

Impact of Technology on Education in Islamic Countries in Middle East and its Effect on Security of the Region

Tahereh Ebrahimifar*

Associate Prof. Islamic Azad University. Tehran Centre Unit.

Abstract

Technology is inherently neutral and can be used in equal measure for good or evil. Interestingly, this determination is a matter of perspective. Technology enables or enhances a number of activities. Fundamentally, technology can be used to improve teaching and learning, to make administrative operations more efficient and effective, to help discover knowledge and to help improve access to information. The problem, of course, is how these things relate to the role of humans. While traditionalists may contend that technology detracts from the essence of humanism, there is abundant evidence to show that today's students are doing quite well, as both learners and as people. A fundamentally important issue today involves a dichotomy concerning whether it is the inputs or the outputs that determine the effectiveness of institutions. Although education is timelier and its impacts are gradual, it is far too often underplayed when it comes to a nation's security by the size of military and present economic growth. Education has never been more central to the security of Middle East countries.

Key words: Middle-East, Education, Technology, Security, Online Learning, Traditional Education.

* Received on 27 November 2016
Email: dr_ebrahimifar@yahoo.com

1. Introduction

New technologies have played a very major role in the transformational events that have taken place in the Middle East in recent years and will likely continue to have a profound effect in these countries. In the ultra-modern world of today, the role of technology and its undeniable impact on public administration is obvious to everyone. It has a tangible role in establishment of quality and functional goals of society. The human desire to achieve a better life is getting more depended on technology, and this is perhaps the most important reason that our world is developing with extraordinary speed. In fact, the main difference between the world as it is today with the past, is the speed of technological developments. The world is changing and the pace of change is increasing more and more. We are in a critical relationship with the technology. Some believe that humanity is threatened by the evolution of technology. They believe that by application of new technologies, machines are replacing manpower. But the main goal of technology is to facilitate fulfilment of jobs by human and not the omission or replacement of human. Thus, the prevalence of technology drastically affects many areas of society including education. Education has always been one of the main concerns of the educational system of every country, and families and the educational system are constantly trying to help this process to reach its destination in better and faster ways with regard to the possibilities and necessities of the age. Educational system has the duty of creativity and innovation as well as the proper use of the talents and abilities of individuals. This is the way for the development of cultural, economic and social community. The present age which is called the age of technology, can contribute to this issue.

In this paper, we aim to discuss the role of technology in our education and its impact on the quality of education and the educational systems. It also emphasize on the effectiveness of traditional teaching and explores the key issues of classroom, as compared to online learning and compares the major dimensions of learning effectiveness of the two cases. As a result, various questions rose in this case: How technology affects the teaching process and how is this impact in the field of education in Islamic countries in Middle East? What are the differences between traditional education and Distance training?

Due to the dynamic impact of technology on different aspects of education , this article have tried to use the systemic approach and charting cause – effect , to present its dynamics characteristics in order to answer these questions.

2. Interaction of Technology and Human Factors

Education boosts the use of technology and technology aids education. Technology affects the human factors and brings change in them. On the other hand, human factors are effective on the adoption of technology, the type of technology and how to use it. One of the important areas of technology in training is the education. By influencing on human factors and development of human skills, technology, provides improved educational performance. The

relationship between technology and education with productivity of manpower is two-way and interdependent relationship (Lee, 2011). This means that on the one hand, without having skilled manpower familiar with methods and practical skills at their disposal, one cannot hope to the real and sustainable development and National stability based on knowledge. On the other hand, technology is itself the tool and effective method for training and manpower productivity increase.

3. Education in Middle East

In the last three decades, developed and developing countries have faced with many ups and downs in the political, economic, cultural and educational field. In the face of many potential future challenges, the educational system as a necessary asset in the effort to achieve the goals of development is considered as the most important tools available to promote and realize the aspirations of a nation. Here the task of the educational system and the importance of its position are evident. The main mission of the educational system is to upgrade the individuals and develop their talents and also full recognition of their creative abilities. To achieve this target, though difficult and long, is considered an essential contribution to the pursuit of a more just and better world to live. This will be realized when everything is put in its place. Proper use of new technology can make positive changes in the educational system. The educational system plays an important role in innovation and creativity, as well as the correct use of the talents and abilities of people.

On the other hand, technology has always been associated with the development of the society and improvement of living standards of life. Development as one of the most important goals of human society requires a tool such as technology to affect its structures.

In Middle East, while most of its countries have surplus labor force, they lack the necessary skill for the growth of the industrial sector. Concentration on human capital will be solution to solve these problems by providing the necessary skills in human resources. The need for investment in human resources in these countries is far more than physical capital. In spite of imports and creation of physical capital, these countries are yet not able to accelerate their economic growth. They still remain underdeveloped in the human resources and because of the lack of essential skills, are not able to make full use of these resources. Although the professional skills and expertise is imported with foreign capital it is not enough (Brach, 2009).

Therefore, investments on social projects are one of the important needs of these countries. There are abundant natural resources in this region, but production methods and skills necessary for effective and rational use of these resources to improve economic and social conditions is limited. Increasing the level of knowledge and skills of the people is necessary condition for the elimination of economic backwardness and creation of motivation necessary for

development (Brach, 2010). Education is one of the areas that can solve the problem in this region.

4. The Impact of Technology on Education in Middle East

With the advent of new technologies and the fast pace of change, the behavior of individuals in Middle East is undergoing different changes that will inevitably put certain bad effects on society and the individual. As a result, society in dealing with a large volume of new technologies, while reducing the damaging effects, must take required steps in order to further the benefits of technology not only to survive but also grow.

Generally, technology plays an important role in the country's educational system. As shown in the figure 1, with the advent of new technologies, the amounts of manual and physical work have been reduced and the changing natures are towards soft work. Intellectual work requires special skills and expertise provided through academic education. Professionals and skilled have an incentive to innovation. This innovation creates new technologies or upgrade old technology in developed countries. But in most Middle Eastern countries, Censorship is common practice. For this reason, many of the countries within this region were hesitant to widely adopt the Internet (Mirza, 2011).

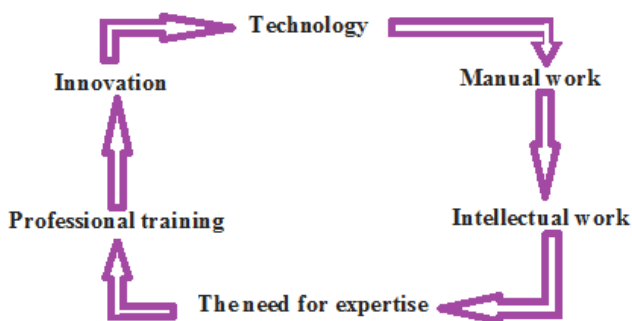


Fig.1- Role of technology on educational system

But the application of technology in education in developed, and developing and underdeveloped countries is different and therefore has a different effect on education. In developed countries, access to information, flourishes the creativity and innovation which eventually will increase the efficiency of the technology (Figure 2).



Fig.2- Application of technology in developed countries

But in developing countries, including the Middle East, access to the large volume of information creates anxiety and stress due to lack suitable substrates and the characteristic of malicious causes. Hence, profitability is reduced and the cost goes up (Figure 3).

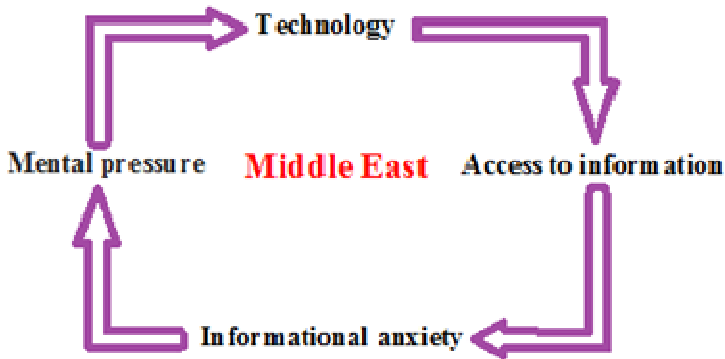


Fig.3- Application of technology in developing countries

5. Effect of Technology on Security of Middle East

The correlation between education and security is clear. Education is not just a tool to develop ones country, but holds the capacity to cure and fight extremism. Pushing education to the forefront of a nation's security agenda is a universal predicament (Jalbout, 2015).

Generally, advancements of technology have led to the modification of information the nature of which has changed popular resistance throughout the Middle-East region. But more worrisome is the fact that the aviation security challenge will only grow. The unprecedented and growing reach of ISIS,

through direct agent or self-radicalized terrorists, means that the threat is likely to remain for the foreseeable future.

Generally, technology in Middle East region provides pressure in four ways:

A- Mental and Physical Pressures

In this case, technology provides pressures on individuals in two ways. New technologies increase the workload. In a society with a traditional structure, due to the limited capacity of individuals on the one hand and the volume of activity on the other hand, leads to the physical pressures. The harm caused by work pressure increases anxiety about the performance. The resulting stress may increase the psychological pressure, and the individual will be isolated. On the other hand, the volume of work and the creation of new techniques require new skills, may lead to increased stress that again may be left isolated. This leads to reduced performance levels and increase costs. When this pressure goes out of the individual's tolerance, insurgency will occur. This isolation makes the individual to work alone or in a group, on specific technology to meet their target. Conflicts in the Middle East perhaps fit this kind of entanglement (Figure 4).

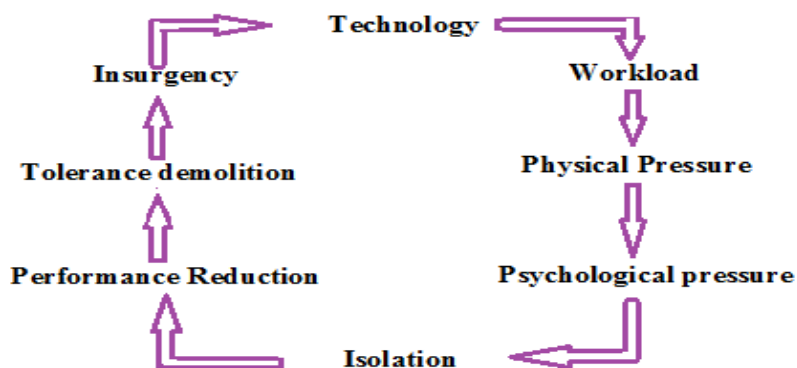


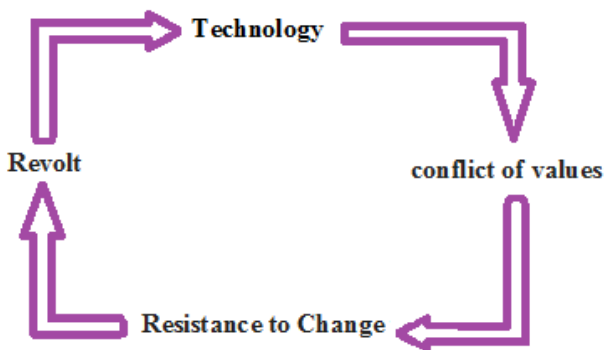
Fig.4- Performance of technology in societies with traditional structure

B- Antagonism Pressures

Conflict of values is created with the advent of new technologies. This conflict in situations where there is no proper planning for the arrival of new technologies becomes more acute. The new technology always causes new ethical issues that often increase as potential threat. Ethical issues associated with new technologies occur in a long period. However, these conflicts and feeling of insecurity provide resistance to change. In other words, many cultures or because of unfounded and pathological fantasies or because they are afraid to enter the new technologies, present their resistance in different forms such as

non-use or misuse of new technologies. Of course, at certain point where they want to create or change a particular culture, technology and tools are organized in an organizational activity in order to succeed in replacing the desired cultural change. This is evident in the Middle East as well (Figure 5).

Fig.5 Antagonism pressure of technology



C- Identity Pressures

Identity is a grade to which individuals before identifying by a special working group or field of professional expertise are recognized as a set of organization. With the advent of new technology, individual identity is influenced by the professional identity. One of the issues about the identity loop that can be seen in the Middle East is the strong relationship between organizational identity and organizational behavior of the so-called Islamic State which considers its identity as organizational and with access to the large volume of data and misuse of technology has led to unrest in the Middle East.

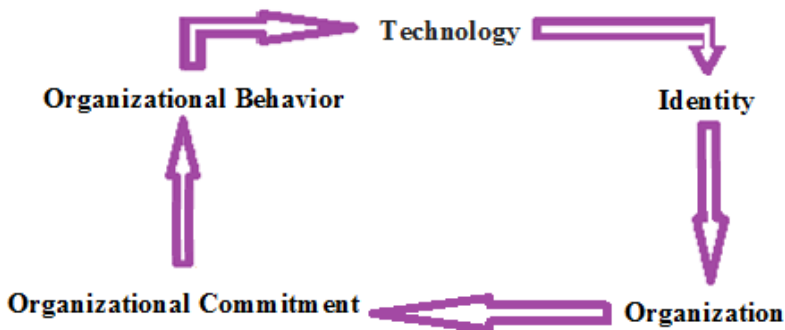


Fig.6- Identity pressure of technology

D- Informational Pressures

With the advent of new technologies, including IT, the possibility of access to a large volume of data is provided. As a result, information has created the field of creativity and innovation, which has led to innovations in different fields. But on the negative point, Technology may bring informational stress.

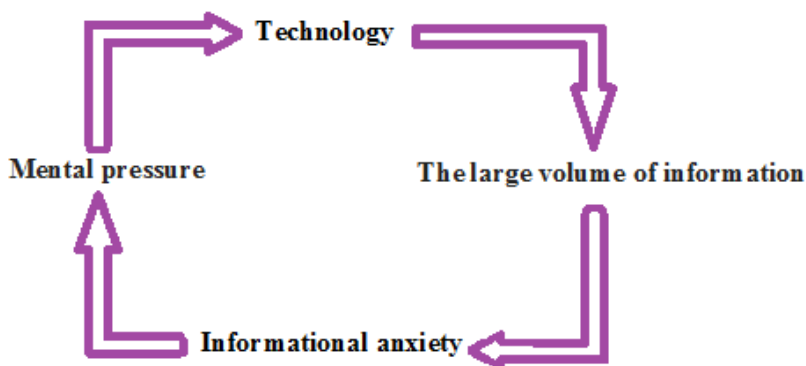


Fig.7- Informational pressure of technology

6. Effect of Technology on Educational Instruction

It would be an exaggeration to argue that technology has not influenced classroom teaching. At the same time, however, it is fairly clear that the basic model of educational instruction that existed many years ago is largely still in place. Understanding the different types of technology and their perspective applications in education is an important step in comprehending the scale and scope of change that is possible in education through technology (Izumi, 2013).

Online learning has revolutionized the educational environment. Evolution of technology has provided distance learning to a growing number of students instead of the traditional classroom-style learning. Distance learning may be regarded as a viable option for many individuals of all ages who desire to get an education but a classroom environment also offers students the opportunity to have face-to-face interactions with their peers and instructors. While distance learning is an ideal solution for certain types of students, others prefer to get a chance to participate in a lecture or class discussion physically. In Middle East, where violence is on the rampage and love is forgotten, traditional classroom setting gives a huge opportunity for learning and growth not only mentally, physically, emotionally, spiritually but socially as well. Love, friendship, self-confidence, gesture, belongingness, cannot be transferred digitally. While explaining the advantage and disadvantage of digital education, this paper mainly stress on the advantage of traditional classroom learning in the Middle East.

On-line teaching is the application of technology that teaches people on certain issues but does not limit the scope of learning. Therefore, by using the

advanced technology, range of search is widened and students experience new knowledge in helping them understand the elements of change, and realize that the future is shaped by them. They understand that they have a variety of options ahead and do more than the collection of information. But there arises three difficulties (Ebrahimifar, 2011).

Wide range: The wide range of technology, include infinite cultural variety. Approaching the new and various sphere will cause different clashes with different culture. To avoid these clashes, people usually enter to that spheres which are closer to theirs. The creation of different terrorist groups in the Middle East reflects this issue. Therefore a suitable base for cultural discourse will not be provided.

1- *Speed of information*: In digital space, the communication is established rapidly and simultaneously and the reaction, therefore, is rapid and simultaneous. In such an environment, the chance of thinking and critical review is replaced by urgency in which the cultural signs are not transferred completely. In such circumstances, misunderstanding escalates and rebellion is formed.

2- *No-Boundaries*: Modern-day students not have computers only to help them with their schoolwork; they also use the Internet for research in different field, performing their intentions and purposes without tracing of their symptom, in a manner unknown from any responsibility. This freedom ultimately changes to a unfettered and unbridled freedom, leading to the absence of responsibility. In Middle East with autocratic structure, sacrificing the value of freedom will be destructive.

7. Technology as a Teaching Aid

Technology plays a vital role in every sphere of life, and education is no exception. Technology has revolutionized the field of education. The use of technology has made the process of teaching and learning all the more enjoyable. In general, the new technology is considered as a strong factor for change. New technologies can make education more productive, more scientific and provide more equal access to education. Technology also motivates and engages the learner (McGraw, 2013).

The purpose of education consists of three elements: knowledge, attitude, and learning. Knowledge is not enough for creative and effective learning. Interest, training orientation, and training method are also the pillars of learning. If an individual, does not have incentive to anything, substantially, does not try to learn that thing and his behavior does not change.

Practice and experience are the other conditions of learning. The aim, due to learning, also has three dimensions: cognitive, emotional, and mental-moving dimensions. Some believe that for obtaining necessary creative education, one need to move away from traditional methods and apply for new methods in teaching. However, there are many obvious benefits in using different

technologies, the use of inappropriate technologies or the inappropriate use of technology can have its negative consequences for countries to follow.

However, the benefits gained from the new technologies depend on the extent to which they are used in ways compatible with human cognitive learning processes (Clarck, 2016:7).

8. Online Education VS Traditional Education

Today, technology is being used in increasingly strategic and innovative ways to expand access to education, improve student learning outcomes, provide greater institutional effectiveness, and enable greater efficiencies of more students. While traditionalists may contend that technology detracts from the essence of humanism, there is abundant evidence to show that today's students are doing quite well, as both learners and as people. Two trends have recently converged in teaching public administration: Traditional classroom teaching and online education (Ni, 2013).

Training based on new technologies, has put online training versus traditional education by basic changes in educational system, such as eliminating the time, place and resource constraints. This has caused a major change in techniques, ways and approaches in education. The development of these two trends merging in the contemporary education setting raises a question about the effectiveness of online education, particularly as compared to traditional classroom learning (Al-Hasan, 2011). But in today's era of increasing technology everybody learns differently. With constant changes in technology from all different degree programs, it is important to consider the advantages to an online versus traditional education and examine how each type of education impacts a student. However, this paper intends to emphasize on the advantages of traditional classroom education as compared to online teaching.

9. Online Education

Online education is also known as distance learning and consists of taking classes via the internet. The Virtual Learning Environment (Web-based Learning Environment-WBLE), is defined as the technology that uses the internet as a tool to support and promote learning (Basioudis & De Lange 2009). Distance teaching is an active and intelligent learning that provides certain developments in learning and teaching process and knowledge management, giving this possibility to students to think actively and innovatively and use these ideas, commonly. This type of education is done by using a wide range application of information technology that provides possibility of education and learning for each person in each field and in each time and each place (Cherner, 2015: 193). Distance education, is broad-based and, multiple-orientated- all included. In this system, education is done by internet, covering a set of training methods along with the latest information. Generally, the electronic learning is a kind of learning that happens in the network environment and a set of multimedia technology, media and

telecommunications is taken to service. It is a kind of learning that is done in internet environment and is facilitated using network technology (Nash, 2014).

Generally, distance learning has highlighted three characteristics:

- 1- Capabilities to use information are enhanced.
- 2- Capabilities to select information are enhanced.
- 3- Learners' cognitive powers are strengthened.

Online teaching and learning presents a number of advantages and disadvantages. Important benefits are outlined below:

- *Flexibility*: Online classes offer flexibility to the student. They do not need to attend the courses physically and will mold with the schedule. Students can use much more than just pen and paper to express themselves or present what they have learned. The flexibility makes it possible for many to attend class that would otherwise be unable to do so.
- *Affordability*: Distance learning is very affordable. The affordability of program and the ability to work from home make this a very convenient way to complete studies.
- *Convenience*: With distance learning, there is no need to drive to class meetings or manage loads of book orders every year. savings of travel time, and absence of conflict with work hours are very valuable to all types of students,
- *Accessibility*: It allows for learning in a distant or disadvantaged location. Online education is easy to access and provides a convenient way to obtain course materials such as homework, exam schedules, test scores and more. Most online learning environments are accessible from a standard internet connection and typically require average home computer system requirements.
- *Easy Transfer*: It facilitates easy information transfer. For most online teaching, all course information is obtained by browsing the internet and sending/receiving email. This instant and secure transfer of information provides a convenient way for students to communicate with their instructors and fellow classmates. This provides a means for students to interact with each other while learning a particular subject thus enhancing the overall learning experience.
- *Self-direction*: In online teaching, students, to a large extent, learn to be self-starters and self-independent. This ability is valued in careers as well as working well with others.
- *Time Saving*: Time is one of the issues that learners and teachers both have to face in learning. The time savings from students not having to travel to and from and attend class can allow for much greater time to be spent on other learning activities. Online learning facilitates learning without having to organize when and where everyone who is interested in a course can be present. Students, as well as the instructor, can put more time on other activities. (Bowen, 2015).

As with new teaching methods, online learning has faced much criticism from many sources. It is argued that online teaching will reduce the

effectiveness of obtaining quality career positions these skeptics claim many existing barriers to effectively learning complex subjects in an online-only setting. So, even given all the benefits of e-learning, one cannot deny there are some drawbacks:

- *Barriers to accessing learning environments:* Although Internet courses allow all the students in over the world to develop their potential, but this facility is not provided to all. All people do not have equal opportunity to internet and other online facilities. All educational centers are not equipped with the facilities required for this type of instruction.
- *Isolation:* Online education creates a “monologue and not a real dialogue” in the learning environment. Some believe that online teaching isolates the students from one another as well as their instructor reducing the overall value of taking the course. This is because learning online is a solo act for the most part, which may give the learner the feeling that they are acting completely alone. Getting used to a life of isolation, makes people sad and feel more depressed.
- *Health Concerns:* Distance learning requires the use of a computer and other such devices; this means that eyestrain, bad posture and other physical problems may affect the learner. Too much work makes the situation worse.
- *Limited understanding of effective teaching methods:* Distance learning is a useful method, but many people have limited understanding of effective teaching methods due to youth of online learning. Many in developing and under-developed also do not know how to use it properly. This issue has caused the technology to become a destructive tool especially in Middle East.
- *Reducing individual transactions:* Not only less time you spend with the people but also those who are around you physically, are deprived from your love. As a result, people tend to spend less time with you.
- *Deviation of the real-life goals:* Too much attention to the virtual world in social network has prevented people to compete in the real world and achieve important goals.
- *Comparison:* Constantly comparing you with others in your social networks lead to destruction.

10. Traditional Classroom Education

However, the mission of education is to help students to cope with life crises and use the opportunities and battle the risks and strengthen the ability to anticipate events and adapt to change. But this mission only by understanding the desire of young people in the educational system according to their social needs can play an effective role only through classroom instruction.

The advantages of online education are numerous, from flexibility to time saving. However, but a quick look around the real world clearly demonstrates that most students are still choosing traditional classes (Guarino & Leopardi, 2014). This shows that there can be multiple drawbacks to online education in comparison to traditional classroom education.

The inherent characteristics of the traditional classroom instruction present advantages that make it a far superior choice to online teaching (McLaren, 2004). These advantages can be illustrated as bellow:

1.Face to face meetings: In classroom, different attractions can be added in order to inculcate motivations to the learners to do better and new research. By inspiring the student with beauty of words and different attractions, one can develop the spirit of research and scientific exploration. Hand gestures, voice intonation, and facial expression can all be very important in efficiently making things clear and conveying valuable nuance.

2.Quick feedback: One of the issues which are very important in classroom teaching is that both tutors and students receive the feedback of their work in the shortest time. When the student and teacher get the feedback on their teaching practice so quickly, they can do better planning for future programs and can make considerable progress in learning and teaching.

3.Developing order: The Middle East is a traditional society in which class management, and order in teaching, enjoys great importance and from the past was regarded as the main responsibility of tutor. Classroom management skills and how to teach, has great effect on the behavior and feelings of learners, and teacher's work is evaluated in this way.

4.Interaction: Online education facilitates learning without having to organize when and where everyone who is interested in a course can be present. Most students consider the traditional classroom environment beneficial for learning because they can interact with the teacher and their classmates. Especially for people who learn better through cooperative activities and group work, the possibility of asking questions and receiving immediate answers is important.

5.Improvements in teaching methods and techniques: Undoubtedly, human resources, especially tutors, are the main constituent educational environments and in this regard, the attitude and teaching methods of teachers in the educational activity process and, ultimately, its impact on learning process is very important. Influence of location and the necessary facilities, are obvious to any individual, but all the facilities without teacher performance will be of no use. Teacher deals with identifying opportunities to mobilize adequate learning environment, and organizes the environment and the educational facilities, and creates desired educational opportunities and by recognizing the talents, interests and abilities of students, will lead them in the right way.

6.The establishment of cooperation and social interaction: One of the important things emphasized by educational system about the classroom is group's discussion and creation a spirit of social work in students. Students in two-person, a group or class group, enable teacher to get a lot of feedback through listening to explanations of the students. This gives teachers a deeper sight to find out the progress of the students. Participation of all students in the use of IT resources in specific topics gives them the opportunity of challenging each other's understanding and through partnerships, to learn more.

7. Glorifying student talent: Another advantage of classroom education is glorifying of student's hidden talents. When in class, group discussions enthusiasm, reaches to its peak, the students can discover their abilities and capabilities that they themselves may not be aware of them and with guidance of teacher these abilities can be developed.

8. Ethical and moral Training: Other benefits of classroom teaching, is ethical and moral training. In the traditional societies like Middle East, most of ethical subject is thought in the attended class. In this way, moral issue is considered to be relatively more stable in the minds of students.

9. Attention feeling: Human beings crave is love. Sad and happy faces are not something that can be seen online. Love and affection is not something that is expressed through the monitor screen. Sometimes people need to be seen, have sympathy with their sorrows and encourage their success. Online training consists mainly of reading the words on the screen. Persian poem, Sa'adi says: If the teacher whispered love, holidays brought the elusive child to school on foot.

10. Reducing misuse of emerging technologies: When in classroom teaching, students become familiar with the various features as well as practical and tangible characteristics of technologies, the use of such technologies became less negative. Students by realizing the diverse and exciting applications for science and research, notice the positive effects and benefits from the technology and enjoy it and negative use of this tool will be driven to zero.

11. Participation in the competitive environment and motivation;

12. Acquaintance with competitors and their scientific level;

13. Conducting the study with planning;

14. Increasing self-confidence;

15. Making synergy through collective study.

11. Conclusion

One of the most important and influential factor that affects the public administration, is technology. Technology has become the key to a new world of education. Education feeds technology, which in turn forms the basis for education. Education in the Middle East has not been used for understanding the correct application of the technology. In turn, technology did not work as an instrument of effective education. Technology, therefore, technology has become a means of revenge.

What we need in this region today is not talent in producing advanced technologies but talent in understanding. We as an individual and member of societies should be aware of its effects on society and individuals. This calls again on education. Education should teach how to make optimum use of technology and to assist them to make use of the technology for faster development. Education must be much more responsive to the skill needs of society. The basic principles of education have to be based more on the notion of learning capacities rather than formal education. For the majority of Middle

East countries, the quality of life is deteriorating and development is still the main problem.

All industrial societies because of their belief in science and technology have made them consistent with the instrumental rationality of the production. Instrumental rationality of all cultural, political, social and economic sectors of society is forced to adhere to the principle of material productivity. But here the issue is raised in the name of the proper use of technology, in this sense that it can be used in a way that it does not put bad effect on human values.

On the other hand, distance, education in Middle East makes the issue more complicated. Education through virtual instructor is a type of teaching and learning in which the teachers and learners are geographically separated from each other. Internet is not only for lessons, and students are not limited to particular issue of instructor. Technology may take people to the private room and use it in negative term. Due to the youth of online learning, there has been little research conducted to evaluate the teaching methods or the effectiveness of student comprehension through an online-only learning environment. Some programs may be designed for a combination of online and classroom style teaching for the same course. This allows for the benefits of both types of learning to be realized.

References

1. Al-Hassan, Ahmad(?). Traditional classroom Teaching: Petra University. In [www.researchgate.net/publications.PublicPostFileLoader.ht](http://www.researchgate.net/publications/PublicPostFileLoader.ht)
2. Basioudis I.G., & De Lange, P.A. (2009). An assessment of the learning benefits of using a Web-based Learning Environment when teaching accounting. *Advances in Accounting, incorporating Advances in International Accounting* 25, 13–19.
3. Bowen, W. G. (2015). *Higher education in the digital age*. New York, NY: Princeton University Press.
4. Brach, J. (2009). Technology, Political Economy, and Economic Development in the Middle East and North Africa. *Review of Middle East Economics and Finance*, 5, 1, 1-23.
5. Brach, Juliane (2010). *Technological Readiness in the Middle East and North Africa-Implications for Egypt*. GAGA WP 155/2010.
6. Cherner, T., Dix, J., & Lee, C. (2014). Cleaning up that mess: A framework for classifying educational apps. *Contemporary Issues in Technology and Teacher Education*, 14(2), 158–193.
7. Clarck, Ruth Colvin and Richard E Mayer (2016). *E-Learning and the Science of Sons Instruction* (fourth edition), Wiley & Inc. New Jersey.
8. Ebrahimi far, Tahereh (2011). The Impact of information Technologies on the Persian Gulf Region: Peaceful or Agonal Dialogue. *Global Media Journal (Polish Edition)*, Fall 2011, No. 2 (8).
9. Guarino S, Leopardi E, Sorrenti S, De Antoni E, Catania A, Alagaratnam S(2014). Internet-based versus traditional teaching and learning methods. Oct.

- 11, 1014. National Center for Biotechnology Information www.ncbi.nlm.nih.gov/.
10. Izumi, Lance, Frazier Fathers, and Jason Clemens (2013). *Technology and Education: A primer*, Frazer Institute.
11. Jalbout, Maysa (2015). How can the Middle East close its education gap. <https://www.weforum.org/agenda/.../how-can-the-middle-east-close-its-education-gap/> May 21, 2015.
12. Lee, Yuan-Hsuan; Waxman, Hersh; Wu, Jiun-Yu (2011). Revisit the Effect of Teaching and Learning with Technology. ????
13. www.bibsonomy.org/bibtex/.../dblp
14. McGraw-Hill (2013). McGraw-Hill Launches First-Ever Adaptive Learning Ebook in Canada. Press Release (February 26). <http://www.digitalbookworld.com/2013/mcgraw-hill-launches-first-ever-adaptive-learning-ebook-in-canada/>
15. McLaren, C.H. (2004). A comparison of student persistence and performance in online and classroom business statistics experiences. *Decision Sciences Journal of Innovative Education*, 2(1), 1–10.
16. Mirza, Abdulrahman (2011). Models of e-learning adopted in the Middle East. *Applied Computing and Informatics*, 9(2), 83-93.
17. Nash, Susan Smith (2014). Adaptive Learning: Feedback and Mastery—Where Are We Today? Web blog E-Learning Queen (January 13).
18. <http://elearnqueen.blogspot.com/2013/01/adaptive-learning-feedback-and-mastery.html>
19. Ni, Ya (2013). Comparing the Effectiveness of Classroom and Online Learning: Teaching Research Methods. *Journal of Public Affairs Education*, 19(2), 199–215.