

A Proposed Framework for Enhancing the Content of the Life Skills Curriculum for Third-Grade Secondary Students in Light of Knowledge Economy Skills

Dr. Yousef Saeed Alghamdi*

*Imam Abdulrahman Bin Faisal University, Saudi Arabia, Dammam

Abstract:

The current study aimed to determine the extent to which the content of the life skills curriculum for the third year of secondary school includes knowledge economy skills, and to develop a proposed perception for developing the content of the life skills curriculum by including knowledge economy skills. The researcher used the content analysis method and built the study tool, which was represented by a content analysis card, based on a list of knowledge economy skills which included (5) main skills, and a standard was built consisting of a number of indicators that reached (40) sub-skills, and the validity and reliability of the study tool were calculated; By presenting it to a group of experts, the researcher then analyzed the content of the life skills curriculum for the third year of secondary school according to it. The results of the study showed that the knowledge economy skills included in the life skills book for the third year of secondary school were average, and their availability rates varied between the three study units of the book. It was ranked in descending order (social and communication skills 28.10%, thinking and problem-solving skills 27.35%, skills in dealing with information and communication technology 18.39%, behavioral skills 16.29%, economic skills and preparation for the labor market 9.87%). In light of these results, a proposed perception was developed to include knowledge economy skills - which received very low availability rates - in the life skills book, and the study came out with a set of recommendations and proposals.

Keywords: Content analysis, knowledge economy, knowledge economy skills, life skills

Introduction:

In today's rapidly changing world, the fifth industrial revolution, the information age, and the technological and economic transformations have had a profound impact on educational institutions. There is a pressing need to explore the best methods and means to prepare individuals to keep pace with these changes and developments, based on solid educational foundations. For nations and societies to achieve progress and leadership, they must focus on the inputs to the educational system in general and curricula in particular. Knowledge, its production, utilization, and investment have become the requirements of the 21st century. Knowledge and its applications are considered one of the primary sources of global economic growth, and for a country to be a global competitor, it must actively participate in knowledge development and provide various sectors with the necessary tools to achieve social welfare. (Al Ashqar 2020, P 206).The knowledge-based economy has become a global phenomenon that advanced countries are keen to adopt to keep up with the economic and social transformation requirements. The evolution of information and communication technology fields, the knowledge explosion, and the promotion of a culture of creativity and production have played a significant role in the emergence of the concept of the knowledge economy (Fragidis, Paschaloudis, and Tsourela, 2008, p. 63). As individuals are the producers, transmitters, and developers of knowledge, educational institutions find themselves facing educational challenges and transformations that prompt them to reconsider their goals, strategies, and curricula. There is a need to provide an education that equips learners with life skills, qualifies them for the job market, and contributes to economic development with high efficiency. Dimmock & Goh (2011) mention that the knowledge economy represents an educational system that empowers students to acquire, produce, disseminate, and share knowledge with others, aiming to improve the quality of human life. Al-Ahmadi (2022) believes that a community's success depends on the robustness and effectiveness of its educational system. Therefore, educational systems must adapt to the rapid changes in the world, one of which is the knowledge economy. The world has become preoccupied with changing and developing curricula based on the knowledge economy to elevate individuals' levels, keep up with rapid developments, and become a driving force for nation-building. The importance of the knowledge economy is evident in the Kingdom of Saudi Arabia's efforts over the years to support the orientation towards a knowledge-based economy. The country has been working to keep up with the accelerating knowledge and technical developments in the world, attract and localize them, and develop knowledge economy skills among generations by enabling knowledge transfer, accumulation, generation, and investment.

The Kingdom of Saudi Arabia has witnessed a broad community movement as it confidently moves towards building a more diverse economy with higher knowledge content. Therefore, the Royal Order No. (546) was issued on 02/01/1433 AH, mandating a committee to develop a comprehensive and practical national strategy for the transformation into a knowledge society. This strategy is supported by executive and time-bound programs with specified costs, with a vision of a "diverse and prosperous economy and a knowledge-based society while preserving Islamic values" (Ministry of Economy and Planning, 1435 AH). Consequently, the Kingdom of Saudi Arabia's transformation towards a knowledge society has become imperative to ensure the sustainability of the development process and build a modern and competitive economy. This can be achieved by transforming society into one that believes in the message of science and understands the value of knowledge generation,

dissemination, and utilization. In light of this, the Ministry of Education in the Kingdom of Saudi Arabia has sought to adopt programs for curriculum development to realize the vision of education and its goals, aligning them with the latest developments and requirements of national transformation. Several plans and strategies have been approved, including the Talent, Creativity, and Innovation Support Strategy, the Knowledge Development Strategy, the Higher Education Development Strategy, and the National Plan for Communications and Information Technology.

Within this framework, the Ministry of Education has adopted several initiatives and programs that support the knowledge economy, such as electronic transformation and e-transactions represented by the Noor and Safeer programs and electronic and virtual educational platforms. These initiatives aim to improve the efficiency and effectiveness of knowledge services provided to all beneficiaries (Ministry of Education, 2018, p. 11). Despite the growing interest in the importance of moving towards a knowledge economy in educational institutions, this interest is still weak. One of the reasons may be: the lack of a clear vision regarding the skills of the knowledge economy, which the educational system should develop according to. This aligns with the recommendations of studies and research that addressed the knowledge economy in general education, such as the study by Al-Balushi and Al-Maamari (2020), which recommended conducting more studies on the knowledge economy and ways to employ it in various school subjects. Studies by Al-Ashqar (2020), Al-Balushi and Al-Maamari (2020), Al-Ahmadi (2022), Rahim (2022), and Alam (2022) recommended rebuilding school curricula to align with the requirements of development towards the knowledge economy. Additionally, the studies by Rasul and Ahmed (2021) and Al-Riyami (2021) emphasized the necessity of integrating knowledge economy skills into school curricula.

Based on the above, this study calls for examining educational and school curricula and the content of textbooks and working on their evaluation and development to serve the modern concepts of knowledge economy skills. One of these school curricula is the life skills curriculum for the third secondary grade (tracks system)

Study Problem:

Curriculum evaluation is an indispensable scientific process as educational institutions aim to verify the effectiveness of the curricula they offer to their students. This is achieved by assessing the outcomes the curriculum has on the learners' knowledge, skills, and attitudes. As governments worldwide strive to achieve high economic growth, which requires advanced skills, the first step towards this goal is to obtain a well-educated workforce (Warhurst, 2008). Education is considered one of the pillars of the knowledge economy, as the basic needs for productivity and competitiveness require providing the workforce or human capital. This is what the Government of the Kingdom of Saudi Arabia aims to achieve in its Vision 2030, emphasizing the need to build an independent personality for the learner by imparting knowledge, skills, and good behaviors.

Despite the educational importance of knowledge economy skills and the necessity of including them in school curricula, studies indicate a low level of representation of these skills in the curricula. For example, the study by Rahim (2022) found that knowledge economy skills in the science textbook for the second intermediate grade were weakly represented. Al-Ahmadi (2022) called for a review of the language competencies books for the first year of the tracks system in secondary education in the Kingdom of Saudi Arabia in light of the skills of the knowledge economy, especially those related to the technological and economic fields. Al-Balushi and Al-Maamari (2020) recommended the integration of knowledge economy skills in various school grades and their continuous update to keep up with the developments and changes of the times.

In the context of the Kingdom's efforts to develop education and transition towards a knowledge society, and given the significant role of teachers in the educational process, teachers must be positively and actively involved in this new system to achieve its goals. Therefore, to the best of the researcher's knowledge, there are no studies that have addressed the skills of the knowledge economy and the necessity of including them in the content of the life skills curriculum (tracks system) in secondary education in the Kingdom of Saudi Arabia. Consequently, the problem of the study lies in assessing the degree of inclusion of knowledge economy skills in the content of the life skills curriculum for the third secondary grade and then developing a proposed framework for integrating these skills.

Study Questions:

The current study aims to answer the following main question:

What is the proposed framework for developing the content of the life skills curriculum for the third secondary grade in light of the skills of the knowledge economy?

The following sub-questions branch out from the main question:

- 1- What are the skills of the knowledge economy that need to be included in the content of the life skills curriculum for the third secondary grade (tracks system)?
- 2- What are the percentages of availability of knowledge economy skills included in the content of the life skills curriculum for the third secondary grade (tracks system)?
- 3- What is the proposed framework for developing the content of the life skills curriculum for the third secondary grade in light of the skills of the knowledge economy (tracks system)?

Study Objectives: The current study aims to:

- 1- Identify the skills of the knowledge economy that need to be included in the content of the life skills curriculum for the third secondary grade.
- 2- Determine the percentages of availability of knowledge economy skills included in the content of the life skills curriculum for the third secondary grade.

- 3- Develop a proposed framework for enhancing the content of the life skills curriculum for the third secondary grade in light of the skills of the knowledge economy.

Study Importance: The current study is expected to benefit the following categories:

Theoretical Importance: The theoretical importance of this study was as follows:

- 1- Providing a list of knowledge economy skills suitable for the secondary level.
- 2- Informing the educational policy directions in the Kingdom of Saudi Arabia, which aim to link education with development, transition towards a knowledge-based economy, and achieve Vision 2030.
- 3- The study's findings may assist researchers in conducting similar research, contributing to curriculum development.

Practical Importance: The practical importance of this study was as follows:

- 1- **Curriculum planners and developers of life skills:**

By providing them with the skills of the knowledge economy in the life skills curriculum at the secondary level.

- 2- **Researchers:**

Opening up new avenues for conducting studies on the life skills curriculum at the primary and intermediate levels.

- 3- **Life Skills Teachers:**

The current study may help life skills teachers focus on the knowledge economy skills included in the curriculum

Study Limitations:

- 1- **Subject Boundaries:** The skills of the knowledge economy included in the content of the life skills textbook for male and female students in the third secondary grade (tracks system) for the academic year 1445 AH.
- 2- **Temporal Boundaries:** The second semester of the academic year 1445 AH.
- 3- **Spatial Boundaries:** The life skills curriculum for the third secondary grade in secondary education.

Study Terms:

Knowledge Economy:

Defined by the World Bank as "an economy that relies on acquiring, generating, disseminating, and effectively investing knowledge to achieve rapid economic and social development" (Ministry of Economy and Planning, 1435 AH).

The researcher operationally defines it as: "The effective use of knowledge, enabling the learner to apply, utilize, and invest it with the aim of building human capital, developing human resources, and contributing to achieving the developmental plans of the Kingdom of Saudi Arabia through the content of the life skills book for the third secondary grade (tracks system)."

Knowledge Economy Skills:

The researcher operationally defines these as: "A set of personal, communicative, social, scientific research, problem-solving, and decision-making skills included in the content of the life skills curriculum for the secondary level, which enable the learner to build, apply, and utilize knowledge in their daily life, thus developing them intellectually, technically, socially, and behaviorally, and preparing them for the job market."

Life Skills:

The researcher operationally defines life skills as: "The book prescribed for male and female students in the third secondary grade in secondary education (tracks system), which was adopted in the academic year 1445 AH."

Content Analysis:

Al-Adwan and Al-Hawamdeh (2011) define it as "breaking down and dissecting the content to extract the concepts, facts, principles, theories, and ideas contained within" (Al-Adwan & Al-Hawamdeh, 2011, 91).

The researcher operationally defines it as: "Dissecting and breaking down the content of the life skills book for the third secondary grade into its basic components to identify the extent to which the content includes the main and sub-skills of the knowledge economy, according to the criteria adopted in the current research."

Theoretical Framework:

First Axis: Knowledge Economy:

First: The Concept of the Knowledge Economy: There has been much discussion in recent years about the knowledge economy, and various terms have been used interchangeably to refer to it, such as the information economy, the Internet economy, the digital economy, the cyber economy, the virtual economy, the electronic economy, the network economy, the intangible economy, and the knowledge-based economy. As noted by Najm (2008, 148), other terms like Web Economy are also used to refer to the same concept. As it is a modern concept, there are multiple definitions of the knowledge economy. One definition describes it as "an economy that relies on building, producing, and employing knowledge through optimal utilization of capabilities to develop human resources and improve the quality of life in various fields" (Shaghafa, 2013, 28). The World Bank defines it as "an economy that relies on acquiring, generating, disseminating, and effectively investing knowledge to achieve rapid economic and social development" (Ministry of Economy and Planning, 1435 AH).

The knowledge economy plays a prominent role in the economic and social aspects of today's world. Knowledge is a major and highly effective component in the success and evolution of any economy, especially the knowledge-based economy. This underscores the importance of training and education as a fundamental means of acquiring knowledge (Al-Assaf, 2013, 26).

The concept of the knowledge economy and knowledge society has become a central and pivotal concept, addressed by numerous studies and research emphasizing the increasing attention to the concept of the knowledge society. The knowledge economy is a modern branch of economics, focusing on knowledge, its investment, and its transformation into a source of national income to enhance sustainable economic development in a competitive environment. Meanwhile, a knowledge society

is built on innovation and creativity, supported by economic incentives, legislative frameworks, and laws regulating the work of intellectual capital through the dissemination and exchange of knowledge as an economic activity. This aligns with Saudi Arabia's Vision 2030, which considers the transition towards a knowledge society based on the knowledge economy as a vital and contemporary topic, as the knowledge economy is seen as one of the most important requirements for growth and integration into the modern global market. This is evident in the adoption of the Talent, Creativity, and Innovation Support Strategy, Vision 2022, in 2008, which emphasizes the need for Saudi Arabia to become an innovative society with talented, creative, and well-educated young leaders and professionals, thus supporting the transition to a knowledge society and achieving sustainable development (King Abdulaziz and His Companions Foundation for Giftedness and Creativity, 2008).

Second: Basic Requirements for a Knowledge Economy Society: The transition towards a knowledge economy society based on the knowledge economy requires the following:

- 1- A supportive community infrastructure and easy access to the Internet (World Bank Institute, 2013, 13).
- 2- A learning society with workers and producers who possess knowledge and the ability to question and make connections (an effective research and development system).
- 3- Developing an extensive network of information and communication technology, along with directed scientific research to serve development, and skilled minds equipped with qualifications in information and communication technology.
- 4- Digital readiness, which entails providing communication services to all parties in the institutional system, e-governance, restructuring and rationalizing public spending, and increasing spending allocated to promote knowledge, generate human capital, and develop it with high-quality capabilities and significant capacities through training and development (Al-Hashimi & Al-Azawi, 2007, p. 47).

Third: Teacher Roles in Light of the Knowledge Economy: Al-Zahrani and Ibrahim (2012) indicate that the roles required of teachers to support the knowledge economy include:

- Focusing on effective learning with student participation, considering individual differences, relating learning to life, emphasizing higher-order thinking skills, and utilizing life skills.
- Assisting students in acquiring knowledge and developing themselves cognitively and behaviorally.

Khambayat & Majumdar (2010) point out that the shift towards a knowledge economy imposes continuously evolving skills on teachers. However, all these skills fall under the umbrella of sustainable development, which is based on essential fundamentals: (creativity, innovation, critical thinking, and technology). Regardless of the quantity and quality of a teacher's qualifications and experience, they cannot dispense with continuous learning and lifelong training. In fact, the more experienced and skilled a teacher is, the more they need to develop their skills, and they should also assist other educators in the field. As Bayrake (2009, p. 22) notes, experienced and distinguished teachers should help less senior colleagues.

Bonal & Ramba (2003, p. 11) clarify one of the essential roles of teachers in light of the knowledge economy, which is ensuring that student acquire knowledge. This entails developing students' abilities to enable them to access different types of knowledge, making knowledge acquisition an expected outcome of the educational process. Teachers must be the active element in this process, which requires them to rapidly develop their specialized knowledge and be qualified to teach it.

Fourth: Benefits of the Knowledge Economy: The knowledge economy has numerous advantages, the most prominent of which include (Al-Hashimi & Al-Azawi, 2007):

- 1- It gives consumers greater confidence and more options.
- 2- It is based on disseminating, utilizing, and producing knowledge.
- 3- It forces institutions to innovate, and respond to consumer needs.
- 4- It influences the determination of growth, production, employment, and the skills required in the job market.
- 5- It transforms traditional jobs and creates new ones.
- 6- Achieving basic and necessary changes and improvements for the future.

Fifth: Knowledge Economy Skills: The classification of knowledge economy skills varies depending on the levels of development that the concept of the knowledge economy has gone through. The Organization for Economic Cooperation and Development (OECD) defines these skills as "the competencies that complement the educational curricula and are acquired by knowledge workers, which are required for work in the light of the knowledge economy" (Al-Balushi, Al-Rabani, & Al-Maamari, 2021). Due to the transition towards a knowledge economy, the type of skills and learning required has changed. There is now a focus on thinking skills, problem-solving, dealing with technology, rapid developments, behavioral and social skills, and specific professional preparation, as indicated by Al-Saadi and Al-Dosari (2012). Al-Qarara'a (2013) concluded that knowledge economy skills include thinking and innovation skills, research and inquiry, problem-solving, enhancing teamwork and collaboration, communication through practical skills, gathering and organizing information, dialogue and discussion, prediction and control, hypothesis formation, and using computer technology in teaching. Ramadan (2015) found that knowledge economy skills encompass critical thinking skills, effective communication skills, cooperation and teamwork skills, creativity and innovation skills, problem-solving and decision-making skills, and technology using skills. Al-Rabat (2019) classified them into six skills: thinking skills, behavioral and social skills, personal skills, communication skills, scientific research skills, and problem-solving and decision-making skills.

Therefore, the transition towards a knowledge-based economy should start with reforming the educational system in general and schools in particular. Education is the means for a country to transition towards a knowledge society, and it is the foundation for the knowledge economy. By reforming and developing educational institutions, the foundation of this system is strengthened, accelerating the maturation and cohesion of the knowledge economy experience. Education and development are intertwined, and education precedes development as an authentic investment that forms the basis for all other investments. It is the fundamental pillar for economic, political, and social structures (Al-Hashash, 2014, 321). In this regard, the officials in the Kingdom of Saudi Arabia have recognized this fact. One of their most important goals is to enter a knowledge society and achieve sustainable development by preparing generations of digitally literate learners and equipping them for knowledge economy fields, while also strengthening their national identity and sense of belonging. This is achieved through developing plans and programs, restructuring institutions, and improving their mechanisms and tools. One of the most important institutions in this regard is the educational system (Ministry of Education, 2008). Based on linking education to developmental plans, the Tenth Development Plan in the Kingdom of Saudi Arabia (2015-2019) adopted a shift towards a knowledge-based economy. This was done by focusing on education that disseminates knowledge and establishes capabilities to enable the transfer, accumulation, generation, and investment of knowledge in various economic and social sectors (Ministry of Economy and Planning, 2019). As curriculum development is essential for educational reform in the knowledge economy era, the study by Assiri (2018) indicated that the goals of content changes in the curriculum development project are consistent with the trends of the age, including the knowledge economy. The curriculum content is formally presented in the form of textbooks, which are the primary reference used by teachers. Textbooks contribute to developing life skills in learners in general and secondary school students in particular. On the other hand, the secondary level in the Kingdom of Saudi Arabia is a distinctive and crucial level as it leads to higher education in various forms and patterns, professions, and the preparation of the human resources necessary for implementing social and economic transformation and meeting development requirements (Al-Ghamdi & Abdul Jawad, 2010, p. 122). Therefore, this study aims to explore knowledge economy skills as one of the modern approaches in life skills curricula and understand the extent of their application by teachers. Hence, there is a need to transition to an educational system that focuses on providing students with the skills necessary for a knowledge-based economy, such as research skills, lifelong learning skills, critical thinking skills, adaptability to rapid developments in information and communication technologies, and more (Al-Saadi & Al-Dosari, 2012, p. 4). As educational curricula are the means by which education achieves its goals, they are subject to improvement and development. A curriculum encompasses all educational and pedagogical activities that contribute to the comprehensive development of students, shaping their behavior, and modifying it to create the type of individuals desired by society. Curriculum development centers have attached great importance to textbook preparation. Life skills books are fundamental in promoting students' growth as they foster thinking, inquiry, and scientific research (Rahim, 2022, p. 4). Al-Hashimi and Al-Azawi (2007, p. 72) indicate that curriculum development, including all its elements, is a necessary step towards achieving the desired educational outcomes in society, developing learners' skills and abilities, and supporting them in lifelong learning. Developing curricula based on knowledge economy skills is imperative in a rapidly advancing world. Some researchers in this field suggest that the most important fundamentals to consider for curriculum development to keep up with the knowledge economy theory include ensuring a professional and practical curriculum development process that takes into account the characteristics of the learner and the nature of the subject matter. It should also emphasize the practical aspect that supports all the experiences included in the curriculum, be primarily focused on the learner's needs and their personal experiences, develop learners' skills and foster positive attitudes, take into account individual differences, incorporate modern and diverse teaching and learning strategies, prepare learners to adapt and interact with the developments of the next level, and equip them to cope with the requirements of the age of knowledge. In light of the above, the researcher will address the following knowledge economy skills in this study: thinking and problem-solving skills, information and communication technology skills, behavioral skills, social and communication skills, behavioral skills, and economic skills and preparation for the job market.

Second Axis: Life Skills:

First: Life Skills:

Socend: The Importance of Life Skills Teaching Methods: The importance of life skills varies according to the diversity of their goals. These skills are essential in the field of education to achieve full compatibility between school and life, linking learning to the needs of learners and the requirements of society. They help individual lead a better life, especially in an era characterized by rapid knowledge, technological, and economic growth. This calls for preparing individuals who can adapt and interact with these developments through direct experiences and interaction with others, making learning meaningful by motivating learners and encouraging them to sense the problems of society and work towards finding solutions (Al-Ghamdi, 2019, 22).

The importance of life skills in the learner's life lies in the following (Monsi & Bakheet, 2010, p. 37):

- Achieving integration between school and life by linking the needs of learners, life situations, and the requirements of society. This helps the learner manage their life with flexibility, effectiveness, independence, and the ability to positively adapt to their environment and keep up with changes while coping with pressures.
- Providing learners with the opportunity to live a better life, especially in a society characterized by rapid knowledge, information, and technological growth and an ever-increasing knowledge economy.
- Acquiring direct experiences for learner through direct interaction with people and life phenomena, enabling them to integrate what they learn and study with their interactions in the surrounding environment.
- Offering excitement and interest in the educational process by linking it to the learner's needs and providing them with modern methods to independently acquire information from reliable sources.
- Fostering a sense of societal problems and a desire to solve them in cooperation with others.

- Promoting healthy interaction between the learner and others and their environment and society through communication, expression of opinions and ideas clearly and correctly.
- Enabling learner to connect with the global community, learn about global issues, and acquire knowledge about the lives of different peoples.

Third: Prominent Classifications of Life Skills: Al-Daoud and Khalil (2015, p. 153) classified life skills into four main axes:

1. **The first axis: Safety and Security:** including skills that help learner rationalize consumption, maintain public facilities, and practice safety applications in various situations.
2. **The second axis: Social Relations:** including the skills necessary for learners to form healthy social relationships and engage in community service, promoting positive interaction.
3. **The third axis: Environment:** including skills needed by learners to preserve the natural environment and deepen their understanding of environmental issues and ways to address them.
4. **The fourth axis: Health:** including skills required by learner to maintain their safety and health and promote awareness and positive practices.

Al-Sudani and Al-Masoudi (2011) classified life skills into multiple types, including environmental skills related to the environment and how to preserve it, health skills focusing on the learner's health and its maintenance, preventive skills, dialogue and time management skills, and problem-solving skills that develop thinking and analytical skills in learner. Each of these main skills encompasses a set of sub-skills. There are also several other classifications of life skills, the most famous of which include:

- **Personal skills:** self-control, emotional management, and self-learning.
- **Social skills:** effective communication, cooperation, leadership, and negotiation.
- **Academic skills:** reading, writing, calculation, problem-solving, and critical thinking.
- **Professional skills:** planning, organizing, analyzing, communicating, and problem-solving.
- **Technical skills:** the ability to effectively use technology, programs, and electronic tools.

The Close Relationship between Life Skills and Learning/Acquiring Knowledge Economy Skills:

The importance of acquiring life skills for students has been emphasized by numerous studies, leading educational institutions to pay significant attention to this area and dedicate a specific curriculum for it, similar to other diverse subjects taught to students across educational levels, from kindergarten to secondary school. A closer examination of the dimensions of life skills reveals that they serve as fundamental requirements for developing knowledge economy skills in students.

Since the knowledge economy is a modern approach in curricula, any emerging trend in the educational field should be based on the principles of certain educational philosophies and learning theories that provide the framework for that trend. Similarly, the knowledge economy is grounded in several educational philosophies, as mentioned by Guile, David (2010, p. 21), who states that the knowledge economy is based on progressive philosophy, social efficiency, and constructivist theory. Likewise, the school curriculum is designed based on a set of philosophical foundations and theories, as shown in Table (1).

Table 1: Philosophical and Theoretical Foundations of the Knowledge Economy and the Life Skills Curriculum.

Philosophy	Knowledge Economy	Life Skills
	Progressive: The knowledge economy emphasizes the learner as the center of the educational process, with learning revolving around the experience resulting from the learner's interaction with their surrounding environment.	Progressive: Life skills focus on teaching students some health, nutritional, practical, social, and psychological knowledge and skills, in addition to satisfying their various basic needs and working to unify family and social relationships.
	Social Constructionism: The knowledge economy orientation revolves around societal issues. Accordingly, the curriculum includes educational experiences aimed at serving the community, solving its problems, and developing strategies for planned social change.	Social Constructionism: The life skills curriculum aims to bring about change in society by building its philosophy on a sense of community and the ultimate outcome of integration, sufficiency, economic recovery, and improved living standards. This is achieved through the development of the girl, the family, and society, attention to societal issues, and understanding the needs and interests of people.
	Social Efficiency:	Social Efficiency:

	One of the goals of the knowledge economy orientation is to meet society's needs for technically capable workers who can contribute to the industrial world and innovation. The knowledge economy approach views the learner as a producer of knowledge.	As the life skills curriculum aims to make the student a seeker and producer of knowledge according to the needs of society and to acquire the basic skills that enable them to possess the requirements of practical and professional life, it offers skill-based courses that develop positive attitudes related to a love for work, dedication, and commitment.
The theories on which each is based	In the knowledge economy, learning is a constructive, active, and continuous process in which the best conditions for learning are created when encountering a real problem or task. The process of individual knowledge construction occurs through social negotiation with others, with the learner discovering what they learn through the practice of scientific thinking and sharing the responsibility for managing and evaluating learning.	The life skills curriculum is based on constructivist theory, which posits that learning occurs as a result of interaction with society and the educational environment. Learning is meaningful because students build upon prior experiences, and learning takes place through experimentation and real-life tasks.

It is evident from Table(1) that there is a relationship between the knowledge economy and the life skills curriculum as they agree on the philosophy and theory. Both approaches focus on the student, their needs, their relationship with the surrounding environment, and their interaction with it. They also emphasize the needs and problems of society and aim to impart skills that make the student a knowledge seeker and producer, ultimately improving their economic level, that of their family, and that of society.

Second Axis: Previous Studies:

- **Assiri study (2018):** aimed to develop a list of knowledge economy skills to be included in biology textbooks for the secondary level in the Kingdom and determine the extent of their inclusion. The researcher used the descriptive method and a content analysis card as a tool. The study concluded that the percentage of knowledge economy skills in the "Biology book" book for the first secondary grade was as follows, in descending order: (Thinking and Problem-Solving Skills, Economic Skills and Preparation for the Job Market, Behavioral Skills, Information and Communication Technology Skills, and Social and Communication Skills). For the second and third secondary grades, the order was as follows: (Thinking and Problem-Solving Skills, Economic Skills and Preparation for the Job Market, Information and Communication Technology Skills, Behavioral Skills, and Social and Communication Skills). The content of the Biology book for the third secondary grade, in its first and second parts, had the highest inclusion of knowledge economy skills.
- **Rasul and Ahmed (2021):** aimed to identify the extent to which knowledge economy skills are included in the content of the Chemistry book for the third intermediate grade. The researchers developed a list of knowledge economy skills, including (6) main skills and (20) sub-skills, and employed a descriptive-analytical method. The results showed that knowledge economy skills are included in the Chemistry book for the third intermediate grade but with varying degrees. The book achieved (1029) repetitions distributed across six main skills, and the percentage of knowledge economy skills in the book was as follows, in descending order: Thinking Skills (47%), Basic Skills (20%), Communication Skills (17%), Information Gathering Skills (12%), Behavioral Skills (3%), and Team Work Skills (1%). The results indicated a weakness in the representation of some knowledge economy skills and a disparity in the representation percentages in the content of the Chemistry book for the third intermediate grade compared to the percentages proposed by the arbitrators and specialists.
- **Rahim (2022):** aimed to identify the extent to which knowledge economy skills are included in the Science book for the second intermediate grade. The researcher used the content analysis method and developed a research instrument in the form of a card that included knowledge economy skills, comprising (16) sub-skills distributed across (6) main skills, along with a criterion consisting of (55) indicators. The results showed that knowledge economy skills in the Science book for the second intermediate grade were weak. Based on the results, the researcher drew several conclusions. The knowledge economy skills in the Science book were ranked as follows: (Basic Skills, Communication Skills, Thinking Skills, Behavioral Skills, Group Work Skill, and Information Gathering and Organization Skill). These skills were found to be more prevalent in the first part of the Science book than in the second part. The researcher recommended re-examining the content of the Science book for the second intermediate grade to ensure the inclusion of all knowledge economy skills, enabling students to better utilize these skills.
- **Al-Ashqar (2020):** aimed to identify the knowledge economy skills to be included in the Mathematics book for the tenth basic grade in Palestine and determine the degree of their inclusion. The researcher used a descriptive-analytical method and a content analysis card as a tool. The study concluded with a list of knowledge economy skills consisting of eight areas, encompassing (69) indicators. The degree of inclusion of these areas in the Mathematics book for the tenth basic grade in

Palestine was as follows, in descending order: Evaluation Field (24.65%), Mental and Thinking Field (24.13%), Cognitive Field (19.43%), Communication Field (12.66%), Economic Field (5.88%), National Field (5.51%), Technological Field (5.06%), and Social Field (2.68%). The study recommended paying attention to all knowledge economy skills when developing mathematics curricula for the basic level.

- **Al-Balushi and Al-Maamari (2020):** aimed to identify the extent to which the content of the Social Studies curriculum for grades (3-12) in Oman includes knowledge economy skills using a list of knowledge economy skills constructed and validated through the (Delphi) method over three consecutive rounds. The final list consisted of five general skills: Basic Knowledge Skills, Digital Skills, Knowledge Production Skills, Professional Skills, and Life Skills, followed by a set of basic and sub-skills. The study was applied to the content of the Social Studies curriculum for grades (12-3), totaling (20) books for the first and second semesters across three educational levels. The results showed that the highest degree of inclusion of knowledge economy skills was for Basic Knowledge Skills in the content of all Social Studies books. The second level of the basic education stage for grades (5-10) was the level with the highest inclusion of knowledge economy skills. The study recommended the necessity of including knowledge economy skills in various school grades and continuously updating their inclusion to keep up with the developments and changes of the age.
- **Al-Riyami (2021):** aimed to identify the knowledge economy skills that should be available in the Mathematics curriculum for the post-basic stage and reveal the degree of their inclusion in the Mathematics curriculum in Oman. The study employed a descriptive method and a questionnaire for data collection. It was applied to a sample of (43) teachers. The results yielded a list of knowledge economy skills that should be available in the Mathematics curriculum for the post-basic level, comprising (38) paragraphs distributed across three main axes: (Cognitive and Mental Skills, Economic Skills, and Communication and Information Technology Skills). The study also revealed that the degree of inclusion of knowledge economy skills (for the three axes) in the Mathematics curriculum for the post-basic level, from the perspective of male and female Mathematics teachers in the Al-Dakhiliyah Governorate in Oman, was at a medium level. The results also showed no statistically significant differences ($\alpha \leq 0.05$) between the responses of the study sample regarding the degree of inclusion of knowledge economy skills in the Mathematics curriculum for the post-basic level for most paragraphs, attributable to the gender variable (male/female teachers).
- **Alam (2022):** aimed to develop a proposed framework for enhancing the content of the Arabic language curriculum for the second secondary grade in light of knowledge economy skills. The following tools were used: a list of knowledge economy skills suitable for second-grade secondary students and a form for analyzing the content of the Arabic language curriculum for the second secondary grade. The descriptive-analytical method was used as it suited the nature of the research. Content analysis was performed using the analysis form. Several results were obtained, the most important of which was the ranking of the availability of the main skills of the knowledge economy in the curriculum content as follows: Social skills ranked first with a percentage of (27.01%), cultural skills ranked second with a percentage of (19.23%), economic skills ranked third with a percentage of (18.16%), thinking skills ranked fourth with a percentage of (14.34%), technological skills ranked fifth with a percentage of (13.12%), and personal skills ranked sixth and last with a percentage of (8.08%).
- **Al-Ahmad (2022):** aimed to identify the knowledge economy skills to be included in the content of the Language Competencies books for the first year of the tracks system in secondary education in the Kingdom of Saudi Arabia and determine the degree of their inclusion. The descriptive-analytical method was used, and the study concluded with a list of knowledge economy skills consisting of six areas, encompassing (34) indicators. The results showed that the degree of inclusion of the areas of knowledge economy skills was as follows, in descending order: Cognitive Field (26.3%), Mental Field (22.3%), Evaluation Field (20.2%), Social Field (16%), Technological Field (8.3%), and Economic Field (6.9%). In light of the results, the researcher recommended re-examining the Language Competencies books for the first year of the tracks system in secondary education in the Kingdom of Saudi Arabia, particularly regarding technological and economic skills.

Research Methodology and Procedures:

First: Research Methodology:

The researcher adopted a descriptive-analytical method to analyze the Life Skills book for the third secondary grade (tracks system) for the academic year 1445 AH in the Kingdom of Saudi Arabia. This is a one curriculum prescribed for third-grade secondary students to identify the percentages of knowledge economy skills included in it.

study community : The study community consisted of the Life Skills curriculum for the third secondary grade (tracks system) for the academic year 1445 AH - 2023 AD in the Kingdom of Saudi Arabia. It comprises (3) study units with a total of (13) topics. The first unit, titled "Personal and Social Skills," includes five topics: (Personal Goal Setting Skill, Conflict Management Skill, Dealing with Life Stressors Skill, Psychological Flexibility, and Cooperation Skill). The second unit, titled "Thinking Skills," covers three topics: (Basic Thinking Skill, Idea Processing Skill, Problem-Solving and Decision-Making Management Skill). The third unit, titled "Community Awareness Development Skills," includes five topics: (Applying the System and Maintaining Public Taste, Nationality and Citizenship, Social Responsibility, Adapting to Social Crises, and Entertainment and Tourism).

Table 2: Characteristics and Units of the Life Skills Curriculum for the Third Secondary Grade

Unit	Unit Address	Number of lesson	Title of lesson	Pages	Number of pages	Relative weight
First	Personal and social skills	5	The skill of setting personal goals	9 - 14	6	7.41%
			Conflict management	15 – 19	5	6.17%
			Dealing with life stress	20 – 24	5	6.17%
			Psychological flexibility	25 – 31	7	8.64%
			cooperation	32 - 37	6	7.41%
Second	thinking skills	3	Basic thinking skill	41 – 46	6	7.41%
			The skill of processing ideas	47 – 51	5	6.17%
			Problem solving and decision making skill	52 - 57	6	7.41%
Third	Community awareness development skills	5	Implementing the system and maintaining public taste	61 – 68	8	9.88%
			Patriotism and citizenship	69 – 76	8	9.88%
			Social Responsibility	77 – 82	6	7.41%
			Adapting to social crises	83 – 87	5	6.17%
			Entertainment and tourism	88 - 95	8	9.88%
Total pages analyzed					81	100%

It is clear from Table (2) that the number of pages analyzed is (81) pages, after the researcher excluded pages that are not relevant to the analysis, including the book's introduction, conclusion, behavioral objectives, scientific terms, and index.

Study Tool: Knowledge Economy Skills Criterion:

To analyze the content of the Life Skills curriculum for the third secondary grade for the academic year 1445 AH - 2023 AD and ascertain the extent to which it includes knowledge economy skills, it was necessary to develop a specific criterion for these skills to guide the researcher in the analysis process. A criterion for analyzing the content of the Life Skills curriculum for the third secondary grade was developed, comprising (42) indicators in its preliminary form. The researcher presented this list of main and sub-skills with their indicators and provided a description of each to a group of experts and specialists in the fields of curricula, teaching methods, and educational technology. After the experts suggested modifications, resulting in the deletion of (two sub-skills), the analysis tool (analysis criterion) was finalized, consisting of (5) main skills and (40) sub-skills.

Table (3) shows the list of main and subsidiary skills in its final form

Table (3): Final List of Main Skills and Sub-Skills (Indicators) of the Knowledge Economy

Axes	Main skills	Number of indicators	Indicators (sub-skills)
The first axis	Thinking and problem-solving skills	11	It helps the learner to choose and define the problem
			It encourages the learner to follow the steps of scientific thinking when facing problems.
			The learner is encouraged to research and interpret the results

			<p>It helps the learner to formulate hypotheses</p> <p>It helps the learner to collect information and analyze it to reach results</p> <p>Develops the skill of speed reading to extract important ideas.</p> <p>The learner is encouraged to apply what he learns in real life</p> <p>It activates the largest number of senses during the learning process</p> <p>Stimulates the learner's creative spirit</p> <p>Develops critical thinking and judgment.</p> <p>It raises questions that develop the learner's curiosity.</p>
The second axis	Skills in dealing with information and communications technology	6	<p>It encourages the use of appropriate technical resources to search for knowledge.</p> <p>Employs technology in organizing knowledge and preparing research and reports.</p> <p>Encourages the use of technology in communicating with the teacher and peers to share knowledge.</p> <p>Enhances the use of technology in analyzing information.</p> <p>The learner develops an assessment of the accuracy of electronic information sources.</p> <p>Promotes the positive use of information technology.</p>
The third axis	Social and communication skills	9	<p>Promotes social values.</p> <p>Preserves cultural heritage and identity in light of global cultural openness.</p> <p>It encourages consultation with experts in various fields of science.</p> <p>It strengthens the relationship between the school and the community.</p> <p>It is recommended to produce scientific journals and bulletins.</p> <p>It indicates the need to adapt and deal with contemporary issues.</p> <p>Develops the skill of dialogue and discussion.</p> <p>Encourages the preparation of various reports.</p> <p>Encourages knowledge of the latest developments and discoveries.</p>
fourth Axis	Behavioral skills	7	<p>It enhances the learner's self-confidence.</p> <p>Develops the spirit of cooperation in carrying out work.</p> <p>Develops the ability to take responsibility and leadership.</p> <p>Promotes commitment to religious and moral principles.</p>

			Encourages the spirit of positive competition.
			Develops the ability to evaluate oneself objectively.
			It encourages continuous learning and practice.
Fifth axis	Economic skills and preparation for the labor market	7	Determines the basic expertise required to master the work.
			Promotes good use of time.
			He urges the need to appreciate any work and not to despise some professions.
			It encourages anticipating the future in various fields of science.
			Encourages learners to role-play different professions.
			Enhances production and innovation through daily work.
			It links life skills with other sciences, to provide the learner with a wide range of experience.

1- Content Analysis of the Life Skills Curriculum for the Third Secondary Grade:

To analyze the content of the Life Skills curriculum for the third secondary grade, the researcher performed the following steps:

- A. Analysis Objective:** Identify the knowledge economy skills included in the content of the Life Skills curriculum for the third secondary grade, as specified by the criterion for this purpose.
- B. Units of Analysis:** These are the units that are easily counted and measured. Their presence, absence, or repetition provides indications that are useful in content analysis. In content analysis, three units are typically employed: the sampling unit, the recording unit, the context unit, and the counting unit (Krippendorff, 2004, p. 98).

When analyzing content, the researcher, based on the research objective, can resort to appropriate analysis units. Three units are commonly used in content analysis:

1. **Recording Unit:** This is the smallest unit through which the recurrence of a phenomenon in the content is evident. Some specialists, such as Berelson (1971), suggest that there are five main units: language units, personality units, natural or idea units, area and time measurement units, and idea units, which the researcher can use in content analysis depending on the nature and objectives of the research.
2. **Context Unit (Content):** This unit comprises several recording units and may overlap with them. These are linguistic units within the content (sentence/phrase/paragraph/topic) that aid in the precise determination of the meanings of the recording units that are counted and measured. They are larger units that surround the recording units to confirm their meaning.
3. **Enumeration Unit:** This is the final requirement in the coding or recording process. Recurrence is used as the enumeration unit, and percentages are calculated to determine the recurrence of each category of knowledge economy skills and sub-skills. The researcher adopted the calculation of percentages as the most suitable method for content analysis in this study.

The researcher relied on explicit and implicit ideas as recording units in this study because the Life Skills curriculum is a scientific subject, and its statements are often clear and explicit. The use of implicit ideas is due to some topics that may imply ideas expressing knowledge economy skills according to the criterion of these skills.

C. Application of the Analysis Process: The researcher selected a portion of the Life Skills curriculum content as the coding sample for the content analysis card. The researcher's choice fell on the third unit of the book, titled "Community Awareness Development Skills." The researcher used the card to analyze the content of the unit in light of its inclusion of knowledge economy skills. The analysis was performed by the researcher and a colleague, and the researcher repeated the analysis after a (30) day interval for confirmation. The content of the selected unit was analyzed, and Table (3) presents the results of analyzing the unit's content in light of the knowledge economy skills included in the adopted criterion, **following these steps:**

- 1- Reading the topic comprehensively to identify the main ideas in the material.
- 2- Reading the sample unit (page) to identify the analysis units, i.e., ideas that convey specific concepts.
- 3- Subsequently, isolating the implicit or explicit idea and classifying it according to the research instrument.
- 4- Recording the analysis results in the form previously prepared by the researcher and quantifying the results using the enumeration unit.

The researcher followed the following rules and foundations in the analysis process:

- If the main idea contains a sub-idea, it is treated as an independent and separate idea in the analysis.
- If a conjunction appears in the idea, it is considered a new and independent idea unless the conjunction explains, clarifies, or confirms a previous idea.
- If the idea is unclear and related to what precedes or follows it, the researcher can refer back to reading the previous or subsequent ideas to accurately identify the idea.
- In case of ambiguity in determining ideas, the researcher can consult experts and specialists for their opinions and clarification of each idea, determining the section or paragraph to which each idea belongs, and expressing it.

D. Validity of Analysis:

To ensure the validity of the analysis of the unit (coding sample), the researcher presented the unit's content and the criterion to two experts in curricula, teaching methods, and educational technology. They agreed on the suitability of the analysis, which the researcher considered a validation of the analysis.

E. Analysis Reliability:

To achieve acceptable reliability in the analysis, the researcher employed the following methods:

A- Inter-Rater Reliability: The researcher utilized an external analyst to analyze the content of the selected unit, and Holsti's equation was used to calculate the reliability coefficient, resulting in a value of (0.89), indicating high reliability. Some studies suggest that acceptable reliability coefficients range from (0.50 or 0.60) and above. Table (4) shows the reliability coefficient values using Holsti's equation.

B- Test-Retest Reliability: The researcher repeated the analysis after 30 days from the initial analysis and calculated the correlation coefficient between the two analyses, which expresses the reliability coefficient. The resulting coefficient was 0.95, indicating high reliability. Table 4 presents the reliability coefficient values using Holsti's equation.

Table (4): Reliability Coefficient Values of the Analysis

Between the two reconciliations	Between the researcher and the external analyst	0.89
Harmony of time	Between the researcher and himself after (30) days	0.95

After applying the formula, the overall agreement percentage was 95%, while the agreement percentage between the five areas of knowledge economy skills ranged from a minimum of 92% to a maximum of 96%, indicating acceptable reliability. Holsti (1969) states that an agreement percentage of 85% and above indicates an acceptable level. Table (5) and Table (6) show the results of applying Holsti's equation to the five areas of the study instrument and calculating the agreement coefficient for each area and for all areas combined.

Table (5): Results of Analyzing the Content of the Third Unit of the Life Skills Book for the Third Secondary Grade (Coding Sample)

Thinking and problem solving skills	First analysis	Second analysis	Number of times agreement	Number of times the difference
It helps the learner to choose and define the problem.	6	5	5	1
It encourages the learner to follow the steps of scientific thinking when facing problems.	5	4	4	1
The learner is encouraged to research and interpret the results.	4	4	4	0
It helps the learner to formulate hypotheses.	4	4	4	0
It helps the learner to collect information and analyze it to reach results.	6	6	6	0
Develops the skill of speed reading to extract important ideas.	7	7	7	0
The learner is encouraged to apply what he learns in real life.	5	5	5	0
It activates the largest number of senses during the learning process.	9	8	8	1
Stimulates the learner's spirit of creativity.	5	4	4	1
Develops critical thinking and judgment.	6	6	6	0
It raises questions that develop the learner's curiosity.	8	7	7	1
Skills in dealing with information and communications technology				
It encourages the use of appropriate technical resources to search for knowledge.	7	7	7	0

Employs technology in organizing knowledge and preparing research and reports.	8	7	7	1
Encourages the use of technology in communicating with the teacher and peers to share knowledge.	6	6	6	0
Enhances the use of technology in analyzing information.	8	7	7	1
The learner develops an assessment of the accuracy of electronic information sources.	7	6	6	1
Promotes the positive use of information technology.	9	8	8	1
Social and communication skills				
Promotes social values.	4	3	3	1
Preserves cultural heritage and identity in light of global cultural openness.	5	5	5	0
It encourages consultation with experts in various fields of science.	4	3	3	1
It strengthens the relationship between the school and the community.	4	3	3	1
It is recommended to produce scientific journals and bulletins.	2	2	2	0
It indicates the need to adapt and deal with contemporary issues.	3	2	2	1
Develops the skill of dialogue and discussion.	5	5	5	0
Encourages the preparation of various reports.	3	3	3	0
Encourages knowledge of recent developments and discoveries.	5	4	4	1
Behavioral skills				
It enhances the learner's self-confidence.	5	5	5	0
Develops the spirit of cooperation in carrying out work.	8	7	7	1
Develops the ability to take responsibility and leadership.	6	5	5	1
Promotes commitment to religious and moral principles.	6	5	5	1
Encourages the spirit of positive competition.	4	4	4	0
Develops the ability to evaluate oneself objectively.	5	4	4	1
It encourages continuous learning and practice.	6	5	5	1
Economic skills and preparation for the labor market				
Determines the basic expertise required to master the work.	6	5	5	1
Promotes good use of time.	9	9	9	0
He urges the need to appreciate any work and not to despise some professions.	9	8	8	1
It encourages anticipating the future in various fields of science.	7	6	6	1
Encourages learners to role-play different professions.	6	6	6	0
Enhances production and innovation through daily work.	8	7	7	1
It links life skills with other sciences, to provide the learner with a wide range of experience.	10	9	9	1

Table (6) Coefficients of agreement for each of the five domains and for the domains as a whole

Knowledge economics skills	First analysis	Second analysis	Number of times agreement	Number of times the difference	Holsti coefficient of agreement
Thinking and problem solving skills	65	60	60	5	96%
Skills in dealing with information and communications technology	45	41	41	4	95%
Social and communication skills	35	30	30	5	92%
Behavioral skills	40	35	35	5	93%
Economic skills and preparation for the labor market	55	50	50	5	95%
Skills as a whole	240	216	216	24	95%

The reliability coefficient for the content analysis card as a whole over time was 95%, which is a good and acceptable level of reliability, allowing for confidence in the content analysis card.

Results of the Study and Discussion:

First: Answers to the Research Questions:

Answer to Question (1): What are the knowledge economy skills that should be available in the content of the Life Skills curriculum for the third secondary grade (tracks system)?

To answer this question, the researcher developed a list of knowledge economy skills that should be included in the Life Skills curriculum for the secondary level in the Kingdom by reviewing educational literature and relevant previous studies, such as the studies by Assiri (2018), Al-Ashqar (2020), Al-Balushi and Al-Maamari (2020), Rasul and Ahmed (2021), Al-Riyami (2021), and Alam (2022). The researcher also considered the opinions and remarks of the arbitrators to whom the list was presented in its preliminary form.

The final list of knowledge economy skills to be included in the Life Skills book for the secondary level consisted of (5) main skills: Thinking and Problem-Solving Skills, Information and Communication Technology Skills, Social and Communication Skills, Behavioral Skills, and Economic Skills and Preparation for the Job Market, encompassing (40) sub-skills as shown in Table (3).

Answer to Question (2): To what extent does the content of the Life Skills curriculum for the third secondary grade include knowledge economy skills?

To answer this question, the researcher analyzed the content of the Life Skills curriculum for the third secondary grade according to the list of knowledge economy skills, extracting percentages and frequencies. Table (7) shows the frequencies and percentages, along with the ranking of knowledge economy skills included in the Life Skills book for the third secondary grade.

Table (7): Frequencies and Percentages of Knowledge Economy Skills Included in the Life Skills Curriculum for the Third Secondary Grade

Main skills and sub-indicators	Unit One: Personal and Social Skills		Unit Two Thinking Skills		The third unit: Skills for developing community awareness		Total	
	Repetition	percentage	Repetition	percentage	Repetition	percentage	Repetition	percentage
Thinking and problem solving skills								
It helps the learner to choose and define the problem	7	2.67%	4	2.17%	5	2.24%	16	2.39%
The learner is encouraged to follow scientific thinking in confronting problems.	8	3.05%	3	1.63%	4	1.79%	15	2.24%

The learner is encouraged to research and interpret the results	7	2.67%	4	2.17%	4	1.85%	15	2.24%
It helps the learner to formulate hypotheses	8	3.05%	3	1.63%	4	1.85%	15	2.24%
It helps the learner to collect information and analyze it to reach results	6	2.29%	5	2.72%	6	2.69%	17	2.54%
Develops the skill of speed reading to extract important ideas.	7	2.67%	6	3.26%	7	3.14%	20	2.99%
The learner is encouraged to apply what he learns in real life	7	2.67%	4	2.17%	5	2.24%	16	2.39%
It activates the largest number of senses during the learning process	5	1.91%	5	2.72%	8	3.59%	18	10.17%
Stimulates the learner's creative spirit	6	2.29%	4	2.17%	4	1.85%	14	2.17%
Develops critical thinking and judgment.	5	1.91%	6	3.26%	6	2.69%	17	2.54%
It raises questions that develop the learner's curiosity.	7	2.67%	6	3.26%	7	3.14%	20	2.99%
	73	27.86%	50	27.17%	60	26.91%	183	27.35%
Skills in dealing with information and communications technology								
It encourages the use of appropriate technology to search for knowledge.	8	3.05%	6	3.26%	7	3.14%	21	3.14%
Employs technology in organizing knowledge and preparing research and reports.	7	2.67%	6	3.26%	7	3.14%	20	2.99%
Uses technology to communicate with teacher and peers to share knowledge.	9	3.44%	5	2.72%	6	2.69%	20	2.99%
Enhances the use of	6	2.29%	6	3.26%	7	3.14%	19	2.84%

technology in analyzing information.								
The learner develops an assessment of the accuracy of electronic information sources.	8	3.05%	5	2.72%	6	2.69%	19	2.84%
Promotes the positive use of information technology.	9	3.44%	7	3.81%	8	3.59%	24	3.59%
	47	17.94%	35	19.02%	41	18.39%	123	18.39%
Social and communication skills								
Promotes social values.	7	2.67%	4	2.17%	5	2.24%	16	2.39%
Preserves cultural identity in light of global cultural openness.	9	3.44%	6	3.26%	9	4.04%	24	3.59%
It encourages consultation with experts in various fields of science.	7	2.67%	7	3.81%	8	3.59%	22	3.29%
It strengthens the relationship between the school and the community.	9	3.44%	5	2.72%	6	2.69%	20	2.99%
It is recommended to produce scientific journals and bulletins.	8	3.05%	6	3.26%	6	2.69%	20	2.99%
It indicates the need to adapt and deal with contemporary issues.	9	3.44%	5	2.72%	7	3.14%	21	3.14%
Develops the skill of dialogue and discussion.	8	3.05%	7	3.81%	9	4.04%	24	3.59%
Encourages the preparation of various reports.	7	2.67%	5	2.72%	7	3.14%	19	2.84%
Encourages knowledge of recent developments and discoveries.	8	3.05%	7	3.81%	7	3.14%	22	3.29%
	72	27.48%	52	28.26%	64	28.70%	188	28.10%
Behavioral skills								

It enhances the learner's self-confidence.	6	2.29%	5	2.72%	5	2.24%	16	2.39%
Develops the spirit of cooperation in carrying out work.	7	2.67%	6	3.26%	7	3.14%	20	2.99%
Develops the ability to take responsibility and leadership.	6	2.29%	5	2.72%	5	2.24%	16	2.39%
Promotes commitment to religious and moral principles.	7	2.67%	4	2.17%	5	2.24%	16	2.39%
Encourages the spirit of positive competition.	6	2.29%	3	1.63%	4	1.85%	13	1.94%
Develops the ability to evaluate oneself objectively.	6	2.29%	3	1.63%	4	1.85%	13	1.94%
It encourages continuous learning and practice.	6	2.29%	4	2.17%	5	2.24%	15	2.24%
	44	16.79%	30	16.30%	35	15.70%	109	16.29%
Economic skills and preparation for the labor market								
Determines the basic expertise required to master the work.	4	1.53%	3	1.63%	3	1.35%	10	1.49%
Promotes good use of time.	4	1.53%	3	1.63%	5	2.24%	12	1.79%
It encourages the necessity of appreciating work and not despising some professions.	4	1.53%	3	1.63%	3	1.35%	10	1.49%
It encourages anticipating the future in various fields of science.	4	1.53%	2	1.09%	3	1.35%	9	1.35%
Encourages learners to role-play different professions.	3	1.15%	1	0.54%	2	0.90%	6	0.90%
Enhances production and innovation through daily work.	3	1.15%	1	0.54%	2	0.90%	6	0.90%
Connects life skills with	4	1.53%	4	2.17%	5	2.24%	13	1.94%

other sciences to expand the field of expertise.								
	26	9.92%	17	9.24%	23	10.31%	66	9.87%
Total	262	39.16%	184	27.50%	223	33.33%	669	100%

Table (8) Frequencies, percentages, and ranking of the cognitive economics skills included in the life skills curriculum for the third year of secondary school.

series number	Main skill	Duplicates	Percentages	Ranking
1	Thinking and problem solving skills	183	27.35%	2
2	Skills in dealing with information and communications technology	123	18.39%	3
3	Social and communication skills	188	28.10%	1
4	Behavioral skills	109	16.29%	4
5	Economic skills and preparation for the labor market	66	9.87%	5
Total		669	100%	

It is evident from Table (8) that the fields of knowledge economy skills available in the Life Skills curriculum for the third secondary grade are ranked in descending order according to their frequency and percentages as follows: (Social and Communication Skills, Thinking and Problem-Solving Skills, Information and Communication Technology Skills, Behavioral Skills, and Economic Skills and Preparation for the Job Market). The high ranking of social and communication skills, which achieved the first rank with a percentage of 28.10%, is expected, given their role in developing knowledge economy skills. This includes encouraging cooperative work in knowledge production, dissemination, and sharing among individuals. The researcher attributes this to the reinforcement of units with collaborative group activities and the inclusion of some social values in the content. The curriculum content should focus on social links and relationships and encourage participation in various social events. The current study's result regarding the social domain, which ranked first, aligns with Alam (2022), where social skills also occupied the first rank, and Al-Ahmadi (2022), where the social domain ranked fourth in terms of the availability of social skills as one of the areas of knowledge economy skills. The current study's result differs from Assiri (2018), Al-Ashqar (2020), Rasul and Ahmed (2021), and Rahim (2022), which revealed a deficiency and low coverage of social skills aspects, with social and communication skills ranking last. It also differs from Al-Balushi and Al-Maamari (2020) and Al-Riyami (2021), whose results indicated a lack of inclusion of social fields in general. Thinking and problem-solving skills ranked second with a percentage of 27.35%, which is considered a low and acceptable percentage. The researcher attributes this result to the reinforcement of units in the Life Skills book with activities that stimulate the student's thinking about certain societal issues, in addition to the way the Life Skills content is presented in the form of real-life problems that require the student to think and find solutions. This also reflects the authors' awareness of the importance of integrating thinking and problem-solving skills in education.

The current study's result regarding thinking and problem-solving skills, which ranked second, agrees with Assiri (2018), Rasul and Ahmed (2021), and Al-Riyami (2021), where thinking and problem-solving skills occupied the first rank, and Al-Ashqar, where the mental and thinking domain ranked second. It also aligns with Rahim (2022), Sharaf (2022), where thinking skills ranked third, while in Alam (2022), thinking skills ranked fourth. The current study's result differs from Al-Ashqar (2020), Al-Balushi and Al-Maamari (2020), Abdullah and Al-Dawoodi (2021), and Al-Ahmadi (2022), whose results revealed a deficiency in the inclusion of thinking and problem-solving skills in general. Information and Communication Technology Skills ranked third with a percentage of 18.39%, which is considered a low and acceptable percentage. The researcher attributes this to the reinforcement of units in the Life Skills book with activities that rely on the use of educational technology, in addition to the inclusion of multiple media in the books, reflecting the authors' awareness of the importance of integrating technological skills in education. The current study's result regarding technological skills agrees with Assiri (2018) and Al-Ashqar (2020), where Information and Communication Technology Skills ranked fourth, Rasul and Ahmed (2021), where they ranked third, and Rahim (2022), where communication skills ranked second. It differs from Al-Balushi and Al-Maamari (2020), whose results showed a deficiency in technological skills, and Al-Ahmadi (2022), Alam (2022), and Sharaf (2022), where technological skills ranked fifth. The current study's result regarding the technological domain differs from Al-Balushi and Al-Maamari (2020), which revealed a deficiency in technological skills, and Al-Ahmad (2022), where the results indicated a lack of coverage of technological aspects, with the technological domain being the least covered. It also differs from Al-Riyami (2021) and Abdullah and Al-Dawoodi (2021), whose study results showed a weakness in the percentage of availability of Information and Communication Technology Skills in the Life Skills book. Behavioral skills ranked fourth with a percentage of 16.29%, which is considered a low and acceptable percentage. The researcher attributes this to the reinforcement of units in the Life Skills book with activities that promote the learner's self-confidence, their sense of responsibility towards themselves and their group members in cooperative work, and their ability to objectively evaluate themselves. This also reflects the authors' awareness of the importance of integrating behavioral skills in education.

The current study's result regarding behavioral skills agrees with Assiri (2018), Rasul and Ahmed (2021), and Rahim (2022), where behavioral skills ranked fourth. It differs from Alam (2022), where behavioral skills ranked sixth and last, with the results indicating a deficiency and low coverage of behavioral skills in the Arabic language curriculum content.

Economic skills and preparation for the job market ranked fifth and last with a percentage of 9.87%, which is also low. The researcher observes a lack of content addressing economic issues and activities and applications focusing on developing and investing in human capital and preparing it for the job market. The reason may be that this area falls within the scope of other curricula, such as National Education and Social Studies. The current study's result regarding the deficiency in the economic domain, which ranked second to last, agrees with Al-Balushi and Al-Maamari (2020) and Rahim (2022), which revealed a deficiency and low coverage of these aspects in general and the inclusion of these features in particular. It also agrees with Al-Ahmadi (2022) and Sharaf (2022), which indicated a deficiency and low coverage of global and local economics, with economic skills and preparation for the job market ranking last. The current study's result differs from Al-Riyami (2021), Abdullah and Al-Dawoodi (2021), and Assiri (2018), where economic skills and preparation for the job market ranked second, and Alam (2022), where they ranked third.

As shown in Table (8), there is a variation in the degree of availability of knowledge economy skills as a whole in the Life Skills book for the third secondary grade. Social and communication skills had the highest availability percentage (28.10%), followed by Thinking and Problem-Solving Skills (27.35%), Information and Communication Technology Skills (18.39%), Behavioral Skills (16.29%), and Economic Skills and Preparation for the Job Market (9.87%). This result can be illustrated graphically in Figure (1). This result also agrees with the results of Assiri (2018) and Rasul and Ahmed (2021) in terms of the ranking of availability percentages of knowledge economy skills, despite the difference in the nature of the content analyzed in each of these studies.

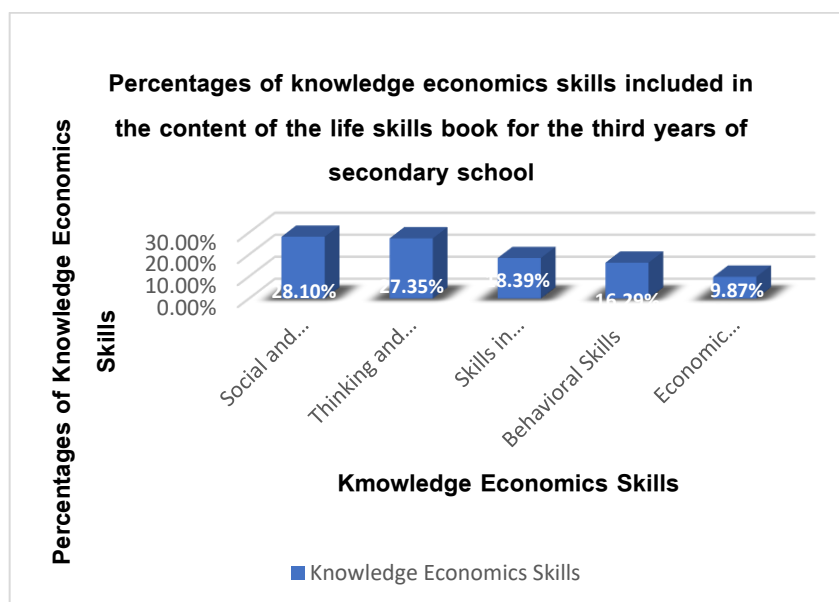


Table (1) illustrates the availability percentages of knowledge economy skills in the Life Skills curriculum for the third secondary grade.

Answer to Question 3: What is the proposed framework for integrating Knowledge Economy Skills into the content of the Life Skills curriculum for the third secondary grade?

To answer this question, the researcher reviewed the results of Table (7), which presents the frequencies and percentages of the availability of knowledge economy skills in the content of the Life Skills curriculum for the third secondary grade. The table reveals a variation in these percentages, with some skills being highly important but having a very low availability percentage compared to others. These include Economic Skills and Preparation for the Job Market, with an availability percentage of 9.87%. This necessitates increasing the percentage of these skills in the Life Skills curriculum. The proposed framework entails the following:

First: The proposed scenario for developing the content of the life skills curriculum for the third year of secondary school in light of knowledge economy skills:

A- Foundations of the Proposed Framework:

The researcher presents a theoretical proposed framework for developing the Life Skills curriculum for the third secondary grade in light of knowledge economy skills by preparing the Life Skills curriculum to keep pace with Vision 2030. The proposed framework in this study refers to: "Developing a general plan to integrate knowledge economy skills with their sub-indicators into the Life Skills curriculum for the third secondary grade." This framework is built on cognitive foundations, including the nature of knowledge and the subject matter, psychological foundations related to the psychological aspects, characteristics, needs, and inclinations of secondary school students, social foundations addressing societal problems, environment, and issues, and educational foundations involving the organization of curriculum elements and the generalization process in an integrated, interrelated system, from objectives to evaluation. It also includes all educational foundations related to each of these elements.

B- Justifications for the Proposed Framework:

- Keeping up with modern global trends in curriculum development in light of the challenges of the knowledge economy.
- The low level of knowledge economy skills in general in the Life Skills curriculum for the third secondary grade (tracks system).
- Developing economic skills and preparing for the job market.

C- Objectives of the Proposed Framework: The general objective of the proposed framework is to develop the content of the Life Skills curriculum for the third secondary grade in light of knowledge economy skills by including the sub-skills that had very low availability percentages after content analysis. This general objective is broken down into a set of specific objectives:

- Encourage students to work with a positive competitive spirit.
- Help students link life skills to other sciences to broaden their areas of expertise.
- Guide students to use the information in their knowledge structure to solve problems.
- Encourage students to use critical thinking to continuously evaluate themselves.
- Promote student participation in group work to achieve goals.
- Enable students to utilize information technology and modern means of communication in knowledge production.

D- Content of the Proposed Framework:

The content of the Life Skills curriculum for the third secondary grade is formulated in light of the foundations and objectives of the proposed framework, focusing on knowledge economy skills in terms of their inclusion in the content of lessons, training, and activities. Emphasis is placed on the skills that content analysis revealed to be weakly included in the Life Skills curriculum.

Table 9: Scope and Sequence Matrix of the Life Skills Curriculum for the Third Secondary Grade in Light of Knowledge Economy Skills

series number	Cognitive economics skills	Topics	Teaching period
1	Economic skills and preparation for the labor market	- Planning for time management. - Mastery of work. - Estimating the value of the work. - Life skills and expanding the field of experience. - Anticipating the future.	a class a class a class a class a class
2	Behavioral skills	- Positive competition in the work environment. - Self-evaluation and development. - Role-playing different professions. - Innovation in doing business.	a class a class a class a class

It is evident from Table (9), the Scope and Sequence Matrix of the Life Skills Curriculum for the Third Secondary Grade in Light of Knowledge Economy Skills, that content analysis revealed a (very weak) inclusion of these skills in the Life Skills curriculum.

H- Educational Means for the Proposed Framework:

A set of educational means that help achieve the objectives are suggested, including: Artificial Intelligence applications such as: Chatbot, ChatGPT, Google Bard, smart boards, the Internet, the school textbook, educational platforms, resource rooms, and web-based electronic sources.

I- Teaching Strategies for the Proposed Framework:

The researcher proposes a set of appropriate teaching strategies for knowledge economy skills in the proposed framework, such as: Self-Learning Strategy, Problem-Solving Strategy, Differentiated Learning Strategy, and Constructivist Learning Strategy.

J- Educational Activities for the Proposed Framework:

Appropriate educational activities are prepared, characterized as follows: Aimed at developing knowledge economy skills, linked to objectives and content, and related to the characteristics, needs, inclinations, and interests of students. These include:

- Developing group practical activities with peers on how to apply knowledge economy skills.
- Encouraging students to read about topics related to knowledge economy skills.

K- Suitable Evaluation Methods for the Proposed Framework:

The researcher suggests a set of appropriate evaluation methods:

- Achievement files.
- Observation cards for activities performed by students.
- Written and oral questions.
- Performance and practical tasks.

Recommendations of the Study:

In light of the study's findings, the researcher makes the following recommendations:

- 1- Utilize the results of this research by the curriculum planners and designers at the Ministry of Education to reconsider the content of the Life Skills curriculum for the third secondary grade, ensuring a balance in the inclusion of knowledge economy skills.
- 2- Integrate knowledge economy skills into the programs for preparing science teachers who teach life skills in colleges of education and train them to recognize knowledge economy skills and the appropriate methods and approaches for teaching them.
- 3- Re-examine the content of the Life Skills curriculum for the third secondary grade to include knowledge economy skills sufficiently, enabling students to better utilize these skills. This is also recommended by Rahim (2022) and Alam (2022).
- 4- Develop a guide for Life Skills teachers, including knowledge economy skills, to accompany the Life Skills textbook.
- 5- Conduct training courses for Life Skills teachers to introduce them to knowledge economy skills and enable them to teach these skills effectively.

Proposals of the Study:

Building on the findings of the study, the researcher proposes the following:

1. Conduct a study to identify the extent to which knowledge economy skills are included in the content of the Life Skills curriculum at the primary and intermediate level.
2. Design a training program to develop knowledge economy skills among third-grade secondary students effectively.
3. Develop a training program to train Life Skills teachers on modern strategies for teaching knowledge economy skills to their students.

First: Arabic References

1. Al-Ahmad, Rasha Abdul Karim. (2022). Knowledge Economy Skills in the Content of Language Competencies Books in the Secondary Tracks System in the Kingdom of Saudi Arabia. *Arab Studies in Education and Psychology*, 142, 53-80.
2. Al-Ashqar, Ayman Mahmoud. (2020). Knowledge Economy Skills in the Mathematics Book for the Tenth Basic Grade in Palestine. *Journal of Educational and Psychological Sciences*, 21(1), 203-237.
3. United Nations Development Programme. (2022). *Global Knowledge Index, Definitions and Methodology*, Regional Bureau for Arab States in cooperation with the Mohammed bin Rashid Al Maktoum Foundation for Knowledge.
4. Al-Balushi, Jalila bint Matar, Al-Rabani, Ahmed bin Hamad, and Al-Maamari, Saif bin Nasser. (2021). *A Proposed Model for Integrating the Concepts and Skills of the Knowledge Economy in School Education in Line with the Requirements of the Knowledge Economy in the Sultanate of Oman* (Unpublished Doctoral Dissertation). Sultan Qaboos University, Muscat.
5. Al-Balushi, Jalila Matar, and Al-Maamari, Saif bin Nasser. (2020). The Extent of the Inclusion of Knowledge Economy Skills in the Social Studies Curriculum for Grades (3-12) in Oman: An Analytical Study. *Mustaqbal Al-Tarbia Al-Arabia*, 27(126), 177-222.
6. Tawfiq, Amr Ramadan. (2018). Requirements for the Transition to a Knowledge-Based Economy. *Maktabat Net*, 19(2), 33-35.
7. Al-Hashash, Khalid. (2014). *Knowledge Economy: Sustainable Wealth*. Kuwait National Library: Kuwait.
8. Al-Daoud, Haya Abdullah, and Khalil, Manal Mohammed. (2015). The Role of University Curricula in Developing Some Life Skills among Female Students at King Faisal University. *Journal of Taif University for Humanities Sciences*, 3(12), pp. 85-135.
9. Al-Rabbat, Bahira Shafiq. (2019). The Effectiveness of Integrating the Strategies of Mind Gardens and the Visual Approach in Developing Some Knowledge Economy Skills in Mathematics for Second-Grade Intermediate Students. *Tarbawiyat Al-Riyadiyat*, 22(5), 173 - 250, retrieved on 27/9/2023 from <https://doi.org/10.21608/armin.2019.81193>
10. Rahim, Ahmed Abdul Amir. (2022). Knowledge Economy Skills Included in the Science Book for the Second Intermediate Grade. *Al-Qadisiyah Journal in Arts and Educational Sciences*, Qadisiyah University, 22(Special Issue), 1-22.
11. Rasul, Ghassan, and Ahmed, Zainab. (2021). Content Analysis of the Chemistry Book for the Third Intermediate Grade in Light of Knowledge Economy Skills. *Journal of Educational and Psychological Research*, Baghdad University, Center for Educational and Psychological Research, 18(71), 536-565.
12. Al-Riyami, Mohammed bin Nasser. (2021). The Degree of Inclusion of Knowledge Economy Skills in the Mathematics Curriculum for the Post-Basic Stage from the Perspective of Mathematics Teachers in the Governorate of Al-Dakhiliyah in Oman. *International Journal of Educational and Psychological Studies*, 10(1), 156-169.
13. Al-Zahrani, Ahmed, and Ibrahim, Yahya. (2021). The 21st Century Teacher, *Al-Ma'rifa Magazine*, Issue 211, pp. 39-73.
14. Zeitoun, Hassan Hussein. (2010). *Introduction to the Curricular Approach: A Contemporary Vision*, Cairo: Dar Al-Sulta Press.

15. Al-Saadi, Azizah, and Al-Dosari, Haya. (2012). Concepts of the Knowledge Economy, Its Applications, and Challenges in the Gulf Cooperation Council Countries, Workshop: The Efforts of the Supreme Council for Education in Directing Education in the State of Qatar towards the Knowledge Economy, Doha, October 10-11.
16. Al-Sudani, Abdul Karim, and Al-Masoudi, Abbas. (2011). An Analytical Study of Biology Books for the Intermediate Stage in Light of Life Skills, *Al-Qadisiyah Journal in Arts and Educational Sciences*, 10(3-4), pp. 117-133.
17. Al-Sharif, Mohammed. (2018). The Degree of Availability of Knowledge Economy Skills among Social Studies and National Education Teachers from the Perspective of School Leaders in the Kingdom of Saudi Arabia. *International Specialized Journal of Education*, 7(12), 107 - 121.
18. Shaghafa, Saeed Tawfiq. (2013). Knowledge Economy Skills in the Science Books for the Upper Basic Stage in Gaza, Unpublished Master's Thesis. Department of Curricula and Teaching Methods, Faculty of Education, Islamic University of Gaza: Gaza.
19. Al-Shammari, Khalid Abdullah, and Al-Assiri, Reem Mohammed. (2021). The Reality of Practicing English Language Teachers in the Secondary Stage of Knowledge Economy Skills in the Light of the Kingdom's Vision. 2030, *Assiut University College of Education Journal*, 37(12), 153 -202.
20. Al-Adwan, Zayd Salman, and Al-Hawamdeh, Mohammed Fouad. (2011). Curriculum Design: Theory and Application, Dar Al-Masira Publishing and Distribution, Amman, Jordan.
21. Al-Assaf, Jamal Abdul Fattah. (2013). The Extent of Awareness of Social Studies Teachers of Their Teaching Roles in Light of Curricula Based on the Knowledge Economy in the Directorate of Amman Second Education. *Journal of Educational and Psychological Sciences*, 7(1), 25-30.
22. Assiri, Sara Ahmed. (2018). Knowledge Economy Skills Required for Secondary School Students and the Extent of Their Inclusion in the Content of Biology Textbooks. *Journal of Educational Research*, 14(19), 471-512.
23. Alam, Saber Alam. (2022). A Proposed Framework for Developing the Content of the Arabic Language Curriculum for the Second Secondary Grade in Light of Knowledge Economy Skills. *Assiut University College of Education Journal*, 38(9), 2-49.
24. Al-Ghamdi, Hamdan Ahmed, Abdul Jawad, Nour Al-Din Mohammed. (2010). The Development of the Education System in the Kingdom of Saudi Arabia. Al-Rushd Library: Riyadh.
25. Al-Qarara'a, Ahmed Odeh. (2013). Knowledge Economy Skills in the Chemistry Book for the Second Secondary Grade and the Degree of Teachers' Possession of Them. *Journal of Human and Social Sciences*, Issue 13, 1-22.
26. Al-Qudah, Bassam Mohammed, Abu Latifa, Raed Fakhri, Al-Khawaldeh, Moayed Ahmed, and As'af, Mohammed Aref. (2014). The School Curriculum: Theoretical Knowledge and Practical Applications. Riyadh: King Fahd National Library.
27. Makhoulf, Mustafa Abdul Rahman. (2017). Life Skills Based on the Knowledge Economy Acquired from Learning the Health and Fitness Curriculum for Preparatory Year Students at King Faisal University. *Assiut Journal of Sport Sciences and Physical Education*, Issue 45, Volume 3, 1273-1303.
28. King Abdulaziz and His Companions Foundation for Giftedness and Creativity. (2008). Talent, Creativity, and Innovation Support Strategy, available at <http://www.kacgo.org.sa/AR/AboutKACGC/Strategies/pages/intro.aspx>
29. Monsi, Mahmoud Abdul Halim, and Bakheet, Khadeejah Ahmed. (2010). Life Skills: Teaching and Learning, Dar Al-Zahra, Riyadh.
30. Mansour, Huda. (2021). Vision 2030 Towards the Knowledge Economy in the Kingdom of Saudi Arabia, 41(4), 425-456, retrieved on 23/9/2023 from DOI: 10.21608/caf.2021.221002
31. Najem, Najem Abboud. (2008). Knowledge Management: Concepts, Strategies, and Processes, Amman, Jordan, Al-Warraaq Publishing.
32. Al-Namrawi, Ziyad Mohammed. (2014). Evaluation of the Quality of the Mathematics Book for the Second Secondary Grade (Scientific) in Jordan in Light of the Knowledge Economy from the Perspective of its Teachers. *Damascus University Journal*, 30(2),
33. Al-Hashimi, Abdul Rahman, and Al-Azawi, Faiqah. (2009). Knowledge Economy and Teacher Formation, United Arab Emirates, Al-Ain, Dar Al-Kutub Al-Jami'iyah.
34. Hoskins, Brownie, and Leo, Liu. (2019). Measuring Life Skills in the Context of Life Skills and Education for Citizenship in the Middle East and North Africa, UNICEF, the World Bank, Amman, Jordan.
35. Ministry of Economy and Planning. (2019). Tenth Development Plan (2015-2019) Summary of the Tenth Development Plan and its Priorities, Saudi Arabia: Publications of the Ministry of Economy and Planning. (No publication number).
36. Ministry of Economy and Planning. (1435). National Strategy for the Transition to a Knowledge Society. (No publication number).
37. Ministry of Education, General Directorate of Educational Supervision. (2008). Educational Supervision in the Age of Knowledge, retrieved on May 8, 2023, from <http://www.kacst.edu.sa/ar/about/media/news/Pages/news669.aspx> The electronic portal of the Ministry of Education in the Kingdom of Saudi Arabia.

Second: Foreign References

1. Bayrake, M. (2009). In-Service Teacher Training in Japan & Turkey A Comparative Analysis of Institutions and Practices. *Australian Journal of Teacher Education*, 34(1),10-22.
2. Bonal, X, Ramba, X. (2003). Captured by the Totally Pedagogised Society Teacher and Teaching in the Knowledge Economy. *Globalization, Societies and Education*,1(2), pp169-184.
3. Dimmock. C & Goh, J. (2011). Transformative pedagogy, leadership and School Organization for the Twenty-First Century Knowledge Economy: the case of Singapore. *School Leadership & Management*, 31(3). Pp215-234.

4. Fragidis, G., Paschaloudis, D. & Tsourela, M. (2008). Towards an Educational Model for the Knowledge Economy. Communications of the IBIMA,3(9), 62-67.
5. Guile, D. (2010): The Learning Challenge of K knowledge Economy. SENSE PUBLISHERS ROTTERDAM/BOSTON/TAIPEI
6. Khambayat R.& Majumdar, S (2010) Preparing Teachers of Today for the Learners of Tomorrow Journal of Engineering Science and Management Education, 2(2). pp15-27.
7. Krippendorff, K. (2004). Content analysis. An introduction to its methodology, 2nd ed. Thousand Oaks ,CA: Sage.
8. Shahrazad Hadad, Sh. (2017). Knowledge Economy: Characteristics and Dimensions, Management Dynamics in the Knowledge Economy, 5(2), pp.203-225.
9. Vail Lise M. (2010). Teaching in Century21 (MA Thesis) Watson school of Education, University of North Carolina, Education, Wilmington.
10. Warhurst, C. (2008) The knowledge economy, skills and government labour market intervention, Policy Studies, 29:1, 71-86, DOI: 10.1080/01442870701848053
11. World Bank Institute. (2013). Measuring Knowledge in the World's Economies: Knowledge Assessment Methodology and Knowledge Economy Index, World Bank, Washington DC.