RESEARCH ARTICLE



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The Required Competencies for Future Teachers in Light of the Requirements of Intellectual Security and Knowledge Economy

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ABSTRACT

Intellectual security is one of the most important challenges facing the world in light of the rapid repercussions of globalization. Achieving it has become among the most important issues at all levels due to the radical change that globalization has brought about in the patterns of thinking in society. Also, the process of teacher preparation has gained increasing attention in light of the impact of the information and technological revolutions. Hence, teacher preparation processes must be reviewed in light of the information and technological revolutions, which qualify him to adapt to the requirements and challenges of this age. Therefore, the research aimed to identify the competencies necessary for the future teacher in light of the requirements of intellectual security and knowledge economy. To achieve this objective, a questionnaire was prepared that includes the competencies required for the teacher to qualify him to achieve the requirements of intellectual security and knowledge economy. It was administered to (77) male and female teachers in the schools of Najran, and (41) members of the teaching staff at the College of Education at Najran University. The final version of the questionnaire included a list of (27) competencies, divided into (15) competencies on intellectual security, and (12) competencies on knowledge economy. The results showed high importance and need for these competencies from the teachers and faculty members' perspectives. Also, there were no differences in the teachers and faculty members' responses to the degree of need for these competencies.

Keywords: Knowledge economy, Intellectual security, Competencies

INTRODUCTION

Intellectual security has become one of the most important challenges facing the world in light of the rapid and great repercussions of globalization. Therefore, its realization has become one of the most important issues at the political, social and economic levels, because globalization - in all its forms and different mechanisms and channels - has brought about a radical change in the thinking patterns in society. This is because of its influence which transcends all local boundaries to take on a global character and the dangers and repercussions it produced; it became a threat to the intellectual security of societies. Intellectual security in light of globalization and its repercussions has become a national demand and a strategic vision that requires all institutions of society to draw up plans and exert maximum efforts and energies to keep pace and deal with those repercussions. The realization of intellectual security remains not only at the borders of security policies; rather, it has become obligatory for all societal institutions, including educational ones to unify concerted efforts and integrate roles to achieve intellectual security within the community.

Educational institutions occupy a prominent role in achieving the goals, objectives and interests of society because they build the individual, formulate his idea and give him the beliefs, principles and morals that make up his personality. They present him to society as a capable and qualified individual to exercise his role in building society. In addition to educational institutions, there must be a qualified teacher, who

works to translate the educational goals of the state and turn them into reality. He is responsible for transmitting knowledge and thoughts to students. Hence, the teacher's success is measured through his influence on students' behavior and the extent of this influence as intellectual security is linked to the human mind, being the most important and dangerous type of security (Al Kufiri, 2020).

Salem (2019) and Abu Qandil (2017) agree that intellectual security refers to a set of joint measures and procedures between the state and society with all its institutions to protect the individuals' minds from any intellectual or cultural deviations. This provides them with reassurance about their culture and identity. Intellectual security has dimensions.

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The political dimension is represented in protecting individuals from internal and external dangers. The social dimension refers to social relations and ties. The cultural dimension is represented in identity. Finally, the educational dimension is related to protecting students from negative influences and providing them with positive values and trends that enhance cultural and intellectual construction.

Khamis (2018) emphasized that the teacher has a major role in enhancing the elements of protecting the intellectual security of learners through his direct impact on their attitudes and behaviors. Therefore, realizing intellectual security requires permanent teacher preparation and professional development by providing him with modern visions and methods that qualify him to help his students acquire values, attitudes and behaviors. These will help them face the challenges resulting from the diversity of means of disseminating information and thoughts.

Al-Jasser (2018) also highlighted that the need to enhance intellectual security has increased in light of scientific and technological progress, whose impact has extended to all aspects of life. Also, the diversity of the means of communication and the ease of exchanging ideas and opinions led to the easy spread of different ideologies. This adds a new responsibility to the teacher, represented in building the learner's thought and preparing him to face the different currents and intellectual deviations. The matter is no longer confined only to one culture, but rather the diversity and multiplicity of cultures impose the necessity of qualifying the teacher to be able to provide his students with skills of dialogue, interaction, constructive criticism and critical thinking.

Several studies have emphasized the importance of enhancing intellectual security. Lee et al. (2018) pointed out the need to reconsider curricula and teacher preparation programs in light of the challenges associated with intellectual and cultural security. Gallego-Arrfat et al. (2019) emphasized the necessity of providing teachers with future competencies that qualify them to deal with the requirements of digital and intellectual security. Wagdi et al. (2018) recommended the necessity of training teachers on the professional competencies necessary to achieve intellectual security within educational institutions. Al-Zboun et al. (2021) confirmed the need to take advantage of electronic means in training individuals to enhance intellectual security. Nour et al. (2021) suggested the importance of studying the reality of teachers' roles in enhancing intellectual security and the obstacles that prevent it. Al-Johani (2020) assessed the reality of Islamic education teacher preparation programs in light of the requirements of intellectual security from the point of view of faculty members. Finally, Alfawaz (2021) emphasized the importance of universities in the Kingdom of Saudi Arabia to play their role in enhancing the requirements of intellectual security.

In light of the above, there are several educational effects and benefits to enhancing intellectual security. Also, the previous studies confirmed the need to reconsider teacher preparation programs in light of the requirements of intellectual security and to present the scenarios that would qualify the teacher in this field. Therefore, the necessity of revealing the necessary competencies for future teachers in light of the requirements of intellectual security is confirmed.

The twenty-first century is characterized by scientific and technical progress in various scientific and knowledge fields. In light of this progress, new factors have appeared that affect the global economy including knowledge and its applications. It is one of the main sources of global economic growth. Knowledge economy is one of the main factors to guide the global economy today. Al-Ghamdi (2020) states that knowledge has an economic dimension, given the value it adds to the product. Contemporary perceptions confirm that the main economic source of society will not be capital or the human element but rather knowledge. The focus on information and technology has become one of the main factors in economy. It requires a shift toward knowledge economy, which depends on enhancing the competitiveness of individuals by providing them with knowledge, attitudes and skills that qualify them to transform their societies towards knowledge economy. Educational systems are not immune to the impact of the era of knowledge economy; rather, it is the most affected, because it is a field for knowledge reception, growth, analysis, and the link between its results and applications. Therefore, there is a need for educational institutions to continuously research the field of teacher preparation and build his skills and competencies.

Sawy and Mahmoud (2019) confirmed that the teacher preparation process has gained increasing interest in light of the impact of information and technological revolutions. The conscious teacher can achieve the goals of education in light of rapid developments. This requires a review of teacher preparation processes in light of the information and technological revolutions to qualify him to adapt to the requirements and challenges of this era. In light of the increasing value of knowledge as an economic resource, many terms have emerged, foremost of which is the term knowledge economy. It is characterized by the tendency towards investment in human resources based on the importance of intellectual and knowledge capital and reliance on qualified and specialized cadres. Knowledge economy is defined as the economy that revolves around obtaining, sharing, using, employing and creating knowledge to improve the quality of life in all fields. By taking advantage of technological applications, employing the human mind and scientific research, it can respond and be in harmony with the knowledge and technical developments and developments in areas of communications and information technology.

Knowledge economy refers to the dissemination, production and employment of knowledge sufficiently in all areas of life socially, economically, civilly, politically to lead to the development and growth of the personality of the individual, institution or society, depending on the set of information and communication technologies (Al-Ghamdi, 2020). Therefore, it can be said that knowledge economy in the field of teacher preparation is a set of knowledge, values, trends and competencies necessary for the teacher to enable him to exercise his professional and social roles efficiently and effectively. Thus, knowledge economy is an economy that revolves around the acquisition, employment and innovation of knowledge to improve the quality of life. This can be realized by benefiting from information services and applications, the use of the human mind, and the employment of scientific research to bring about a set of strategic changes in the economic environment to become more responsive to the challenges of globalization and information technology and communications (Mustafa & Al-Kilani, 2011).

Several studies emphasized the importance of developing teacher competencies in line with the requirements of the future, especially the requirements of knowledge economy. Livingstone (2018) and Zahorec et al. (2021) emphasized the importance of including twenty-first-century skills and digital competencies in teacher preparation programs in light of the requirements of globalization and knowledge economy. Also, Alhothali (2021) confirmed the importance of changing concepts and competencies in teacher preparation programs in light of knowledge economy, and Varghese and Musthafa (2021) stressed the need for continuous research to analyze gaps in teacher preparation programs for the skills of the twenty-first century.

In light of the foregoing, the importance of developing the necessary plans and strategies to deal with knowledge economy is emphasized. It has a significant impact on all activities of the teaching and learning processes and outcomes. It is also shown from previous studies the need to develop teacher preparation programs in light of the requirements of providing them with the necessary competencies for the future and dealing with knowledge economy. Therefore, there is a need to reveal the competencies necessary for the future teacher in light of the requirements of knowledge economy.

Statement and Questions of the Study

The successive technological developments - whose impact extended to all fields of life - imposed the urgent need to enhance the dimensions of intellectual security. The diversity of the means of communication and the ease of exchanging ideas and opinions led to the easy spread of different ideologies. This imposed a new responsibility on the teacher represented in building the learner's thought and preparing him to confront the various currents and intellectual deviations.

Several studies have confirmed the importance of intellectual security (Al-Masry & Makhamra, 2018; Al-Samri, 2020; Al-Kafiri, 2020; Ölmez-Çağlar, Mirici & Erten, 2020; Lee et al., 2018; Al-Hujaili & Al-Tunisi, 2022). Also, the literature stressed the need to reconsider and plan professional development programs that contribute to providing teachers with the necessary competencies to deal with intellectual security challenges (Al-Jasser, 2018; Khamis, 2018; Al-Johani, 2021; Nour et al., 2021; Wajdi et al., 2018; Al-Zboun et al., 2021). This imposed the need to define the necessary competencies for teachers in light of the requirements of intellectual security.

On the other side, the current and future trends of education tend to develop education towards knowledge economy. It has become a necessity for education systems because it provides opportunities and challenges in employing cognitive and technological capabilities and applications. This employment imposes an urgent need for qualified individuals in all sectors and the education sector in particular. This is consistent with what was reported by several studies regarding reconsidering the planning of professional development programs for teachers in light of the challenges posed by the successive technological and cognitive developments (Livingstone, 2018; Goodwin, 2021; Hamed & Zaidan, 2020; Al-Hujaili & Al-Tunisi, 2022). Accordingly, the importance of knowledge economy and its impact on education becomes clear and imposed the need to identify the competencies of future teachers to qualify them to achieve the requirements of knowledge economy.

In light of the foregoing, there is an urgent need for teacher preparation and qualification to enable him to achieve the requirements of intellectual security and knowledge economy. Accordingly, the statement of the study was crystallized in the main research question "What are the necessary competencies for future teachers in light of the requirements of intellectual security and knowledge economy?"

Sub-questions:

- What are the competencies for future teachers in light of the requirements of intellectual security?
- What are the necessary competencies for future teachers in light of the requirements of knowledge economy?
- Are there statistically significant differences in the degree of teachers' need for competencies from the points of view of school teachers and faculty members at the College of Education?

OBJECTIVES OF THE STUDY

The current study aims to:

• identify the necessary competencies for future teachers in light of the requirements of intellectual security.

- identify the necessary competencies for future teachers in light of the requirements of knowledge economy.
- reveal the differences in the degree of teacher's need for competencies from the points of view of school teachers and faculty members at the College of Education.

Significance of the Study

The results of the current study may contribute to the following:

- Presenting some results that benefit those in charge of planning and developing professional development programs for teachers regarding the dimensions and requirements of intellectual security and knowledge economy.
- Shedding light on the requirements of intellectual security and knowledge economy and the associated competencies, which must be taken into account during teacher preparation before and during service.
- Identifying the necessary training needs for future teachers in the fields of intellectual security and knowledge economy.
- This research derives its importance from the importance
 of the topics it addressed. It will present some results to
 researchers that contribute to overcoming the obstacles
 they face when planning and developing teacher training
 programs in light of intellectual security and knowledge
 economy.
- Benefiting from the research designed instrument, a
 questionnaire including the competencies necessary for
 future teachers in light of the requirements of intellectual
 security and knowledge economy.
- The need of the educational field, especially in the Arab region, for this kind of study in light of the repercussions of globalization, weak identity and the emergence of deviant ideas.

METHOD

Research Design

In light of the nature of the study and its objectives, the descriptive analytical approach was used because it is suitable to achieve the objectives of the study. A questionnaire was used to identify the necessary competencies for future teachers in light of the requirements of intellectual security and knowledge economy as well as the extent of the need for those competencies from the point of view of school teachers and faculty members in the College of Education.

Population and Sample/ Study Group/Participants

The population of the study consisted of all male and female teachers in schools in Najran as well as members of the teaching staff in the College of Education. The sample of the study was randomly selected and numbered (77) from the teachers of the

three school stages as well as (41) members of the teaching staff in the College of Education at Najran University in the second semester of the academic year 1443 AH corresponding to 2022.

Data Collection Tools

To achieve the objectives of the study, a questionnaire was designed to identify the competencies necessary for the future teacher in light of the requirements of intellectual security and knowledge economy through the following steps:

- Determining the objective of the questionnaire: it aims to identify the competencies necessary for the future teacher in light of the requirements of intellectual security and knowledge economy.
- Determining the sources of deriving the competencies of future teachers in light of the requirements of intellectual security and knowledge economy. Some sources and references were concerned with identifying requirements for enhancing intellectual security (Al-Jasser, 2018; Khamis, 2018; Gallego-Arrufat et al., 2019; Al-Kafiri, 2020; Al-Asmari, 2020; Alfawaz, 2021; Al-Johani, 2021; AL-Zboun et al., 2021; Al-Hujaili and Al-Tunisi, 2022). Some references were also reviewed that were concerned with determining the requirements of knowledge economy (Livingstone, 2018; Sawy & Mahmoud, 2019; Al-Ghamdi, 2020; Hamed & Zaidan, 2020). A set of items was reached that represent some of the proposed competencies for the future teacher in light of the requirements of intellectual security and knowledge economy.
- Determining and estimating the responses method: In light of the objective of the questionnaire, a four-point Likert scale for the responses was selected as shown in Table 1:

The responses were estimated based on the weighted average method. The range (highest range - lowest range) was calculated, then the length of the category was calculated by dividing the range by the number of options as shown in Table 2.

Preparing the initial version of the questionnaire: In light
of the above, the initial version of the questionnaire was
prepared. It included demographic data as well as the two
domains of competencies. The first domain was formulated
entitled "The competencies necessary for the future teacher

 Table 1. Four-point Likert scale of the response degrees

Response	Highly agree	Agree	Not agree	Not highly agree
Degree	4	3	2	1

 $\textbf{Table 2} : Levels \ of \ weighting \ responses \ according \ to \ the \ Likert \ scale$

Range	1.00:1.74	1.75 : 2.49	2.50 : 3.24	3.25 : 4
Significance	No need	Weak need	Moderate need	High need

in light of the requirements of intellectual security" and included (14) items or competencies. The second domain entitled "The competencies necessary for the future teacher in light of the requirements of the knowledge economy" included (13) items or competencies.

Validity and Reliability

- A. Experts (external validity): The external validity of the research instrument was verified by presenting the initial version of the questionnaire to three specialists in measurement, evaluation, curricula and teaching
- methods. They were asked to express their opinion on the adequacy and comprehensiveness of the items, their linguistic integrity and connection to the domain they measure. The experts agreed on the appropriateness of the questionnaire and accuracy of items formulation.
- B. Internal consistency validity: To verify the internal consistency of the questionnaire, the Pearson correlation coefficient was calculated between the degree of each item of the questionnaire and the total score of the domain to which it belongs after distributing the questionnaire to (16) school teachers in Najran city as shown in Table 3 and 4:

Table 3: Pearson correlation coefficients of the items of the digital security domain with the total score of the domain

No.	Item	Pearson correlation
1	Introducing the roles required to maintain national security.	0.73**
2	Creating a stimulating educational climate to acquire the skills of purposeful dialogue and intellectual communication.	0.87**
3	Creating educational situations and activities that enhance learners' scientific thinking skills.	0.82**
4	Urging learners to coexist with other cultures and open up safely to them.	0.67*
5	Awareness of the negative effects of intellectual deviation and negative intellectual currents.	0.84**
6	Urging the promotion of the values of citizenship and belonging to the homeland and strengthening the national identity.	0.77**
7	Urging to master critical thinking skills and distinguishing between right and wrong.	0.68**
8	Encouraging participation in achieving group goals and respecting others' opinions.	0.81**
9	Simulating examples of creative thinkers and positive currents of thought.	0.65*
10	Dialogue with students on intellectual and community issues and problems and proposing solutions	0.69*
11	Planning activities and situations aimed at training students on the optimal use of their energies and leisure time for their benefit and their community.	0.74**
12	Planning and applying educational activities and models to urge students to be moderate and tolerant and accept others.	0.75**
13	Awareness of ideas, rumors, methods of incitement, and bullying through social media.	0.78**
14	Awareness of the importance of participating in the events and activities of forums, dialogue centers and intellectual institutions	0.82**
15	Planning and implementing activities and events that enhance the concept of moderation and preventive methods.	0.73**

Table 4: Pearson correlation coefficients of the items of the knowledge economy domain with the total score of the domain

No.	Item	Pearson correlation
16	Mastering the skills of creating learning communities based on cooperation and sharing of knowledge and applications.	0.63*
17	Training students to master metacognitive skills and respond to higher levels of thinking.	0.77**
18	Planning and implementing activities that reinforce learning to engage in learning.	0.71**
19	Personalized, professional, social, human, cultural and digital knowledge.	0.65*
20	Training students on effective communication skills, self-learning, life-long learning and decision-making.	0.64*
21	Developing experiences and learning communities that reinforce the principles of (Think, Share, Create).	0.79**
22	Mastering knowledge management skills and activating its mechanisms and skills.	0.74**
23	Mastering the skill of imparting knowledge to students using innovative methods, processes and techniques	0.85**
24	Employing global knowledge sources and diversifying the forms and methods of access to them.	0.69**
25	Planning and implementing educational activities and experiences that enhance discussions, dialogue, accountability, critical thinking, and teamwork.	0.79**
26	Planning and implementing innovative activities and methods to enhance the cognitive and social presence.	0.76**
27	Developing students' different thinking patterns and the ability to make decisions.	0.65*

Table (3) shows that the values of the correlation coefficients between the total responses of each item and the total responses on the domain of necessary competencies for the future teacher in the field of intellectual security were statistically significant. This indicates the internal consistency of all items of the questionnaire and their affiliation to the domain.

Table 4 shows that the values of the correlation coefficients between the total responses of each item and the total responses of the domain of the competencies needed for the future teacher in the field of knowledge economy were statistically significant. This indicates the internal consistency of all items of the questionnaire and their affiliation to the same domain.

C. The reliability of the questionnaire: To measure the reliability of the questionnaire, the Alpha Cronbach equation was used. The responses obtained from the exploratory sample - (16) male and female teachers in the schools of Najran - were processed. Table 5 shows the results of calculating the reliability coefficients for the two domains of the questionnaire:

According to Table 5, it is clear that the reliability coefficients for the domains of the questionnaire as well as the

coefficient of total reliability scored above (0.70). This indicates an acceptable reliability coefficient for the questionnaire.

Data Analysis

The SPSS (7, v25) program was used to process the collected data. The descriptive statistics methods represented in means, standard deviations, percentages, and frequencies were used. Also, the inferential statistics methods represented in the T-test were used to show any significant differences in the school teachers and faculty members' responses to the degree of need for competencies.

FINDINGS AND DISCUSSION

The Results of the First Research Question:

To answer the first research question "What are the competencies for future teachers in light of the requirements of intellectual security?" means and standard deviations were used to determine the importance of competencies from the points of view of school teachers and faculty members in the College of Education as displayed in Table 6.

Table 5: The results of calculating the reliability coefficients for the domains of the questionnaire

Domains of the questionnaire	Number of items	Values of reliability coefficients
The first domain: the required competencies in the field of intellectual security	15	0.71
The first axis: the required competencies in the field of knowledge economy	12	0.76
Total	27	0.73

Table 6: Means and standard deviations of the extent of the need for competencies in descending order according to the mean

			Standard	
Competencies	Source of response	Means	deviation	Degree of need
Introducing the roles required to maintain national security.	School teachers	3.56	0.50	High
	Faculty members	3.51	0.506	High
Creating a stimulating educational climate to acquire the skills of	School teachers	3.70	0.46	High
purposeful dialogue and intellectual communication.	Faculty members	3.73	0.449	High
Creating educational situations and activities that enhance learners'	School teachers	3.51	0.503	High
scientific thinking skills.	Faculty members	3.46	0.505	High
Urging learners to coexist with other cultures and open up safely to	School teachers	3.71	0.455	High
them.	Faculty members	3.68	0.471	High
Awareness of the negative effects of intellectual deviation and negative	School teachers	3.70	0.461	High
intellectual currents.	Faculty members	3.63	0.488	High
Urging the promotion of the values of citizenship and belonging to	School teachers	3.60	0.494	High
the homeland and strengthening the national identity.	Faculty members	3.54	0.505	High
Urging to master critical thinking skills and distinguishing between	School teachers	3.18	0.721	Medium
right and wrong.	Faculty members	3.61	0.494	High
Encouraging participation in achieving group goals and respecting	School teachers	3.58	0.496	High
others' opinions.	Faculty members	3.56	0.502	High
Simulating examples of creative thinkers and positive currents of	School teachers	3.62	0.488	High
thought.	Faculty members	3.59	0.499	High

Competencies	Source of response	Means	Standard deviation	Degree of need
Dialogue with students on intellectual and community issues and	School teachers	3.61	0.491	High
problems and proposing solutions	Faculty members	3.54	0.505	High
Planning activities and situations aimed at training students on the	School teachers	3.45	0.551	High
optimal use of their energies and leisure time for their benefit and their community.	Faculty members	3.41	0.499	High
Planning and applying educational activities and models to urge	School teachers	3.87	0.338	High
students to be moderate and tolerant and accept others.	Faculty members	4.00	0.000	High
Awareness of ideas, rumors, methods of incitement, and bullying	School teachers	3.34	0.476	High
through social media.	Faculty members	3.85	0.358	High
Awareness of the importance of participating in the events and	School teachers	3.61	0.491	High
activities of forums, dialogue centers and intellectual institutions	Faculty members	3.54	0.505	High
Awareness of the importance of participating in the events and	School teachers	3.66	0.476	High
activities of forums, dialogue centers and intellectual institutions	Faculty members	3.56	0.502	High
Overall	School teachers	3.58	-	High
	Faculty members	3.61	-	High

Table 6 shows that the degree of need for competencies related to the domain of intellectual security from the teachers' point of view came to a high degree whether for competencies related to the field of intellectual security in general or the degree of need for each competency, except for one competency "Urging to master critical thinking skills and distinguishing between right and wrong" where the need for was moderate. Faculty members in the College of Education see that these competencies are of great importance to teachers. The results of their responses indicate that the degree of need was high for all competencies. Teachers must master them. Also, the low degrees of standard deviations reflect a clear agreement on the degree of need for competencies both from the points of view of school teachers and faculty members.

It was also noted that teachers and faculty members agreed on the results of their response to the first five competencies in the degree of need. The competencies were: planning and applying educational activities and models to urge students to be moderate and tolerant and accept others, awareness of ideas, rumors, methods of incitement, bullying through the means of communication, creating a stimulating educational climate to acquire the skills of purposeful dialogue and intellectual communication, urging learners to coexist with other cultures and open up safely to them, awareness of the negative effects of intellectual deviation and negative intellectual currents. However, the order of the rest of the competencies varied according to the degree of need from the point of view of school teachers and faculty members.

The researchers believe that the general agreement that all competencies represent high importance and need as well as the agreement on ordering the level of need for the five referred competencies. This is due to their awareness of the importance of intellectual security and its impact on the educational system and society. Also, it is necessary to strive to acquire the skills associated with it and to impart them to learners to enable them to deal with various developments. These results are consistent with what was indicated by the studies of Al-Jasser (2018), Khamis (2018), Gallego-Arrufat et al. (2019), Al-Kafiri (2020), Al-Asmari (2020), Alfawaz (2021), Al-Johani (2021), AL-Zboun et al. (2021), and Al-Hujaili and Al-Tunisi (2022). They stressed the need to work on rehabilitating teachers in the field of intellectual security and providing them with the necessary skills to deal with issues and topics related to it. As for the competence of (urging to master critical thinking skills and distinguishing between right and wrong) which received a medium degree of need, this may be because teachers are practicing it now. Also, it was from their point of view, which may not be directly related to intellectual security skills.

The results of the second research question:

To answer the second research question "What are the necessary competencies for future teachers in light of the requirements of knowledge economy?" means and standard deviations were used to determine the importance of competencies from the school teachers and faculty members' point of view in the College of Education as depicted in Table 7.

According to Table 7, it was shown that the degree of importance and need for competencies in the field of knowledge economy was high. All the competencies were important and scored a high level of need from the point of view of the faculty members in the College of Education. The level of need for nine competencies was from the point of view of teachers. The means degrees of need ranged between

Table 7: Means and standard deviations of the extent of the need for competencies

Constant	C	Manue	Standard deviation	Dames of word
Competencies	Source of response	Means		Degree of need
Mastering the skills of creating learning communities based on cooperation and sharing of knowledge and applications.	Teachers	3.64	0.484	High
	Faculty members	3.56	0.502	High
Training students to master metacognitive skills and respond to higher levels of thinking.		3.78	0.417	High
levels of tilliking.	Faculty members	3.80	0.401	High
Planning and implementing activities that reinforce learning to	Teachers	3.13	0.833	Medium
engage in learning.	Faculty members	3.59	0.499	High
Personalized, professional, social, human, cultural and digital	Teachers	3.21	0.848	Medium
knowledge.	Faculty members	3.73	0.449	High
Training students on effective communication skills, self-learning,	Teachers	3.60	0.494	High
life-long learning and decision-making.	Faculty members	3.44	0.502	High
Developing experiences and learning communities that reinforce the	Teachers	3.65	0.480	High
principles of (Think, Share, Create).	Faculty members	3.68	0.471	High
8 8	Teachers	3.62	0.488	High
mechanisms and skills.	Faculty members	3.78	0.419	High
Mastering the skill of imparting knowledge to students using	Teachers	3.65	0.480	High
innovative methods, processes and techniques	Faculty members	3.61	0.494	High
Employing global knowledge sources and diversifying the forms and	Teachers	3.57	0.498	High
methods of access to them.	Faculty members	3.51	0.506	High
Planning and implementing educational activities and experiences	Teachers	3.55	0.501	High
that enhance discussions, dialogue, accountability, critical thinking, and teamwork.	Faculty members	3.73	0.449	High
and camwork.				
Planning and implementing innovative activities and methods to	Teachers	3.01	0.698	Medium
enhance the cognitive and social presence.	Faculty members	3.39	0.628	High
Developing students' different thinking patterns and the ability to	Teachers	3.31	0.544	High
make decisions.	Faculty members	3.37	0.488	High
Overall	Teachers	3.48	-	High
	Faculty members	3.60	-	High

(3.80-3.31). As for the three competencies of (Personalized, professional, social, human, cultural and digital knowledge, Planning and implementing activities that reinforce learning to engage in learning, and Planning and implementing innovative activities and methods to enhance the cognitive and social presence.), the level of need for them came moderate (3.21, 3.13, 3.01) respectively. Also, the low degrees of standard deviations reflect a clear agreement on the degree of need and importance for knowledge economy competencies both from the points of view of school teachers and faculty members. These results are in line with what was confirmed by the results of the studies by Livingstone (2018), Sawy and Mahmoud (2019), Al-Ghamdi (2020), and Hamed and Zaidan (2020). It was also noted that there was agreement in the responses to the competency that scored the highest level of need (Training students to master metacognitive skills and respond to higher levels of thinking.). There is a difference in the responses of teachers

and faculty members to the order of the degree of need for the rest of the competencies. This may be due to the importance of metacognitive skills and how to realize them and respond to higher levels of thinking. The nature of metacognitive skills and higher levels of thinking are based on the processes of planning, organizing, monitoring, selection and self-control as well as the processes of sorting, categorizing, analyzing, criticizing and evaluating. All of these processes and skills are directly related to the skills of managing and producing knowledge and employing it in solving problems and making decisions. As for the different responses between teachers and faculty members in ordering the level of importance and need for the competencies of knowledge economy, they may be due to the modernity of the field of knowledge economy and the skills and dimensions associated with it and consequently the lack of sufficient awareness among teachers of its requirements and dimensions.

Table 8: The results of the T-test to test the significance of the differences between the responses to the degree of need for competencies related to intellectual security from the point of view of teachers and faculty members.

Domain	Source of response	Means	Standard deviation	df	T	Sig.
Competencies of intellectual security	Teachers	3.58	0.164	••	0.588	0.516
	Faculty members	3.61	0.151	28		
Competencies of knowledge economy	Teachers	3.476	0.245		1.47	0.154
	Faculty members	3.599	0.149	22		

The Results of the Second Research Question:

To answer the third research question "Are there statistically significant differences in the degree of teachers' need for competencies from the points of view of school teachers and faculty members at the College of Education?" The T-test was used to show differences between the degree of need for competencies from the point of view of teachers and faculty members as displayed in Table 8.

Table 8. shows no differences between the responses of teachers and faculty members in the College of Education on the degree of importance and need for competencies related to intellectual security. There was a high need among teachers for those competencies. This result can be explained in light of the teachers' need for intellectual security competencies as well as the conviction of the faculty members in the College of Education that they are responsible for preparing and qualifying the teacher to keep pace with technical, information and digital developments. These results agree with those results of the studies by Al-Jasser (2018), Khamis (2018), Gallego-Arrufat et al. (2019), Al-Kafiri (2020), Al-Asmari (2020), Alfawaz (2021), Al-Johani (2021), and Al-Zboun et al. (2021).

The results also indicate that there were no differences between the responses of teachers and faculty members in the College of Education on the degree of importance and need for competencies related to knowledge economy and the presence of a high need among teachers for these competencies. There was a high need among teachers for those competencies. This result can be explained in light of the teachers' need for knowledge economy competencies as well as the faculty members' conviction in the College of Education that they are responsible for preparing and qualifying the teacher to keep the pace of informational developments and methods of knowledge management, production and employment. This result is in line with the results of the studies by Livingstone (2018), Sawy and Mahmoud (2019), Al-Ghamdi (2020), and Hamed and Zaidan (2020). They emphasized the importance of being aware of knowledge economy skills and mastering knowledge management, production, innovation and employment skills and the use of associated methods.

Conclusion

The study showed a number of results as follows:

- Intellectual security competencies are a basic requirement for the future teacher. They enable him to deal with technical, information and digital developments. The results concluded that intellectual security competencies represent a high level of importance and need for teachers from the points of view of teachers and faculty members in the College of Education. They are responsible for planning and implementing teacher preparation and qualification programs.
- The competencies of planning and implementing educational activities and models to urge students to be moderate and tolerant and accept others, aware of ideas, rumors, methods of incitement, and bullying through the means of communication; creating a stimulating educational climate to acquire skills of purposeful dialogue and intellectual communication; urging learners to coexist with other cultures and safely open on them; awareness of the negative effects of intellectual deviation and negative intellectual currents) were among the competencies that came at the forefront of intellectual security requirements, which the teacher must master.
- Knowledge economy competencies are a basic requirement for the future teacher to enable him to deal with knowledge developments and recent methods of knowledge management, production, innovation and employment as a supportive element for investment in the economy. The results showed that the competencies of knowledge economy represent a high level of importance and need for teachers from the points of view of teachers and the faculty members in the College of Education. They are responsible for planning and implementing teacher preparation and qualification programs.
- The competencies of (training students on mastering metacognitive skills and responding to higher levels of thinking, developing experiences and learning communities that enhance the principles of (think, share, create), mastering knowledge management skills and activating its mechanisms and skills, mastering the skill of imparting knowledge to students using innovative methods, processes and techniques), came at the forefront of knowledge economy competencies that the teacher must master.

 There were no differences between the teachers and faculty members' points of view in responding to determining the level of importance and need for intellectual security competencies and knowledge economy competencies. This confirms their importance and the need to train teachers to master them.

In Light of the Results, the Study recommended

- Reconsidering the planning and implementation of teacher preparation programs in faculties of education to ensure that the requirements of intellectual security and knowledge economy are included in those programs.
- Planning and implementing professional development programs and workshops to qualify teachers and provide them with the necessary competencies to achieve the requirements of intellectual security and knowledge economy.
- Selecting qualified and trained cadres to train teachers in educational departments and regions on mastering the competencies of intellectual security and knowledge economy.
- Reconsidering the curricula of different educational stages to ensure that they include activities, experiences and simulation models for intellectual security, management, employment and investment in knowledge.
- Including the competencies that have been reached within the professional standards for preparing teachers and then the requirements for obtaining a professional license for educational occupants.
- Benefiting from the list of competencies that have been reached in planning teacher preparation programs and courses as well as in planning the necessary teaching and professional competencies for the teacher.

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REFERENCES

- Abu Qandil, W. (2017). The degree of awareness of Arabic language teachers of the concepts of intellectual security and its relationship to school violence among tenth grade students in Jordan. Unpublished master's thesis, College of Graduate Studies, the Hashemite University, Jordan.
- Al-Asmari, F. A. A. (2020). A proposed conception of social studies curricula at the secondary stage in light of the dimensions of intellectual and cultural security in the Kingdom of Saudi Arabia. Journal of the Islamic University of Educational and Social Sciences, 4(1), 129-194.

- Alfawaz, N. M. (2021). The Role of Saudi Arabia's Universities in Enhancing Intellectual Security and the Requirement for National Dialogue in its Strategic Plans from the viewpoint of the Faculty Members. Journal of Educational & Psychological Sciences, 22(1).
- Al-Ghamdi, A. A. A. (2020). The degree to which the secondary school teacher practices his roles in the era of knowledge economy as seen by the leaders of public schools. The Arab Journal of Educational and Psychological Sciences, 4 (16), 67-96.
- Alhothali, H. M. (2021). Inclusion of 21st Century Skills in Teacher Preparation Programs in the Light of Global Expertise. International Journal of Education and Practice, 9(1), 105-127.
- Al-Hujaili, H. M. F., & Al-Tunisi, N. T. A. (2022). The degree of availability of the dimensions of intellectual security in the language competencies course for the secondary stage in the Kingdom of Saudi Arabia. Journal of Educational and Psychological Sciences, 6(9), 128-146.
- Al-Jasser, A. M. S. (2018). The role of English language teachers in consolidating the values of intellectual security among secondary school students in Riyadh and its relationship to teacher training. The Islamic University Journal of Educational and Psychological Studies, 26 (5), 64-84.
- Al-Johani, A. Z. (2021). Opinions of the Teaching Staff at Taibah University about Islamic Education Teacher Preparation Programs in the Light of the Requirements of Intellectual Security. International Education Studies, 14(5), 42-62.
- Al-Kafiri, W. M. S. (2020). The Role of Jordanian Schools in Enhancing Students' Intellectual Security. The Arab Journal for Security Studies, Naif Arab University for Security Sciences, 36 (1), 75-89.
- Al-Masry, I. S. & Makhamra, K. (2018). The role of school administrations in enhancing the intellectual security of learners: a field study on government schools in the city of Hebron. Journal of Humanities of Oum El Bouaghi University, 5(2), 316-338.
- Al-Zboun, M. S., Al-Zboun, M. S., & Fakhouri, H. N. (2021). The role of electronic means in enhancing the intellectual security among students at the University of Jordan. International Journal of Advanced Computer Science and Applications, 12(1), 358-364.
- Gallego-Arrufat, M. J. G. A., Torres-Hernández, N. T. H., Pessoa, T. P., Gallego-Arrufat, M. J., Torres-Hernández, N., & Pessoa, T. (2019). Competence of future teachers in the digital security area. Comunicar. Media Education Research Journal, 27(2).
- Goodwin, A. L. (2021). Teaching standards, globalization, and conceptions of teacher professionalism. European Journal of Teacher Education, 44(1), 5-19.
- Hamed, N. M., & Zaidan, A. M. S. (2020). Self-professional development for teachers of basic education in Egypt in light of the requirements of knowledge economy (a suggested perception). Fayoum University Journal of Educational and Psychological Sciences, 14(3), 213-314.
- Khamis, T. A. (2018). Training Needs for Middle School Teachers to Enhance Intellectual Security. Fayoum University Journal of Educational and Psychological Sciences, 10(3), 165-207.
- Lee, T., Cheng, Y. C., & KO, J. (2018). Curriculum reform with a school-based approach: Intellectual, structural and cultural challenges. School Leadership & Management, 38(3), 278-301.

- Livingstone, D. W. (2018). Tipping point for teachers? Changing working conditions and continuing learning in a 'knowledge economy'. International Journal of Lifelong Education, 37(3), 359-371.
- Mustafa, M. K., and Al-Kilani, A. M. (2011). The degree to which Islamic education teachers practice the roles of the teacher in light of knowledge economy from the point of view of their supervisors in Jordan. Damascus University Journal, 27 (3, 4), 681-718.
- Nour, M., Al Adwan, R. I., & Al Saideh, J. A. F. (2021). The Role of Islamic, Social and Arabic Education Teachers in Enhancing Intellectual Security from Public Secondary School Students Perspective Amman First Education Directorate. Review of International Geographical Education Online, 11(10), 1806-1828.
- Ölmez-Çağlar, F., Mirici, İ. H., Erten, İ. H. (2020). Measuring possible language teacher selves: A scale development study. International Online Journal of Education and Teaching (IOJET), 7(1), 327-353.
- Salem, H. I. A. (2019). The educational role of al-Sablah Secondary teachers in enhancing the intellectual security of their students

- in Jerash Governorate and the difficulties they face. Dirasat: Educational Sciences, 46, 91-116.
- Sawy, Y. Z., & Mahmoud, H. M. (2019). A proposed program based on knowledge-based economy and its effectiveness in developing future thinking and awareness of the future roles of students as teachers, Mathematics Division, Faculty of Education. Journal of the Faculty of Education, Ain Shams University, 43 (1), 15-62.
- Varghese, J., & Musthafa, M. M. A. (2021). Why the Optimism Misses? An Analysis on the Gaps and Lags of Teachers' Perceptions of 21st Century Skills. Education, 10(1), 68-75.
- Wagdi, M. B. N., Rahayu, S., Ulfatin, N., Wiyono, B. B., & Imron, A. (2018). The professional competency teachers mediate the influence of teacher innovation and emotional intelligence on school security. Journal of Social Studies Education Research, 9(2), 210-227.
- Záhorec, J., Hašková, A., Poliaková, A., & Munk, M. (2021). Case Study of the Integration of Digital Competencies into Teacher Preparation. Sustainability, 13(11), 6402.