

A Proposed Perception To Developing The Professional Competencies Of Early Childhood Teachers In The Light Of The 21st Century Skills

Mohammad Abdu Allah AL Alhazmi¹, Ebtsam Sultan Abdul Hameed Ahmed²

¹Professor of Education Fundamentals, Department of Education and Psychology, Dean of the College of Education, Najran University, KSA, E-mail: manaser@nu.edu.sa

²Associate professor, Department of Kindergarten, College of Education, Najran University, KSA, E-mail: dr.ebtsamsultan22@gmail.com

Corresponding author: Mohammad Abdu Allah AL Alhazmi, E-mail: manaser@nu.edu.sa

Abstract

The present research work herein, aims to present a proposed vision for the development of professional competencies for early childhood teachers in the light of the skills of the twenty-first century. Professional competencies, and suggestions for the development of these competencies, and the research tool was applied to a sample of (106) female teachers in Najran city. Among the recommendations, the most important of which are the holding of training courses and specialized workshops to develop the professional competencies of teachers, integrating the skills of the twenty-first century in the programs of preparing early childhood teachers.

Keyword: A proposed conception, professional competencies, twenty-first century skills, early childhood teachers.

Introduction

The current era is witnessing rapid cognitive and technological developments, and successive changes in various aspects of life. These developments and changes have cast a shadow over the educational and educational system, and it has become necessary to develop all its elements, foremost of which is the development of the teacher's performance to enable him to interact professionally with the requirements of this age. The issue of developing the teacher's performance is almost the common denominator on which most educational development projects focus without exception, and he has to adopt all future hopes that aim to advance the educational system, and it is the basis for every development, because any efforts made to improve any aspect of the educational process cannot lead To the desired progress unless you start preparing a good teacher [1] This means that upgrading the educational system in early childhood requires raising the level of performance of female teachers by developing their information, skills and experience, which in turn will lead to raising the level of children and achieving growth This is why many studies have recommended the

need to develop the teacher's competencies and performance skills in line with the requirements of the current era. Many contemporary global trends have emerged in the preparation and training of teachers, to keep pace with most of the changes and challenges facing the educational process, the most prominent of which was the competency-based teacher training method, which stems from the belief that the proper educational and professional performance of the teacher inside and outside the classroom includes a set of special competencies. And the teacher cannot exercise his roles unless he has a set of basic competencies that affect his performance in educational situations [2], it is considered [3] that it is necessary to develop the competencies of the kindergarten teacher because of their positive role in enabling her to deal with children, develop their abilities and achieve balanced comprehensive growth, and the most important of these competencies (Competencies Personal, teaching competencies, administrative competencies, assessment competencies, professional growth competencies and interaction with others). The study of Kim et al. [4-12] and on

the need to intentionally develop the performance of female teachers in the light of the philosophy of twenty-first century skills, as they are among the necessary skills to ensure the preparation of highly qualified learners in line with the knowledge and technological boom, these skills include (technological skills, participatory skills, communication skills, professional skills, and thinking skills). It is clear from the foregoing that preparing female teachers and raising the level of their professional competencies is an educational requirement and a strategic choice for developing the educational system starting from the early childhood stage. Therefore, the current research attempts to present a proposed vision for developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century.

Research problem

The teacher is the mainstay of the educational process, so one of the most important objectives of the National Transformation Program of the Ministry of Education 2020 was to “improve the recruitment, preparation, rehabilitation and development of teachers” to ensure the improvement of educational outcomes that meet the required standards to contribute to advancing development in society (National Transformation Program, 2020). The Kingdom’s vision 2030 emphasized the importance of preparing the teacher, developing his performance, and providing him with the capabilities and skills that enable him to keep pace with the requirements of the labor market and development needs. (Kingdom’s Vision 2030) In light of this, many educational conferences were held that emphasized the need to prepare the teacher and develop his performance, including the Fifth Conference for Teacher Preparation “Teacher Preparation and Training in the Light of Development Demands and Developments of the Age” (2016), and the International Conference on Teacher and the Age of Knowledge: Opportunities and Challenges Under the slogan “A Renewed Teacher for a Changing World” (2016), the International Conference on Education Evaluation “Future Skills, their Development and Evaluation” (2018), and the first conference of the Saudi Teacher Association “Teacher Development Requirements and Future Ambition” (2019), the (virtual) international conference confirmed For the future of digital education in the Arab world, (2020) the need to pay attention to teacher training in order to bring about comprehensive and continuous professional development for him in all aspects, and the need to keep pace with these trainings to

the variables of the era of knowledge, and the requirements of informational and technological progress, and he [13] believes that the teacher’s job is no longer limited to providing learners with information and facts as it was in the past, but rather exceeded them until it became a comprehensive educational process for all aspects of personality growth in its physical, mental and emotional forms, which requires his mastery of professional competencies, including (planning Implementation- lesson evaluation, human relations, self-learning and knowledge renewal, community service, and the study [14] confirmed that education in the digital age requires a set of skills that the teacher should possess, and the most important of these skills is the ability to think critically. And the skills of using and managing educational technology [15] believes that the current teacher preparation and qualification system does not meet the requirements of development necessary to keep pace with the challenges of the twenty-first century, so it is necessary to develop teacher competencies (competencies of higher thinking skills, competencies for managing life skills, competencies of educational technology, Competencies of the art of the teaching process, competencies for managing the evaluation system, competencies for spiritual and human values, competencies for managing capabilities through the concept of multiple intelligences, competencies for the knowledge economy) including It enables him to play the many roles necessary to raise generations in proportion to the changes and challenges of this era confirms that the new roles of the teacher require professional specifications and competencies that help him to perform his new teaching tasks effectively. These competencies include all the skills, knowledge and attitudes that the teacher possesses. However, there is a noticeable decrease in the level of the teacher’s teaching performance in light of the skills of the twenty-first century. Therefore, it has become necessary to reconsider the nature of teacher preparation programs to keep pace with future challenges. The study [16-17] and the study of Kuswandono and Diasti, & (2020) confirmed that the professional development of the teacher must be in the light of the philosophy of twenty-first century skills, intentionally as it contributes to the development of the educational process with all its components, and the results reached The study [18] concluded that the focus of female teachers revolves around classroom performance in general, teaching methods and specialized expertise, and most of them did not address modern skills that are compatible with the global technological and

knowledge boom. The results of the study recommended the necessity of preparing teachers and training them in proportion to the skills of the twenty-first century [19] believes that there is no value for teachers to possess the skills of the twenty-first century if they are not translated into reality and are actually practiced in their teaching, so it is necessary to develop professional development programs In-service to address deficiencies in teacher teaching practices in line with 21st century skills. In light of the above, the problem of the current research can be formulated as follows:

Although the interest in developing professional competencies for early childhood teachers began, the interest in developing these competencies in the light of the skills of the twentieth century as one of the skills that have a great impact on the educational system is still below the required level, and in light of this, the current research seeks to present a proposed vision for the development of competencies Professionalism for early childhood teachers in the light of the skills of the twenty-first century in line with modern trends and future visions of the directions of the Kingdom of Saudi Arabia.

Research questions

- What is the proposed scenario for developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century?
- What is the level of professional competencies for early childhood teachers in light of the skills of the twenty-first century?
- What are the obstacles to developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century?
- What are the proposals for developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century?

Research aims

The current research aims to:

- Identifying the level of professional competencies for early childhood teachers in the light of the skills of the twenty-first century.
- Designing a proposed vision for developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century.
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Research importance

Theoretical significance

- The current research derives its importance from the importance of its topic of "Developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century", which has been imposed by many cognitive and technological changes and developments.

- This study is a nucleus for carrying out similar studies in the areas of developing programs for preparing and training female teachers and raising their efficiency during service.

- The research is considered among the future studies that are concerned with drawing the features and dimensions of the educational future and proposing a number of possible alternatives for developing early childhood teacher preparation programs.

Practical importance

- The proposed vision may help in planning for the development of professional competencies for teachers in light of the skills of the twenty-first century.

- The results of the research may help in identifying the shortcomings and weaknesses in the performance of early childhood teachers.

- The results of the research may help those in charge of professional development programs at the Ministry of Education in providing some suggestions for developing the performance of early childhood teachers.

Research limits

- Objective limits: the proposed perception, professional competencies, twenty-first century skills, early childhood teachers

- Spatial boundaries: The research was applied in the kindergartens of Najran city in the south of the Kingdom of Saudi Arabia.

- Temporal limits: The search tool was applied electronically during the first semester of the academic year 1443 AH

- Human limits: the current research was limited to a random sample of early childhood teachers in Najran city.

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Research terms

Suggested perception: A proposed perception

It is procedurally defined as future planning based on actual field results for the development of professional competencies for early childhood teachers in the light of the skills of the twenty-first century.

Professional competencies

It is procedurally defined as a set of overlapping knowledge, skills and abilities possessed by early childhood teachers that qualifies them to perform their roles in an appropriate manner with the child, with a certain level of proficiency, and it can be observed, interpreted and evaluated, and contributes to achieving the desired educational goals, and includes activity planning competencies, activity implementation competencies, competencies Activity evaluation, thinking and creativity competencies, technological competencies, professional growth competencies and human relations.

21st century skills: 21st century skills

It is defined procedurally as a set of skills that early childhood teachers must possess in order to comply with the requirements of the twenty-first century, including (learning and creativity skills, digital culture skills, professional and life skills).

Early Childhood Teacher

It is procedurally defined as a teacher concerned with establishing children in the early childhood stage in the period from (4-6) by providing them with values, knowledge, experiences and skills to achieve the desired educational goals in proportion to the child's age characteristics, in accordance with the trends and values of society, and in a manner that qualifies them for the future.

Theoretical framework

The development of professional competencies is one of the basics of developing the education system, because of its great importance in developing the teaching performance of the teacher, developing learning of the various skills of learners, achieving the goals of education and raising the level of quality of its outputs. Therefore, educational institutions pay great attention to preparing the teacher and advancing the level of his professional competencies [20]. The Competency Based Teacher Education (CBTE) movement has emerged in the United States of America, as a new educational method calling for the need to prepare programs to qualify teachers and develop their performance. of teachers [21], in addition to the fact that technological development and the use of modern technologies in educational institutions require the teacher to master new competencies that enable him to perform his role to the fullest [22-23] see that programs based on competencies Professional preparation for kindergarten teachers includes (developing a clear plan to determine the most important competencies, in addition to defining criteria for judging the quality of performance), with the aim of providing high-

quality education for children, and achieving the maximum possible degree of skill and academic discrimination to achieve the desired goals [24] believes that Empowering kindergarten teachers with professional competencies that contribute to providing children with information, life skills, scientific expertise and behavioral values that enable them to adapt to the reality of education and the developments of the times, and then achieve integrated comprehensive education.

Defining professional competencies

Many researches and studies have dealt with the professional competencies of the teacher in general and kindergarten teachers in particular with study and analysis. Accordingly, many definitions of professional competencies have emerged. I defined them [25] as the teacher's ability to perform his work skillfully, quickly and proficiently. The competencies include a set of overlapping skills that are integrated in what Among them are (the subject matter competencies, self-education, teaching methods, assessment competencies, classroom management and cognitive renewal) (p.427) and defines it [26] as the teacher's possession of a set of knowledge, skills, abilities, concepts and trends, which can be derived from his multiple roles, and it is a practical performance that can be observed, analyzed, interpreted, and measured (Pg.245), while he [27] defines it as the set of abilities and the resulting knowledge, skills and attitudes that the teacher possesses and practices and that enable him to perform his work, roles and responsibilities well, and have a direct or indirect impact on the educational process [28] believes that professional competencies are all information, experiences and knowledge that are reflected in the behavior of the kindergarten teacher and that facilitate the mental, social, emotional and physical development of children efficiently and effectively, and can be identified, observed and measured. (p.213) It is also defined as the set of skills, behaviors and teaching abilities that a kindergarten teacher must possess in order to bring about the desired change in the child's behavior [29-30] believes that professional competencies are abilities, performance skills, attitudes and values, and the associated experiences that guide the behavior of the kindergarten teacher and raise her performance to a certain level of mastery with an economy of effort, time and expenses (p.389).

Classification of professional competencies

Several classifications of professional competencies have emerged in order to determine their dimensions and the skills and trends they

include, prepare lists for them, and determine ways to develop them. Here are some common classifications of professional competencies, and the classifications that dealt with professional competencies for early childhood teachers will be limited to, and the following is an explanation of some of these classifications:

The [31] classified the professional competencies necessary for the kindergarten teacher into (personal competencies, teaching competencies, management and planning competencies, evaluation competencies, professional growth competencies and interaction with others), while the study [32] classified professional competencies in the light of national standards. Kindergarten in Egypt has been divided into five main areas: (planning, teaching methods and learning situation management, knowledge of specialization, evaluation, teacher professionalism). Evaluation adequacy, adequacy of human relations), and [33] considers that the competencies include cognitive competencies, performance competencies, emotional competencies, productivity competencies, while [34] they classified the competencies of kindergarten teachers into personal competencies, competencies Teaching, social competencies, and after presentation to the arbitrators, the personal and social competencies were merged into one category. Thus, the study concluded that the competencies were classified into (personal competencies, and teaching competencies) and [35] identified the competencies that kindergarten teachers must have in six areas. These are (general knowledge, specialized knowledge, planning, implementation, evaluation and evaluation, professionalism. As for the study of [36] the list of professional competencies for kindergarten teachers was defined as follows (planning of educational experience, preparation and presentation of educational experience, adequacy of human relations, adequacy of encouraging children to participate in class interaction, adequacy of kindergarten classroom management, adequacy of academic and professional growth, technological adequacy) and [37] classified the professional competencies of kindergarten teachers into educational planning competencies, education implementation competencies, and education evaluation competencies. Finally, [38] identified the professional competencies for kindergarten teachers in (planning, teaching, continuous teacher) and in light of the previous classifications, a list was prepared that included some appropriate professional competencies for early childhood teachers, and it was presented to a group of arbitrators, whose number reached (seven

arbitrators). To identify the most important of these competencies, and the current research includes (activity planning competencies, activity implementation competencies, activity evaluation competencies, thinking and creativity competencies, technological competencies, professional growth competencies and human relations).

Dimensions of professional competencies

Occupational competencies have several dimensions that are clarified by [39] as follows:

- Academic dimension: It includes the cognitive competencies that contribute to the effective teaching of scientific content.
- The educational dimension: It includes the competencies of organizing the classroom environment, attracting the attention of learners, promoting and developing self-discipline.
- Ethical dimension: It includes the professional ethics shown by the teacher in his dealings with the learners.

The importance of professional competencies

The reference [40] believes that the teacher's possession of professional competencies helps in planning educational tasks well, determining educational goals efficiently, determining teaching strategies appropriate to the educational situation, mastering the scientific material, and integrating between the theoretical and practical aspects during the explanation, and this contributes to the development of the educational system and its improvement [41] stressed the importance of supporting teachers to master competencies that guarantee positive learning outcomes, and to integrate technological technologies into the educational process creatively to meet learning needs, keep pace with the challenges of the twenty-first century, and help learners acquire and develop twenty-first century skills.

21st century skills

The issue of teacher formation and professional development is no longer a secondary issue, but rather has become a crucial issue in order to improve the teaching profession and the quality of learners. Therefore, it is necessary to develop the teacher's teaching capabilities and professional competencies to keep pace with the requirements of the twenty-first century, where a highly qualified and advanced teacher makes a big difference with his students [42-43] considers that the skills of the twenty-first century are among the basic requirements for female students who specialize in kindergarten, through which they can

develop the educational process in kindergarten and prepare integrated activities that will develop the mental abilities and thinking skills of pre-school children.

Defining twenty-first century skills

The term twenty-first century skills refer to a set of skills that make learning successful in the current century, and these skills have been identified by the twenty-first century partnership organizations as critical thinking and problem-solving skills, innovation and creativity, collaboration and teamwork, leadership, understanding cultures Multicultural, communication and media culture, computing culture, profession and self-reliant learning [44]. It is defined as a set of skills that the teacher must possess and appear in his teaching practices to achieve the goals of education and ensure creativity and innovation, critical thinking and problem solving, cooperation and communication, information culture, adaptation, flexibility, self-direction, responsibility and productivity, social skills. It is a set of performances and skills that the teacher should possess in order to keep pace with the twenty-first century, and these skills contribute to his success in the teaching profession, and to achieving the goals of the educational process [45]. As for (Al-Azab, 2019), it defines it as a set of skills that enable the teacher to work successfully in the twenty-first century. It includes some sub-skills, which are creativity and innovation skills, learning and mastery skills, digital culture skills and information technology, professional and life skills.

Classification of 21st Century Skills

Several classifications of twenty-first century skills have emerged, and the following is an overview of some of these classifications:

The Partnership for Twenty-First Century Skills has divided Century Skills into three main groups: Learning and innovation skills, consisting of (creativity and innovation, critical thinking and problem solving, cooperation and communication), information technology skills, media and digital culture, consisting of (information culture, media culture). ICT culture, life and career skills, consisting of (flexibility and adaptation, initiative and self-direction, social skills, productivity, leadership and responsibility), [46]. Among the most famous classifications of twenty-first century skills is the classification of the educational laboratory of the northern central region, and it included the classification of twenty-first century skills into four groups: the skills of the digital age, including (scientific culture skills, economic culture, digital culture, technical culture,

information culture, and visual culture) creative thinking skills, including Higher-order thinking skills, creativity, adaptability and self-direction), effective communication skills, including (teamwork skills, personal and social skills, and effective communication), high productivity skills, including (planning and time management skills) and a category [47] categorize the twenty-first century skills into (critical and creative thinking skills, values and ethics skills, and communication skills), while Turhan and Demirci [48] categorized the twenty-first century skills into information and communication skills, including (media knowledge skills, skills Connection); Thinking and problem solving skills (including creativity, innovation, critical thinking, problem solving, and intellectual curiosity); Personal skills and self-direction, including (interpersonal and cooperative skills, accountability and adaptability, social responsibility) and through previous classifications, the current research adopts the classification of twenty-first century skills into learning and creativity skills, digital culture skills, life skills and profession.

The role of the teacher to meet the challenges of the twenty-first century [49-51]

- Plan and present activities and units in a coherent manner that include the most important knowledge and skills that learners need
- Use assessment strategies to evaluate the knowledge and skills of the twenty-first century.
- Employing technology in the educational process in planning the lesson and evaluating students electronically.
- Planning classroom and extracurricular activities and practical skills and providing enrichment activities to develop the thinking of learners.
- Preparing learners through collaborative and competitive work.

Research Methodology

The researchers used the descriptive-analytical approach, which is based on an accurate description of the phenomenon by collecting information, classifying it and expressing it quantitatively and qualitatively, in order to reach conclusions that contribute to presenting a proposed vision for developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century.

Research community and sample

The research community consisted of all early childhood female teachers in Najran city for the

first semester of the year 1443 AH / 1444 AH, who numbered (298) female teachers. As for the research sample, it was chosen by the simple random method, and it included (106) parameters.

Research tools

To answer the research questions and achieve its goals, the following tools were prepared:

First: List of professional competencies for early childhood teachers

To arrive at an appropriate list of professional competencies for early childhood teachers, the following was done:

A review of the literature and previous studies that dealt with professional competencies in general and early childhood teacher’s competencies in particular, including the study of [52]

- Preparing the list in its initial form and included (activity planning, formulation of behavioral objectives, presenting the activity, preparation, classroom management, employing educational aids, evaluation, technological competencies, thinking and creativity competencies, social development competencies and human relations, sufficient encouragement for children to participate in class interaction Effective Communication Competencies)

- Arbitration of the list by presenting it to seven arbitrators who are specialists in early childhood in order to get acquainted with their point of view in terms of the appropriateness of the proposed professional competencies. Some competencies were excluded, and others were merged.

Reaching the final image of the list.

Second: Identifying the reality of the professional competencies of early childhood teachers in the light of the skills of the twenty-first century.

The objective of the questionnaire:

Identifying (the reality of professional competencies for early childhood teachers in Najran city, obstacles to developing professional competencies, proposals for developing professional competencies).

Steps to build the questionnaire

- View previous studies
- Determine the sections of the questionnaire and its main and sub-themes.
- Preparing the questionnaire in its initial form
- Presenting the initial image to a group of arbitrators to express their opinion on its suitability to achieve the research objectives
- Amending the questionnaire in the light of the arbitrators' opinions, and arriving at the final picture.
- Validity of the search tool
- Veracity of the arbitrators

The questionnaire in its initial form was presented to a group of specialists to express their opinions on the validity of the questionnaire and its suitability to achieve the objectives of the research, and the consistency and suitability of the phrases to the axis to which it belongs, and in the light of their opinions and suggestions, the final form of the questionnaire was reached.

Sincerity of internal consistency

The internal consistency of the questionnaire was verified by applying it to an exploratory sample of early childhood teachers in Najran city, which consisted of (35) female teachers during the first semester of the year 1443/1444 AH. to which it belongs, using the statistical program (SPSS), as shown in the following table:

Table 1: The validity of the internal consistency of the correlation coefficients between each paragraph of the questionnaire

5 th item		4 th item		3 rd item		2 nd item		1 st item	
Corr. Factor	Statement #	Corr. Factor	Statement #	Corr. Factor	Statement #	Corr. Factor	Statement #	Corr. Factor	Statement #
*0.637 *	.40	*0.884 *	.33	*0.781 *	.22	*0.729 *	.11	*0.867 *	1.
*0.833 *	.41	*0.899 *	.34	*0.847 *	.23	*0.844 *	.12	*0.821 *	2.
*0.912 *	.42	0.886	.35	*0.812 *	.24	*0.861 *	.13	*0.697 *	3.
*0.878 *	.43	*0.707 *	.36	*0.598 *	.25	*0.745 *	.14	*0.867 *	4.
*0.746 *	.44	**0763	.37	*0.802 *	.26	*0.713 *	15	*0.751 *	5.

*0.624 *	.45	*0.849 *	.38	*0.756 *	.27	*0.801 *	.16	*0.871 *	6.
*0.562 *	.46	*0.723 *	.39	*0.837 *	.28	*0.900 *	.17	*0.747 *	7.
*0.697 *	.47			*0.804 *	.29	*0.861 *	.18	*0.811 *	8.
6th item				*0.791 *	.30	*0.697 *	.19	*0.798 *	9.
*0.884 *	.52	*0.729 *	.48	*0.639 *	.31	*0.807 *	.20	*0.735 *	10.
*0.869 *	.53	*0.822 *	.49	*0.696 *	.32	*0.789 *	.21		
*0.842 *	.54	*0.913 *	.50	7th item					
*0.904 *	.55	*0.865 *	.51						
				*0.598 *	62	*0.562 *	59	**0.697	56
				*0.802 *	63	*0.697 *	60	**0.822	57
				*0.639 *	64	*0.791 *	61	**0.697	58
								**0.747	65

** D at 0.01. significance level

The results shown in the previous table indicate that the values of the correlation coefficients between each statement and the total degree of the axis are statistically significant at the significance level (0.01), and all of them are positive values,

which means that there is a high degree of internal consistency of the questionnaire statements.

Second: Calculating the validity of the internal consistency between the degree of each of the axes of the questionnaire and the total degree of the questionnaire

Table 2: Validity of the internal consistency of the correlation coefficients between each of the axes of the questionnaire and the total score of the questionnaire

Corr. Factor	Item	Corr. Factor	Item
**0.609	Fifth: Technological competencies	**0.786	First: activity planning competencies
**0.611	Sixth: Professional growth competencies and human relations	**0.682	Second: the competencies of implementing the activity
**0.782	Seventh: Obstacles to developing professional competencies	**0.723	Third: the competencies of activity evaluation
		**0.755	Fourth: Competencies of thinking and creativity

** Function at 0.01. level

The results shown in the previous table indicate that the values of the correlation coefficients between the axes of the questionnaire as a whole are statistically significant at the level of questionnaire.

significance (0.01), and all of them are positive values, which means that there is a high degree of internal consistency between the axes of the

The stability of the resolution was verified by calculating Cronbach's Alpha coefficient, and the

Calculating the stability of the resolution

following table shows the stability coefficient of the resolution axes.

Table 3: Calculation of the stability of the resolution Cronbach's alpha coefficient

Cronbach's alpha coefficient	Number of phrases	Questionnaire axes
0.925	10	First Axis: Planning Competencies
0.937	11	The second axis: implementation competencies
0.933	11	The third axis: the competencies of the calendar
0.855	7	Fourth Axis: Competencies of Thinking and Creativity
0.868	8	Fifth Axis: Technological Competencies
0.875	8	The sixth axis: the competencies of professional growth and human relations
0.914	10	Seventh Axis: Obstacles to developing professional competencies
0.979	65	The overall stability of the resolution

Results, discussion and interpretation

To answer the research questions, the literature and previous studies related to professional competencies were consulted, and then analyzed in order to answer the questions, and the following is a presentation of the results that were reached after applying the research tool to answer the question: What is the level of professional competencies for

early childhood teachers in light of the skills of early childhood teacher’s XXI century? The frequencies, percentages, arithmetic averages and standard deviations of the responses of the research sample members were calculated on the paragraphs of this axis, and the results were as follows:

Table 4: Arithmetic averages and standard deviations of the level of professional competencies in the research sample in the field of (activity planning)

Performance level	Rank	Standard deviation	Arithmetic mean	Phrase
High	2	0.582	4.59	.1
High	5	0.840	4.22	.2
Intermediate	8	0.963	3.12	.3
High	3	0.568	4.58	.4
Intermediate	7	0.958	3.13	.5
Intermediate	9	0.946	3.00	.6
Intermediate	6	0.953	3.15	.7
High	1	0.505	4.69	.8
High	4	0.651	4.51	.9
Intermediate	10	0.968	2.70	.10
Intermediate		0.975	3.13	General average

It is clear from the previous table that the level of professional competencies for early childhood teachers in the light of the twenty-first century skills in (activity planning) came to a medium degree and the arithmetic averages ranged between (4.69) and (2.70), and the general arithmetic mean was (3.13). The paragraph "I select the sources of knowledge that can be referenced to enrich the scientific content" came in the first rank with an arithmetic average (4.69), followed in the second rank by choosing the educational aids before

The importance of planning adequacy, as it is through it: determining the scientific content of the activity in order to achieve the goals, organizing the way of displaying the activity and avoiding randomness and improvisation. It will achieve the

starting the activity, while in the last rank he mastered the inclusion of higher-order thinking skills during the planning of the activity with an arithmetic average of (2.70) The previous result agrees with the study (Al-Deeb and others, 2021), (Al-Barqi, 2019), (Ibrahim, 2014) and the previous result differs with the study (Al-Zahrani, 2018), whose results found that the female teachers’ skill in planning the activity before implementing the proposed program was weak.

The previous result is attributed to:

objectives, the time distribution, the teaching aids, the methods and strategies through which the content can be presented, the evaluation methods,), and to keep pace with the requirements of the twentieth century, good planning must meet a set

of conditions, including the planning of the activity planning Interactively, the tasks and roles of the teacher and the child are identified. It includes

enrichment activities through which the child's various thinking skills can be developed.

Table 5: Arithmetic averages and standard deviations of the level of professional competencies in the research sample in the field (executing the activity)

Performance level	Rank	Standard deviation	Arithmetic mean	Phrase
High	1	0.651	4.51	1.
High	2	0.840	4.22	2.
Intermediate	9	0.945	2.66	3.
Intermediate	7	0.930	2.69	4.
Intermediate	6	0.949	2.77	5.
Intermediate	10	0.911	2.61	6.
High	3	0.965	3.42	7.
Intermediate	8	0.942	2.68	8.
Intermediate	5	0.997	2.84	9.
Intermediate	4	0.980	2.86	10.
Intermediate	---	0.797	2.77	General average

It is clear from the previous table that the level of professional competencies for early childhood teachers in the light of the twenty-first century skills in (executing the activity) came to a medium degree and the arithmetic averages ranged between (4.51) and (2.61), and the general arithmetic mean was (2.77). The paragraph "I use modern teaching strategies effectively while teaching" came in the first place with an arithmetic average (4.51), followed in the second place by stimulating the children's attention to the activity in a variety of ways, while it came in the last place to encourage children to make decisions with an arithmetic average (2.61). The previous result agrees with the study [53] and it differs with the study [54], which found that the performance level of kindergarten

teachers for teaching competencies is weak and needs training and mastery of all skills to implement the activity in order to reach the desired level. Through which the child is acquired many different concepts and skills, and the skill of implementation of the activity includes: the optimal use of educational aids, the use of innovative teaching strategies that attract children to the educational content, in addition to asking thought-provoking questions, employing communication skills in an effective manner, and managing the time of the activity and the classroom environment professionally. Providing new learning experiences and implementing self-learning activities appropriate to children's abilities.

Table 6: Arithmetic averages and standard deviations of the level of professional competencies in the research sample in the field of (activity evaluation)

Performance level	Rank	Standard deviation	Arithmetic mean	Phrase
High	1	0.552	4.75	1.
Intermediate	8	0.974	2.85	2.
Intermediate	6	0.975	2.96	3.
High	4	0.602	4.43	4.
High	3	0.664	4.45	5.
Intermediate	11	0.958	2.84	6.
Intermediate	9	0.954	2.85	7.
Intermediate	10	0.944	2.85	8.
Intermediate	7	0.974	2.94	9.
Intermediate	5	0.971	3.03	10.
High	2	0.520	4.64	11.
Intermediate		0.798	2.85	General average

It is clear from the previous table that the level of professional competencies for early childhood teachers in the light of the twenty-first century

skills in (activity evaluation) came to a medium degree and the arithmetic averages ranged between (4.75) and (2.84), and the general arithmetic mean

was (2.85). The paragraph “I identify weaknesses and strengths during the children’s performance of the activity” came in the first place with an arithmetic average (4.51), followed in the second place by communicating with parents to develop children’s performance in light of the evaluation results, while in the last place came remedial plans in the light of the evaluation results with an arithmetic average (2.84) The previous result is consistent with the study [55-56]. The previous result is attributed to the fact that the evaluation competencies through which it is possible to determine the level of the child’s achievement, identify weaknesses and strengths, and provide

remedial plans in light of Evaluation results, and through evaluation, it is possible to judge the extent to which goals have been achieved, and to keep pace with the requirements of the twentieth century, teachers must be trained to provide innovative treatment plans for weaknesses, use evaluation outputs efficiently to solve children’s problems, cooperate with the family to treat weaknesses, diversify evaluation methods including It matches the educational situation and the content to be evaluated. In addition to training the child to participate in the actual evaluation process.

Table 7: Arithmetic averages and standard deviations of the level of professional competencies in the research sample in the field of thinking and creativity competencies

Performance level	Rank	Standard deviation	Arithmetic mean	Phrase
Intermediate	6	0.957	2.92	1.
Intermediate	2	0.951	2.99	2.
Intermediate	3	0.990	2.99	3.
Intermediate	5	0.992	2.92	4.
Intermediate	4	0.964	2.94	5.
Intermediate	1	0.925	3.04	6.
Intermediate	7	0.977	2.84	7.
Intermediate		0.813	2.948	General average

It is clear from the previous table that the level of professional competencies for early childhood teachers in the light of the twenty-first century skills in (thinking and creativity competencies) came to a medium degree and the arithmetic averages ranged between (3.04) and (2.84), and the general arithmetic mean was (2.94). The paragraph “thinking in a logical way” came in the first place with an arithmetic average (4.51), followed in the second place by possessing critical thinking skills, while it came in the last place to have metacognitive skills with an arithmetic average (2.84). The previous result agrees with the study of [57-58] that early childhood teachers must have flexibility in thinking that allows them to accept

everything that is new, important and useful to enrich the concepts of the child, uses unconventional solutions in dealing with problems, predicts future problems, uses various methods that stimulate thinking (Brainstorming, visual puzzles, developing the child’s imaginative abilities, creating an educational environment that stimulates thinking, creativity and innovation, and to keep pace with the requirements of the twentieth century, you must possess metacognitive skills, use systemic thinking skills, train the child in all kinds of thinking, inference and inductive, in addition to creating activities To develop creativity in the child.

Table 8: Arithmetic averages and standard deviations of the level of professional competencies in the research sample in the field of technological competencies

Performance level	Rank	Standard deviation	Arithmetic mean	Phrase
Intermediate	1	0.961	2.99	1.
Intermediate	6	0.961	2.83	2.
Intermediate	2	0.970	2.95	3.
Intermediate	7	0.966	2.78	4.
Intermediate	5	0.993	2.85	5.
Intermediate	4	0.921	2.88	6.
Intermediate	3	0.898	2.95	7.
Intermediate	8	0.975	2.75	8.

Intermediate		0.742	2.87	General average
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It is clear from the previous table that the level of professional competencies for early childhood teachers in the light of the twenty-first century skills in the field of (technological competencies) came to a medium degree and the arithmetic averages ranged between (2.99) and (2.75), and the general arithmetic mean was (2.87). The paragraph "I employ digital technologies (computers, media players, the Internet, social networking in managing the learning process" came in the first place with a mean of (2.99), followed in the second place by having the ability to manage and organize digital information, while it came in the last place to have information about Cyber security with an arithmetic average of (2.75) and the previous result agrees with the study [59-60], which emphasized the importance of using parameters for modern technological techniques in the process. Therefore, there is a need for advanced modern methods in preparing kindergarten teachers to face technological progress, including self-learning,

programmed education, distance education, and e-learning, in addition to providing material and human capabilities and technological innovations within kindergartens to help teachers develop Professional competencies. The previous result is attributed to the fact that technological competencies have become one of the most important competencies of the twenty-first century, through which the teacher is able to employ digital technologies efficiently in the workplace. The educational stop starting from the planning of the activity through the implementation and then evaluation, and in order for the teacher to be able to employ audio-visual and interactive techniques to provide children with different concepts and skills, and to choose educational electronic games appropriate for the educational content, and they must take into account the ethical and legal aspects associated with the use of technological technologies.

Table 9: Arithmetic averages and standard deviations of the level of professional competencies in the research sample in the field of professional growth competencies and human relations

Performance level	Rank	Standard deviation	Arithmetic mean	Phrase
Intermediate	1	0.985	2.96	1.
Intermediate	6	0.971	2.83	2.
Intermediate	7	0.960	2.80	3.
Intermediate	8	0.963	2.79	4.
Intermediate	4	0.967	2.87	5.
Intermediate	3	0.979	2.89	6.
Intermediate	5	0.984	2.85	7.
Intermediate	2	0.992	2.92	8.
Intermediate		0.849	2.866	General average

It is clear from the previous table that the level of professional competencies for early childhood teachers in the light of the twenty-first century skills in (professional growth competencies and human relations) came to a medium degree and the arithmetic averages ranged between (2.96) and (2.79), and the general arithmetic mean was (2.866). The paragraph "I can adapt to new rapidly changing roles and responsibilities" came in the first place with an average of (2.96), followed by the second place with the skill of initiative and self-direction, while in the last place came the skill of motivating others by example with an average of (2.84). The previous result agrees with the study [61], whose results found that female teachers lack professional competence in the unit of expertise curriculum in the areas of dealing with female co-workers and enabling study to develop professional competencies in dealing with female co-workers

and children through the proposed program. The previous result is attributed to the fact that the competencies (professional growth and human relations) are among the necessary competencies that enable female teachers to achieve career success through: adapting with others and with the nature of the profession, adapting to sudden changes, completing the tasks assigned to them without supervision and with perfection, managing time efficiently, managing crises Successfully, making the right decisions in emergency situations, establishing positive social relationships with others, and employing social relationships in solving children's problems. To answer the question: What are the obstacles to developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century? The frequencies, percentages, arithmetic averages, and standard deviations of the responses

of the research sample members were calculated on the paragraphs of this axis, and the results were as follows:

Table 10: Arithmetic averages and standard deviations of obstacles to developing professional competencies for early childhood teachers

degree of approval	Rank	Standard deviation	Arithmetic mean	Phrase
High	5	0.550	4.42	1.
High	9	1.200	3.39	2.
High	8	0.951	4.17	3.
High	1	0.574	4.63	4.
High	7	0.841	4.30	5.
High	2	0.819	4.50	6.
High	4	0.806	4.44	7.
High	6	0.746	4.36	8.
High	3	0.679	4.47	9.
High	10	1.014	3.02	10.
High	-----	0.578	4.68	General average

It is clear from the previous table that the obstacles to developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century came to a high degree, and the arithmetic averages ranged between (4.63) and (3.02), and the general arithmetic mean was (4.68). The paragraph “Weak awareness of some female teachers about the importance of developing performance in the light of the skills of the twenty-first century” came in the first rank with an arithmetic average (4.63), followed by the increase in the teaching and administrative burdens on female teachers with an average of (4.50) while the last rank came in the absence of the necessary time To practice professional competency development activities (3.02) and the previous result agrees with the study [62]. The previous result is attributed to the fact that one of the most important obstacles to developing professional competencies for early childhood teachers Weak awareness of some female teachers about the importance of

The proposed scenario: To develop the professional competencies of early

The proposed conceptualization philosophy

The philosophy of the proposed vision stems from the goals of the Kingdom of Saudi Arabia’s vision 2030 in the field of education, and in light of the Kingdom’s keenness to upgrade and develop female teachers professionally, and then improve

The proposed vision stems from several foundations and premises that support and build upon it, namely:

- The vision of the Kingdom of Saudi Arabia 2030, which focused on the importance of

developing performance in the light of the skills of the twenty-first century, lack of material capabilities needed to develop professional competencies, unwillingness of some female teachers to transfer their experiences, skills and knowledge among themselves and their colleagues, lack of time to practice professional performance development activities. A decline in the internal self-motivation of some teachers to continue their professional self-development, and the absence of a development plan to advance the level of performance of the teachers. To answer the question: What are the proposals for developing the professional competencies of early childhood teachers in the light of the skills of the twenty-first century? An open question was formulated at the end of the questionnaire to identify proposals for developing professional competencies for early childhood teachers. In light of these proposals, and in light of previous studies, a proposed scenario was prepared and can be explained as follows:

childhood teachers in the light of the skills of the twenty-first century

their teaching and professional performance, to create an effective educational environment that stimulates creativity, and to graduate ambitious national generations starting from the early childhood stage.

The starting points for the proposed concept

- developing the teacher's performance and enhancing his role in the educational process.

- The imperative of sustainable professional development to meet changes at the global level, and improve the quality of education.
- The repercussions of scientific and technological progress and the successive changes taking place in this era and their repercussions on the educational process.
- Developing the educational system in line with contemporary global trends.
- Preparing a new generation of female teachers capable of using modern technology.
- Raising the efficiency rates and the level of performance of the parameters.
- The results of previous studies, which emphasized the importance of teacher possession of the skills of the twenty-first century.

The objectives of the proposed vision

- Developing the competencies of professional teachers in light of recent changes and the requirements of contemporary reality and the Kingdom's vision 2030.
- Providing female teachers with the expertise, skills and specialized information necessary to develop their performance professionally.
- Enhancing teachers' conviction of the importance of committing to performing their new roles in line with the skills of the twenty-first century to achieve the goals of the Kingdom's Vision 2030.
- **Regulatory requirements: They are as follows:**
 - Providing a supportive and stimulating environment for the development of professional performance in line with the skills of the twenty-first century.
 - Allocating the necessary time to practice professional performance development activities inside and outside the kindergarten.
 - Establishing specialized workshops to clarify the practical aspect of the skills of the twenty-first century.
 - Holding a periodic forum to exchange distinctive and innovative experiences among female teachers to develop professional performance.
 - Encouraging the relevant community institutions to support the activities of developing the professional performance of teachers.

- Empowering female teachers with the knowledge necessary to develop their performance professionally.
- Empowering female teachers with twenty-first century skills.
- Helping female teachers to adopt new professional practices in light of the skills of the twenty-first century in order to achieve their professional excellence.
- Preparing female teachers who have the ability to compete regionally, locally and globally.

Requirements for developing professional competencies for early childhood teachers in the light of the skills of the twenty-first century

The requirements for developing professional competencies can be divided into the following:

- **Personal requirements: They are as follows:**
 - Enhancing the professional motivation of early childhood teachers to continue self-development.
 - Increasing the empowerment of female teachers, which makes them more able to assume professional responsibility.
 - Developing educational institutions (kindergartens and primary schools) in line with the requirements of the twenty-first century
 - Exchange visits between kindergartens to attend exemplary activities and exchange experiences.
 - Participation in specialized workshops, and educational.
 - Participation with working papers in educational and specialized conferences.
- **Material and human requirements: They are as follows:**
 - Inviting specialists and experts in the field of early childhood to support the development of the professional performance of female teachers.
 - Establishing an electronic platform dedicated to early childhood teachers to support their professional development.
 - Providing moral and material incentives to encourage female teachers to continue professional development.
 - Providing female teachers with appropriate educational programs to develop professional performance in accordance with the skills of the twenty-first century.

- Providing laboratories equipped with computers and the Internet to integrate modern technologies in kindergartens.
- Conducting surveys to identify the training needs of female teachers.
- Concluding educational partnerships at the level of kindergarten education departments at the level of the regions of the Kingdom.
- Forging research partnerships between universities and the Education Department to exchange experiences and skills.
- Adding twenty-first century skills as evaluation simulations in the teachers' annual performance report.

Obstacles to developing professional competencies for early childhood teachers

- Weak awareness of some female teachers of the importance of developing performance in light of the skills of the twenty-first century.
- A decline in the internal self-motivation of some female teachers to continue self-professional development.
- Some teachers' unwillingness to transfer their experiences, skills and knowledge among themselves and their colleagues.
- Lack of time to practice professional performance development activities.
- Lack of material resources necessary to develop professional competencies.
- Weak incentives for teachers.

Suggested solutions to face the obstacles

- Enlisting the help of experts specialized in the field of early childhood education and employing their knowledge and expertise to develop the performance of teachers.
- Providing permanent and advanced learning resources such as laboratories equipped with computers, educational programs and specialized books to support the development of twenty-first century skills.
- Establishing an electronic platform dedicated to early childhood teachers to support their professional development.
- Providing moral and material incentives to encourage female teachers to continue professional development
- Holding various meetings, seminars and workshops on a regular basis to exchange experiences, information and skills.

- Rewarding teachers who participate in professional development activities morally and materially.
- Linking all educational institutions to implement professional performance development programs.
- Training courses on (modern teaching methods and methods in the field of early childhood education, the latest psychological and educational theories to treat children's problems, the use of technological techniques, transforming scientific content into simple and attractive electronic content.

Recommendations

In light of the research findings, the following recommendations can be made:

- Holding training courses and specialized workshops to develop the professional competencies of teachers.
- Organizing an integrated training program to prepare newly experienced teachers
- Integrating twenty-first century skills into early childhood teacher preparation programmes

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