

The role of Arab Open University in developing its graduates' economic and social returns

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ABSTRACT

This study aimed at finding out the economic and social returns achieved by Arab Open University graduates of 2012-2014. The sample consisted of 251 out of 1565 BA male and female graduates who voluntarily identified the sort of returns they achieved by choosing any of 43 items included in a questionnaire posted on their emails, put on the University's site and distributed at the Alumni Club meeting in 2017. The researchers used means, standard deviations and percentages to identify the economic and social returns gained by the graduates, while they used (T Test) to find differences in these returns due to gender and (One Way ANOVA) to know the differences in these returns due to the adequacy of the academic programs. The results showed a wide range of economic and social returns achieved by the graduates, as a result of the open learning style in the University, while no significant differences were noticed in these returns due to gender or specialization.

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1. INTRODUCTION

Education is considered a leading field in human energies investment for the sake of society development and modernization, especially in the economic and social sectors, provided that educational outcomes are well built and organized to the very needs of community. As with the economic returns, researchers as Titei [1], Woessmann [2], Stevenson [3] as well as Kőmives, Héder and Dajnoki [4] strongly believe that education is a leading sector of investment and development, and that universities' outstanding graduates gain good chances in the labour market. On the other hand, researchers have not yet agreed about these returns as far as social returns are concerned. Martins and Jin [5] claim that the available studies have not yet reached any stylized facts about social returns, while researchers like Canton [6], Henderson, Houtenville and Wang [7] stress the objective social returns to educated employees.

Depending upon such findings, a university outcomes, therefore, should always be assessed and evaluated on practical bases. One of the ways to achieve this goal is to look into the economic and social returns for the university graduates. This provides fundamental indications about graduates' chances to develop their economic and social life, as well as the universities to evaluate their programs' content, methods, strategies, and final outcomes; whether they are well tailored to the needs of both, the graduates and the society. This study tried to follow up what graduates of Arab Open University/ Jordan 2012-2014 have achieved as far as economic and social returns are concerned as a result of the adequacy of the academic programs.

It is quite agreed now that a university's mission is not limited to providing educational opportunities for students, but also to contribute to the development of their behavior to positively affect their

lives and their relationships at the social level, and to offer solutions to scientific, economic and social problems of a community, by providing capable human resources. Such kind of manpower can effectively participate in developing various sectors of society, through their new knowledge, creative thinking, skills, attitudes and energy. The ability of a university to provide labor market with such resources to promote these tasks is now an important criterion for evaluating the outcome quality of any given university. It is this what "Investment in Education" really means [8, 9].

With the vast growing numbers of people seeking for learning opportunities in order to find suitable jobs or to improve their positions in the labor market, universities experience a serious competition to provide the best possible learning conditions by developing their plans, programs, curricula, strategies and modern methods of teaching, as well as adopting the most technological innovations, particularly in ICT, to develop their graduates' knowledge, skills and attitudes making them more qualified to gain the best opportunities available in the labor market [10].

The United Nations sees that investment in education requires a number of conditions which stand in the forefront of providing educational opportunities for all, and a high level of curriculum planning based on community needs and development requirements [11]. Therefore, educational innovations of modern teaching methods and strategies, as well as providing opportunities for active communication with learners, have become basic requirements for economic and social development in any society [12].

The new information and communication technology, and its applications in education in particular, has provided renewable solutions to educational problems facing our world today, which is characterized as being rapidly and constantly changing. E-Learning, as an unconventional learning style, is based on active self-learning in developing students' competencies. It requires open source systems for learning, production and application of knowledge, utilizing up-to-date communication technology. This kind of education has now become the answer for both local and global labor markets [13].

Scholars have constantly stressed that accurate utilization of new trends in instructional technology and communication could guarantee active learning and counts for better attitudes towards explorative and creative thinking. This can fundamentally help solve various problems facing society of today [14].

New educational styles, systems and trends, such as On-line Learning, Open-learning, Blended Learning, Virtual Learning...etc. which are largely dependent upon E-Learning, are now dominating the educational scene in the world of today, particularly in the developed countries. They are described by both teachers and students as being highly attractive, interesting and fruitful in the sense of ability to respond to their expectations and circumstances, as well as the labor market experiences and skills required. Students experience high degrees of interest and pleasure in E-Learning as it utilizes multi strategies, methods and media. This explains the rapid widespread of modern instructional models [15].

Rutten and Vandermeersche [16] and Allen [17] indicate that information and communication technology applications in the field of education have exceeded information process, as they have become an important means for scientific and cultural knowledge at almost all community levels, and that this necessarily promotes cultural communication among communities and encourages a wider social participation in the daily search for appropriate solutions to problems of life faced by these communities.

On the other hand, LMS being a basic element in E-Learning applications, provide great opportunities to achieve common goals of both learners and employers. Both parties can easily know details about the educational content and applications in any given educational institute because of the high level of transparency in which content, activities, skills and trends are presented [18].

As an outcome of these consequences in the mutual interaction between manpower seeking for jobs and the labor market, universities have paid growing attention to what their students should acquire, what types of knowledge, skills and experiences that may enable their graduates to contribute to the development of local communities. They invented sets of criteria to ensure continuous curricula development that suits the requirements of the labor market, characterized by permanent change and regeneration. AOU has developed its own criteria to achieve a high standard of response to both students' needs and labor market's requirements [19].

Data available about the situation in Jordan, shows that Jordan is characterised by the World Bank in 2012 as being at a good level of education compared with developing countries [20]. However, only 38 percent of jobs was provided by the public sector in 2014 [21]. This was a result of the economic reform process which started in Jordan after its financial crisis of 1989 when the privatisation of state owned enterprises and the reduced the size of the public sector [22]. However, Alshyab, Sandri and [23], looking into the differences in returns to education in Jordan according to gender and public-private sector, concluded that education is an investment, and its returns in terms of increased wage can be used as an indicator for productivity in any economy. Their findings showed that returns to education for male employees are higher than for female in Jordan in both sectors.

Since its foundation in 2002, AOU has adopted a modern educational system based on integrated educational strategies which provides education to all who wish to learn, regardless of their age, gender or nationality. It adopts the Blended Learning approach that combines traditional face to face classes with E-Learning and Distance Instructional strategies. It also stresses the development of self-learning skills and attitudes providing a widely open source environment. Before AOU was established, so many students could not have any access to traditional universities in order to continue their study, as they were engaged to their jobs, families and other social responsibilities, or living in distant places to these universities. AOU has provided advanced opportunities for those students to continue their study and upgrade their knowledge, experience and their chances in the labor market. So the University procedures have varied, and several branches have been established in the Arab countries (9 branches now). The University has employed highly qualified teaching and managerial staff in bringing about a qualitative shift in the nature of students' learning in terms of flexibility, rich knowledge and technical skills [24].

A follow-up study about the University graduates in the labor market and fieldwork may provide important implications to the University, highlighting the extent to which graduates have achieved so far in developing their economic and social status as a result of study at this University. It also gives field evidence about the extent to which AOU has been successful in fulfilling its stated goal to provide its graduates with the needed knowledge, expertise and skills applicable to the labor market. Such evidence is so essential in deciding what plans, arrangements and procedures should be taken into account for additional improvements. To fulfill this aim, the researchers have looked into the economic and social returns the graduates have achieved as a result of their study in AOU / Jordan from their point of view

2. RESEARCH METHOD

2.1. Problem of the Study

There is a lack of sufficient information about economic and social returns that AOU / Jordan graduates have got due to their study at the University as they themselves define. This shortage of information stands as an obstacle to the efforts of decision makers in the University to assess and evaluate its outputs and the extent to which graduates have been able to benefit at the economic and social levels, so that they can continuously generate more relevant objectives, curricula and academic performance.

2.2. Questions of the Study

This study intended to answer the following questions:

- a. What are the economic returns achieved by AOU / Jordan graduates from their point of view?
- b. What are the social returns achieved by AOU / Jordan graduates from their point of view?
- c. Are there significant differences in economic returns between the university graduates due to gender?
- d. Are there significant differences in social returns between the university graduates due to gender?
- e. Are there significant differences in economic returns among university graduates due to academic programs?
- f. Are there significant differences in social returns among the university graduates due to academic programs?

2.3. Significance of the Study

The study significance lies in the indications it provides that can be essential for decision makers and teaching staff members in the University. They can benefit from these indications establish an accurate linkage between curricula, teaching methods and applications in the various academic programs to provide the labor market and society with better competitive outputs.

2.4. Terms of the study

The following terms are used in this study as stated below:

- a. Economic returns: any economic earnings or changes gained by a graduate due to his/her study at AOU.
- b. Social returns: any social changes achieved by a graduate due to his/her study at AOU.
- c. E-learning: learning that utilizes modern technology, especially computers, Internet and any related applications in education.
- d. Open Learning: open sources education for any time, any age and anywhere.
- e. Blended learning: learning that combines traditional styles of learning to e-learning applications in achieving the stated objectives of curriculum.

2.5. Instrument of the study

A questionnaire of 43 items, 20 economic and 23 social, was sent to all AOU/Jordan graduates through emails, the University's site LMS, or distributed during the Alumni Club meeting held in 2017. A three-column scale (yes, not sure, no) was used given the values (1, 0, -1) relatively. The questionnaire was revised by 5 experts who recommended deletion of two economic items and one social, plus wording amendment for some other items in both.

2.6. Sample of the study

The sample consisted of (251) out of 1565 AOU / Jordan graduates of four BA academic programs (Education, English Language, Information Technology and Business Management) in the years 2012-2014. They represented nearly 1/6 of the total number of the graduate. The sample graduates voluntarily answered the questionnaire on the University's LMS, personal emails or during the Alumni Club meeting 2017. Table 1 and Table 2 show the distribution of AOU graduates and sample of the study:

Table 1. AOU/ Jordan BA Graduates 2012-2014

Year	Information Technology		Business Management		English Language		Education		Total	
	female	male	female	male	female	male	female	male	female	male
2012	18	25	50	30	79	16	193	45	340	116
2013	42	45	62	51	72	19	179	52	355	167
2014	35	56	72	49	77	19	231	48	415	172
Total	95	126	184	130	228	54	603	145	1110	455

Table 2. Distribution of the Sample of the Study

No	Program	Information Technology	Business Management	English Language	Education	Total
female	24	33	50	58	165	
Total	57	60	60	74	251	

2.7. Study Limitations

The results of this study are limited to AOU graduates / Jordan. Generalization of the results are also limited to BA graduates in 2012-2014.

3. RESULTS AND ANALYSIS

Three methods were used to get accurate results; means and percentages of responses to know what economic and social returns the graduates have achieved, (t test) to find the differences in economic and social returns due to gender, and (One Way ANOVA) to find differences in economic and social returns due to the academic programs.

Question 1: "what are the economic returns that the graduates achieved out of their study at AOU/ Jordan from their point of view?" Figure 1 shows the calculated percentages of (Yes) response to each of the 20 economic items out of 251, the total number of the sample graduates:

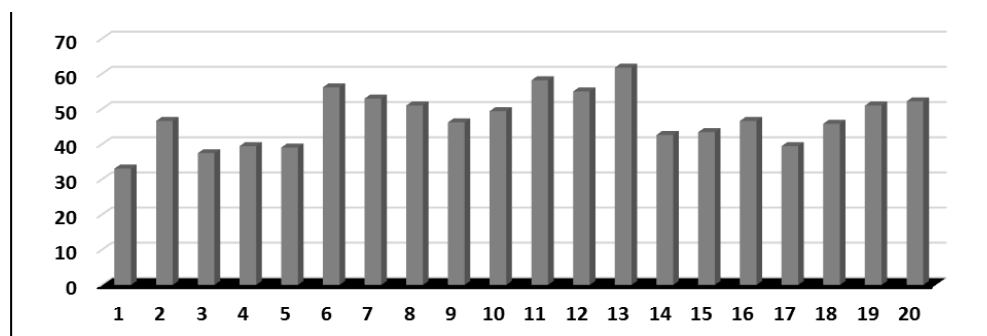


Figure 1. shows the calculated percentages of (Yes) response to economic items

Figure 1 shows that 33.06% of the graduates said (yes) to item (1) which reads "**I got a job because of my study at the University**". Al-Mousa, KamelLakhoua & Altarawneh [24] pointed out that a large number of AOU students had already engaged jobs before they joined AOU. 46.61% of the graduates' sample, who were previously employed, responded (Yes) to item (2) that they have received a higher salary after graduation. This raises the direct economic returns to 79.67% of respondents, which is obviously high.

One may also notice that this change in economic returns have been reflected on other detailed economic items, Particularly item 6 "**My study at AOU enabled me to buy a new car**" which got 56.17% of the total sample, item 11 "**I moved to a better residence depending on salary earnings**" which got 58.16%, and item 13 "**My children moved to a better school**" which got 61.75%. It should be noted here that percentages (Yes) response to the economic items have ranged from 37.45% to 54.98%, which expresses a reasonable range of economic returns.

The (Yes) response to the 20 economic returns mentioned in the questionnaire, each of which represents an aspect of the change in AOU graduates' economic status, in addition to the fact that the respondents are males and females from several academic programs, indicates that AOU have provided various opportunities for its graduates in the labor market, and it has positively affected their economic status. On the other hand, it indicates that this effect covers both; those who were already employed and those with no job at graduation, which in turn indicates AOU's concern about the labor market various needs. This result seems quite consistent with what studies had concluded about winning the competition in the labor market as being a common goal among Universities today [10].

Question 2: "what are the social returns that the graduates achieved out of their study at AOU/ Jordan from their point of view?" Figure 2 shows the calculated percentages of (Yes) response to each of the 23 social items out of 251, the total number of the sample:

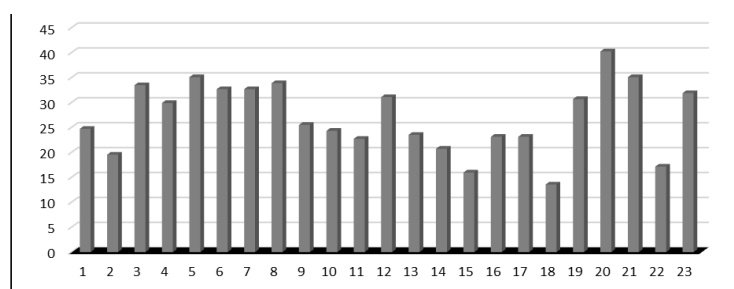


Figure 2. Percentages of (Yes) response to social items

Figure 2 shows that there are many positive social returns gained by AOU graduates whether at the personal or community level, regardless of graduates' gender or academic program. The graduates responded (Yes) at different proportions to the 23 social items. Item (20), for example, which reads "**I became more concerned with arranging for joint trips with my family and colleagues**" got the highest (Yes) responses, 40.23%. The responses express a wide desire or tendency by the graduates to expand their social community relations and deepen their interactive communication with others.

Figure 2 also refers to items related to the graduates' self-concept and how they are appreciated by their families and at a wider social circle. They express a deeper interaction with the community, specially answering (Yes) to items (3, 5, 6, 7, 8, 12, 19, 21 and 23 of which proportions ranged between 30.67% and 35.87% of total respondents. These results may describe a positive impact of the social returns on the graduates' life. This was stressed by Bayati [5] who confirmed an urgent need for human development in the Arab countries to extend social relationships and direct them to suit the needs of the community through digitization of mind, which is a core goal in AOU's Policy.

However, it can be noticed that higher proportion of AOU graduates gave their answer (Yes) to the economic returns than the social ones. While their (Yes) response ranged from 33.06% and 61.75% to the economic items, the social items ranged between 13.54% and 40.23%. The reason for this may relate to the fact that a high rate of AOU graduates are older in age compared with other universities' graduates, and they have their own mature social experiences even before they joined the University. The top priority for universities' students is to improve their economic status through the development of their scientific and practical knowledge, skills, attitude and competencies [18]. AOU graduates enrolled in their chosen college

as a major step in their struggle for a convenient job, and their decision was to take this major step through AOU. Thus, social changes or returns had not been a top priority.

Question 3: "Are there any differences in the economic returns between AOU graduates due to gender?"

The (T-Test) was used by the researchers to find if there were significant differences in economic returns between male and female AOU graduates. Table 3 shows the (T-Test) results:

Table 3. Differences in the Economic Returns Due to Gender

Gender	N	Mean	Std. Deviation	t	Sig.
Female	165	4.44	12.88	1.18	.560
Male	86	2.39	13.43	1.16	

Table 3 which shows the means and standard deviations of (Yes) response for both male and female graduates to the economic items, does not indicate significant differences in economic returns due to gender. The significance is shown to be only 0.567 according to (T Test). With reference to the total numbers of male and female graduates at AOU / Jordan, one can realize that the female number of graduates is generally much higher than the males. As shown in Table 1, 1110 female were graduated in BA academic programs 2012-2014, which means more than twice the number of males that was only 455 graduates. The number of females in the sample of the study reached 165 vs 86 males, which also represents nearly the double. This is actually an indication of the eagerness of females to willingly compete males to take advantage of the opportunities offered by AOU for the labor market. This seems also the case with those who had missed out opportunities to continue their education years before. This may be taken in addition to what AOU had been able to provide them with to answer the labor market changing needs with the transferable knowledge, skills, and attitudes needed. These are the factors that may help in this competitive race for employment [8].

Question 4: "Are there any differences in the social returns between AOU graduates due to gender?"

The (T Test) was used by the researchers to find if there were significant differences in economic returns between male and female AOU graduates. Table 4 shows the (T-Test) results:

Table 4. Differences in the Social Returns Due to Gender

Gender	N	Mean	Std. Deviation	t	Sig.
female	165	-4.39	16.31	1.00	.061
male	86	-6.48	14.56	1.03	

Table 4 shows approximately the same result as the Table 3; it also shows that the means and standard deviations of (Yes) response for both male and female graduates to the social items does not indicate significant differences in social returns due to gender. The study, in its answer to Q1 of the study, has already noted that the results in Figure 1 and 2 indicated a lower (Yes) response percentage on the social items in general than on economic items.

To combine this result to the result of Q4, one may conclude that insignificant results here are due to the fact that most graduates had had a consistent and stable level of social experience before they joined the University compared with other universities' graduates, in addition to their different age. Thus, the majority of them found no difference between social status before and after graduation. It appears that males and females are alike in this attitude, as shown by the results in this Table. The researchers believe that this is a part of the universities' general intention pointed out by the UNESCO [11], in that investment in education requires access to education for all, regardless of gender.

Question 5: "Are there any differences in economic returns among university graduates due to academic program?" To determine an accurate result to this question the researchers used (One Way ANOVA) as shown in Table 5:

Table 5. Differences in the Social Returns Due to Gender

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	983.41	3	327.80	1.936	.124
Within Groups	41814.26	247	169.28		
Total	42797.68	250			

Table 5 shows no significant differences in economic returns to AOU graduates due to academic program, as the significance is only (.124). In other words, the economic returns earned by graduates were not affected by the type of academic program of graduates (Education, English, Information Technology, and Business Administration). It may therefore be reasonable to conclude that the nature of knowledge, skills, modern strategies, new technology used and attitudes obtained by graduates are transferable to the labor market. These components seem to be key factors when looking for employment opportunities. These are considered the basic educational elements in AOU as its official website tells [19].

Question 6: "Are there differences in returns among university graduates due to academic program?"

To get an accurate result to this question, the researchers used (One Way ANOVA) as shown in Table 6.

Table 6. Differences in the Social Returns Due to Academic Program

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	747.46	3	249.15		
Within Groups	61183.41	247	247.70	1.00	.391
Total	61930.87	250			

Table 6. about the social returns also shows no significant differences in these returns among AOU graduates due to academic programs as only (0.391) significance was calculated. This means that social returns to AOU graduates were not affected by the academic programs (Education, English, Information Technology, and Business Administration).

This result may indicate that the relatively older age of graduates and their countless daily social activities they had been exposed to for several years before joining AOU, have lessened the social gap between their social status before joining AOU and after graduation. In addition, Allen [17] argues that information and communication technology applications, have become key components in cultural and social cooperation which helps them participate in social activities, to solve their common problems. This reflects a modern style of interaction among human beings from all walks of life regardless of their academic fields. This may interpret why no significant differences is detected in this respect.

4. CONCLUSION

Conducting further studies to detect economic and social returns for graduates of other academic programs in AOU/ Jordan and other branches. Examining other aspects of professional and life returns gained by AOU graduates. Studying AOU academic programs' outcomes VS labor market needs to expand the response to these needs

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