

# The Role of Social Networking in the Effectiveness of University Education

## *Exploratory Survey*

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**Abstract—** The great technical development witnessed in the information and communication technology sector over the last two decades, especially amid the widespread of the Internet, new facts came to light, as it made people communicate in a virtual world. This development resulted in what is known as the social networking, and these networks are considered one of the fastest growing sectors of e-learning in the last years. The policies and plans of global education were shifted from focusing on the educational content to finding the best ways that enable students to learn. Thus, students can build new relationships and share their intellectual and cognitive interests with others, in addition to publishing on the multimedia. Accordingly, this study is based on a series of previous studies and scientific research related to the subject of the current study: the role of social networking in the effectiveness and support of education for the university students. The current study is based on the descriptive analytical method using the analysis of strengths, weaknesses, opportunities and threats (SWOT), and who cares for identifying the strengths and weaknesses of the social networks in promoting the educational process from the point of view of experts as well as describing the opportunities and threats for these networks. Therefore, the most prominent finding of this study is that the social networks has increased the effectiveness of university education through the multiple advantages and applications that enrich the educational process, especially as 72% of the study respondents believe that the social networking impacts the educational process positively, while only 28% believes the social networking does not support the educational process. The study also presents some recommendations, notably the need for applying the accredited learning environments to the social

networking at the level of higher education systems as per each specialty to benefit from it in developing the skills and knowledge of learners.

**Keywords-** *Social Networks, E-Learning, online learning, Facebook, Web 2.0, Academic achievement, University education.*

### I. INTRODUCTION

With the progress of time and evolution of modern techniques, especially the introduction of the second-generation of web, several social networking websites that are based on activating the live communities on the Internet came to light. The users of these programs (networks and websites) share their interests and activities through this means of interactive virtual communication that helps individuals communicate and interact in a virtual information environment.

The virtual interaction and communication have several effects on the users of social networks, especially as regards education. The education, especially higher education, witnesses radical changes due to the contemporary technological developments and consequent civilization changes. Thus, it was necessary to replace the traditional education management systems with other more open systems that keep up with the rapid changes of Web 2 technology and are consistent with the method through which the new generation deals with information.

This surely creates a new education system, especially if it is invested properly and efficiently. Therefore, this study focuses primarily on the role and importance of social networking on education from the perspective of higher education (university) students by relying on SWOT analysis. The study presented some recommendations which are considered a solution for these threats.

## II. THE PREVIOUS STUDIES

After conducting a survey of the different kinds of intellectual production, the researcher managed to get more studies about the social networking and its role in supporting education for university students who are in a badly need of the modern technologies to carry out the scientific research. Thus, it was necessary to identify the impact of social networking on education to boost its positives and reduce negatives. This is the target that the current study seeks to achieve through using the SWOT analysis in eight scientific studies related to the subject of the study and published in English and Arabic. These studies will reviewed and arranged in a descending order, as follows:

Study [1]:

This study aims to identify the relationship between the use of Internet by English Department students and their academic achievement in Zarqa University. The study respondents include the 475 students registered in the first semester of the academic year 2011/2012. A questionnaire was offered to them through asking, which included some questions about the use of network. Interviews were also made with some teachers and students. The number of questionnaires that will be analyzed amounted to 326, with an increase of 68.6%.

The study results: 311 (95.4%) of the respondents use the Internet. More than 75% of people use the network for less than 10 hours a week. The study also showed that about 70% of the students use the Internet for the purposes of the study. The cumulative grade point average (GPA) was used at the end of each semester for the academic achievement of the student [1].

Study [2]:

This study aims to get the perceptions of Malaysian university students on how to use the social networking websites and the impact of such websites on their academic performance. The study was based on a preliminary survey of some Malaysian university students to gather preliminary results through using the Statistical Package for Social Sciences (SPSS) and software to analyze the data.

The study results: The study showed that most respondents agree that the social networking websites have a positive effect on their academic performance. The study indicated that 26% of the respondents used the SNSs for academic purposes, such as communicating with supervisors and lecturers (8%), and conducting the related academic discussions (9%), which is less than the time spent in other activities [2].

Study [3]:

This study aims to identify the need to change the traditional pattern of educational after the introduction of Web 2.0 technology. The main objectives of this study include identifying the motives for the use of social networking by higher education students in Oman, as well as identifying the impact of social networking tools on learning and teaching in general, to analyze the problems that may encounter students when using social networks. In addition, the study determines whether the traditional learning styles need to be changed in the age of Web 2.0 technologies. The approach used in this study is a survey conducted on the students of various universities, colleges and other higher education institutions in Oman, to explore the social networking tools that may impact the approaches of teaching and education from the prospective of students.

The study results indicate that a high percentage of students are affected positively by the use of social networking programs, which allowed them to control their own learning environment and share knowledge with other students in different ways such as SMSs as well as audio and video messages and other media. In addition, Web 2.0 tools, such as Blogger, Facebook, YouTube and online courses that give

students better educational opportunities to improve their educational performance [3].

Study [4]:

*This study aims to analyze the level of intimacy and engagement between the higher education students of computer science in Finland as a result of their use of social networks. It also aims to analyze the experience of using of the media, specifically Edmodo Blog as an aid in learning to support teamwork. The data were collected through conducting a questionnaire and holding interviews.*

The study results showed that some respondents were not familiar with the social media at the beginning of the session, but Edmodo Blog had a positive impact on students in the educational process, given that it is one of the social networks used in blogging. This study provides empirical evidence for small blogs on social networking websites, especially Edmodo which can be used as an educational tool to help students share knowledge [4].

Study [5]:

This study aims to investigate the motives of using the social network Facebook by school and university students and its relation with their academic achievement. The study also identifies the new areas of using the social networking in the educational process. The study was applied randomly to a sample of (1,200) students of the bachelor's degree in the University of Jordan students and Jordan school students. A questionnaire was made to measure the motives that pushed the students to use the social network Facebook. The questionnaire has five sub-dimensions (entertainment, time spending and communication with friends; follow-up of the scientific developments; search for information, research and knowledge of modern technologies).

The study results: the motives that push college students to use Facebook are fun, entertainment, time spending and follow-up of the developments. Meanwhile, the most prominent motives that push school students for using Facebook are search for information, research and knowledge of modern technologies. College students use Facebook more

than school students to follow up the latest developments. The results showed an inverse correlation between academic achievement of students and the motives of using Facebook for the purpose of entertainment and communication with friends as well as follow-up of developments[5].

Study [6]:

This study aims to ascertain the extent of the possibility of employing the social networking in the educational process and the reality of using the social networking by the students of Sudanese universities (studying the case of Sudan University). It also highlights the main obstacles that prevent the employment of social networking in the educational process in Sudan, as well as reaching proposals for improving the reality of the employment of social networking to serve the educational process.

The study used the descriptive approach to reveal the targeted results through the study sample that consisted of 50 students from the Faculty of Computer Science and information Technology and five faculty . The study also relied on a questionnaire and interviews as tools for data collection and the SPSS software for statistical processing.

The study results are: 1 – The social networking contributes effectively to improving the level of communication between students. 2 – The social networking can be used in the learning process. 3 – The social networks significantly affect the academic communication between students 4-There are some obstacles that prevent the use of social networking websites in the educational process, notably the slowness of the network, the language used in these websites, lack of reliability of the sources of information exchanged between friends through these websites [6].

Study [7]:

This study aims to identify how to use social networking technology to complete face-to-face courses, as a means to buoy the students' feelings towards the society, as well as enhancing classroom communities in the context of higher education. Data were collected from 67 students who enrolled in four courses at the public universities of Taiwan.

The study results: The majority of respondents have strong feelings of social cohesion. They have positive feelings about learning experiences in the classroom, using the social networking as a complementary tool. The study recommends addressing the difficulties and fears of trainers on the use of social media in the educational aspects, while submitting recommendations for research and practices in the future [7]. Study [8]:

This study sheds light on using Facebook at the University of Cape Town, South Africa, as well as delivering the lectures to students through the new social networks. The study was based on the approach of drawing on the virtual ethnography and qualitative interviews.

The study results: There are several benefits of using Facebook in the educational process, especially the development of small educational communities that face some challenges such as illiteracy about the information and communications technology and unequal access by users [8].

Through reviewing the previous studies on the use of social networking in higher education, we sum up the following:

The previous and current studies agree on the effectiveness of the role of using the social networking in supporting the higher education

1) *The study of (Al-Mukhaini, 2014) highlighted the students' motives of using the social networking in the educational process, and this is one of the objectives of the current study.*

2) *The study of (Hend Al-Swaer) focused on the relation of using the social networking and the students' academic achievement, proving that there an inverse relation between them. This is one of the aspects which the current study focuses on.*

3) *The study of (Nihal Abdul Razak, 2013) identified the obstacles that prevent from using the social networking in the university education, and this is one of the results which the current study seeks to reveal through analyzing the threats facing such networks.*

4) *The study of (Tanja E Boch, 2009) was limited to studying Facebook and its role in the university education, and this is considered one of the goals of the current study that focuses on the use of social networking, including Facebook.*

### III. THE PROBLEM OF THE STUDY

The social networking websites are one of the most prominent types of the new media, which emerged as a result of the internet revolution. The students of this age interact with the Web2 technology such as Facebook, Twitter, YouTube, Wiki, the virtual world and sharing of videos and images. The students create a world intertwined with their realistic world, in which they spend a significant part of their daily time. This takes a large part of their interest, and imposes itself with its renewable technology. In addition, the social networking impacts both the social and academic life of students, and thus it became part of their educational process that became not limited to the education institutions. Accordingly, the current study unveils the effective role of social networking in the university education.

The problem of the current study can be formulated in the following question:

What is the role played by social networking in boosting the effectiveness of education and participation of knowledge for college students?

### IV. THE STUDY METHODOLOGY

The current study used the descriptive and analytical approach that is suitable for the nature of this study. The approach studies the phenomenon and gives it an accurate description and a qualitative expression through using the SWOT analysis that identifies the strengths, weaknesses, opportunities and threats related to the current study.

#### A) *The study community and sample*

The researcher has taken a sample representing eight different researches, through offering a questionnaire to the college students. The questionnaire included several objectives related to the advantages and disadvantages of the social networking and the motives that pushed college students to use the social networking in the educational process, as well as the role of social networking in boosting education and supporting the knowledge sharing at universities.

#### B) *The study limits*

- The objective limits that are represented in studying the role of social networking in boosting the university education
- The spatial limits that are represented in studying the impact of social networking on the education of college students
- The temporal limits that mean conducting the study during the first semester of the year 1438AH / 2017AD.

C) *The analysis of strengths, weaknesses, opportunities and threats (SWOT)*

The main step to know the role of social networking in supporting university education includes studying and analyzing the vital factors of social networking in terms of analyzing the internal environment (strengths and weaknesses) and the external environment (opportunities and threats), as follows:

- Analysis of the internal environment:

It aims to analyze the factors related to the social networking functions, to identify the strengths that are represented in the social networking efficiency and its ability to make the best achievements, as well as the internal weaknesses that are represented in the weakness of the social networks in supporting the education.

The strengths and weaknesses can be outlined as follows:

Strengths:

- 1) *The social networking has some advantages such as designing an integrated system for the management of e-learning. This system includes admission, registration and management of courses, submission and management of assignments, follow-up of the student learning, supervision of the communication tools, management of lectures and tests as well as the issuance of the final certification.*
- 2) *The social networking provides the advantage of social interaction that allows students to cooperate in achieving the practical activities and communicating with each other.*
- 3) *The social networking creates an atmosphere of competition among students and an interactive educational environment, in which the student is considered an active element bearing the responsibility.*
- 4) *The social networking allows students to brief each other on their activities, as well as adding comments which*

*enrich their education. In addition, students can benefit from the strengths and weaknesses of each other as regards such activities.*

5) *The social networking enables users to build friendships and relationships with those interested in a certain scientific subject around the world, as well as exchanging experiences and information. This helped establish rooms for discussion and a portfolio for the student works.*

6) *The social media allows users to post pictures and videos and offers them the possibility of commenting on them.*

7) *The social networking websites develop the skills of search, social communication, problem resolution and criticism.*

8) *Shifting the attitude of learners from receiving to participating (active learner) and developing the teacher's traditional role to support and guide the different learning methods according to the needs of learners.*

9) *The social networking helps share knowledge among the students and faculty, as students can exchange and borrow books through the Book Tag application.*

10) *The learner can freely express his ideas without fears of committing a mistake before others, which encourages discretion, free thinking and brainstorming.*

11) *Several links are offered to enable students to browse other educational websites or pages on the Internet.*

12) *The social networking boosts and develops the students' technical skills through using tools and programs for designing, producing and displaying the e-learning materials.*

13) *The social media allows students to hold discussions and exchange of views, which stimulates and activates their attention, perception and mental abilities.*

14) *Educational multimedia and applications can be uploaded and downloaded.*

15) *Correct feedback can be received immediately for the posted information from other students and faculty.*

16) *The individual differences between students in the educational environment can be overcome through using the social networks in education. The learning materials can be published on the multimedia.*

Weaknesses:

- 1) *Not all possibilities of the social networking are used in managing education.*
- 2) *Some professors don't reply to the inquiries of students as they are busy and refuse to unveil their personal social networking accounts because of privacy.*
- 3) *Communication disregards values and ethics because of lack of regulations that control communication between students and faculty.*
- 4) *Lack of human interaction between students and faculty, which leads to losing skills and the rules related to customs and social ethics.*

5) *Violating the privacy between students and faculty and knowing their personal details through checking the personal pages of subscribers.*

6) *The links between the different social networking pages and groups make the learner spend more time without having any scientific or educational benefits.*

- Analysis of the external environment:

The process of analyzing the external environment helps the social media identify the risks and obstacles in order to do the necessary preparations before the emergence of potential threats. In addition, a strategy is mapped out to overcome the threat and reduce its negative impacts on the educational process. This is to support the effectiveness of the social networking. The opportunities and threats can be clarified as follows:

The opportunities

1) *Developing the learning environments that are based on electronic interactions through using the social networks and benefiting from their possibilities as digital communities to develop the educational process.*

2) *Opening accounts for social networking applications in a formal framework determined by the university to secure the relationship between professors and students.*

3) *Helping the emergence of digital communities that are based on technology in all aspects of life, in line with the requirements of the new digital era.*

The Threats

1) *Social threats represented in the objection of some professors to communicate with their students.*

2) *Moral threats represented in the misuse of social networks by some students and misbehaving with professors.*

3) *Security threats such as hacking devices, accounts, pages and personal websites.*

4) *IT threats represented in the fact that some students and faculty do not have the skills of using computers in general or the skills to use the social networking in particular.*

5) *Legal threats such as the loss of the intellectual property rights and intellectual property theft.*

## V. THE RESULTS

The analytical aspect: To calculate the percentage of using the social networking in supporting the effectiveness of higher education, we use the equation of the effectiveness of the system [9]:

The effectiveness of the physical education

$$= \frac{\text{the number of points}}{\text{Strength points} + \text{weakness points}} \times 100$$

The number of strength points (16), while the number of

weakness points (6)

The effectiveness of the physical education =

$$\frac{16}{16 + 6} \times 100 = 72\%$$

This means that the social networking impacts by 72% in supporting the educational process. The effectiveness of the social networking should be calculated periodically. Accordingly, the lack of effectiveness of the social networking in supporting the educational process  $100\% - 72\% = 28\%$ .

The current study emphasizes the role of social networks in supporting the effectiveness of the educational process, and this can be confirmed by the fact that many countries have become dependent on the social networks as an important means of teaching methods in the virtual world. China, for example, introduced the social networking in many schools to strengthen the relationship between the teacher and the student.

Many studies and scientific research conducted in this area proved the effectiveness of social networking in the educational process networks. In the US, a study prepared by some researchers at the University of Minnesota showed that 77% of students use the social networks with the aim of learning and developing skills as well as opening to new perspectives.

In addition, the students who use the social networking websites have their skills developed well. The study indicated that publishing the curriculum on the social networking websites helped make school more relevant and meaningful for students. Teachers became also able to increase the students' involvement in education, as well as raising the technological efficiency, enhancing the spirit of cooperation in the classroom and

building better communication skills [10].

Through a study on the social networking accredited by Massachusetts Dartmouth University, it showed that 100% of the college students use one of the social networks. It also indicated that there is a significant increase in the use of the most popular social networks, as shown in the following figure[11]:

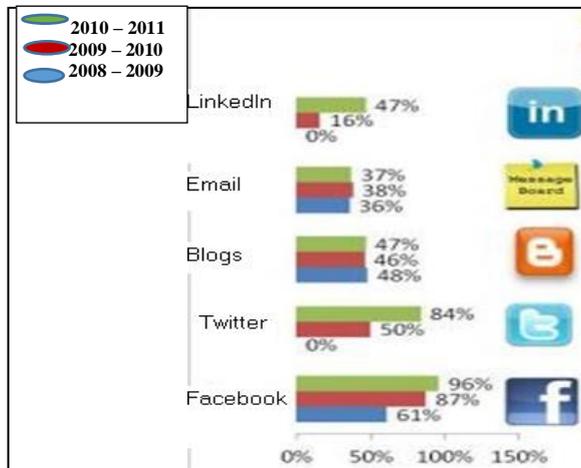


Figure No. 1: Statistics showing an annual increase in the number of social network users

A study conducted in Ghana showed the effectiveness of social networking in education, and indicated that the ranking of the most used networks. Facebook came first with 66.4%, followed by WhatsApp (19.9%), Twitter (6.2%), Skype (3.3%), My Space (2.9%) and Yahoo Messenger (1.3%), as shown in the following table[12]:

Website	Frequency	Percentage (%)
Facebook	1002	66.4
WhatsApp	301	19.9
Twitter	94	6.2
Skype	51	3.3
My Space	40	2.6
Yahoo Messenger	20	1.3
<b>Total</b>	<b>1508</b>	<b>100</b>

Table No. 1: Statistics showing the number of social network users in Ghana

In the same study, respondents were asked whether the social networking impacts the academic performance, 8.1%

said 'yes', 18.6% said 'no', while 2.3% said 'not certain', as shown in the following table[13]:

Percentage (%)	Frequency	Response
80.1	1208	Yes
18.6	164	No
2.3	36	Not Certain
<b>100</b>	<b>1508</b>	<b>Total</b>

Table No. 2: Statistics indicating whether the social networking impacts the academic performance in Ghana

In a study conducted in Oman about the impact of social networking on the academic performance, YouTube took the first rank, followed by Facebook and then Google Plus. Meanwhile, Twitter took the last position, as indicated in the following table [14]:

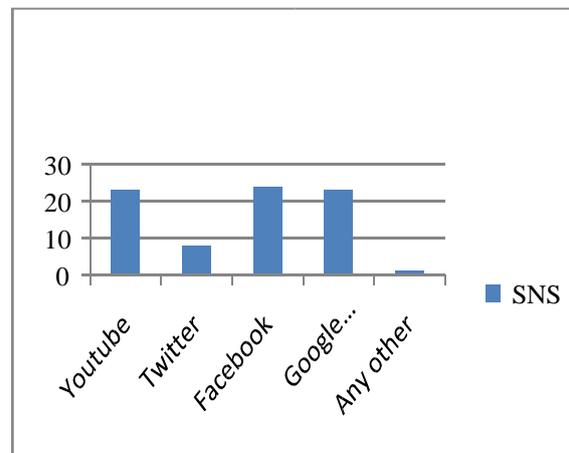


Figure No. 2: Statistics about the percentage of using social networks in Oman

Twitter also played a role in boosting the interaction between students in education, several studies were conducted in this regard, including the study of Junco, Heibergert and Loken 2011 that was conducted on 125 students. They were divided into groups; one using Twitter in study, while the other does not use Twitter. It became clear that Twitter plays an effective role in facilitating communication between students and faculty, as well as discussion about the curricula [15].

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### VI. CONCLUSION, RECOMMENDATIONS AND FUTURE WORK:

This study highlighted role of social networking in supporting and boosting the effectiveness of university education. Through the SWOT analysis, the current study revealed the following results:

- 1) *The social network increased the effectiveness of e-learning through its advantages and multiple applications that enrich the educational process.*
- 2) *Most applications of social networks represent a virtual community that is easier than the real communities.*
- 3) *The social networks-based educational environment is effective in developing the self-learning skills as well as the technical and cognitive skills of students.*
- 4) *The social networks help activate and develop the ability to discuss, cooperate and interact between the students and faculty through offering scientific issues to discussion.*
- 5) *Facebook is the most useable tool in the educational activities, as it provides the possibility of offering instant messages and emails as well as posting photos and videos.*

### RECOMMENDATIONS:

In light of the previous studies, the current study submits the following recommendations:

- 1) *The social network-based educational environments should be used in the university education as per each specialty to benefit from them in developing the skills and knowledge of students.*
- 2) *The students and faculty should be trained to the necessary technical skills to use the social networks in the educational process.*
- 3) *The faculty should be aware of the necessity of interacting and replying to the student questions and offering the necessary consultancy.*
- 4) *The educational institutions should organize workshops and courses to develop the technical skills of students and faculty.*
- 5) *Materials should be published on the different social media about the importance of digital culture and the necessity of using the social network in the educational process.*
- 6) *There should be motives pushing students to use the social network in the educational process.*
- 7) *Social standards should be set for the use of social networks, enforcing students to comply with the regulations and social ethics in discussion and behavior. Students should also be aware that economy is important in the other discussions that are not related to the scientific content.*

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