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The Extent Of Meeting The Requirements Of Knowledge Society In The Educational Process From The Perspective Of Science Teachers And Supervisors In Irbid Governorate

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ABSTRACT

The present study aimed to identify the extent of meeting the requirements of knowledge society in the educational process from the perspective of science teachers and supervisors in Irbid Governorate. The researcher of the present study adopted the descriptive analytical approach. The population consists from the science teachers and supervisors in Irbid Governorate. To meet the objectives of the research, the researcher of the present study designed a questionnaire consisting of (34) paragraphs equally divided into four areas. It was found that the extent of meeting the requirements of knowledge society in the educational process from the perspective of science teachers and supervisors in Irbid Governorate is moderate in all fields, and the total arithmetic average of the areas of the requirements of the knowledge society reached (3.37) with a moderate degree of application.

In light of these results, the researcher of the present study recommends holding training courses for teachers and supervisors on the use of modern methods of teaching and supervision based on the application of the requirements of the knowledge society in the educational process, and working to promote awareness among teachers and supervisors of the importance of striving towards professional development in order to meet the requirements of the knowledge society in the educational process.

Keywords: Knowledge requirements, knowledge society, science teachers, science supervisors.

Introduction

The knowledge and technology society is a source of information and its upgrading, its development, This is evident in the competition that most of the contemporary world countries show in order to form a knowledge and technology society, working to provide the needed technical and information infrastructure and trained human cadres to enter the knowledge and information society in its production.

The developments of the knowledge and knowledge society in the societies of knowledge and technology in the first stage in the first stage in the first edition of information and follow-up on it, have brought about its development and helped it in the trade box (2015) (Kisac & Budak) (Riffa, 2014; Manuel, 2008).

Educational institutions, with their literature and activities, are facing in the current era the era of knowledge and technology from life and the developments that have occurred in various parts of life: educational, culture, crafts, culture, culture, culture, culture, culture, crafts, fast, which began in its economic inevitability and a new pattern of its own , which imposed on educational institutions to find themselves in front of a new challenge based on knowledge and its generation, economy, economy, branding, acquired skills, creativity, and technical development (Bayoumi & El-Meligy, 2014).

The knowledge society represents a new knowledge and economic tributary, because the production, dissemination and employment of knowledge is the main driver of the sustainable growth process. From this persepctive, modern educational systems focused on education with all its inputs, to reach qualitative educational outputs capable of building and employing knowledge (Zigmond,

2014). The integrated educational system is a basic pillar supportingthe knowledge society. The knowledge society is the society that contributes to the production and development of knowledge, benefiting from it and its good use and employment. It is a society whose components are formed from the dissemination of science, knowledge and technology, its production and employment with high efficiency in various fields, and thus the production, exploitation and employment of knowledge in Programs and schemes for developmental purposes and making them among the general goals that society seeks to achieve (Al-Khalifa, 2019).

Knowledge represents a real challenge to all the areas of social, educational, cultural, political and economic aspects of life (Al-Shehri, 2019), and its impact extended in most of it, especially in the educational system, in order to benefit from the communication and information technology to transform into a knowledge society, and thus bring about a qualitative leap in this system and its outputs (Shaheen, 2015).

The requirements of the knowledge society represent the tool or ability to use knowledge so that the educational process becomes an open system in a continuous movement of thought, creativity, change and progress, based on modern educational techniques, such as: open learning, distance learning, and e-learning, through which knowledge is linked in Educational institutions with the conditions and requirements of the knowledge society, and awareness of knowledge with the aim of spreading knowledge services in educational institutions, producing knowledge and applying it in educational institutions, and making knowledge available by offering a set of means that make knowledge in the field of application. (Kharabsheh, 2016)

There is no doubt that one of the most important features of the development witnessed by the educational process in Jordan during the last two decades is the interest in transforming into what is known as the knowledge society, and the accompanying great progress in investing technology and employing knowledge in the educational process, developing human expertise and raising their efficiency and skills as a basis for comprehensive development.

The Ministry of Education in Jordan implemented multiple initiatives to transform into a knowledge and technology society, believing in the importance of transforming the educational system in accordance with the requirements of the knowledge society and economy, which has become a necessary requirement for the educational field in general and for educational supervision in particular (The Jordanian Ministry of Education, 2019). That isbecause educational supervision in various Its specializations represent a basic pillar in the educational system to lead development and development in light of the requirements of the knowledge society, and the transfer of knowledge and technical expertise to teachers and students. The knowledge society and renewable informatics (Abu Dali, 2018, therefore, educational supervision, its roles and functions, is that it represents innovative and constructive educational leadership, monitoring and integrating supervisory practices with the requirements of the knowledge society (Lee & Choi, 2017).

The success of the educational process in all its tasks is based on rapid changes in the field of knowledge and the flow of information resulting from progress in the field of knowledge and technology, which contributed to a change in the orientations of the educational and supervisory process, which contributed to the formation of positive trends towards the application of knowledge and technical requirements in the educational and supervisory process (Sawalma & Qutish, 2015).

In this regard, Bani Issa (2017) emphasized the importance of the educational work’s orientation towards the search for knowledge and information and its use, because of its significant impact on developing the educational process and improving the level of professional performance of teachers. Abu Nadi (Abu Nadi, 2016) pointed out that many educators see the innovations of the knowledge and technology society as a solution to many educational problems related to supervisory tasks, teachers' performance, and students' level of achievement.

The methods ofmeeting the requirements of the knowledge society in the educational process vary, because their use depends on the availability of technical educational software, and the skill of the teacher or supervisor in applying them in the educational process. Perhaps the most prominent of these technical knowledge innovations are: Skype, Viber, and Face To Face)), Facebook, WhatsApp Facebook,

Twitter, etc., through which the teacher or supervisor can create discussion groups, and send individual and group messages to communicate with teachers or students at any time and anywhere (Abu Ayada&Ababneh, 2016).

With the advancement of technology and knowledge, more sophisticated educational software appeared that can be used in the educational process, such as the Kal Board software. This software provides an independent virtual world for the teacher and the supervisor and for each school through using tablets. This software activates the process of participation and interaction inside and outside the classroom. Between the teacher and the students, and between the teacher and the supervisor, and between the students themselves, because this software is provided with a tool for making reports to improve decision-making and support the continuous development of the performance of the supervisor and the teacher and student learning, and through which it is possible to draft detailed reports on the progress in performance, and follow up the educational process inside and outside the school (Al -Hatamla, 2019).

As for the Dropbox application, it consists of a box to host the files sent by the teacher or supervisor, and the user can store and send files, and synchronize them between more than one computer or mobile phone, and schools can use this application to send daily and quarterly plans to the school director, the educational supervisor and the Education Department for review It is evaluated, and then redirected to the teacher after taking notes on it. This application eliminates supervisors and teachers from using CDs (Cano & Garcia, 2013).

The science subject, with its various branches, is one of the scientific study subjects that develop the skills of science, the search for knowledge, and the development of scientific thinking skills. This era, and accordingly, does not require teachers and science supervisors to follow scientific and educational developments, and to keep pace with the requirements of the knowledge society in terms of searching for and producing knowledge and benefiting from it in improving the level of professional performance of the teacher and supervisor, which is reflected positively on the level of students' learning (Maghdawi, 2016).

Based on the foregoing, the researcher of the present study decided to investigate the degree of meeting the requirements of the knowledge society in the educational process from the point of view of science teachers and supervisors in Irbid Governorate. Thus, this research comes in line with some studies that focused on researching the requirements of the knowledge society and the possibility of its application in the educational process, such as the potential study (Al-Hatamla, 2019), which focused on identifying the degree of practice of educational supervisors in Jordan to the requirements of the knowledge and technology community in the educational process, which showed that The degree to which educational supervisors meet the requirements of the knowledge and technology society in the educational process is low.

Al-Zubair (2019))aimed to propose a vision for the application of the technical supervision model in the light of recent trends of educational supervision in the light of the knowledge society. As for the Sabo study (Sabo, 2019), it sought to reveal the role of science supervisors in improving the professional performance of science teachers at the secondary stage in Jeddah. The study indicated that the role of educational supervisors in improving the professional performance of science teachers at the secondary stage in Jeddah is average.

Abu Dali (2018) explored the impact of the requirements of the knowledge society and its characteristics on the competencies of continuing education and the requirements to achieve them in the knowledge society. Continuing education in the knowledge society is required to bring about changes in terms of: its concept, objectives, content, and methods. Nassar's study (Nassar, 2016) also attempted to know the reality of the performance of social studies female teachers in the light of building a knowledge society in secondary schools in the Gaza Strip from the point of view of educational supervisors and teachers. Consider the parameters are great. As for the study of Abu Ayada & Ababneh (Abu Ayada & Ababneh, 2016), it was concerned with revealing the impact of employing information technology in educational supervision in private schools in Amman, and the study showed a great effectiveness in employing electronic technologies in educational supervision.

Kharabsheh (2016) aimed to identify the degree of application of knowledge management processes at Al-Balqa Applied University in Jordan from the point of view of its faculty members. As for Atwan's study (Atwan, 2015) it aimed to reveal the level of

practices of science supervisors for their supervisory functions in the light of the knowledge society, and to show its relationship to their teachers' attitudes towards educational supervision, and concluded that there is an average level of practice for the requirements of the knowledge society, and the presence of Correlational relationship between supervisory practices and the attitudes of mathematics teachers towards supervision, and the absence of statistically significant differences in supervisory practices due to the variable of gender and educational stage.And to verify the extent to which educational supervisors possess the competencies of educational supervision in the light of the requirements of the knowledge society, the study of Shaheen (Shaheen, 2015); (Al-Harbi, 2018) that the degree of possession and practice of contemporary educational supervision competencies in light of the requirements of the knowledge society from the point of view of educational supervisors came to a degree moderate, and there is a high and positive correlation between the degrees of possession and practice.

Al-Shawabkeh (2014) suggested a conception of electronic educational supervision in Jordan to keep up with latest technological development, and indicated that the reality of the application of electronic educational supervision in Jordan came to a low degree.

The study of Schwekrt (2014) was conducted in the US state of Illinois. This researcher found that the use of information and communication technologies has a positive impact in the educational process. As for the study of Adeya & Oyeinka, (2012), it aimed to identify the extent to which faculty in African universities (Kenya, Nigeria) use the requirements of a society Knowledge, and knowledge of the obstacles that prevent the use of knowledge society resources in academic research work and teaching, and one of the most prominent results was that teachers of Kenyan universities use knowledge sources in scientific research to a greater extent than teachers of Nigerian universities, and that the most important obstacles to using knowledge society resources are the use of the Internet in scientific research. It is due to the lack of hardware and material support, and a lack of knowledge of the use of the Internet.

Al-Qafai (2011) aimed to identify the training needs necessary in the production, generation, dissemination and employment of knowledge for the educational supervisor in light of the requirements of the knowledge society from the point of view of educational supervisors in Al-Baha region, and confirmed the existence of a number of training needs necessary for the educational supervisor in light of the requirements of the knowledge society. In its various axes, identifying ways of innovation and renewal, being able to prepare training programs for workers in the educational field, employing supervisory methods to spread knowledge, and mastering communication skills.

What distinguishes the current research from previous studies is that it was applied to science teachers and supervisors in Irbid Governorate, as it is within the limits of the researcher's knowledge, the first to be conducted at the local level, as most studies were applied to universities or administrators. The research sample consists of teachers and supervisors. The sciences and they are more concerned than others in meeting the requirements of the knowledge society and benefiting from it in education and educational supervision.

Statement of the problem and the study's questions

Through the researcher's briefing on educational literature and studies related to the topic of the current research, through the researcher's review of educational literature and previous studies related to the application of the requirements of the knowledge society in the educational process, he noticed the lack of studies at the local level that focused on revealing the degree of application of the requirements of the knowledge society in the educational process. Thus, the researcher of the present study believes that it's important to study the extent of meeting the requirements of the knowledge society in the educational process. He decided to study it from the point of view of science teachers and supervisors in Irbid Governorate, given that teachers and supervisors are more concerned than others in dealing with it and employing it in the educational process and its reflection on the level of students' learning.

Accordingly, the problem of this research was determined in the presence of shortcomings in the level of application of the requirements of the knowledge society in the educational process with regard to the teacher,

the supervisor, the student and the curriculum, by answering the following two questions:

Q1: What is the extent of meeting the requirements of knowledge society in the educational process from the perspective of science teachers and supervisors in Irbid Governorate?

Q2: Are there statistically significant differences at the significance level ($\alpha = 0.05$) between the respondents' attitudes?

The study's objectives:

The researcher of the present study aimed at

1. Identifying the extent of meeting the requirements of knowledge society in the educational process from the perspective of science teachers and supervisors in Irbid Governorate.
2. Identifying whether there is any statistically significant difference at the significance level ($\alpha = 0.05$) between the respondents' attitudes.

The study's significance

The significance of this research arises from the significanceof the topic it deals with, which is: the extent of meeting the requirements of knowledge society in the educational process from the perspective of science teachers and supervisors in Irbid Governorate. This importance is divided into:

First: The theoretical significance

The present study is one of the few studies that address this topic. The researcher of the present study hopes to enrich the educational literature that's related to the development of the educational process and its tasks according to the requirements of the knowledge society, and to draw the attention of those in charge of the educational and supervisory process to the importance of meeting the requirements of the knowledge and technology society in educational and supervisory work.

Second: The practical importance

The practical importance of this research emerges from the novelty of its subject, and the lack of studies and research in this field. Therefore, it is hoped that those in charge of the educational supervision department in the Ministry of Education will benefit from the results of the current research in developing clear plans and programs for the transition of educational supervision to the knowledge society, and enhancing the ability to search for Knowledge and its generation for supervisors and teachers in general, and for science supervisors and teachers in particular, and to open the way for researchers to conduct subsequent studies in the field of meeting the requirements of the knowledge and technology society in education.

Limits

Objective limits: The extent of meeting the requirements of knowledge society in the educational process from the perspective of science teachers and supervisors in Irbid Governorate.

Spatial limits: Directorates of Education in Irbid Governorate.

Human limits: Supervisors and science teachers in the education directorates in the Irbid governorate: Qasbah Irbid, BaniObaid District, Northern Mazar District, Northern Jordan District, Koura District, Bani Kinana District, and Ramtha District.

Definition of terms:

Degree of Application: The degree to which the research sample members obtain the items and areas of the study tool according to the five-fold scale used in the research.

The Knowledge Society: It refers to: "a society that improves the production and use of knowledge in the conduct of its life affairs, and in making sound and rational decisions regarding it" (Khalifa, 2019, 70 p).

Procedural definition: It is the society that seeks to acquire, produce, disseminate and employ knowledge in all areas of economic, educational, social and political life, using digital technology and communication networks for the development of the individual and society.

The requirements of the Knowledge Society: These are represented in the production, use, dissemination and use of knowledge in the development of the educational and supervisory process, which will have a positive impact on the educational process, the teacher's professional performance level, and the students' achievement level (Shdeifat, Basil 2014, 87p). It is measured procedurally by the degree to which the study sample members, from the science teachers and supervisors, obtain the items of the study tool.

Directorates of Education in Irbid Governorate: They are all directorates of education located in Irbid Governorate, distributed over seven directorates, namely:

Qasbah Irbid, BaniObaid District, Northern Mazar District, Northern Ghor District, Koura District, BaniKinana District, and Ramtha District.

Method and Procedures:

Research Methodology

The research followed the descriptive analytical approach due to its relevance to the objectives and nature of the field of this research, which is a research method based on data collection and description of facts related to the extent of meeting the requirements of knowledge society in the educational process from the perspective of science teachers and supervisors in Irbid Governorate, by surveying the responses of the study sample members to the study tool items and analyze it.

Population

The research community consisted of all science teachers and supervisors working in the directorates of education in Irbid governorate, and the number of supervisors reached (36) supervisors, and (700) teachers, according to the statistical report in the directorates of education in Irbid governorate for the year 2022 AD.

Sample

Due to the small size of the science supervisors community, the research sample consisted of all science supervisors and their number was (36) supervisors, and from (70) teachers who were selected in a stratified random manner from the research community.

Instrument

The researcher of the present study designed the research tool for the purpose of collecting data from the study sample, after reviewing the educational literature, identifying the areas that will be studied, and then developing paragraphs that measure each field of study. The requirements of the knowledge society regarding the teacher (9) paragraphs, the application of the requirements of the knowledge society regarding the supervisor (7) paragraphs, the application of the requirements of the knowledge society regarding the curriculum (9) paragraphs, meetingthe requirements of the knowledge society regarding the student (9) paragraphs.

Validity of the Instrument

To verify the validity of the tool, it was presented to a group of arbitrators specialized in educational administration and supervision, and educational technology from Jordanian university professors, and science supervisors in the directorates of education in the Irbid governorate. Linguistically, and in light of the arbitrators' opinions, some paragraphs were reformulated, some of them merged with other paragraphs, and the paragraph was accepted if the arbitrators agreed on it (80%) or more.

Reliability of the Instrument

The values of the tool's reliability coefficients were calculated using the Chronbach alpha method, and the method of re-application to the exploratory sample, which is the same sample on which the first application was applied, with an interval of two weeks between the first and second applications, and the values of the Pearson Correlation coefficient were calculated between the first and second applications.

Table (1) shows the internal consistency coefficients for the study tool domains using the (Alpha Cronbach) equation.

Table (1): The internal consistency coefficients for the study tool domains using the (Cronbach's alpha) equation

Research fields	Cronbach's alpha stability values	Cronbach's alpha stability values
Meeting the requirements of the knowledge society in relation to the teacher	**0.82**	**0.84**
Meetingthe requirements of the knowledge society in relation to the supervisor.	**0.84**	**0.86**
Meetingthe requirements of the knowledge society in relation to the curriculum.	**0.82**	**0.84**
Meetingthe requirements of the knowledge society in relation to the student.	**0.80**	**0.82**
with the total tool	**0.82**	**0.84**

Table (1) shows that the total reliability coefficient using the (Alpha Cronbach) equation for the fields of meeting the requirements of the total knowledge society was (0.82), and the total reliability coefficient of the fields was (0.84), which indicates that the study tool and its fields have acceptable reliability coefficients for the purposes of this research.

The study's procedures

The researcher of the present study followed the following steps:

1. The researcher of the present study reviewed the theoretical literature and previous studies related to the current research topic.
2. After the previous review, the researcher of the present study prepared the study tool, which is a questionnaire consisting of (34) items distributed over the research fields.
3. The researcher of the present study checked the validity and reliability of the study tool, by presenting it to a group of arbitrators.
5. The researcher of the present study chose the exploratory study sample from the study community and from outside the original study sample, to apply the study tool to it, in order to verify its validity and reliability.
6. The researcher of the present study chose the study sample, which consisted of (34) supervisors, and (70) science teachers.
7. The researcher of the present study passed the survey forms to the sample. He retrieved the forms a week later.
8. The researcher of the present study carried out statistical analysis and suggested recommendations.

Statistical methods

The following statistical methods were used by the researcher of the present study:

- Chronbach alpha to calculate the instrument's reliability coefficient.
- Correlation Pearson coefficient to calculate the structural validity of the tool.
- Arithmetic means, standard deviations, and ranks of the responses of the study sample members.

An Independent Samples T-Test to detect differences between the average teacher and

supervisor responses.

Discussion and results

The results related to the first question:

Q.1. What is the extent of meeting the requirements of knowledge society in the educational process from the perspective of science teachers and supervisors in Irbid Governorate?

To answer this question, the arithmetic averages and standard deviations of the attitudes were calculated. The following tables present such values

Table (2): Arithmetic mean and standard deviations of the attitudes of respondents in each area

No.	Field	Intermediate/ Teacher	deviation teacher	Grade	Medium/ Supervisor	deviation honorable	grade
1	Meet the requirements of the knowledge society in relation to the teacher.	3.24	0.92	Moderate	3.22	0.94	Moderate
	Meet the requirements of the knowledge society in relation to the supervisor.	3.21	0.90	Moderate	3.18	0.95	Moderate
2	Meet the requirements of the knowledge society in relation to the curriculum.	3.19	0.90	Moderate	3.16	0.96	Moderate
3	Meet the requirements of the knowledge society in relation to the student.	3.16	0.88	Moderate	3.14	0.99	Moderate
		3.19	total	Moderate	3.17	0.98	Moderate

The results in table (2) show that the arithmetic averages of the responses of the study sample members of science teachers and supervisors to the fields of the research tool

ranged between (3.19 -3.24/5) for science teachers, and between (3.14 -3.22/5) for science supervisors, and all fields were at a degree moderate from the application from the point of view of both science teachers and supervisors, where the field (application of the requirements of the knowledge society in relation to the teacher) ranked first among the fields of the tool with a moderate degree of application, followed by the field of (application of the requirements of the knowledge society with respect to the supervisor) with a moderate degree of The application, and thirdly, the field of (the application of the requirements of the knowledge society in relation to the curriculum) with a moderate degree of application, and finally the field of application of the requirements of the knowledge society with respect to the student and with an average degree of application. and (3.17) for science supervisors with a moderate degree of application as well. These results indicate a convergence between the point of view of science teachers and supervisors about the degree of application of the requirements of the knowledge society in the educational process, as it was found that all fields are applied in the educational process to a moderate degree from the point of view of teachers and supervisors the sciences.

This result is consistent with the results of the studies conducted by (Sabo, 2019; Kharabsheh, 2016; Atwan, 2015; Shaheen, 2015). Those results found that the degree of meeting the requirements of the knowledge society in the educational process is moderate. It is inconsistent with the results reached by (Nassar, 2016). The latter researcher found that the requirements of the knowledge society are met in the educational process to a large extent. It is inconsistent with the results reached by (Al-Hatamla, 2019). The latter researcher found that the requirements of the knowledge society are met in the educational process to a low degree. In order to find out the degree of application of the requirements of the knowledge society in the educational process from the point of view of science teachers and supervisors in each field, the arithmetic averages and standard deviations of the responses of the study sample members for the paragraphs of each field were calculated. The following tables explain this.

In order to find out the degree of meeting the requirements of the knowledge society in the educational process, the arithmetic averages of the responses of science teachers and supervisors for the paragraphs of each field of the study tool were extracted. This is as follows:

The first area: Meeting the requirements of the knowledge society, which is related to the teacher.

Table (3): Arithmetic mean and standard deviations of the responses of the study sample members to the items in the field "Knowledge society requirements in relation to the teacher" arranged in descending order

No.	Paragraph	average teacher	deviation to the teacher	grade	average for supervisor	deviation to supervisor	Rating
2	Uses modern educational technologies in teaching.	3.42	.840	Moderate	3.38	.890	Moderate
9	It works to produce knowledge to serve the educational process	3.40	.880	Moderate	3.34	.900	Moderate
7	Uses knowledge in the educational process	3.34	.900	Moderate	3.30	.900	Moderate
1	Employs knowledge to serve the educational process	3.32	.980	Moderate	3.28	.980	Moderate
8	Practicing the skill of providing educational programs at any time using information and communication technologies	3.24	.950	Moderate	3.20	.960	Moderate
5	Uses technology programs to support traditional learning methods.	3.22	.930	Moderate	3.18	.950	Moderate
4	Participates in the production of educational programs	3.15	.950	Moderate	3.13	.980	Moderate

6	It is able to link the study material with the external educational activities of the students.	3.12	.930	Moderate	3.10	.950	Moderate
3	Possesses the skill of providing training programs at any time using information and communication technologies.	3.00	.880	Moderate	3.08	.940	Moderate
	total	3.24	0.92	Moderate	3.22	0.95	Moderate

Table (3) shows that the arithmetic mean of the responses of science teachers and supervisors to the paragraphs of the field of knowledge society requirements in relation to the teacher ranged between (3.00 -3.42) from the science teachers' point of view, and between (3.08 -3.38) from the point of view of science supervisors, where all came The paragraphs of the field have a moderate degree of application from the point of view of science teachers and supervisors, and paragraph No. (2) which states: (Uses modern educational techniques in teaching), ranked first among the paragraphs of the field with an arithmetic mean of (3.42) for science teachers, and (3.38) For science supervisors, with a moderate degree of application, and in the last place Paragraph No. (3), which states: (He has the skill of providing training programs at any time using information and communication technologies) with an arithmetic average (3.00) for science teachers, and (3.08) for science supervisors, with a score of (3.00) for science supervisors. moderate from the application, and the total arithmetic mean of the domain for science teachers was (3.24), and (3.22) for science supervisors, with a moderate degree of application.

After looking at the values of the arithmetic mean of the responses of science teachers and supervisors to the paragraphs of this field, it turns out that there is an average degree of approval from the point of view of science teachers and supervisors about the degree of meeting the requirements of the knowledge society in the educational process with regard to the teacher, and this result indicates that science teachers need to develop their skills Their competencies for obtaining knowledge, organizing it and applying it in educational care through informing them of everything that is new in the field of specialization and applying this to produce new knowledge through which the study material is developed through research and knowledge and the production of an enrichment educational material.

This result can be attributed to the nature of the design of the organizational structure in the school, which is often not characterized by flexibility or allowing the absorption and meeting the requirements of the knowledge society. Educational flexibility that allows a great possibility of sharing and transferring knowledge among workers within the educational institution, and perhaps this requirement was reflected in the availability of appropriate conditions to effectively implement the requirements of the knowledge society in the educational process. This result agreed with the study (Sabo, 2019; Kharabsheh, 2016; Atwan, 2015; Shaheen, 2015). Which showed that the degree of meeting the requirements of the knowledge society in the educational process is moderate. It differed with Nassar's study (Nassar, 2016), which indicated that the requirements of the knowledge society are met in the educational process to a large extent, and with the study of potentials (Al-Hatamla, 2019). Which showed that the requirements of the knowledge society are met in the educational process to a low degree.

The second area: meeting the requirements of the knowledge society, which is related to the supervisor.

Table (4): Arithmetic mean and standard deviations of the responses of the study sample to the paragraphs of the field "Knowledge society requirements in relation to the supervisor" arranged in descending order

No.	Paragraph	average teacher	deviation to the teacher	Grade	average for supervisor	deviation to supervisor	grade
12	It applies the directions of educational supervision in the light of the knowledge society.	3.38	.840	Moderate	3.36	.890	Moderate

16	Works to produce knowledge to serve the supervisory process.	3.32	.880	Moderate	3.30	.900	Moderate
14	Employs knowledge to serve the supervisory process	3.26	.900	Moderate	3.25	.900	Moderate
10	Electronic supervision is used using information and communication technologies.	3.24	.950	Moderate	3.22	.980	Moderate
17	Uses technical software supportive of traditional supervision methods.	3.18	.930	Moderate	3.15	.960	Moderate
15	Develop in supervisory programs in light of the requirements of the knowledge society.	3.10	.950	Moderate	3.08	.950	Moderate
13	Possesses the skill of presenting supervisory activities using information and communication technologies.	3.00	.880	Moderate	2.90	.980	Moderate
	The overall degree of the field	3.21	0.90	Moderate	3.18	.950	Moderate

Table (4) shows that the arithmetic averages of the responses of science teachers and supervisors to the paragraphs of the field of knowledge society requirements in relation to the supervisor, ranged between (3.00 -3.42) from the science teachers' point of view, and between (2.90 -3.36) from the point of view of science supervisors, where all The paragraphs of the field have a moderate degree of application from the point of view of science teachers and supervisors. Paragraph No. (12) which states: (Applying the directions of educational supervision in the light of the knowledge society), ranked first among the paragraphs of the field with an arithmetic average of (3.38) for science teachers, and (3.36) for science supervisors, with a moderate degree of application, and in the last place paragraph No. (13) which states: (He has the skill of providing training programs at any time using information and communication technologies) with an arithmetic average (3.00) for science teachers, and (3.08) for science supervisors , with a moderate degree of application, and the total arithmetic mean of the domain for science teachers was (3.21), and (3.18) for science supervisors with a moderate degree of application.

After looking at the values of the arithmetic averages of the responses of science teachers and supervisors to the paragraphs of this field, it turns out that there is an average degree of approval among science teachers and supervisors about meeting the requirements of the knowledge society in the educational process with regard to the supervisor, and this result indicates that science supervisors need to develop their skills and competencies to obtain Knowledge, its organization and application in supervisory protection, by informing them of all that is new in the field of supervision and its trends in the light of the knowledge society, and applying this to produce new knowledge through which supervisory methods and programs are developed.

This result can be attributed to the adherence of some supervisors to the application of traditional supervisory methods and activities, which are often not characterized by flexibility or allowing the understanding of the requirements of the knowledge society and their application in educational supervision. Educational, as the flexible supervisory organizational structures allow a great possibility for knowledge sharing and transfer between supervisors, and this requirement may be reflected on the availability of appropriate conditions to effectively implement the requirements of the knowledge society in the supervisory process. This result agreed with the study (Sabo, 2019; Kharabsheh, 2016; Atwan, 2015; Shaheen, 2015). Which showed that the degree of meeting the requirements of the knowledge society in the supervisory and educational process is moderate. And it differed with Nassar's study (Nassar, 2016), which indicated that the requirements of the knowledge society are met in the supervisory and educational process to a large extent, and with the study of potential (Al-Hatamla, 2019).

Which showed that the requirements of the knowledge society are met in the educational process to a low degree.

The third area: meeting the requirements of the knowledge society in the educational process with regard to the curriculum.

Table (5): Arithmetic mean and standard deviations of the responses of the study sample to the paragraphs of the field "Knowledge society requirements in relation to the curriculum", arranged in descending order

No.	Paragraph	average teacher	deviation to the teacher	Grade	average for supervisor	deviation to supervisor	Grade
20	The curriculum helps in developing students' creative thinking skills.	3.38	.800	Moderate	3.34	.890	Moderate
22	The curriculum helps train students on ways to access information that meets their needs.	3.32	.820	Moderate	3.30	.900	Moderate
24	The curriculum helps students build new knowledge.	3.28	.850	Moderate	3.25	.900	Moderate
18	The curriculum helps the student to produce new knowledge.	3.24	.920	Moderate	3.22	.980	Moderate
25	The curriculum assists students in transferring knowledge from theoretical to applied knowledge.	3.22	.860	Moderate	3.15	.960	Moderate
21	The curriculum links students with modern technologies to search for knowledge.	3.18	.880	Moderate	3.08	.950	Moderate
23	The curriculum is linked to societal needs and the labor market.	3.12	.920	Moderate	2.90	.980	Moderate
26	The curriculum helps students to learn on their own.	3.10	.950	Moderate	3.08	.950	Moderate
19	The school curriculum is in line with the latest developments in knowledge.	2.90	.980	Moderate	2.88	.980	Moderate
	The overall degree of the field	3.19	0.90	Moderate	3.17	.950	Moderate

Table (5) shows that the arithmetic averages of the responses of science teachers and supervisors to the paragraphs of the field of knowledge society requirements in relation to the curriculum, ranged between (2.90 -3.38) from the science teachers' point of view, and between (2.88 -3.34) from the point of view of science supervisors, where it came All paragraphs of the field have a moderate degree of application from the point of view of science teachers and supervisors, and paragraph No. (20), which states: (The curriculum helps in developing the creative thinking skill of students), ranked first among the paragraphs of the field with an arithmetic average of (3.38) for science teachers, and (3.34) for science supervisors, with a moderate degree of application, and in the last place paragraph No. (19), which states: (The school curriculum is in line with the developments of modern knowledge) with an arithmetic average of (2.90) for science teachers, and (2.88) for science supervisors, with an average degree of The total arithmetic mean of the field for science teachers was (3.19), and (3.17) for science supervisors, with a moderate degree of application.

This result indicates that there is a consensus among science teachers and supervisors on the importance of the curriculum in developing the cognitive aspects of students. Students' educational needs in line with the requirements of the knowledge society.

However, the curriculum still needs further revision and development in terms of the quality of knowledge it provides to students. This result agreed with the study (Sabo, 2019; Atwan, 2015; Shaheen, 2015). Which showed that the degree of meeting the requirements of the knowledge society in the educational process is moderate. It differed with Nassar's study (Nassar, 2016), which indicated that the requirements of the knowledge society are met in the educational process to a large extent, and with the study of potentials (Al-Hatamla, 2019).

Which showed that the requirements of the knowledge society aremet in the educational process to a low degree.

Fourth Domain: meeting the requirements of the knowledge society in the educational process with regard to the student.

Table (6): Arithmetic averages and standard deviations of the responses of the study sample members to the items in the field "Knowledge society requirements in relation to the student" arranged in descending order

No.	Paragraph	average teacher	deviation to the teacher	Grade	average for supervisor	deviation to supervisor	Grade
28	Developing the skills of scientific research and knowledge among students.	3.35	.780	Moderate	3.33	.890	Moderate
33	Empowering students to understand their educational needs	3.33	.800	Moderate	3.28	.900	Moderate
20	Developing students' social and cooperative skills represented in communicating with others, accepting difference and adapting to different roles.	3.28	.820	Moderate	3.22	.900	Moderate
32	Developing the students' self-learning skill.	3.25	.870	Moderate	3.22	.980	Moderate
27	Develop students' critical thinking skills	3.18	.880	Moderate	3.15	.960	Moderate
34	Students go to the cognitive resources that help them to think.	3.15	.900	Moderate	3.08	.950	Moderate
	Develop students' ability to build new knowledge.	3.10	.920	Moderate	3.00	.980	Moderate
31	Develop students' ability to use modern technology.	3.00	.890	Moderate	2.97	.950	Moderate
29	Develop students' ability to access various information from reliable sources.	2.80	.920	Moderate	2.94	.980	Moderate
	The overall degree of the field	3.16	0.88	Moderate	3.13	.950	Moderate

Table (6) shows that the arithmetic averages of the responses of science teachers and supervisors to the paragraphs of the field of knowledge society requirements with respect to the student ranged between (2.80 -3.35) from the science teachers' point of view, and between (2.94 -3.33) from the point of view of science supervisors, where all The paragraphs of the field have a moderate degree of application from the point of view of science teachers and supervisors, and paragraph No. (28), which states: (Developing the skill of scientific research and knowledge among students), ranked first among the paragraphs of the field with an arithmetic average of (3.35) for science teachers, and (3.33).) for science supervisors, with a moderate degree of application, and in the last place paragraph No. (29) which states: (Developing students' ability to access various information from reliable sources) with an arithmetic average of (2.80) for science teachers, and (2.94) for science supervisors, with a moderate degree of The total arithmetic mean of the field for science teachers was (3.16), and (3.13) for science supervisors, with a moderate degree of application.

It seems that this result is realistic, as most students in schools still depend on receiving knowledge in traditional ways, without resorting to searching for and generating knowledge, which requires students to acquire the skills to access knowledge from its sources and work to represent and apply it in learning and in their daily lives.

This result agreed with the study (Sabo, 2019; Atwan, 2015; Shaheen, 2015). Which showed that the degree of meeting the requirements of the knowledge society in the educational process is moderate. It differed with Nassar's study (Nassar, 2016), which indicated that the requirements of the knowledge society are met in the educational process to a large extent, and with the study of potentials (Al-Hatamla, 2019).

Which showed that the requirements of the knowledge society are met in the educational process to a low degree.

The results of the second question: Are there statistically significant differences at the significance level ($\alpha = 0.05$) between the respondents' attitudes?

To answer this question, the arithmetic means and standard deviations of the responses of science teachers and supervisors about the domains of the research tool and the total tool were extracted. Table (7) illustrates this.

Table (7): Application of the Independent Samples T-Test to the domains of the study instrument and the instrument as a whole according to the responses of science teachers and supervisors

Area	Gender	Mean	Std.	T	Sig.
Meeting the requirements of the knowledge society in relation to the teacher	Teacher	3.24	0.48	1.22	0.23
	Supervisor	3.22	0.49		
Meeting the requirements of the knowledge society in relation to the supervisor	Teacher	3.21	0.62	0.79	0.43
	Supervisor	3.18	0.49		
Meeting the requirements of the knowledge society in relation to the curricula	Teacher	3.19	0.58	0.66	0.51
	Supervisor	3.16	0.45		
Meeting the requirements of the knowledge society in relation to the student	Teacher	3.16	0.62	0.29	0.77
	Supervisor	3.14	0.54		
Overall	Teacher	3.19	0.51	0.74	0.47
	Supervisor	3.13	0.56		

Based on table No. (7),the following results can be reached:

There isn't any statistically significant difference at the significance level ($\alpha = 0.05$) between the arithmetic averages of the responses of science teachers and supervisors to the areas of requirements for the application of the knowledge society in the educational process according to their point of view. The (T) values are not statistically significant. That means that there is a match between the point of view of science teachers and supervisors in Irbid governorate on the degree of application of the requirements of the application of the knowledge society in the educational process. This result indicates that science teachers and supervisors realize the requirements of the knowledge society that must be met in the educational process in all its aspects related to the teacher, supervisor, student or curriculum.

Recommendations:

In light of the results that have been reached, the researcher of the present study recommends the following:

1. Holding training courses for teachers and supervisors on the use of modern methods of teaching and supervision based on the application of the requirements of the knowledge society in the educational process.
2. Exerting effort to promote awareness among teachers and supervisors of the importance of seeking professional development in order to implement the requirements of the knowledge society in the educational process.
3. Harmonizing the contents of the curriculum to achieve the requirements of the knowledge society.
4. Providing the needed technical equipment to improve the educational process.
5. Develop the technical infrastructure of schools in a way that contributes to building an educational system based on building knowledge and technology in education.
6. Exerting effort to conduct research related to the requirements of knowledge society and its relaitonship with other variables.

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