



RESEARCH ARTICLE

The Level of Inclusion of Career and Life Skills in the Content of the My Beautiful Language Curriculum in the Fifth Grade of Primary School

Mahmoud Hela Abdel Baset Abdel Qader

Department of Teaching and Learning, College of Education, King Khalid University

ARTICLE INFO	ABSTRACT
<p>Received: Dec 22, 2024 Accepted: Feb 11, 2025</p>	<p>The current study aimed to identify the level of inclusion of professional and life skills in the content of the Arabic language curriculum in the fifth grade of primary school. To achieve this goal, the researcher used the descriptive approach using the content analysis method, and prepared the study materials and tools, which were: a list of professional and life skills necessary for the content of the Arabic language curriculum in the fifth grade of primary school, a content analysis card, and then verifying the validity and reliability of these tools. The study sample was represented in the content of the My Language curriculum in the fifth grade of primary school, the second semester, 2022/2023 edition. The study tool was applied, then statistical analysis and interpretation of the results and presentation of recommendations and suggestions. The results showed: flexibility and adaptation skills came at a rate of (28.91%) and (98) repetitions; thus, they are in first place, initiative and self-direction skills came at a rate of (18%) and (61) repetitions; thus, they are in third place, productivity and accountability skills came at a rate of (16.22%) and (55) repetitions; thus, they are in fourth place, and multicultural social interaction skills came at a rate of (21.24%) and (72) repetitions; It is thus in second place, and that leadership and responsibility skills came at a rate of (15.63%) and (53) repetitions; it is thus in fifth place, and that the repetitions of the total skills are (339). The research presented some recommendations, the most important of which are: including Arabic language curricula at different educational stages of vocational and life skills sufficiently.</p>
<p>Keywords Vocational and Life Skills Curriculum Fifth Grade Arabic Language</p>	
<p>*Corresponding Author:</p>	

INTRODUCTION

The twenty-first century has brought changes that carry new challenges and horizons; which requires preparing a generation capable of facing them, and dealing with them as active, productive, and even creative individuals within a cooperative framework based on effective communication in a world led by technological development. This will only come about by providing individuals with skills that enable them to do this; therefore, it has become necessary for countries to develop national education projects; with the aim of reconsidering the future skills that individuals need, to prepare them for life and work in the twenty-first century; as twenty-first century skills are necessary to ensure students' readiness to learn and innovate, and to optimally use information and technical media (Shalaby, 2014).

Curricula are one of the basic pillars that help prepare future builders to develop thinking; as the largest amount of information, knowledge, and skills that an individual acquires during his basic

education stages depends on curricula; and although curricula must maintain their values and authenticity, they must keep pace with cognitive and technological development; Curricula are a mirror of peoples, reflecting their current reality and revealing the extent to which they keep pace with events (Abu Kamil, 2021).

The process of analyzing and evaluating school books is one of the important studies in the field of curricula and teaching methods, considering the school book as a container for the content of the curriculum, an important tool for its implementation, and a source for individual and collective learning alike (Al-Farra, 2010, 2).

Twenty-first century skills are an important and necessary requirement in curricula at various educational levels; because they include diverse, comprehensive and useful skills for the learner; as they are related to the era in which we live; and therefore people need them in their lives and their life interactions with each other, as those who do not possess these skills may not be able to adapt to society, or achieve success in many areas.

It is the duty of those responsible for designing and developing curricula to include twenty-first century skills in the curricula, including (learning and innovation skills); so that learners become able to face life problems, make appropriate decisions, and practice critical and creative thinking skills; The intentional and systematic integration of these skills into educational curricula will help educators achieve many goals that they have not been able to achieve for many years (Al-Eid, 2019).

Integrating 21st century skills into curricula will ensure that students are engaged in the learning process, help them build self-confidence, and prepare learners to innovate and participate effectively in different life situations in the 21st century (Ken, 2010).

Integrating 21st century skills into curricula is important, as it will help teachers achieve educational goals. 21st century skills enable learners to learn and achieve in academic subjects at higher levels, and provide an organized framework that ensures learners' engagement and integration into the learning process. They also help learners build confidence, prepare them for creativity and leadership in the 21st century, and participate effectively in practical life (Ken, 2010; Rizk, 2015; Al-Harbi, 2019).

Many studies (Al-Kaltham, 2013; Subhi, 2016; Al-Khazim and Al-Ghamdi, 2016) have confirmed that current curricula are no longer sufficient to prepare students for life and work in a changing, and even rapidly changing, world, because there are challenges facing learners, which requires that today's learning be different from yesterday's learning. It is important to provide students with an abundant and sufficient amount of skills to meet the challenges of the twenty-first century, as education in this century includes - in addition to the main topics - contemporary ideas and skills: such as global awareness, health, economic and environmental culture, technological proficiency and digital age skills, the ability to solve problems, critical and creative thinking, and possessing the components of an integrated personality and other skills (Al-Harbi, 2019).

The call for these skills was initiated by the Partnership for 21st Century Skills (P21), which was established by the US Department of Education and a group of educational institutions such as Microsoft and the National Education Association. This partnership has become one of the most important leaders in developing and teaching 21st century skills (Al-Baz, 2013, 196).

The Arabic language curriculum, like other curricula, must include 21st century skills with all their elements: starting with the objectives, content, activities, teaching methods, educational tools, and assessment methods, and that they be developed among students at all educational levels; due to their great benefits for the learner and society.

The current era is characterized by a knowledge explosion, growing information, rapid developments in knowledge and information, and increasing development in teaching and learning methods and communication technology; this development has been reflected in the educational process, as

knowledge is no longer fixed, but rather growing and renewable; therefore, it has become necessary to develop the educational system with all its elements; and as a result of the developments and changes witnessed by the 21st century in all fields; It has become necessary for the learner living in this century to have a creative mind and critical thinking; which requires the teacher to have a high degree of awareness and professional competence; so that he can develop his knowledge and teaching skills (Al-Sulaiti, 2015).

There is a deep gap between the skills that students learn in school and those they need in life and work in the knowledge-based society, and that current curricula are no longer sufficient to prepare students for life and work in today's changing world, driven by technological development (Bybee, 2010).

Opinions have also called for education to provide learners with the skills necessary to succeed in their societies and work in the twenty-first century, and therefore many institutions concerned with education have sought to formulate frameworks to identify and define twenty-first century skills, and to propose how to integrate them within the educational system in general, and basic academic fields in particular (Shalaby, 2014. 2).

Focusing in the educational process on the functions of one side of the brain (the left side) alone is not enough, but rather skills and abilities that were not taken into account should be employed: as basic skills in qualifying for work, such as: creativity, innovation, and the ability to link elements and events to form something new, which are skills specific to the right side of the brain (Pink, 2005).

Study Problem:

The researcher noticed through his experiences and multiple visits to schools the weakness of students in twenty-first century skills, as well as through interviews with some teachers and asking them about the level of students in twenty-first century skills, and their responses confirmed the weakness of the students' level in those skills, and one of the reasons for this weakness may be the lack of saturation of the curriculum content of students with these skills; Given the importance of learning and innovation skills - as one of the areas of twenty-first century skills - and the importance of including them in curricula in general and Arabic language curricula in particular, and the confirmation of studies on this, including the study of each of: (Al-Yami, 2022; Al-Ruwais, 2021; Al-Shahri, 2021; Al-Jahni, 2019; Al-Bahrawi, 2015; Al-Baz, 2013), as many studies confirmed, including: (Al-Kalthum, 2013; Subhi, 2016; Al-Khazim and Al-Ghamdi, 2016; Younis, 2016) that the current curricula are no longer sufficient to prepare students for life in this era; Therefore, the current research sought to reveal the level of professional and life skills in the content of the Arabic language curriculum in the fifth grade of primary school.

Defining the study problem:

The problem of the current study was determined to reveal the level of inclusion of professional and life skills in the content of the Arabic language curriculum in the fifth grade of primary school.

Study Objectives:

The current study aimed to identify:

The necessary professional and life skills in the content of the Arabic language curriculum in the fifth grade of primary school.

The level of professional, life and innovation in the content of the Arabic language curriculum in the fifth grade of primary school.

Study Questions:

The current study attempted to answer the following questions:

What are the necessary professional and life skills in the content of the Arabic language curriculum in the fifth grade of primary school?

What is the level of professional and life skills in the content of the Arabic language curriculum in the fifth grade of primary school?

Importance of the study:

The importance of the current study stems from the following:

It helps researchers conduct similar research that reveals the level of professional and life skills in curricula.

Preparing a list of professional and life skills needed in the content of the Arabic language curriculum in the fifth grade of primary school; it can be used in evaluating the curriculum.

It helps curriculum planners to include professional and life skills in Arabic language curricula.

It helps teachers to include professional and life skills in their teaching practices.

Limitations of the study:

The current study was limited to:

Professional and life skills, which are (flexibility and adaptation skills, initiative and self-direction skills, productivity and accountability skills, multicultural social interaction skills, leadership and responsibility skills).

Arabic language book for the fifth grade of primary school for the academic year 2022/2023 AD.

Applying this study in the academic year 2022/2023 AD

Study method:

The current research used the descriptive method using the content analysis method; This is due to its suitability to the nature of the study and achieving its objectives.

Study community and sample:

The study community was represented by the Arabic language book for the fifth grade of primary school for the academic year 2022/2023, while the study sample consisted of the Arabic language book for the fifth grade of primary school, the second semester, 2022/2023 edition.

Study terms:

Professional and life skills:

The researcher defines them procedurally as: A set of skills that must be included in the book My Eternal Language for the fifth grade of primary school; To provide them to students in this grade, and they include: (flexibility and adaptation skills, initiative and self-direction skills, productivity and accountability skills, multicultural social interaction skills, leadership and responsibility skills).

Content of the Arabic language curriculum:

The researcher defines it procedurally as: knowledge, concepts, ideas, skills, attitudes, and scientific material included in the Arabic language book for the fifth grade of primary school.

THEORETICAL LITERATURE

21st century skills have been classified in many ways, the most important of which is the Partnership for 21st Century Skills P21 classification; where it divided them into three main areas, each of which includes sub-skills, and these areas are: (learning and innovation skills, information and communication technology skills, life and work skills; NSTA, 2013; P 21, 2006; Trilling and Fadel,

2013; Al-Saleh, 2013; Shalabi, 2014; Al-Helou, 2016; Al-Khazim and Al-Balawi, 2020; Al-Ruwais, 2020; Al-Sardiya, 2020; Al-Azab, 2020; Al-Ruwaished, 2021; Al-Otaibi, 2021; Ali, 2021). The following can shed light on the area of digital culture skills, which is the subject of the current study.

Life and work skills:

This type of skills focuses on skills related to life, profession and work; As it is necessary to prepare learners, it also deals with life skills that represent the intangible elements in individuals' daily lives, and are represented in personal and professional qualities as well. It means developing the individual's skills; so that he becomes self-directed, an independent learner, able to adapt to change, manage projects, bear responsibility, lead others, and achieve results. It includes the skill of flexibility and adaptation, the skill of initiative and self-direction, the skill of social interaction and multicultural interaction (social skills and understanding of multiple cultures), the skill of productivity and accountability, the skill of leadership and responsibility, and this can be explained in some detail as follows (Beer, 2011; Trilling and Fadel, 2013; Shalaby, 2014; Al-Ruwais, 2020; Al-Otaibi, 2020; Al-Azab, 2020; Ali, 2021):

The skill of flexibility and adaptation.

It means the individual's ability to adapt effectively to changes in responsibilities and systems, to prioritize and update them in work environments, as well as his ability to be flexible, deal positively with cases of achievement and failure, deal with criticism from others, negotiate and balance between wrong points of view and beliefs; to reach logical solutions. As well as adapting to roles, working effectively in different environments, benefiting from feedback, interacting through dialogue, discussion and balancing between different opinions and solutions. It also means preparing individuals to be able to: deal with praise, obstacles and criticism positively, understand different points of view and beliefs, negotiate and evaluate them to reach practical solutions. It includes: Adapting to change; where the individual is able to adapt to laws, jobs and responsibilities, and to work effectively in an environment characterized by ambiguity and changing priorities, and flexibility; where the individual is able to deal positively with success, failure and criticism, as well as understanding, negotiating and balancing between different points of view and beliefs; to reach scientific solutions. The individual must have the ability to adapt to new roles and responsibilities, and to work effectively in an atmosphere of ambiguity and changing priorities. These skills can be developed by working on projects that gradually increase in complexity, and challenge the different abilities of individuals, and the individual differences between them; in order to change their way of working and adapt to developments.

Initiative and self-direction skills.

It means the extent to which an individual is able to manage time, formulate goals in light of achievable standards and indicators, as well as the ability to work independently, accomplish tasks, prioritize, self-learning, monitoring, controlling, directing and self-evaluating. It is the ability to set measurable goals, choose priorities, take initiatives in developing work, and the ability to develop work in a critical manner. It also means the ability to set logical goals and follow up on their achievement through: strategic and scientific planning, self-learning and independent work.

It also means preparing individuals to be able to: manage goals and time, set goals with tangible and intangible standards, achieve a balance between short-term and strategic goals, use time, manage workload effectively, work independently, identify tasks and prioritize them, accomplish without direct supervision, self-direction from the individual to himself, and go beyond mastering skills to exploring and expanding personal learning and opportunities; to gain experience, and critically reflect on their previous experiences; to direct their future progress. These skills can be developed by providing individuals with an appropriate level of freedom and providing various activities, such as role-playing, theatrical acting, and field work.

Productivity and accountability skills.

It means the extent to which an individual is able to make decisions, plan, prioritize, bear responsibilities, be transparent, be accurate in judgment and evaluation, employ precise standards in work, manage projects, face challenges, add new things to products, and improve final outputs. It is the ability to achieve goals, complete work within a specific timetable, compare work in light of specific standards, produce cultural or material knowledge that serves goals, and commit to lifelong learning. It also means the ability to set goals, plan to achieve them, face challenges and obstacles, work positively and ethically, manage time, participate effectively, and review and hold accountable the results of work, including: Productivity; as the individual is able to perform a task, or innovate a product using time management skills, goal setting, prioritization, and accountability: as the individual is able to bear responsibilities for the procedures necessary to perform the task, or innovate the product.

It also means preparing individuals; To be able to: manage projects, set and achieve goals in the face of obstacles, pressures and competition, prioritize work, plan to achieve desired results, demonstrate results, and demonstrate additional characteristics associated with producing high-quality products: such as working positively and ethically, performing multiple tasks, participating actively and accurately in work, cooperating, taking responsibility for results, completing work within a specified time frame, and productivity in business terms means (efficiency).

Social interaction and multicultural interaction skills (social skills and understanding of multiple cultures).

It means the extent to which an individual is able to work in diverse groups and teams, social interaction, interact with others, accept cultural differences, and be able to know when listening and when speaking is appropriate, and deal with cultural differences and different ideas. It also means preparing individuals to be able to: direct individuals in a professional and respectful manner, respect different cultures, respond with an open mind to different ideas and values, and activate social and cultural differences to create new ideas. These skills can be developed by designing interconnected learning environments that provide activities that work to resolve differences between individuals.

Leadership and responsibility skills

It means the extent to which an individual is able to lead a team, bear responsibilities, direct, influence others, prioritize the public interest, be flexible and positive in management, distribute tasks, and follow up on work to reach the final product. It is working to achieve common goals, and using individual communication to train others to acquire skills, and the ability to use personal communication skills, and problem-solving skills; To influence others and direct them towards the goal. It also means the ability to bring about change, positive influence to push others to reach their full potential, and act responsibly to achieve goals while taking into account the diversity of others' interests and abilities. It also means preparing individuals to be able to: lead and direct others, use personal communication and problem-solving skills to influence others and direct them towards the goal, and invest in the strengths of others to achieve common goals. It includes: leadership and responsibility; as the individual is able to work with the interest of the larger community in mind.

Many studies have focused on the process of evaluating the curriculum and the skills of the twenty-first century. These studies include the following: (Saif, 2022; Bahrawi, 2021; Dawoud, 2021; Al-Ruwaished, 2021; Al-Shabl, 2021; Al-Shammari, 2021; Al-Shahri, 2021; Hilal, 2021; Baghdadi, 2020; Al-Khazim and Al-Balawi, 2020; Al-Sardiya, 2020; Al-Shahrani, 2020; Abdul-Barr, 2020; Al-Otaibi, 2020; Al-Azab, 2020; Al-Maghribi and Bani Khalaf, 2020; Hindawi, 2020; Al-Jahni, 2019; Al-Harbi, 2019; Al-Arfaj, Al-Khalidi and Al-Shahri, 2019; Al-Qahtani, 2019; Hajjah, 2018; Al-Ghamdi, 2018; Rabat, 2018; Abdel-Aal, 2018; Al-Mansour and Al-Adili, 2018; Al-Helou, 2016; Al-Ghamdi and Muhammad, 2016; Hussein Al-Arja, 2009). These studies recommended the need to pay attention to

the twenty-first century skills of learners in various disciplines, and to include them in the curricula. This study is a response to previous studies.

STUDY PROCEDURES AND PREPARATION OF ITS MATERIALS AND TOOLS:

First: A list of professional and life skills:

The list aimed to identify the professional and life skills required in the content of the Arabic language curriculum for the fifth grade of primary school. In building the list, the researcher relied on reviewing some books, references, studies and research related to the research topic, including (Shalabi, 2014; Al-Jarrah, 2021; Al-Ruwaished; 2021), as well as the opinions of some specialists in curricula and methods of teaching the Arabic language about the professional and life skills required in the content of the Arabic language curriculum for the fifth grade of primary school. The list consisted of five main skills: (flexibility and adaptation skills, initiative and self-direction skills, productivity and accountability skills, multicultural social interaction skills, leadership and responsibility skills), and (50) sub-skills fall under it. After preparing the list in its initial form, it was presented to a group of arbitrators to express their opinion on it in terms of: the sub-skill's affiliation to the main skill, the suitability of the skill and its importance to the research sample, adding, deleting or modifying the wording. The arbitrators confirmed that the list is appropriate.

Second: Preparing the analysis card:

Analysis objective:

The card aimed to analyze the content of the Arabic language curriculum for the fifth grade of primary school in light of professional and life skills.

Analysis category:

The researcher relied on the list of learning and innovation skills that were prepared; It consisted of (5) main skills: (flexibility and adaptation skills, initiative and self-direction skills, productivity and accountability skills, multicultural social interaction skills, leadership and responsibility skills), and (50) sub-indicators fall under it.

Analysis unit:

The idea unit was adopted as a unit of analysis in the My Language book for the fifth grade of primary school, second semester, and the analysis units amounted to (511) analysis units.

Card validity:

The card was presented to seven arbitrators in the field of curricula and teaching methods, in order to express their opinion on it in terms of: clarity of expressions, soundness of their formulation, appropriateness and importance to students and their suitability to the curriculum, and adding, deleting or modifying the formulation. The arbitrators confirmed that the card was suitable for application, with some minor modifications. The card in its final form consisted of (5) main skills, under which (50) sub-skills were included.

Card stability:

The retest or analysis method was used; the researcher analyzed a survey sample of the content, and after two weeks he reanalyzed the same sample, then the percentage of agreement between the two analyses was calculated using the Holsti equation.

$$\text{Points of agreement in the two analyses} \times 2$$

$$\text{stability coefficient} = \frac{\text{Points of agreement in the two analyses} \times 2}{\text{Repetitions in the first analysis} + \text{Repetitions in the second analysis}}$$

$$\text{Repetitions in the first analysis} + \text{Repetitions in the second analysis}$$

The card's stability coefficient reached (0.89), which is an appropriate stability coefficient.

Application of the research tool and analysis process:

The research tool was applied and the analysis process was conducted in the second semester of the academic year 2022/2023 AD. After completing the application of the research tool, it was corrected, and the grades were recorded in preparation for statistical processing, discussion and interpretation.

Study results, discussion and interpretation:

Answering the first question:

The first question stated: What are the necessary professional and life skills in the content of the Arabic language curriculum in the fifth grade of primary school? To answer this question, a list of learning and innovation skills necessary for the content of the Arabic language curriculum in the fifth grade of primary school was prepared? It was presented to the arbitrators, and a list was reached, which is explained in detail in the research procedures.

Answering the second question:

The question stated: What is the level of professional and life skills in the content of the Arabic language curriculum in the fifth grade of primary school? To answer this question, the frequencies, percentages, The results of the analysis came as shown in the following table:

Table (1): Averages and standard deviations in the main occupational and life skills and the card as a whole

The field	Number of indicators	Repetition	percentage	Arrangement
Flexibility and adaptability skills	10	98	%28.91	the first
Initiative and self-direction skills	10	61	%18	the third
Productivity and accountability skills	10	55	%16.22	Fourth
Multicultural Social Interaction Skills	10	72	21.24	the second
Leadership and Responsibility Skills	10	53	15.63	Fifth
Skill set as a whole	50	339	%100	

The previous table shows that flexibility and adaptation skills came in at a rate of (28.91%) and (98) repetitions; thus, they are in first place, initiative and self-direction skills came in at a rate of (18%) and (61) repetitions; thus, they are in third place, productivity and accountability skills came in at a rate of (16.22%) and (55) repetitions; thus, they are in fourth place, multicultural social interaction skills came in at a rate of (21.24%) and (72) repetitions; thus, they are in second place, leadership and responsibility skills came in at a rate of (15.63%) and (53) repetitions; thus, they are in fifth place, and the repetitions of the total skills were (339). Thus, the second question of the study questions was answered, which states: What is the level of inclusion of professional and life skills in the content of the My Beautiful Language curriculum in the fifth grade of primary school?

Study Recommendations

In light of the results of the study, some recommendations can be made, the most important of which are:

-Curriculum planners should pay attention to vocational and life skills, one of the areas of 21st century skills, when building the curriculum.

-Curriculum developers should pay attention to vocational and life skills, one of the areas of 21st century skills, when developing the curriculum.

-Arabic language curricula at different educational levels should include vocational and life skills, one of the areas of 21st century skills, in a sufficient manner.

Study Proposals:

-In light of the research results and recommendations, the following research points can be proposed:

-The level of twenty-first century skills in the Arabic language curriculum at the intermediate level.

-The level of twenty-first century skills in the Arabic language curriculum at the secondary level.

ACKNOWLEDGEMENT:

The authors extend their appreciation to the Deanship of Research and Graduate Studies at King Khalid University for funding this work through large Group project under grant number (270/1445).

REFERENCES

- Ibrahim, Magdy Aziz (2005). Thinking from an educational perspective, its definition, nature, skills, and development of its patterns, Cairo: Alam Al-Kutub.
- Abu Kamil, Ruba Al-Sayed and Darwish, Atta Hassan and Abu Shakir, Muhammad Suleiman (2021). Evaluation of Palestinian science and life books for the upper primary stage 5-8 in light of twenty-first century skills. *Journal of the Islamic University for Educational and Psychological Studies*. Vol. (29). No. (1). January. 209-235.
- Al-Baz, Marwa Muhammad (2013) Developing the science curriculum for the third preparatory grade in light of twenty-first century skills. *Journal of Scientific Education*. Vol. (16). No. (6). 191-231.
- Bahrawi, Atef Abdullah (2021). The degree of possession of graduate students in special education specializations of twenty-first century skills. *Journal of Special Education and Rehabilitation*. Special Education and Rehabilitation Foundation. Vol. (13). No. (44). September. 1-35.
- Al-Bahrawi, Fathi Mabrouk (2015). Professional performance standards required for student teachers in light of twenty-first century skills. *Arab studies in education and psychology*. Arab Educators Association. No. (63). 435-484.
- Baghdadi, Manal Saleh (2020). Evaluation of the content of the science book for the third intermediate grade in light of twenty-first century skills. *Studies in curricula and teaching methods*. No. (248). 73-96.
- Al-Balawi, Awatif Falakh and Al-Balawi, Aisha Muhammad (2019). A vision for a training program to develop some twenty-first century skills among elementary school mathematics teachers in Tabuk City. *Arab Studies in Education and Psychology*. Issue (107). March. 387-433.
- Al-Turki, Kholoud Ibrahim and Al-Jabr, Jabr Muhammad (2020). Twenty-first century skills included in the Physics 1 book in the secondary stage in the Kingdom of Saudi Arabia. *Journal of Educational Sciences*. Imam Muhammad bin Saud Islamic University. Issue (24). August. 15-70.4.
- Al-Jahni, Amal Saad (2019). Evaluating the performance of science teachers in light of twenty-first century skills. *Arab Studies in Education and Psychology*. Arab Educators Association. Issue (116). December. 23-50.
- Hajjah, Hakam Ramadan (2018). The extent to which science books for the upper basic stage include twenty-first century skills. *Educational Sciences Studies*. The University of Jordan. Vol. (45). Issue (3). 163-178.

- Al-Harbi, Ibrahim Salim (2019). The extent of including 21st century skills in mathematics textbooks for the third intermediate grade. *Journal of Education*. Al-Azhar University. No. (183). Vol. (1). July. 512-554.
- Hussein Al-Arja, Muhammad (2009). The level of quality of the content of the science book for the eighth grade in light of international standards and the extent of students' acquisition of them. Master's thesis. The Islamic University. Gaza.
- Hafni, Maha Kamal (2015). Skills of the twenty-first century teacher. The twenty-fourth scientific conference. The Egyptian Association for Curricula and Teaching Methods. Teacher preparation programs for excellence. Cairo: Ain Shams University. Dar Al-Diafa. August 12-13.
- Al-Halou, Narmin Mustafa (2016). Home Economics Teachers' Awareness of Twenty-First Century Skills in Light of Professional Development and Their Attitudes Towards Them. *Journal of the Faculty of Education*. Kafr El-Sheikh University. Vol. (16). No. (3). 461-540.
- Al-Khazim, Khaled Mohammed and Al-Balawi, Abdullah Marzouq (2020). The Level of Teaching Practices among Primary School Mathematics Teachers to Develop Learning and Creativity Skills According to the Requirements of the Twenty-First Century. *Journal of Mathematics Education*. The Egyptian Society for Mathematics Education. Vol. (23). No. (5). July. 28-56.
- Al-Khazim, Khaled and Al-Ghamdi, Mohammed (2016). Content Analysis of Mathematics Books for Upper Primary Grades in Light of Twenty-First Century Skills. Thesis of Education and Psychology. Imam Muhammad bin Saud Islamic University. (53). 61-88.
- Dawoud, Samir Saeed (2021). The Effect of Free Reading on the Development of Deep Reading and Some Twenty-First Century Skills among Student Teachers at the Faculty of Education. *Educational Journal*. Sohag University. November. 301-343.
- Rabat, Bahira Shafiq (2018). The effectiveness of combining the thinking maps strategy and the dual-situation-based learning model to develop some twenty-first century skills in the study of geometry. *Journal of Mathematics Education*. The Egyptian Society for Mathematics Education. (21). (12). October. 277-368.
- Al-Ruwais, Aziza Saad (2021). Evaluating teaching practices in light of the twenty-first century skills of primary school teachers in Riyadh. *Journal of the Islamic University for Educational and Social Sciences*. Islamic University of Madinah. Issue (5). March. 229-277.
- Al-Ruwaished, Noha Rashid (2021). The extent of the availability of twenty-first century skills in teaching mathematics according to the opinions of its teachers in the State of Kuwait. *Journal of the Faculty of Education in Educational Sciences*. Ain Shams University. Vol. (45). Issue (1). 273-312.
- Subhi, Nisreen Hass (2016). The extent of including twenty-first century skills in the developed science curriculum for the first intermediate grade in the Kingdom of Saudi Arabia. *Journal of Educational Sciences*. Vol. (1), Issue (1), 9-44.
- Al-Sardiya, Haya Khalaf (2020). Twenty-first century requirements for special education teachers in light of the Kingdom's Vision 2030. *International Journal of Research in Educational Sciences*. Vol. (3). Issue (1). 387-421.
- Al-Sulaiti, Dhabia Saeed (2015). A proposed vision for reading teacher skills in light of the requirements of the twenty-first century in independent schools in the State of Qatar. *Education*. Al-Azhar University. Egypt. 164. (3).

- Saif, Aithan Hassan (2022). Developing mathematics curricula for the secondary stage in the Republic of Yemen according to twenty-first century skills. *Educational Journal. University of Kuwait*. Vol. (36). No. (144). September. 193-220.
- Al-Shabl, Manal Abdul Rahman (2021). The reality of digital learning in enhancing twenty-first century skills from the point of view of mathematics teachers and supervisors in the secondary stage in the Kingdom of Saudi Arabia. *Shaqra University Journal for Humanities and Administrative Sciences*. Vol. (15). 343-367.
- Shalaby, Nawal Muhammad (2014). A proposed framework for integrating twenty-first century skills into science curricula in basic education in Egypt. *International Specialized Educational Journal*. Vol. (3). No. (10). 1-33.
- Al-Shammari, Salman Hadid (2021), The degree of acquisition of twenty-first century skills by mathematics major students at Shaqra University from the perspective of faculty members. *Educational Journal. Kuwait University*. Vol. (35). No. (139). June. 213-254.
- Al-Shahrani, Badria Muhammad (2020). Evaluation of the content of science curricula in the intermediate stage in light of twenty-first century skills. *Educational Journal. Sohag University*. Vol. (72). 417-468.
- Al-Shahri, Abdulrahman Ali (2021b). The level of inclusion of twenty-first century skills in textbooks in the intermediate stage. *Educational Sciences Journal. King Saud University*. Vol. (33). No. (2). 307-333.
- Al-Saleh, Badr Abdullah (2013). *Twenty-first century skills: learning for life in our time*. King Saud University. Scientific publishing and printing.
- Abdel-Barr, Abdel-Nasser Muhammad (2020). Developing the mathematics curriculum within Egypt's vision for sustainable development 2030 and its impact on the development of some twenty-first century skills among middle school students. *Journal of Mathematics Education. The Egyptian Society for Mathematics Education*. (23). (7). October. 7-81.
- Abdel-Aal, Muhammad Sayed (2018). The effectiveness of a program enhanced with Web2 tools in developing 21st century skills among mathematics teachers at the Faculty of Education. *Journal of Mathematics Education. The Egyptian Society for Mathematics Education*. (21). (6). 214-269.
- Al-Otaibi, Reem Hamoud (2020). The reality of 21st century skills. *Journal of Reading and Knowledge. The Egyptian Society for Reading and Knowledge*. No. (230). December. 323-354.
- Al-Arfaj, Abeer Mohammed and Al-Khalidi, Haya Hatem and Al-Shahri, Haya Mohammed (2019). The degree of inclusion of 21st century skills in the common first-year courses. *Journal of the Faculty of Education. Port Said University*. No. (28). 176-206.
- Al-Azab, Rehab Amin (2020). Characteristics of faculty members in light of 21st century skills and their relationship to providing students with 21st century skills from the perspective of undergraduate students. *The International Journal of Educational and Psychological Sciences*. No. (55). 101-155.
- Ali, Iman Salama (2021). *Curricula and 21st Century Skills*. Educational Sciences. Graduate School of Education. Cairo University. Vol. (29). Special Issue. February. 123-140.
- Al-Ghamdi, Mona Saad (2018). Training Needs and Challenges Facing Mathematics Teachers in Light of the Skills of the 21st Century Teacher. *Journal of the Faculty of Education. Tanta University*. Vol. (70). No. (2). April. 468-528.

- Al-Farra, Maysoun Nasr (2010). Analysis of the Book of Our Beautiful Language for the Fourth Grade in Light of Creative Thinking and the Extent of Students' Acquisition of It. Master's Thesis. Faculty of Education. Islamic University. Gaza.
- Al-Kaltham, Hamad (2013). Content Analysis of the Book of Jurisprudence 1 for the Secondary Stage in the Kingdom of Saudi Arabia in Light of the Twenty-First Century Skills. *Al-Azhar University Knowledge Journal*. (54). 1. 224-243.
- Mahmoud, Ahmed Hassan (2018). The Effectiveness of an Enrichment Program Based on Some Twenty-First Century Skills to Develop Mathematical Strength and Mathematical Thinking among Academically Outstanding Students in the Preparatory Stage. *Journal of Mathematics Education. The Egyptian Society for Mathematics Education*. (21). (11). 326-340.
- Al-Maghribi, Ayat Muhammad and Bani Khalaf, Mahmoud Hassan (2020). The Level of Acquisition of Digital Culture Skills by Eighth Grade Students in Light of the Twenty-First Century Skills in Science Education. *Al-Quds Open University Journal for Educational and Psychological Research and Studies*. Al-Quds Open University. Vol. (11). No. (30). 17-29.
- Malham, Amani Muhammad (2017). The Degree of Availability of Twenty-First Century Skills in the Technology Course for the Upper Basic Stage and the Degree of Students' Possession of Those Skills. Master's Thesis. An-Najah National University. Nablus.
- Al-Mansour, Gharbi Suleiman and Al-Adli, Abdul Salam Musa (2018). The degree of inclusion of science books for the basic education stage in Jordan for twenty-first century skills. Master's thesis. Faculty of Educational Sciences. Al al-Bayt University.
- Hilal, Samia Hassanein (2021). The effectiveness of a developed unit in light of the STEM cognitive integration approach in developing some twenty-first century skills among primary school students. *Journal of Mathematics Education*. Vol. (24). No. (3). January. 221-254.
- Hindawi, Imad Muhammad (2020). The effect of using the service learning strategy in learning chemistry to develop twenty-first century skills among students, chemistry teachers at the Faculty of Education. *Journal of Science Education. The Egyptian Society for Science Education*. Vol. (23). No. (3). March. 151-195.
- Al-Yami, Naji Muhammad (2022). Evaluation of teaching practices of primary school mathematics teachers in light of twenty-first century skills. Master's thesis. College of Education. King Khalid University.
- Younis (2016). Evaluation of the geography curriculum in the secondary stage in light of twenty-first century skills. *Journal of the Educational Association for Social Studies*. Egypt. (76). 63-92.
- Al-Farra, Maysoun Nasr (2010). Analysis of the book Our Beautiful Language for the fourth grade in light of creative thinking and the extent to which students acquire it. Master's thesis. College of Education. Islamic University. Gaza.
- Baghdadi, Manal Saleh (2020). Evaluation of the content of the science book for the third intermediate grade in light of twenty-first century skills. *Studies in curricula and teaching methods*. No. (248). 73-96
- Astleinter, H. (2002). Teaching Critical Thinking. *Journal of Instructional Psychology*, v(29), n(2), 53-76.
- Bybee, W.R. (2010). *The Teaching of Science: 21st Century Skills Perspectives*, NSTA Press.
- Ken, K. (2010). *21st Century Skills. Why they matter, What They are, and How we get there?* Available at: [http://www.Innovationlabs. Com.plsd/resources/kenkay.pdf](http://www.Innovationlabs.Com.plsd/resources/kenkay.pdf).

Partnership for 21 st Century Skills(2006). Framework for 21st Century Learning. Retrieved from:
<http://www.battelleforkids.org/networks/p21>.

Peterson. A.d.(2003). Schools Across Frontiers: The story of the International Baccalaureate and the United World Colleges USA: Carus Publishing Company, ISBN0. 49505-8126.

Pinke, D.H, (2005). A whole New Mind the Penguin Group New York, USA.

Steele Jennifer L. , Hamilton Laura S. , Stecher Brian M. (2010). Incorporating Student Performance Measures into Teacher Evaluation Systems. the RAND Corporation

The National Science Teacher Association.(2013). Quality Science Education and 21 St Century Skills.
<http://www.Nsta.Org>.

Ken, K.(2010). 21 St Century Skills. Why they matter, What They are, and How we get there? Available at: <http://www.Innovationlabs.Com.plsd/resources/kenkay.pdf>.

Ken, K.(2010). 21 St Century Skills. Why they matter, What They are, and How we get there? Available at: <http://www.Innovationlabs.Com.plsd/resources/kenkay.pdf>.