers became more capable of analyzing classroom challenges in greater depth and generating innovative solutions to deal with these challenges. The differences observed in the pre- and post-measurements confirm that using the Wallace model in training helped teachers develop critical and creative thinking skills, which contributed to significantly improving their teaching performance. This result can also be explained by the fact that one of the most important goals that a training program like this seeks to achieve is to enhance teachers' creative thinking skills. The Wallace model, which is based on the stages of creative thinking such as preparation, incubation, illumination, and verification, enables teachers to apply innovative methods in the classroom. The training helps teachers learn how to use critical thinking to solve complex classroom problems, such as classroom management or enhancing student engagement.

The results also indicated that the training program based on the Wallace model introduces teachers to new and more interactive teaching methods, including strategies such as cooperative learning, brainstorming, and active learning. These methods help teachers transform the classroom into an interactive learning environment that encourages students to actively participate and innovate. These strategies make teachers more capable of dealing with diversity in students' levels and learning styles.

This result can also be attributed to the fact that the differences between the pre- and post-measurement in teaching performance show the effectiveness of the training program in enhancing teachers' ability to solve problems. Thanks to training on the Wallace model, teachers learn how to analyze problems, develop hypotheses, and implement innovative solutions. For example, in the case of students' irregular behaviors, teachers can use innovative strategies such as redirecting students' attention or providing alternative interactive activities to calm the chaos.

The result can also be attributed to the fact that the training program improved teachers' interaction with students. Through training methods based on interaction and continuous communication, teachers have the ability to better attract students' attention. As a result, students' interaction increases and their participation and interaction with the subject matter improves. The training program is based on developing curiosity and encouraging exploration, which enhances teachers' ability to motivate their students to acquire new knowledge and interact with the subject matter in unconventional ways. This motivation helps students expand their thinking and search for answers through field activities or group projects, which enhances their academic achievement. The training program helped teachers use continuous assessment methods and effective feedback. By periodically assessing progress and providing constructive feedback, teachers can adjust their teaching methods to suit the individual needs of students. Effective feedback enables teachers to improve teaching strategies to enhance students' understanding and achieve educational goals. The result can also be attributed to the characteristics of the teachers in the training program and their high self-motivation. Participating teachers who have strong self-motivation are more willing to benefit from the training and apply the

acquired skills effectively, and have a personal interest in development. This result is consistent with the study of Ibrahim and Yousefani (2022), which concluded that training programs based on the Wallace model are effective in training teachers.

Recommendations:

In light of the research results, the researchers presented the following recommendations:

- Design ongoing training programs for teachers based on creative models such as the Wallace model, and measure their effectiveness in creative thinking, problem solving, and developing innovative teaching methods.
- Integrate critical and creative thinking strategies and tools into curricula, in order to motivate teachers to use these skills in dealing with classroom challenges.
- Organize regular applied workshops that focus on how to apply the model in classrooms.
- Provide a mechanism for periodically evaluating teaching performance and providing effective feedback to teachers.
- Expand the scope of training according to the Wallace model to include teachers of different educational levels, including teachers in advanced stages.

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