DonnishJournals 2041-1189

Donnish Journal of Educational Research and Reviews
Vol 2(2) pp. 025-031 March, 2015.
http://www.donnishjournals.org/djerr

Original Research Article

Development of Social Studies Curriculum and its Effectiveness in Developing the Professional Requirements for Students at Industrial High School in Light of Knowledge-based Economy Entrance

Ghada Naguib and Shadya Tammam

Institute of Educational Studies, Cairo University, Egypt.

Accepted 11h February, 2015.

The basic function of the Industrial Technical High School is no longer to transfer knowledge, but its function must be the ability to produce knowledge and prepare individuals who can deal with renewable attitudes. Therefore, the need arises to change the curriculum studied by those students so that they can shift from learners to consumption of knowledge and also to produce knowledge. This study carried out by researchers in turn out-of results of previous studies and the results of applying a questionnaire; there is no link between general courses - social studies and technical decisions which leading to the lack in professional requirement from graduate at industrial technical high school and this in turn leads to an inability to keep up with the foundations of the knowledge economy . Due to previous, results the researchers prepared this paper to know the effectiveness of suggested new social studies curriculum in raising professional requirements for students of the industrial technical high school and its effectiveness in transferring them from containers of knowledge into producers of knowledge. Based on the practical part of the paper, researchers have sensed the importance and the need to develop the social studies curriculum at industrial technical high school to raise the professional requirement due to each department and its programs.

Keywords: Social studies curriculum, professional requirements, industrial technical high school, containers of knowledge, producers of knowledge, based economy entrance.

INTRODUCTION

We live in the knowledge era that ripple changes in all fields of our life which shows a fast moving society. This in turn had led to the ability of communities becoming a measure of their production of knowledge and how to employ them to achieve growth in all areas and levels of living. (World Bank 2003).The knowledge society replaces the information society in the context of the knowledge economy. The knowledge society is not a society which has the knowledge or uses the information technology but it is a society that produces knowledge and employs it in various community activities. It is a community which limits unemployment and employs all capabilities of members of the community in all areas of life. And the society which is trying to shift to a knowledge society or knowledge economy society. It is necessary to restore his vision for knowledge and estimate its value. And in light of this the community must identify positions, processes and practices

Corresponding Author: ghadanagnag@gmail.com

within the community and then put a forward future plan and due to that, the community must draw a future map and walk towards it to achieve the forms of various community development.

The community can lay the base configuration of the intellectual capital for its members, by creating an educational structure that enables localization of science in all disciplines and to provide scientific and cultural supportive climate which help in generating new knowledge with its modern applications and using it in various areas of the society.Several studies have confirmed, including Al-Hashimi study (Abdel-Rahman Al-Hashemi ,2014) that positive engagement in the new era begins with the educational institutions, as the future trend of global education tend to develop education towards a knowledge economy.

But if we have a look at most schools of technical and industrial education generally in Egypt tasked to produce individuals with skills in the light of the knowledge economy, we will find that it is going in the opposite direction of its tasks. Minds of these students are capable to achieve the knowledge economy, when they produce views & innovative ideas and solutions to their society.(Khaled Saif, 2010) Confirms that there must be coherence and coordination between education and training within the industrial high school to prepare and develop students' skills in light of the knowledge economy.

The curriculum under the knowledge economy concept must take into account a number of important considerations one of them being the need to focus on the link between knowledge and skills, it is not important to list amount of information without a link to specialization and not to give the student the ability to discover its advantage in his specialty. If we look at the cultural courses at industrial high school we will find that they are separate from the technical courses.

And the development of a curriculum process start from the need to change and format students to become able to deal within the knowledge world, able to create knowledge and skilled in facing challenges. Knowledge economy tends to confirm the re-formulation of educational and technical training programs from conservation and indoctrination to develop the higher thinking levels among students into creativity and innovation levels , which means transformation & shifting from the acquisition of knowledge & skills into forwarding ideas and inventions for new goods and community services in all fields.This trend in education and training makes the industrial technical schools be imperative to re-formulate its programs in light of changing students' tasks from knowledge and skills into producing the knowledge and skills needed by their community.

So the researchers saw that it was necessary to start from the industrial technical institutions, because the Egypt society holds more than two-thirds of the population in these kinds of educational institutions, and the mission was to link the skills with knowledge economy and to hold the labor market internally and externally.

PROBLEM OF THE STUDY

The basic function of the Industrial Technical High School is no longer to transfer knowledge, but their function has evolved into the ability to produce knowledge and prepare individuals to be able to deal with renewable problems with new attitudes and ways. Therefore, the need to change the curriculum studied by those students raised is necessary to transform them from consumers to produceres of knowledge learning.

Industrial high school includes 13 disciplines (programs) and all disciplines are divided into several sessions (departments). The results show that the educational content of the social studies curriculum, which is taught at the industrial technical high school is the same as the one taught at commercial business, and agricultural high school. How can schools with different specializations produce individuals studying the same content.

The researchers carried out an exploratory study in order to know the effectiveness of the social studies curriculum in developing the professional requirements for students at industrial technical high school, and the target groups are: First Supervisors of Social Studies , second teachers of cultural materials at the Ministry of Education at Egypt – Industrial sector. The results of the study survey appeared that the educational experiences in the social studies curriculum content do not relate to the different disciplines (programs) inside the industrial high school, all disciplines, such as electricity, clothing and architecture ---- are taught the same curriculum. The third target group of the study survey was the alumni of industrial technical high schools, who stressed that the content lessons in social studies curriculum do not help them to achieve their professional requirements associated with their competence. Studies have also shown, one of them the Mocren study (Khalid Mocren, 2001) that the social studies curriculum at the industrial technical education is suffering many problems one of them is the cultural course is not linked to the specialization or profession courses.

Based on the above, researchers have sensed the importance and the need to develop the social studies curriculum at industrial technical high school to deal with the vocational requirement for each specialty. So the study problem determined; there is no linking between the cultural courses - social studies courses - and the technical courses which lead to a failure in achieving the professional requirement for the industrial technical high school alumni and this in turn leads to an inability to keep up with the concept & foundations of the knowledge economy. That means there was weakness in social studies curriculum to develop professional requirements of students at industrial technical high school disciplines, especially architecture and clothing specialized (programs) -Sample-of the study. Based on the above, the present study determined that the social studies curriculum in the industrial secondary schools is suffering many problems, one of them is that all the different disciplines within the school use the same curriculum. Resulting in a failure to link the curriculum with specialization or profession.

So researchers have felt the need to develop the social studies curriculum in light of the knowledge-based economy entrance in order to achieve the professional requirements for students of industrial high school specialized architecture and clothing.

QUESTIONS ABOUT THE STUDY

The current study is trying to answer the following questions:

1. What are the professional requirements for students at industrial high school specialized architecture and clothing?

2. What are the professional requirements achieved by students at industrial high school specialized architecture and clothing after studying the social studies curriculum?

3. What are the bases for developing social studies curriculum in light of the knowledge-based economy entrance to develop the professional requirements for students at industrial high school specialized architecture and clothing?

4. What are the effectiveness of the developed curriculum approach in developing the professional requirements for students at industrial high school specialized architecture and clothing?

STUDY TOOLS

The present study determined the following tools:

1. List of the professional requirements for students at industrial high school specialty architecture and clothing.

2. Questionnaire for experts to review the list of professional requirements for students at industrial high school specialty architecture and clothing.

3. Analysis content card for the social studies curriculum of students at industrial high school.

4. Achievement test, to measure the cognitive scope of the industrial high school students (study sample) after confirmation of its validity and reliability.

5. Performance test, to measure the skills and emotional scopes of the industrial high school students (study sample) after confirming its validity and reliability.

THE STUDY PROCEDURES

To answer questions of the study, researchers have been following the following steps:

To answer the first question

Extraction of a list of professional requirements for students at industrial high school specialty architecture and clothing, and that from; the theoretical framework, previous studies and the curriculums content analysis for programs of industrial high school specialty architecture and clothing (appendix 1)

To answer the second question

Analysis of the social studies curriculum of students at industrial high school specialty architecture and clothing using the content analysis card. (appendix 2)

Comparing content analysis results with the list of professional requirements for students at industrial high school specialty architecture and clothing, to identify which professional requirements can be achieved by the social studies curriculum. (appendix 3)

To answer the third question

Determine the basis of developing curriculum in light of knowledge-based economy entrance to develop the professional requirements for students at industrial high school specialty architecture and clothing. (appendix 4-5). Identify all of the (philosophy - objectives - content - teaching strategies - teaching aids - educational activities – evaluation system) for the developed social studies curriculum. (appendix 6)

To answer the fourth question

Measure the effectiveness of the developed curriculum. Apply two modules from the developed social studies curriculum in light of knowledge-based economy entrance: a unit for students at industrial high school specialty architecture (boys) (appendix 7), and a unit for students at industrial high school specialty clothing (girls) (appendix 8), to be sure from developing the professional requirements needed for those students.

RESULTS OF THE STUDY

1. There are statistically significant differences at 0.001 between the pre measurement and the post measurement refer to the post measurement (achievement test), which is indicate effectiveness of the developed curricula (architecture program) and the size effect of the program is 70% refer to Cohen & Z value.

2. There are statistically significant differences at 0.001 between the pre measurement and the post measurement refer to the post measurement (performance test), which is indicate effectiveness of the developed curricula (architecture program) and the size effect of the program is 70% refer to Cohen & Z value.

3. There are statistically significant differences at 0.001 between the pre measurement and the post measurement refer to the post measurement (achievement test), which is indicate effectiveness of the developed curricula (clothing program) and the size effect of the program is 70% refer to Cohen & Z value.

4. There are statistically significant differences at 0.001 between the pre measurement and the post measurement refer to the post measurement (performance test), which is indicate effectiveness of the developed curricula (clothing program) and the size effect of the program is 70% refer to Cohen & Z value.

Differences in Architecture Department Achievement Test

Table 1. Paired Samples Statistics

Achievement test	Average	Number of sample	Standard deviation
Pre	8.7826	23	3.65509
Post	32.0435	23	3.36396

Wilcox on Test

Table 2. Ranks

		N	Mean Rank	Sum of Ranks
Total B – total A	Negative Ranks	0[a]	.00	.00
	Positive Ranks	23[b]	12.00	276.00
	Ties	0[c]		
	Total	23		

a. total B < total A
b. total B > total A
c. total B = total A

Value of Z for the two Applications

Table 3. Test Statistics [b]

	Total B – total A
Z	7.214[a]
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.
b. Wilcox on Signed Ranks Test

Differences in Architecture Department Performance Test

Table 4. Paired Samples Statistics

Performance test	Average	Number of sample	Standard deviation
Pre	2.3478	23	1.46501
Post	11.3478	23	3.05419

Wilcox on Test

Table 5. Ranks

		N	Mean Rank	Sum of Ranks
VAR00011 - VAR00008	Negative Ranks	0[a]	.00	.00
	Positive Ranks	23[b]	12.00	276.00
	Ties	0[c]		
	Total	23		

a. VAR00011 < VAR00008
b. VAR00011 > VAR00008
c. VAR00011 = VAR00008

Table 6. Test Statistics [b]

	VAR00011 - VAR00008
Z	7.217[a]
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.
b. Wilcox on Signed Ranks Test

Differences on Clothing Department Achievement Test

Table 7. Paired Samples Statistics

Achievement test	**Average**	**Number of sample**	**Standard deviation**
Pre	.2609	23	.68870
Post	9.3478	23	4.01824

Wilcox on Test

Table 8. Ranks

		N	Mean Rank	Sum of Ranks
Total B – total A	Negative Ranks	0[a]	.00	.00
	Positive Ranks	22[b]	11.50	253.00
	Ties	1[c]		
	Total	23		

a. VAR00006 < VAR00003
b. VAR00006 > VAR00003
c. VAR00006 = VAR00003

Value of Z for the two Applications

Table 9. Test Statistics [b]

	VAR00006 - VAR00003
Z	4.115[a]
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.
b. Wilcoxon Signed Ranks Test

Differences on Clothing Department Performance Test

Table 10. Paired Samples Statistics

Performance test	**Average**	**Number of sample**	**Standard deviation**
Pre	.1269	23	.58870
Post	8.3478	23	4.01024

Wilcox on Test

Table 11. Ranks

		N	Mean Rank	Sum of Ranks
VAR00011 - VAR00008	Negative Ranks	0[a]	.00	.00
	Positive Ranks	22[b]	11.50	323.00
	Ties	1[c]		
	Total	23		

a. VAR00006 < VAR00003
b. VAR00006 > VAR00003
c. VAR00006 = VAR00003

Value of Z for the two applications

Table 12. Test Statistics [b]

	VAR00006 - VAR00003
Z	6.325[a]
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.
b. Wilcox on Signed Ranks Test

REFERENCES

Abdul al-Rahman al-Hashemi, & Faezah. Al-Azzawi, (2014), Curriculum and knowledge-based economy, Oman: Maseera Dar for publication distribution and printing, edition 2.

Abdul al- Rahman bin Saleh Mushayqih, (2002), Stability and change in the curriculum of the future school ", promoted paper to the Future School symposium , December 22, 2002, College of Education, King Saud University, p. 5.

Ahmed Ali al-Haj Mohammed, (2014), Knowledge-based economy and its development trends, Oman, Maseera Dar for the printing and publishing Central Library.

Organization and Management, Administration of central research.

Albert Saif Al Habib, (2012), How to upgrade and expansion in the field of technical education in Egypt, Presidency of the Council of Ministers, the Central Agency for

Ali bin Hassan al-Qarni, (2009), Requirements the shift in the future educational of secondary schools in Saudi Arabia in light of challenges of the knowledge economy.

Aziza al-Saadi, Haya Al Dosari, (2013), Knowledge economy concepts its applications and challenges in the Gulf Cooperation Council (GCC), workshop in the period from October 10 to 12, 2013, Doha, Qatar.

Bonal, X. & Ramba, X. (2003), Captured by the Totally Pedagogies Society: Teacher and Teaching in the Knowledge Economy.

Davenport, T. & Prusak, L. (1998), Working Knowledge: How Organizations Manage, Boston, Harvard Business School.

Hessen Muhy Eldeen, (2004), Knowledge-based economy in the Information Society, Journal of King Fahd National Library, Saudi Arabia.

Jamal Al Suwaidi, (2004), Human resource development in the knowledge-based economy, the Emirates Center for Strategic Studies and Research, the first edition, Abu Dhabi, p. 11.

Kamel Abdul Rashid Abd Rabbo, (2011), Development of technical education programs in light of industrial renewable requirements for qualification to the labor market, vision for the future, P. 195.

Khalid Elmocren, (2001), Architectural education programs in Saudi Arabia: A Comparative Study, Journal of King Saud University, Architecture and Planning.

Khalid Sief, (2010), Knowledge Economy and amputee Technical Education, February 23, issue 5979.

Mohammed Mrayati, (2005), The new economy: a knowledge-based economy, meaning of the new economy, the first Conference of the Economic Society of Oman in cooperation with ESCWA, Sultan Qaboos University and the Chamber of Commerce and Industry of Oman, Muscat 2- 3October.

Mona Imad al-Din, (2004), Education in the Arab world from the perspective of a future in the light of globalization, information technology and the world of knowledge, a study submitted to the Department of Educational Research and Development, Kingdom of Jordan, p. 37.

Munira Batarseh, (2005). Training program based on the competencies of the knowledge economy of professional development for teachers of home economics in Jordan, unpublished Ph.D. thesis, Amman, Arab University for Graduate Studies, Amman, Jordan.

Nihad Arabyat, (2005), Evaluation for biology book of secondary stage in light of the knowledge-economy standards from the standpoint of supervisors and teachers in Jordan.

Haitham Ayadaat, (2005), Construction a training program to develop the performing skills of teachers at industrial education in Jordan in light of the trend towards a knowledge economy and its impact on developing those skills, unpublished Ph.D. thesis, Amman, Arab University for Graduate Studies, Amman, Jordan.

Riele, K. & Crump, S. (2002), Education and Hope: Bringing VET in From of Margins, International Journal of Educational Inclusive, P.: 251-266.

Thurow, L. (1999), Building Wealth: the New Rules for Individuals, Companies and Nations in Knowledge-based Economy, New York.

Yim-Teo, T. (2004), Reforming Curriculum for a knowledge Economy: Study Case of Technical Education in Singapore, Paper presented to the NCIIA 8th Annual meeting Titled: Education to Works, P.: 137-144.