



*Faculty of Education
Journal of Education*

***The Level of Implement of the Content of Knowledge
Economy at Public Schools Affiliated to the Ministry
of Education in Jordan***

BY

Dr.Sulaiman diab Al-Ahmad Dr.Mohammad Hasan Altarawneh

Faculty of Arts,

Al-Zaytoonah University of Jordan, Jordan

DOI: 10.12816/EDUSOHAG. 2020.

**Journal of Education – Volume (75) July, 2020
Print:(ISSN 1687-2649) Online:(ISSN 2536-9091)**

Abstract:

The aim of this study is to investigate the level to which teachers implement the content of knowledge economy from their point of view and whether this implementation varies depending on the variables: years of experience and scientific qualification. The sample consisted of (800) teachers were randomly selected from the public schools affiliated to the ministry of education in Jordan. To achieve the aim of the study, the researchers used a questionnaire that included (33) items. The results of the study showed that the level of implement of the content of knowledge economy at public schools was intermediate with a mean of (3.576). Also, the results of the study revealed significant differences ($\alpha=0.05$) between the means of the teacher's point of view due to the variables of: years of experience and scientific qualification. In the light of these results, the study suggested some recommendations.

Keywords: *Knowledge Economy, Public Schools , Jordan.*

درجة تطبيق مضامين اقتصاد المعرفة في مدارس وزارة التربية والتعليم في الأردن

د. محمد حسن الطراونة

د. سليمان ذياب الأحمد

جامعة الزيتونة الأردنية - كلية الآداب

الملخص:

سعت هذه الدراسة إلى تقصي درجة تطبيق المعلمين لمضامين اقتصاد المعرفة من وجهة نظرهم ووفقاً لمتغيري: سنوات الخبرة والمؤهل العلمي. تكونت عينة الدراسة من (٨٠٠) معلماً ومعلمة تم اختيارهم عشوائياً من المدارس الحكومية التابعة لوزارة التربية والتعليم الأردنية. ولتحقيق أهداف الدراسة استخدم الباحثان استبانة تكونت من (٣٣) فقرة تم التحقق من صدقها وثباتها. أظهرت نتائج الدراسة درجة متوسطة لتطبيق أفراد العينة لمضامين اقتصاد المعرفة في مدارسهم وفقاً للمعيار الذي اعتمد في هذه الدراسة، إذ بلغ متوسط الاستجابة الحسابي على جميع فقرات مجالات الاستبانة (3.576). كما أظهرت النتائج وجود فرق دال إحصائياً بين متوسطي استجابة أفراد العينة الحسابيين على فقرات الاستبانة تُعزى لمتغير سنوات الخبرة ولصالح من تزيد خبرتهم من المعلمين عن ست سنوات. وأظهرت النتائج وجود فروق دالة إحصائياً بين أوساط استجابات أفراد عينة الدراسة الحسابية على فقرات الاستبانة تُعزى لمتغير المؤهل العلمي ولصالح أفراد العينة المؤهلين علمياً بدرجة ماجستير فأكثر. وبناء على النتائج سابقة الذكر؛ أوصى الباحثان بمجموعة من التوصيات.

Introduction and Literature Review:

In the age of scientific and technological progress and knowledge explosion, the education process in different countries of the world plays an important role in improving the quality of the outcomes of this process, which contributes to the economic, intellectual, social and political development of these countries. It has emerged in this age a new set of concepts in the world of knowledge, such as the concept of knowledge surplus, the added value of knowledge, the information society and the knowledge economy. These concepts focus on the impact of knowledge on human capital and its importance in the development of contemporary societies (Abdul-hak & Soman, 2014; Alamayrah et al, 2012).

Contemporary societies are moving towards the new economy in which knowledge has become the engine of production and new important strategic resource of economic in life (Kafi, 2013). Arfaj (2019) indicates that the knowledge economy aims to be the main engine of economic growth in countries, based on the availability of ICTs, and the use of innovation and digitization. Also, Naser et al (2016) points out that the knowledge economy aims to focus on the investment process in individuals as resources that serve as the intellectual capital of society. This is confirmed by David (2010), who explained that the knowledge economy is one of the concepts that refers to the investment of knowledge in economic development through an integrated and interactive relationship between the knowledge that represents the capital of the members of society and the economic resources that represent the physical capital.

One of the basic requirements of any society to transform into a knowledge economy is The existence of an infrastructure, an environment that encourages creativity and Provide a supportive community force (Alqarah, 2013).

In this regard, Alrababah & Hiajnah (2017) point out that the knowledge economy requires a set of conditions to be achieved, such as the provision of ICT tools, the preparation of scientifically qualified and professional personnel, research capabilities and high skills in discovery and problem solving.

In addition to the above, the transition to knowledge economy and the development of societies into knowledge societies requires a shift in the roles of the teacher to become facilitator and the learner to achieve

The Level of Implement of the Content of Knowledge Economy.....

learning outcomes that are consistent with the requirements of the knowledge economy by providing students with the necessary skills, attitudes and values using modern teaching strategies, a variety of assessment methods, a classroom environment equipped with the new technology, and advanced curricula. Then we can answer the questions that are constantly asked: Why do we teach and learn? What are the characteristics of the teacher and learner we want? (Nelson, 2010; Yunus, 2001; Mahmoud, 2016; Alnashiri, 2014).

In Jordan, the development of education towards the knowledge economy has come in response to the requirements of this era to raise the level of the educational system in Jordan to meet the needs of Jordanian society local, regional and global and to create sustainable economic development through its skilled manpower capable of effectively participating in the knowledge economy locally, regionally, and globally (Ministry of Education, 2015).

The educational development project towards the knowledge economy is one of the best programs of educational development witnessed by the Jordanian educational system. The project occupies a distinguished position and great importance because it represents a comprehensive and integrated project for educational transformation based on national commitment to pursue the goals of qualitative development of learning according to specific time stages. In order to achieve this, an integrated educational program has been initiated, which is capable of creating an incubating environment that nurtures the learner and provides him with competencies and life skills that depend on the development of creative thinking, the ability to solve problems and interact with different societies (Alzyodi, 2012).

The project of educational development towards the knowledge economy includes four components (Ministry of Education, 2012):

Firstly: reorientation of the objectives of policies and strategies through administrative and governance reform, responding to the needs of the learner as the focus of the teaching and learning processes, and the needs of society according to the requirements of the knowledge economy.

Secondly: modification of educational programs and practices to achieve educational output suited to the knowledge economy in order to develop curricula and systems for measuring students' learning based on common vision and educational strategy.

The Level of Implement of the Content of Knowledge Economy.....

Thirdly: providing support for the development of appropriate quality education environments by developing and improving the physical and qualitative facilities and equipment necessary to provide an appropriate learning environment in accordance with the priorities of reducing overcrowded classrooms and replacing unsafe school buildings with secure school buildings.

Fourthly: focusing on the development of early learning readiness since early childhood, and strengthening methods of supporting programs that seek to improve the quality of learning.

Statement of the Problem:

A great deal of time and effort has been invested in Jordan to develop aspects of the teaching and learning processes, such as curricula, the school environment, and teacher training and rehabilitation to help students achieve learning outcomes that meet the requirements of the knowledge economy by providing them with the necessary knowledge, values and skills (Ministry of Education, 2015). Therefore, there is an urgent need to continuously investigate the extent to which teachers apply the contents of the knowledge economy.

Questions of the study:

1. What is the level to which teachers' implement the contents of knowledge economy from their point of view?.
2. Does the level of teachers' implement of the contents of the knowledge economy vary according to years of experience variable(1-5 years, 6 years and above)?.
3. Does the level of teachers' implement of the contents of the knowledge economy vary according to scientific qualification variable(diploma, bachelor, postgraduate)?.

Aims of the study:

1. Investigate the level to which teachers implement the content of knowledge economy from their point of view.
2. Investigate whether the level of teachers' implement of the contents of the knowledge economy varies depending on the variables: years of experience and scientific qualification.

The Level of Implement of the Content of Knowledge Economy.....

Significance of the study:

This study is highlighting the concept of the knowledge economy which is one of the modern trends in the field of education aimed at generating and disseminating knowledge. Moreover, this study is consistent with what has been recommended in previous studies that indicated that research should be carried out to investigate the level to which teachers implement the contents of the knowledge economy. Provide information to the Ministry of Education on the level of teachers' application of the contents of the knowledge economy in public schools.

Delimitations of the study:

1. The study was **delimited** to a sample of public schools teachers from the **educational** directorates: aljeeza, naor and wadi al-sir in the academic years: (2017/2018) and (2018/2019).
2. The study was **delimited** to the contents of the knowledge economy in the following domains: knowledge generation, Educational Technology, teacher and learner, and the school environment.
3. The study tool is prepared by researchers; therefore, the dissemination of its findings depends on the nature of the tool and its degree of suitability in terms of validity and reliability.

Terms of the study:

Knowledge Economy:

New trend of how knowledge is created, through the human mind as intellectual capital, and by utilizing information and communication technology applications in order to improve the quality of life of individuals and societies (Alhayek, 2015).

Contents of Knowledge Economy:

A set of requirements related to the knowledge economy aimed at the continuous promotion learning and teaching of the learner through modern methods that enable him to generate knowledge and employ it in his daily life. In this study, the level of the implement of teachers to the contents of the knowledge economy is measured by their responses to the items of the study tool in the following domains: knowledge generation, Educational Technology, teacher and learner, and the school environment.

The Level of Implement of the Content of Knowledge Economy.....

Methodology:

Population of the study:

The study population consisted of (4379) public schools teachers from the following directorates of education: aljeeza, naor and wadi al-sir in the Jordanian capital of Amman.

Sample of the study:

The sample consisted of 800 randomly selected teachers according to the following variables: years of experience and the scientific qualification, as shown in table 1.

Table 1.

Distribution of the sample according to the study variables

variable	Categories	n	%
Years of experience	1-5 years	382	48
	6 years and above	418	52
	Total	800	100
Scientific qualification	Diploma	76	10
	Bachelor	618	77
	Postgraduate	106	13
	Total	800	100

Data Collection:

To collect data, the researchers developed a questionnaire based on previous studies and theoretical literature on the subject of knowledge economy (Ministry of Education, 2012; Alamayrah et al, 2012; Alkhaldi, 2013; Altweissi, 2014; Ministry of Education, 2015; Naser et al, 2016; Alshweihat, 2016; Albatainy, 2016; Alrababah & Hiajnah, 2017; Abu Saaleek & Alwraikat, 2017). This questionnaire included (33) items on the likert five-scale: very agreeable, agreeable, moderately agreeable, disagreeable, very disagreeable. The items of the questionnaire were distributed into the following domains:

1. knowledge generation.
2. Educational Technology.
3. Teacher and learner.
4. School environment.

Also, the following criteria was used to judge the level to which teachers' implement the contents of knowledge economy from their point of view, as shown in table 2.

The Level of Implement of the Content of Knowledge Economy.....

Table 2.

Judgment criteria of the level to which teachers' implement the contents of knowledge economy

Implement level	mean
Low	1-2.33
Intermediate	2.34-3.67
High	3.68-5

Validity and Reliability of The Questionnaire:

To ensure the validity of the questionnaire, it was presented to a group of reviewers from the faculty members and specialists in the knowledge economy. Some items were amended in light of the recommendations especially with regard to the linguistic and structuring of the items. Also, to ensure the reliability of the questionnaire, a pilot study was conducted on (100) teachers, the Kronbach Alpha formula was used which amounted to (0.91) that was considered acceptable for the present study. Table 3 shows the reliability coefficient (Kronbach Alpha) for the questionnaire domains and questionnaire as a whole.

Table 3.

Reliability coefficient (Kronbach Alpha) for the questionnaire domains and questionnaire as a whole

Domains	Number of items	Reliability Coefficient
Knowledge generation	7	0.920
Educational Technology	8	0.930
Teacher and learner	10	0.780
School environment	8	0.890
Total	33	0.910

Data Analysis:

By using SPSS program, means and standard deviation were calculated. Also, independent sample T-Test, One-Way ANOVA and Scheffe test were used to investigate the significance of the mean differences of the sample responses on the questionnaire domains according to the following variables: years of experience and scientific qualification.

The Level of Implement of the Content of Knowledge Economy.....

Results:

Results related to the first question:

What is the level to which teachers' implement the contents of knowledge economy from their point of view?. To answer this question, the means of the sample responses and standard deviations were calculated on the items of the four questionnaire domains as illustrated in table 4.

Table 4.
Means, standard deviations and implement level of the sample responses on the items of the four questionnaire domains

Domain	№ of Item	Item Text	Mean	Std. deviation	Implement level
Knowledge generation	1	Knowledge generation and dissemination	3.606	1.049	Intermediate
	2	Providing data and information to develop useful knowledge	3.454	1.223	Intermediate
	3	Gain continuous learning skills and awareness expansion	3.531	1.237	Intermediate
	4	Providing education, training and development opportunities to achieve self-learning	3.614	1.112	Intermediate
	5	Developing knowledge and employing it in various activities	3.589	1.113	Intermediate
	6	The application of theoretical knowledge gained in practice	3.618	1.130	Intermediate
	7	Classifying acquired knowledge and employing it in its various fields	3.613	1.086	Intermediate
	For all items of the domain		3.575	0.870	Intermediate
Educational Technology	8	Employing educational technology in following up the learner achievement	3.548	1.304	Intermediate

The Level of Implement of the Content of Knowledge Economy.....

		and cognitive development			
	9	Organizing courses for teachers on the use of educational technology	3.425	1.351	Intermediate
	10	Using educational technology in the learning and teaching processes	3.673	1.196	High
	11	Using educational technology to communicate with the learner	3.354	1.279	Intermediate
	12	Using educational technology to communicate with educated parents	3.384	1.281	Intermediate
	13	Organizing training programs for learners to use educational technology	3.616	1.111	Intermediate
	14	Developing learners' abilities to master dealing with the Internet	3.524	1.209	Intermediate
	15	Activate the use of e-learning for learners	3.508	1.189	Intermediate
	For all items of the domain		3.504	0.998	Intermediate
Teacher and learner	16	Developing the learner's ability to apply the knowledge acquired in the school	3.563	1.168	Intermediate
	17	Encourage the learner to work in research groups	3.535	1.319	Intermediate
	18	Training the learner on life skills	3.723	1.163	High
	19	Development of scientific thinking for the learner	3.656	1.162	High
	20	Proficiency in the Arabic language and the ability to use it in various purposes of life with the need	3.650	1.269	High

The Level of Implement of the Content of Knowledge Economy.....

		to teach a foreign language, especially the English language			
	21	Developing the learner's abilities to use and analyze numbers and data	3.562	1.210	Intermediate
	22	Training the learner in recycling at school	3.540	1.235	Intermediate
	23	Encourage the learner to participate in scientific competitions	3.683	1.219	High
	24	Involving the learner in planning for teaching	3.609	1.228	Intermediate
	25	Encourage the learner to use mind maps	3.653	1.240	High
		For all items of the domain	3.618	1.006	Intermediate
School environment	26	Providing a suitable learning environment that is the main focus of the learner	3.626	1.271	Intermediate
	27	Activating school plans related to training and ensuring the quality of education	3.579	1.085	Intermediate
	28	Activating systems and instructions to achieve school goals	3.726	1.097	High
	29	Designing the school environment that develops the learner's self-learning	3.615	1.173	Intermediate
	30	Strategic planning and foreseeing the future in line with the needs of the learner	3.645	1.145	High
	31	Developing the driving skill of the learner	3.659	1.098	High
	32	Enhancing the scientific research	3.649	1.134	High

The Level of Implement of the Content of Knowledge Economy.....

	skills of the learner			
33	Availability of safety and comfort elements in the school building to meet the needs of the learner	3.289	1.506	Intermediate
	For all items of the domain	3.598	0.978	Intermediate
	For all items of the questionnaire	3.576	0.885	Intermediate

Table 4 shows that the level to which teachers' implement the contents of knowledge economy from their point of view at public schools was Intermediate with a mean of (3.576). However, the domain of “Teacher and learner” ranked first with a mean of (3.618) followed respectively by the domain of “School environment” with a mean of (3.598), the domain of “Knowledge generation” with a mean of (3.575) and finally the domain of “Educational Technology” with a mean of (3.504).

Results related to the second question:

Does the level of teachers' implement of the contents of the knowledge economy vary according to years of experience variable(1-5 years, 6 years and over)?. To answer this question, independent samples t-test was used to investigate the significance of the mean differences of the sample responses according to years of experience variable as illustrated in table 5.

Table 5.
Results of independent samples T-Test for the differences in the means of the sample responses according to years of experience variable.

<i>Years of experience</i>	<i>n</i>	<i>Mean</i>	<i>Std. deviation</i>	<i>df</i>	<i>t</i>	<i>Sig. (2-tailed)</i>
1-5 years	382	3.476	0.933			
6 years and above	418	3.668	0.829	798	-3.088	0.027

Table 5 shows a statistically significant difference ($\alpha = 0.05$) in the means of the sample responses in favor of teachers who have experience 6 years and above.

The Level of Implement of the Content of Knowledge Economy.....

Results related to the third question :

Does the level of teachers' implement of the contents of the knowledge economy vary according to scientific qualification variable(diploma, bachelor, postgraduate)?. To answer this question, the means of the sample responses and standard deviations were calculated according to scientific qualification variable as illustrated in table 6.

Table 6.

Means and standard deviations of the sample responses according to scientific qualification variable

Scientific qualification	n	Mean	Std. deviation
Diploma	76	3.240	1.237
Bachelor	618	3.600	0.850
Postgraduate	106	3.706	0.724
total	800	3.576	0.885

Also, One-Way ANOVA was used to investigate the significance of the mean of differences of the sample responses according to scientific qualification variable as illustrated in table 7.

Table 7.

Results of One-Way ANOVA for the differences in the means of the sample responses according to Scientific qualification variable

Source of variance	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	10.619	2	5.309	6.880	0.001
Within Groups	615.057	797	0.772		
Total	625.676	799			

Table 7 shows significant differences($\alpha=0.05$) in the means of the sample responses according to scientific qualification variable and to check between any of the levels of this variable were those differences; Scheffe test was used as illustrated in table 8.

Table 8.
Multiple Comparisons between levels of the Scientific qualification variable by using Scheffe test

(I) Qualifications	(J) Qualifications	Mean Difference (I-J)	Std. Error	Sig.
Diploma	bachelor	-0.356*	0.107	0.004
	postgraduate	-0.466*	0.132	0.002
Bachelor	diploma	0.356*	0.107	0.004
	postgraduate	-0.110	0.092	0.490
Postgraduate	diploma	0.466*	0.132	0.002
	bachelor	0.110	0.092	0.490

*. The mean difference is significant at the 0.05 level.

Table 8 shows a statistically differences ($\alpha=0.05$) in the means of the sample responses in favor of teachers who have bachelor and postgraduate qualifications. Also, table 9 shows no statistically differences ($\alpha=0.05$) in the means of the sample responses of teachers who have bachelor and postgraduate qualifications.

Discussion and Conclusion:

The results of the study concluded that the level to which teachers implement the contents of knowledge economy from their point of view at public schools was intermediate. This means that Ministry of Education should construct appropriate programs to develop and train teachers to keep pace with the requirements of the knowledge economy with regard to scientific mastery of communication tools and use of information technology(Alshweihat, 2016; Abu Saaleek & Alwraikat, 2017).

Also, the results showed that the domain of “Teacher and learner” came in the first rank which means that this result may be attributed to the ability of teachers to plan well, and use them different teaching strategies that contribute to training and developing students in different fields like using life skills, scientific thinking, language skills and engage them in scientific innovation competitions. Furthermore, the domain of “School environment” came in the second rank followed respectively by the domain of “Knowledge generation” and the domain of “Educational Technology”, which means there is interest in the requirements of the school environment but the level of interest is not as required. Also, these results may be attributed to the weakness infrastructure required by the knowledge economy in public schools in general, Lack of adequate

The Level of Implement of the Content of Knowledge Economy.....

budget for these schools and the large number of students in the classroom (Bonal & Rambla, 2003).

With regard to the effect of study variables, the results revealed a statistically significant difference due to the variable of years of experience in favor of 6 years and above. These results may be attributed to the ongoing educational rehabilitation and training programs related to the knowledge economy provided by the ministry of education for teachers during their various years of experience (Ramadan, 2015).

In addition to the above, the results revealed a statistically significant difference due to the variable of scientific qualification in favor of bachelor and postgraduate. These results may be attributed to the fact that the bachelor and postgraduate programs in the universities are related to the implement of the contents and principles of the knowledge economy.

Suggestions:

In light of the study results, the researchers recommend:

1. More Attention should be accorded during the preparation, rehabilitation and training of teachers before and during the service to how to deal with the applications of information technology and employ them in communicating with students.
2. . Providing a safe and comfortable school environment that meets the needs of different students.
3. Providing schools with the necessary educational techniques and advanced devices that contribute to the availability of data and information for teachers and students, through the World Wide Web and databases.
4. Using a variety of teaching methods that help students to use the knowledge they acquire in their daily lives.
5. Conducting further studies on the field of knowledge economy, to include samples and other variables different from the variables covered in this study.

Acknowledgment:

The researchers extends their appreciation to the Deanship of Scientific Research at Al-Zaytoonah University of Jordan for funding this work.

References:

- Abdul-Haq, Z., & Soman, A.(2014). The Level of Equity in the Arabic Language Curriculum of the New Educational Perspectives Included in the Education Reform for knowledge Economy (ERfKE). *Journal of Educationa and Psychology*, 47(4), 135-155.
- Abu Saaleek, A., & Alwraikat, M.(2017). Degree Possession of the Technological Skills Included in the Knowledge-Based Economy by Students in the Faculty of Educational Sciences at the University of Jordan. *Dirasat journal: Educational Sciences*,44(2), 159-180.
- Alamayrah, M., Alkhaldeh, T., & Maqableh, A.(2012). the degree of possessing and application for the knowledge economy amongst the school teachers of the basic stage in Jordan from the teachers' perspectives. *Al - Quds Open University Journal for Research and Studies*, 26(2), 243-280.
- Albatainy, S. (2016). degree of applying Knowledge economy at Albaha schools and ways of activating it. *International Interdisciplinary Journal of Education*, 5(4), 214-235.
- Alhayek, A.(2015). The degree of representation of Arabic language books for the basic stage for the knowledge economy. *Journal of Al-Manarah*, 21(2). 269-307.
- Alkhalidi, J.(2013). The Degree Islamic Education Teachers Possess Concepts of Cognitive Economics. *IUG Journal of Educational and Psychology Sciences*, 11(1), 159-187.
- Alnashiri, A.(2014). the quality of teaching performance for the teachers of social and national studies at the intermediate stage in the light of the requirements of the knowledge economy. *Un Published Thesis*, Umm Al Qu'ra University, Mecca, Saudi Arabia.
- Alqarah, A.(2013). The Cognitive Economy Skills Included the Chemistry Book of 2nd Secondary and Teachers Possesing Degree of them. *Journal of Humanities and Social Sciences*,(13), 1-22.
- Alrababah, H., & Hiajnah, W. (2017). Assessment of Knowledge Economy in the Empowerment of Educational Process and its Contemporary Challenges in Jordanian University. *IUG Journal of Educational and Psychology Sciences*, 25(1), 121-142.
- Alshweihat, S.(2016). The Assimilation Degree of the Principles of Knowledge Economy and their Implementation, of Public Schools Secondary Teachers, in Jerash Governorate in Jordan. *An-Najah University Journal for Research – B (Humanities)*, 30(10), 2000-2024.
- Altweissi, A.(2014). The Degree to Which Career Education Teachers are Practicing the Knowledge Economy skills, as Perceived by the

The Level of Implement of the Content of Knowledge Economy.....

- Educational Supervisors in Jordan. *Jordan Journal of Educational Sciences (JJES)*, 10(1), 37-54.
- Alzyodi, M.(2012). The role of telecommunication and information technology for the education development program towards knowledge economy in developing life skills among the students of public schools in Jordan. *The international Journal for talent development*, 3(2), 83-107.
- Arfaj, S. (2019). a paradigm for developing the home economics curricula for the female Masters students in view of the requirements of the knowledge economy and the needs of the labor market. *IUG Journal of Educational and Psychology Sciences*, 27(1), 360-395.
- Bonal, X., & Rambla, X. (2003). Captured by the Totally Pedagogised Society: Teacher and Teaching in the Knowledge Economy, Globalization. *Societies and Education*, 11 (2), 169-184.
- David, G.(2010). *The learning challenge of the knowledge economy*. Sense Publishers.
- Kafi, M.(2013). *Knowledge Economy*. First Edition, Arab Society Library, Amman, Jordan.
- Mahmoud, K.(2016). Roles of teacher in light of the requirements of knowledge economy age: analytical study. *Journal of criticism and enlightenment*,(5), 106-138.
- Ministry of Education. (2015). *Follow-up reports of the Education Development Project Towards Knowledge Economy (ERFKEII)*. Amman, Jordan.
- Ministry of Education. (2012). *Educational Development Project Towards the Knowledge Economy - Phase II (ERfKE II)*. Amman, Jordan.
- Naser, I. , Awajneh, A., & Sabbah, S. (2016). Degree of the Teachers' Practice of Their Roles and Knowledge Economy Concepts from Their Perspective in Palestine. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*. 7(5): 371-382.
- Nelson, M.(2010). The adjustment of national education systems to a knowledge-based economy: a new approach .*Comparative Education*, 46(4), 463-486.
- Ramadan, E.(2015). The Degree of Availability of Skills of Knowledge Economy among Students at Faculty of Social Sciences at AL Imam Mohamed Ibn Saud Islamic University from the perspectives of Faculty Members and students. *Jordan Journal of Educational Sciences (JJES)*,11(2), 219-237.
- Yunus, A. (2001). Education Reforms In Malaysia. Paper presented at the *International Conference on Education Research: Understanding Educational Issues in The Asia Pacific Region*. Seoul, Korea.