

The Extent to which Knowledge-based Economy Skills are Included in the Secondary Level Curriculum in Qatar

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Abstract. The present study aimed to analyze the knowledge-based economy skills presented in Islamic Education books studied by high school students in Qatar. The sample for the study included Islamic Education books, analyzed cover to cover, for the eleventh and twelfth grades excluding the introduction, the list of references, and lesson questions. The researcher prepared a content analysis form as the study instrument in accordance with previous studies containing 53 signs apportioned to 11 basic rules. The overall result for this study showed a disparity and a low frequency in the ratio of skills based on the knowledge economy included in the content of Islamic education books for high school students. The most inclusive criteria are in descending order "learning how to learn", "management of information" and "problem-solving". The study's primary aim was to help develop the content of the Islamic curriculum through current global skill trends for high school students. It is necessary to include rules for the skills needed for a knowledge-based economy in middle and high school Islamic books. The study also recommends other group studies be conducted to complement these conclusions and assessments.

Keywords: knowledge-based economy; Islamic education; high school

1. Introduction

School textbooks are the most important educational resource as they contain the educational material and experiences through which desired educational objectives are achieved. A book contains a huge amount of information and data that teachers deliver to students using a variety of teaching methods and strategies. Therefore, the ministries of education develop books and curricula in line with huge technological and socio-economic developments.

Education for Knowledge Economy (ERFKE) projects have been launched whereby the knowledge economy is based on investing in humans, their minds, capabilities, creativity and effectively exploiting the huge amount of information provided by the revolution in technology and communications. This is the essence of the transmission of economic activity from the production of goods to the production and manufacture of knowledge services (Naser Al-Din, 2016; Malhotra, 2003).

The importance of the **knowledge** economy lies in achieving benefits for both the teacher and learner, as it allows students to communicate with their teachers through participation in developing learning resources and it also encourages cooperative learning that plays an essential role in information and communication technology. For example, the computer provides an opportunity for learners to obtain information, organize and store it quickly, and with less effort time and cost than traditional learning methods; hence, the teacher is the supervisor and facilitator of a student's learning (Wheeler, 2000).

Among the basic requirements for societies to convert to a knowledge-based economy is the presence of a supportive social force, infrastructure, and human forces capable of making and employing knowledge. In addition to updating educational programs and plans, developing laws and systems which support scientific and education research is essential, alongside allocating sufficient funds for information technology and enhancing its role in public life (Al-Safi et al., 2010).

2. The study problem and its questions

The knowledge explosion and the revolution of knowledge are the most prominent characteristics of our current age; it has led to the transformation of our society's economy from an economy based on machinery and traditional natural resources, to an economy based on knowledge, data and information in which our capital is the human mind. Hence this era has been called the era of knowledge economics. We can achieve it by establishing specialized centers for training and qualifications and updating curricula and methods of learning based on smart technologies, such as advanced robots and digital technologies like the Internet of Things (IoT).

Each new human development, such as new technology, must demonstrate its impact on society and individuals in general and on the educational process and learners in schools. Therefore, it has become essential for supervisors in educational institutions to keep pace with this development and achieve the desired goals at the lowest possible cost, effort and time, through workshops and courses to introduce supervisors and teachers to new technological developments. In order to achieve this, educational systems have had to consider the field carefully, preparing individuals and building their skills to cope with the changes, since teachers represent the main pillar through which the attitudes and outlook of educated individuals are formed for life. Furthermore, at this point, there has been a race to develop educational systems comprehensively to cope with the rapid changes that the era of the knowledge economy is witnessing (Al-Zahrani & Ibrahim, 2012).

The problem which this study aims to answer focuses on the extent to which the textbooks for Islamic education at secondary level in the State of Qatar cover the skills required for knowledge economics, by answering the following study questions:

1. To what extent are the knowledge economy skills included in the Islamic education book for the eleventh grade scheduled in the State of Qatar?
2. To what extent are the knowledge economy skills included in the Islamic education book for the Twelfth grade scheduled in the State of Qatar?

3. Significance of the study

The importance of the current study lies in the fact that it is one of the first studies to focus on analyzing Islamic educational books to assess knowledge economic skills, as Islamic education involves material and a course of study no less important than other prescribed subjects. The importance of knowledge economics in an era of knowledge revolution increases the need to undertake such an analysis. The present study constitutes a qualitative addition to pedagogy within the educational field in general, and particularly in the field of Islamic education.

4. Objectives of the study

The present study aims to reveal the extent to which Islamic education books for secondary level in the State of Qatar cover the skills required for knowledge economics, to provide benefit to the curriculum. Textbook developers have focused attention on the inclusion of knowledge economics skills in textbooks in general and Islamic education textbooks in particular because Islam has kept and keeps pace with all future developments. This is testament that the true Islamic religion is suitable for every time and place.

5. Study definitions and procedural definitions

The term knowledge economy refers to an economy based mainly on the element of knowledge using the human mind, through the use of research and development instruments, available economic resources, and the use of qualified staff (Al-Shammari & Al-Laithi, 2008).

Moatamen (2004) defined the knowledge economy as an economy that focuses on how to obtain, use, employ, create and reproduce knowledge to improve quality of life, to become more responsive and in line with the challenges of globalization, information and communication technology, the universality of knowledge and sustainable development as a comprehensive and integrated concept.

In another definition, a knowledge economy is reported as being an economy based on investing in intellectual capital through developing the education system, employing information and communication technology, supporting, producing and disseminating knowledge (Al-Kudairi, 2001).

Meanwhile, researchers define it according to the requirements of research as an economy that relies on information and knowledge and considers how to produce and employ it, through the full use of modern technology and how to benefit from it in the field of education.

Knowledge economy skills refer to a set of knowledge processes and attitudes necessary to apply knowledge to life situations that require the use of problem-solving skills using critical and creative thinking (Al-Banna & Jalal, 2010).

The World Bank defines it as an economy that uses events to achieve economic and social development, and this includes bringing in foreign knowledge, as well as adapting and building knowledge to meet its own needs (Alakhdr, 2019, p1).

In educational terms, researchers have defined knowledge skills as a set of knowledge and processes that must be included in the curriculum to keep pace with the era of knowledge economics to produce knowledge used in life situations that require the skills related to learning, information management, creative thinking, decision making, problem-solving, teamwork, information technology, communication, personal influence, leadership, and critical thinking.

Islamic education books are the books prescribed by the Ministry of Education in the State of Qatar for teaching in educational institutions for the academic year 2019/2020 at secondary level.

6. Theoretical framework and previous studies

A knowledge economy is characterized by its capability for creativity and innovation; since it is based on the human mind, it helps to spread knowledge, employ it and produce it in all fields and helps educational institutions to develop, innovate and achieve their desired goals (Al-Hashimi & Fayzah, 2007). Since it is characterized by abundance, unlike the traditional economy, which is a scarce economy, it has the potential to encompass creativity and innovation and is considered more appropriate for supporting conditions for a safe environment (Ghadeer, 2010).

One previous study, by Al-Belooshi and Al-Ma'amari (2020) focused on building a list of the future knowledge economy skills that should be available in educational settings in Oman in accordance with the requirements of the knowledge economy. Using the Delphi method, the data were collected by sending a list of possible skills to a sample of experts representing elite decision makers. The results indicated that basic knowledge skills represented the top five skills, followed by life and professional skills, digital skills, interpersonal skills and communication skills.

Al-Watry (2019) study showed the degree of inclusion of knowledge economy skills within vocational education books for the intermediate stage in the State of Kuwait as reported by teachers and their practice thereof. To achieve the goals of the study, a descriptive survey method was used; a questionnaire was also used to collect data from the sample participants. This sample consisted of a mixture of 335 male and female teachers of professional education. The study found that the

knowledge economy skills presented in the books for professional education for the intermediate stage in Kuwait were well appreciated and that the degree of practice of professional education teachers was also high.

Al-Damak (2019) study aimed to investigate the degree of inclusion of the standards of knowledge-based economics in home economics books at secondary level in the State of Kuwait. The sample included both family and consumer science books for the secondary level home economics specialization. An analysis tool was developed including (17) criteria, and the following results were found: the total number of iterations of knowledge-based economics standards in these books was (1177) iterations, and the researcher recommended that the authors of home economics books should pay attention to the standards of knowledge-based economics and include them in the content of the assessed books.

Al-Otaibi (2017) studied the extent to which content relevant to a knowledge economy was included in science books for the top three grades at primary level in the Kingdom of Saudi Arabia (KSA); the sample for the study consisted of science books for the top three grades at primary level in the KSA (student books, activity books) in the first and second parts. It indicated that indicators of knowledge economics consisted of 39 signs and in the content of science books for the top three grades at primary level, 6 fields were included arranged in a row. These were the thinking skills, knowledge, communication skills, economic field, the cultural and technical fields.

Shatat (2017) conducted to evaluate the developed science textbook for third-graders in the light of the knowledge economy in Jordan, according to teacher estimates. The researcher used the descriptive approach, and the study sample consisted of (74) female teachers who were teaching science to third-graders in the fourth Amman Directorate in the Tabarbour area. The study concluded that the degree of availability of knowledge economy standards in the science book, according to teachers' estimates, was average. The researcher recommended the need to focus on including knowledge economics skills in the science textbook for the third grade and motivating female teachers to focus more on these skills.

Meanwhile, Al-Kuthiri and Safi (2017) conducted a study to identify the parts of the knowledge economy included in the jurisprudence course for middle-class first graders in the KSA. To achieve the goals of the study, the two researchers prepared a content analysis form and then analyzed the content in light of the identified parts of the knowledge economy. Among the most relevant findings was the conclusion that 22 knowledge economy elements were available in the content of the jurisprudence book for the first intermediate grade. These were distributed across three fields, namely the technical and communication field, the field of knowledge and mental development, and the social and national field. These researchers also recommended that elements of the knowledge economy should be included in the content of the jurisprudence book for the first intermediate grade in the KSA.

The study by Ahmad (2017) ascertained several results, the most important of which was the availability of knowledge economy elements in the Arabic

language textbook for the sixth primary grade, and also the performance of Arabic language teachers with a very low degree of knowledge of the field of information technology, the economic field, the national field, the field of leadership and the ethical field; skills were available to a small degree in the field of mental development, and to a moderate degree, in the field of social growth and cooperative work, while they were extensively available in the field of communication. The researcher also recommended that the content of Arabic language books should include the skills required for the knowledge economy.

The study by Al-Khawaldeh and Hammadneh (2015) aimed to identify the degree to which social education books observe the principles of knowledge economics for secondary education. Content analysis was undertaken and the researchers developed a list of principles of knowledge economics that should be available in the books on social education. The results showed an absence of statistically significant differences at a significance level ($\alpha=0.05$).

Hamzah (2014) study aimed to identify the extent to which the content of the mathematics curriculum for the fourth grade included basic consideration of modern educational trends in which are part of the ERFKE from the perspective of teachers in government schools in Jordan. The study sample consisted of (62) male and female teachers. Schools in Amman were chosen in a simple random way. The researcher used a questionnaire that he had developed and which contained (55) paragraphs distributed into (4) fields. The most important results were that the educational material takes into account the criteria for a knowledge economy to a large degree, and that the evaluation of learning and the tools accompanying the content of the mathematics curriculum for the fourth basic grade correspond to the standards for a knowledge economy at an average level.

The study by Al-Khaldi (2013) aimed to reveal the degree to which the concepts of knowledge economics are possessed by Islamic education teachers in Jordan in the light of certain demographic variables. The researcher designed a questionnaire consisting of (35) items, distributed to the sample that consisted of 93 male and 133 female teachers. The results indicated that the degree to which individuals possessed the concepts of a knowledge economy was high in the field of planning for teaching and lesson implementation; intermediate for classroom management; and low in the field of evaluation and the field of educational aids.

Al-Edwan and Hamaidi (2011) conducted a study aimed at investigating the extent to which the books for social and national education for the lower basic stage, first, second and third grades in Jordan included the standards for knowledge economics from the teacher's point of view. A questionnaire was designed that included 40 rules, divided into five key fields, and this was distributed to primary school teachers in Madaba Governorate. The results of the study indicated, according to the teachers' points of view, that there is a general weakness in the clarity of the rules and philosophy behind the knowledge economy concept in the books for the targeted stage, especially in the field of thinking skills. The third-grade book had the highest rate of inclusion of the standards for knowledge economics, followed by the second-grade book, then the first-grade book.

Al-Qaisi (2011) study aimed to investigate the features of a knowledge economy and the features that should be included in the content of Sharia science courses when developing secondary education in the KSA. The researcher prepared a tool for the study to classify the features of knowledge economics, and which included (78) features distributed across seven main areas. As a result, the knowledge field was best represented, with (949) instances, while the national field was lowest ranked with a frequency of only (62).

The aim of the study conducted by Al-Zoubi (2010) was to demonstrate the impact of an Islamic education curriculum developed based on the principles of a knowledge economy, on the achievement and the development of creative thinking at the primary level in Jordan. Two units of the Islamic education curriculum for the ninth grade were developed and a sample consisting of (59) students in the ninth grade was selected from the Directorate of Education of Al-Koura district. The students were divided into two groups: control and experimental. Content analysis of the targeted book, achievement test, and creative thinking test (TORRANCE) was undertaken. The results showed an uneven distribution of the principles of the knowledge economy within the Islamic education curriculum; the technological field was most commonly included, and the cognitive development field was least commonly included.

As for Al-Howaymel (2009), his study aimed to evaluate the Arabic textbook for the second grade in the light of knowledge economics from the viewpoint of teachers. The study sample consisted of (76) male and female teachers teaching the second grade in the Al-Karak governorate. The researcher developed a questionnaire which included (59) statements, distributed across seven fields. The results showed that there were no statistically significant differences due to educational qualifications or teaching experiences.

Bani Ata (2004) conducted an analytical study to understand the degree to which high school history books in Jordan adhered to the international standards for textbooks and to build a proposed model for their development in light of these standards. The sample for the study consisted of (88) male and female teachers and 250 students. In terms of books, the sample consisted of the book *Contemporary History of Jordan* for the second grade at the secondary level and the book *History of the Arabs and the Contemporary World*. During the content analysis, the results of the study showed that there is less adherence in the book *History of the Arabs and the Contemporary World* to international standards compared to the book *Contemporary History of Jordan* for the second secondary grade.

We note from the previous studies that most of the studies focused on analyzing the content of the curricula and evaluating them in the light of the knowledge economy from the viewpoint of the teachers themselves, such as Al-Howaymel (2009), Hamza (2014), and Shatat (2017), while some studies focus on the principles of knowledge economics in Islamic education books and social education, such as Al-Zoubi (2010).

Some studies were concerned with the standards of the knowledge economy in the textbooks, such as Al-Damak (2019). On the other hand, the rest of the studies were concerned with the availability of concepts, parts or areas related to a knowledge economy in the educational curricula such as the subject of Islamic education in the studies by Al-Khalidi (2013) and Al-Qaisi, (2011); Arabic in the study by Ahmed (2017); jurisprudence for first intermediate female students in the study by Al-Kuthiri and Safi (2017) and science for the top three grades in the study by Al-Otaibi (2017). One study concerned the skills related to knowledge economics in books for vocational education (Al-Watry, 2019).

The paucity of previous studies in Islamic education, especially those which analyze the extent to which knowledge economics skills are included, is the strength of this study. What distinguishes it from others is that the curriculum that was analyzed is new and has been developed in the State of Qatar. Research and studies in this area have not been conducted previously.

The knowledge economy has different dimensions, the most important of which is the economic dimension, while the social dimension is concerned with increasing awareness of both information and information culture in society. The technological aspect is concerned mainly with the spread of technology and its applications to different areas of life. Finally, the cultural aspect is concerned with regarding knowledge as highly important and paying attention to creative capabilities and spreading awareness, culture, and science in daily life to some extent (Nour Al-Din, 2010).

It is worth noting that the knowledge economy involves skills that must be supported by competencies and curricula to keep pace with individual, industrial and cognitive requirements. A memorandum issued by the New Zealand Planning Council in (1991) states that for the country to move into the era of the knowledge economy, the following competencies must be considered, namely: labor and management skills, information technology, language skills, thinking skills and creativity in problem-solving (Yim-Teo, 2004).

On the other hand, the National Council for Learning in Japan identified the following skills: the spirit of competition among students, developing an individual's ability to be creative and innovative and preparing individuals in a way that enables them to have a place in society (Al-Qarara,2013). But Jordan Ministry of Education (2005) defined the skills as creativity, learning how to learn, information management, organizational awareness, leadership, information technology, communication, and personal influence.

The Islamic education book analysis tool was built into this study in the light of knowledge economy skills that were identified by the countries mentioned above and includes signs for each of the knowledge economy skills.

7. Method and procedures

This study adopted a descriptive-analytical approach, because such an approach helps to study phenomena, and describes the relationships between them and other related factors with the possibility of analyzing and interpreting data. In this study, the author used a content analysis method.

8. Sampling strategies

The sample for analysis consisted of all the academic subjects included in the content of Islamic education books for the second stage (eleventh grade, twelfth grade) in the State of Qatar, as planned for the academic year 2020/2019. Each book consists of 16 lessons, and thus the total of lessons analyzed in this study was (32) lessons. The five units of analysis which follow have been previously identified: word, subject or idea, character, paragraph, space, and time scale. In this study, an entire paragraph was adopted as an analysis unit and this was used for registering and indexing the Islamic education books.

Among the controls that governed the process of analyzing the books for Islamic education in this study, firstly, only 32 lessons were analyzed, excluding the index, introduction, and lesson questions; secondly, only the first-semester book was analyzed for each grade.

9. Research instrument

To answer the study questions, the researchers developed a tool for analyzing the content of Islamic education books, for the second stage, in the light of knowledge economics skills in the State of Qatar. The tool took into account research in this field presented in previous studies such as Shaqfa (2013), Al-Qaisi (2011), and others, as well as the opinions of educational specialists and experts, and exploring education reform for knowledge economy projects in Jordan.

The researchers identified 11 primary fields for knowledge economy skills included in the books for Islamic education for secondary level. Sub-signs were categorized under each field and the preliminary study tool was presented to three faculty members in the curriculum department and specialists in Islamic education curricula for assessment, to verify the validity of the content analysis tool, and ascertain the degree of importance, clarity, and belonging. Some paragraphs related to the wording were then modified with guidance from the principles or regulations stipulated or suggested by of the assessors as suitable for Islamic education. The tool was aligned for use in analyzing the content of Islamic education books for the second stage according to the concepts of knowledge economics; the list consisted of 11 rules and 53 signs distributed as follow: the idea of learning how to learn (7 signs), the information management field (3 signs), the creative thinking field (4 signs), the decision-making field (5 signs), the problem-solving field (8 signs), the teamwork field (4 signs), the communication field (5 signs), the information technology field (3 signs), the personal impact field (6 signs), the leadership field (3 signs) and the critical thinking field (5 signs).

To measure the reliability of the content analysis tool, reliability over time was used. Stage 1: the researchers analyzed the textbooks twice over two separate

periods (2 weeks). Stage 2: the researchers calculated the coefficient of agreement between the two analyses using the number of times there was agreement between the two analyses divided by the total number of points of agreement and difference, using the Holistic equation. Table (1) shows the coefficient of agreement between the two analyses for the content of Islamic education books for the eleventh grade.

Table 1: The coefficient of agreement between the two analyses of the content of Islamic education books for the eleventh grade

Rules	Analysis process		Agreement points	Difference points
	First	Second		
Learning how to learn	35	32	32	3
Information management	44	40	40	4
Creative thinking	20	18	18	2
Decision making	15	15	15	0
Problem-solving	36	38	36	2
Group work	18	18	18	2
Communication	22	26	22	4
Information technology	5	5	5	0
Personal impact	15	13	13	2
Leadership	5	7	5	2
Critical thinking	27	25	25	2
Total	242	237	229	23

$$\text{Reliability coefficient} = \frac{\text{Number of agreement points}}{\text{Number of agreement points} + \text{difference points}} \times 100\%$$

$$\text{Reliability coefficient} = \frac{229}{229+23} \times 100\% = 90.87\%$$

It is clear from Table 1 that the agreement rate was high between the first and second analyses according to the content rules for Islamic book for the eleventh grade as it reached 90.87%, which is a good percentage that indicates the reliability of the analysis process.

10. Results and discussion

In this paper, the researchers put forward a detailed presentation of the study's findings and discuss it as follows:

1. To what extent are the knowledge economy skills included in the Islamic education book for the eleventh grade scheduled in the State of Qatar?

To answer this question, the researchers calculated the rates and percentages for each of the fields. The following table presents the results.

Table 2: The rates, percentages, and rankings of the knowledge economy skills included in the Islamic education book for the eleventh grade

#	Field	Frequency	Percentage	Rank
1	Learning how to learn	35	14.17	3
2	Information management	43	17.40	1
3	Creative thinking	18	7.28	6
4	Decision making	15	6.07	8
5	Problem-solving	38	15.38	2
6	Group work	18	7.28	7
7	Communication	25	10.12	5
8	Information technology	5	2.02	11
9	Personal impact	14	5.66	9
10	Leadership	7	2.83	10
11	Critical thinking	29	11.74	4
Total		247	100%	-

It is apparent from Table (2) that the overall percentage of the availability of rules for knowledge economy skills in the content of the Islamic education book for the eleventh grade is low. The eleven rules are included in the content of the Islamic education book for the eleventh grade in different proportions. The information management field ranked first with 43 instances, with a percentage of 17.40%, and second was the problem-solving field with 38 instances and a percentage of 15.38% followed by the field of learning on how to learn with 35 instances and a percentage of 14.17%. The information technology field was ranked lowest with only five instances and a rate of 0.22%. It is also apparent from the results that the field of creative thinking and the field of teamwork had the same frequency with 18 instances each and 7.28%. Information management may have been ranked first because Islamic education books contain, in every single paragraph, either Quranic verses or supplications of the Prophet. Therefore, accuracy and quality are required when adding these skills to Islamic education curricula to achieve the Islamic goals for society and the individual. The justification of for the exclusion of the information technology field beyond its current presence - according to the researcher's knowledge - stems from educators and developers of the Islamic education curriculum not being aware of the necessity of linking the subject to technology even though technology is an important source of knowledge in this age.

Table 3: The rates and percentages of each indicator for each field in the content of the Islamic education book for the eleventh grade

Field	Indicator	Frequency	Percentage
Learning how to learn	The book activates the curiosity of learners	2	5.56
	It develops the ability to continue self-learning	6	16.66
	It stimulates the use of the appropriate environment for learning	3	8.33
	It motivates students to apply what they learn in their lives	9	25

Total	It activates as many senses as possible during the learning process	3	8.33
	A Review that has been learned to improve his information	9	25
	It urges research and discusses knowledge critically to confirm it	4	11.11
		36	100%
Information management	It develops ability in information technology	1	2.33
	It includes quality and accurate data and information	33	76.744
	It contains information searches and classification activities	9	20.93
		43	100%
Creative thinking	It encourages the writing of research and reports	6	35.294
	It develops the ability to distinguish and perceive the issues raised	2	11.765
	It develops the ability to generate diverse ideas	4	23.529
	It urges new details to be added to an idea accurately	5	29.412
Total		17	100%
Decision making	It urges individuals to consult people of experience and set a role model	4	26.667
	It encourages the implementation of sound decisions	2	13.333
	It urges individuals to slow down in terms of the issuance of judgments	2	13.333
	It provides correct and complete information on the subject	7	46.667
	It determines the available options based on the available information	0	0
		15	100%
Total	It provides serial and integrated information on the subject	16	42.105
	It encourages boldness, perseverance, and initiative	3	7.8947
	It develops the ability to discover sources of knowledge	0	0

Problem-solving	It promotes self-confidence and self-reliance	4	10.526
	It helps students to reach and apply the results	3	7.8947
	It urges planning and information gathering for results	2	5.263
	It urges the use of modern technical means of research and investigation	10	26.315
Total		38	100%
Group work	It encourages active participation	4	25
	It raises students' motivation for teamwork	5	31.25
	It encourages the exchange of information and experiences between students	2	12.5
	It calls for mistakes to be taken as learning opportunities, not blame and criticism	5	31.25
Total		16	100
Communication	It strengthens the relationship between school and society	5	20.83
	It develops the ability to manage the communication process	1	4.166
	It encourages constructive criticism and backs it up with evidence	5	20.83
	It develops listening and expression skills and accepts others' opinions	5	20.83
	It is prepared for the topic to be raised in advance	8	33.33
Total		24	100%
Information technology	It motivates students to use technology to organize research	1	20
	It motivates students to use technology in research analysis	2	40
	It encourages the use of appropriate electronic sources for the required information	2	40
	Total		5
	It calls for an understanding of the surrounding world	3	20
	It emphasizes verbal fluency and eloquence	6	40

Personal impact	It promotes leadership and initiative	2	13.333
	It calls for flexible solutions	0	0
	It employs the Arabic language properly and influences others	4	26.666
	It calls for a proper response to external influences	0	0
	Total	15	100%
Leadership	It enhances the importance of taking into account the feelings of others	0	0
	It contributes to a positive exchange of experiences	3	42.85
	It promotes collaborative work and tackles others' problems	4	57.14
	Total	7	100%
Critical thinking	It enhances the ability to find similarities and differences	8	27.586
	It identifies information related to the topic	2	6.896
	It promotes critical thinking and justification	7	24.137
	It demonstrates variety in questions to contribute to a deeper understanding	9	31.034
	It enhances the ability to accurately identify problems	3	10.343
Total	29	%100	

As shown in Table 3, regarding the information management field, we find that the indicator, "It includes quality and accurate data and information" achieved the highest availability rate at 76.74%. The researcher attributes this result to the nature of Islamic education books and their association with the Quran Kareem and the Sunnah of the Prophet, therefore quality and accuracy. As for the field of learning how to learn, we find that the indicator, "A Review that has been learned to improve his information" and the indicator, "It motivates students to apply what they learn in their lives" achieved the highest availability at 25%. For the problem-solving field, the indicator, "It provides serial and integrated information on the subject" had the highest availability rate at 42.1%. This is due to the advantages of Islamic law in dealing with all issues and submitting all suggestions that a person faces in his life. This result is consistent with the study (Al-Edwan & Hamaidi 2011) and (Al-Otaibi, 2017).

2. To what extent are the knowledge economy skills included in the Islamic education book for the Twelfth grade scheduled in the State of Qatar?

To answer this question, the researchers used the tool to analyze the content of the Islamic education book for the twelfth grade in light of the fields for knowledge economy skills that were prepared for this purpose. The rates and percentages for each of the fields were then calculated.

Table 4: The rates, percentages, and rankings of the knowledge economy skills included in the Islamic education book for twelfth grade

#	Field	Frequency	Percentage	Rank
1	Learning how to learn	31	14.975	2
2	Information management	30	14.492	3
3	Creative thinking	11	5.314	8
4	Decision making	16	7.729	6
5	Problem-solving	42	20.289	1
6	Group work	25	12.077	5
7	Communication	26	12.560	4
8	Information technology	0	0	11
9	Personal impact	10	4.830	9
10	Leadership	4	1.932	10
11	Critical thinking	12	5.797	7
Total		207	100%	-

It is apparent from Table 4 that the general percentage of the availability of rules for knowledge economy skills in the content of the Islamic education book for twelfth grade is low. The eleven fields appeared in the Islamic education book for the twelfth grade in different proportions. The problem-solving field was ranked first with 42 instances, with a percentage of 20.289%. In second position was the learning how to learn field with 31 instances and a percentage of 14.975%; the information management field followed closely in frequency with 35 instances and a percentage of 14.492%. The information technology field was ranked lowest with 0 instances as the textbook did not have any indicators relating to information technology skills. It is also clear to us from the results that the field of teamwork and the field of communication were close to each other in terms of instances (25 and 26 respectively) with similar percentages (12.07% and 12.65%, respectively). The reason for this is due to the presence of Quranic verses and Prophetic hadiths that are verified before they are placed in the curriculum. The other reason is that the book includes many curricular and extracurricular activities that motivate students to seek knowledge in different ways. The researchers attribute the exclude the information technology in Islamic book to the nature of the subject and how to teach it.

Table 5: The rates and percentages of each indicator for each field in the content of the Islamic education book for the twelfth grade

Field	Indicator	Frequency	Percentage
Learning how to learn	The book activates the curiosity of learners	4	12.930
	It develops the ability to continue self-learning	6	19.354
	It stimulates the use of the appropriate environment for learning	1	3.225
	It motivates students to apply what they learn in their lives	5	16.129

Total	It activates as many senses as possible during the learning process	5	16.129
	A Review that has been learned to improve his information	6	19.354
	It urges research and discusses knowledge critically to confirm it	4	12.930
		31	100%
Information management	It develops ability in information technology	0	0
	It includes quality and accurate data and information	25	83.33
	It contains information search and classification activities	5	16.66
Total		30	100%
Creative thinking	It encourages the writing of research and reports	6	35.294
	It develops the ability to distinguish and perceive the issues raised	2	11.765
	It develops the ability to generate diverse ideas	4	23.529
	It urges new details to be added to an idea accurately	5	29.412
Total		17	100%
Decision making	It urges individuals to consult people of experience and set a role model	4	25
	It encourages the implementation of sound decisions	0	0
	It urges individuals to slow down in terms of the issuance of judgments	7	43.75
	It provides correct and complete information on the subject	2	12.5
	It determines available options based on available information	3	18.75
Total		16	100%
Problem-solving	It provides serial and integrated information on the subject	18	42.857
	It encourages boldness, perseverance, and initiative	2	4.7619
	It develops the ability to discover sources of knowledge	3	7.1428
	It promotes self-confidence and self-reliance	4	9.523
	It helps students to reach and apply the results	0	0

Total	It urges planning and information gathering for results	5	11.904
	It urges the use of modern technical means of research and investigation	10	23.809
		42	100%
Group work	It encourages active participation	8	32
	It raises students' motivation for teamwork	7	28
	It encourages the exchange of information and experiences between students	6	24
	It calls for mistakes to be taken as learning opportunities, not for blame and criticism	4	16
Total		25	100
Communication	It strengthens the relationship between school and society	5	21.73
	It develops the ability to manage the communication process	0	0
	It encourages constructive criticism and backs it up with evidence	4	17.39
	It develops listening and expression skills and accepts others' opinions	3	13.04
	It is prepared for the topic to be raised in advance	11	47.82
Total		23	100%
Information technology	It motivates students to use technology to organize research	0	0
	It motivates students to use technology in research analysis	0	0
	It encourages the use of appropriate electronic sources for the required information	0	0
		0	100
Personal impact	It calls for an understanding of the surrounding world	1	10
	It emphasizes verbal fluency and eloquence	3	30
	It promotes leadership and initiative	3	30
	It calls for flexible solutions	2	20
	It employs the Arabic language properly and influences others	0	0
	It calls for a proper response to external influences	1	10
Total		10	100%

Leadership	It enhances the importance of taking into account the feelings of others	1	25
	It contributes to a positive exchange of experiences	1	25
	It promotes collaborative work and tackles others' problems	2	50
Total		4	100%
Critical thinking	It enhances the ability to find similarities and differences	2	16.66
	It identifies information related to the topic	2	16.66
	It promotes critical thinking and justification	1	8.33
	It promotes variety in questions to contribute to a deeper understanding	4	33.33
	It enhances the ability to accurately identify problems	3	25
Total		12	100

As shown in Table 5, for the problem-solving field, the indicator, "It provides serial and integrated information on the subject" had the highest availability rate at 42.85%. This is due to the advantages of Islamic law in dealing with all issues and submitting all suggestions that a person faces in his life.. follow it the learning how to learn field, we find that the indicators, "A Review that has been learned to improve his information" and, "It develops the ability and continuity of self-learning" had the highest availability rate at 19.35%. The researcher attributes this to the fact that the Islamic Education Book focuses on recalling previous information and building new information. To expand the knowledge structure of students, and achieve horizontal and vertical integration in the educational process. while for the information management field, the indicator, "It includes quality and accurate data and information" had the highest availability rate at 83.3%. about the field of teamwork, the indicator, "It encourages active participation" had the highest availability rate at 32%. These results differ with a study of (Al-Zoubi, 2010).

11. Conclusion and Recommendations

According to the findings in this paper, we find that Islamic education textbooks at secondary level in Qatar do not include all the fields for knowledge economy skills and the content, in these terms, is weak and varied. The Islamic education book for the twelfth grade did not include any information technology field skills. Furthermore, the Islamic education book for the eleventh grade referred more to the skills for a knowledge economy with a frequency of 247 relevant instances compared to the book of Islamic education for the twelfth grade which referred to the skills for a knowledge economy 207 times. This indicates the weakness of

Islamic education books for the high school stage in the State of Qatar and indicates that textbooks do not meet the requirements for the age of knowledge. This area, therefore, requires development and reconsideration to achieve content appropriate to the era of the knowledge economy that we live in, at a time when knowledge is increasing and technology is developing. According to the results, researchers recommend the following: reconsidering the design of Islamic education books to teach the skills needed for a knowledge economy; utilization of educational technology in teaching the Islamic education curriculum, and paying more attention to higher skills and critical thinking. Finally, it is important to reconsider the training and qualifications of teachers in order to maximize the spread of these skills.

12. References

- Ahmad, S. (2017). The querulents of the knowledge economy included in the Arabic language book for the sixth grade of primary school and the degree of teachers' ownership of it. *Scientific Journal*, 33(7), 597-645. <https://doi.org/10.12816/0042477>
- Alakhdr, A. (2019). School reform according to the knowledge economy. Retrieved from <https://www.saudiopinions.org/ar/10952/>
- Al-Banna, J., & Jalal, K. (2010). *The extent to which high school mathematics books in Jordan have taken into account the skills of knowledge economics* [Working paper]. The First Curriculum conference, Jordan.
- Al-Belooshi, J., & Al-Ma'amari, S. (2020). The Skills of the Knowledge Economy Expected in the Future in the School Education in Oman: A Scientific Study by Using the Delphi Method. *Journal of Educational and Psychological Studies*, 14(2), 229-249. <http://dx.doi.org/10.24200/jeps.vol14iss2pp229-249>
- Al-Damak, M. B. (2019). *The degree to which high school books in the State of Kuwait include knowledge-based economy standards* [Master's thesis]. Al-Bayt University. <https://doi.org/10.35658/1445-000-020-003>
- Al-Edwan, Z., & Hamaidi, D. (2011). Evaluating social and national education textbooks based on the rules of the knowledge-based economy from the perspectives of elementary teachers in Jordan. *Education*, 131(3), 684-696.
- Al-Hashimi, A., & Fayzah, M. (2007). *Curriculum & Knowledge Economy*. Oman: Dar Al Massira for Publishing.
- Al-Howaymel, O. (2009). Evaluation of our Arabic language book for second basic class students in the light of the knowledge economy in Jordan from its teachers. *Educational Sciences Studies*, 36(1), 117-132.
- Al-Khalidi, J. (2013). To reveal the degree of Islamic education teachers and teachers in Jordan possessing concepts of knowledge economics in light of some demographic variables. *IUG Journal of Educational and Psychological Studies*, 21(1), 159-187.
- Al-Khawaldeh, N., & Hammadneh, M. (2015). The degree of observance of books of social studies to the principles of knowledge economics for the stage of secondary education in Jordan through analyzing their content. *Basic Education College Magazine for Educational and Humanities Sciences*, 2, 3-7.
- Al-Kudairi, M. (2001). *Knowledge economy*. Egypt: The Nile Arab Group for Publishing and Distribution.
- Al-kuthiri, H., & Safi, A. (2018). The extent of conclusion the book of jurisprudence for the students of the first-grade intermediate in Saudi Arabia for the knowledge

- economic. *International Journal of Educational and Psychological Studies*, 3(2), 198-391.
- Al-Otaibi, W. B. H. (2017). The extent to which the fields of the knowledge economy are included in the content of science books for the top three grades of the elementary stage in the Kingdom of Saudi Arabia. *Educational Journal*, 31(123), 169-301. <https://doi.org/10.34120/0085-031-123-016>
- Al-Qaisi, M. B. A. (2011). *Knowledge economy features included in the content of sharia sciences courses in the Secondary Education Development Project in the Kingdom of Saudi Arabia* [Doctoral dissertation]. Mu'tah University.
- Al-Qarara, A. O. (2013). The Cognitive Economy Skills Included the Chemistry Book of 2nd Secondary and Teachers Possessing Degree of them. *Journal of Humanities and Social Sciences*, 13, 1-22.
- Al-Safi, A., Salim, Q., & Dabour, A. (2010). *Educating children in the age of knowledge economy*. Jordan: Dar Al-Thaqafa for Publishing and Distribution.
- Al-Shammari, H., & Al-Laithi, N. (2008). *Knowledge Economy*. Dar Al-Safa Library for Publishing and Distribution.
- Al-Watry, E. B. (2019). *Cognitive economics skills in intermediate education vocational books in the State of Kuwait from the teachers' point of view and their practice* [Master's thesis]. Al-Bayt University.
- Al-Zahrani, A., & Ibrahim, Y. (2012). Teacher of the twenty-first century. *Knowledge Magazine*, 211.
- Al-Zoubi, I. (2010). *The effect of a developed curriculum on Islamic education, in the light of the principles of cognitive economics in achievement and development of creative thinking among basic stage students in Jordan* [Doctoral dissertation]. Amman Arab University. <https://doi.org/10.36621/0397-002-002-001>
- Bani Ata, M. Q. (2004). *Evaluation of history books for high school in Jordan in the light of international standards for textbooks and building a proposed model for developing them in the light of these standards* [Doctoral dissertation]. Amman Arab University. <https://doi.org/10.35677/0552-000-005-004>
- Ghadeer, B. (2010). *Knowledge economy*. Shuaa Publishing and Science.
- Hamzah, M. A. (2014). The extent to which the content of the mathematics curriculum takes into account the fourth basic grade of modern educational trends included in the project to develop education towards knowledge economics (ERFKE) from the viewpoint of government school teachers in Jordan. *The Journal of the Islamic University for Educational and Psychological Studies*, 22(1), 55. <https://doi.org/10.12816/0013552>
- Malhotra, Y. (2003). Measuring knowledge assets of a nation: knowledge systems for development. *United Nations Advisory Meeting of the Department of Economic and Social Affairs Division for Public Administration and Development Management, Ad Hoc Group of Experts Meeting Knowledge Systems for Development*.
- Ministry of Education, (2005). Training manual, education training: qualification and supervision department. Jordan educational training directorate.
- Moatamen, M. (2004). The role of the Jordanian system in advancing towards a knowledge economy: Message of a teacher. *Ministry of Education*, 43(1), 17-21.
- Naser Al-Din, S. (2016). *Knowledge Economy*. Retrieved from www.4arab.net.com
- Nour Al-Din, I. (2010). *Knowledge management and modern technology*. Osama House for Publishing and Distribution.
- Shaqfa, S. (2013). *Knowledge economy skills in the content of science books for the upper basic stage in Gaza and the extent of acquisition of tenth-grade students*. The Islamic University, Palestine.

- Shatat, R. (2017). *Evaluation of the science textbook developed for third-graders in the light of knowledge economics in Jordan* [Master's thesis]. Hashemite University.
- Wheeler, S. (2000). *Telemetric research the role of the teacher in the use of ICT*. University of western Bohemia. Retrieved from www.fae.plym.ac.uk/roleteach.html
- Yim-Teo, T. (2004). *Reforming Curriculum for a knowledge Economy: The Case of Technical Education in Singapore*. Paper presented to the NCIIA 8th Annual meeting Titled: Education that Works (pp. 137-144).