

E-LEARNING AS A PANACEA FOR SOCIO-CULTURAL IMPEDIMENTS IN WOMEN'S EDUCATION: A STUDY ON STRUGGLE OF FEMALE LEARNERS IN CONFLICT ZONES WITH SPECIAL REFERENCE TO YEMEN

Iftikhar Yusuf Al-Ariqi
Phd Scholar
English Department
Kuvempu University
Shankaraghatta, Shimoga,
Karnataka

Rajendra Chenni
Professor
Department of P.G of Studies
& Research in English
Kuvempu University
Shankaraghatta, Shimoga,
Karnataka

Jagannath K. Dange
Professor
Department of P.G of
Studies & Research in
Education
Kuvempu University
Shankaraghatta, Shimoga,
Karnataka

Mir Mohsin
Phd Scholar
Management Department
Shankaraghatta, Shimoga,
Karnataka

Abstract

It is well-known that education has been facing unrelenting impediments in Yemen. Yemeni girls are the worst victims who are suffering in pursuing their secondary or high education despite the educational uprising achieved throughout the last twenty years. Moreover, due to the recent war occurs in the area, girls encounter not only socio-cultural barriers to carry on their regular formal learning, but also some other economic and security problems as a result of instability in the area. Conflicts can be ethnic, social, civil or identity conflicts and so on conceived in terms of an essentialist ethnicity, or regionalism, or tensions over state-formation. Yemen has gradually sunk into a civil and regional conflict which forces most of students specifically female learners to stay at home rather than going to schools or colleges. This paper aims to firstly offer a theoretical analysis of the obstacles which have faced Yemeni women in pursuing their education shedding light on the socio-cultural status in the past as well as in the time of instability. It also tries to explore theoretically how e-learning can act as a blessing in disguise for Yemeni women who are continuously struggling for their educational rights due feudal and tribal structure of Yemeni society plus merciless war and political instability. It has been observed that e learning can eliminate or reduce to the minimum socio-cultural obstacles that are infringing on the educational rights and development of Yemeni women.

Keywords: socio cultural barriers, instability, women's education, e-learning

E-LEARNING AS A PANACEA FOR SOCIO-CULTURAL IMPEDIMENTS IN WOMEN'S EDUCATION: A STUDY ON STRUGGLE OF FEMALE LEARNERS IN CONFLICT ZONES WITH SPECIAL REFERENCE TO YEMEN

- Iftikhar Yusuf Al-Ariqi
- Rajendra Chenni
- Jagannath K. Dange
- Mir Mohsin

Introduction & context:

The right to education for all citizens is ensured in Yemen through the government's establishment of schools and educational institutions. Since the unity between the north and south in 1990, the Yemeni government has worked hard to wipe out illiteracy among its population. Although education has been regulated as obligatory in 2001, the law was not applied (Yemeniaty, 2012). Ramzia Al-Eriyani (2013) the head of Yemen women union asserts that the education percentage in the last ten years in Yemen rose only to 5%. In a society where superiority is given to the males, it has been noticed that male children in Yemen have better opportunities to attend schools than the females. In a conservative environment like Yemeni community, many girls have always to struggle and face various difficulties either social or cultural ones to pursue their learning. Furthermore, Yemen joined the 'Arab Spring' that prevailed in several countries in the Middle East and North Africa (MENA) region during 2011. As the crisis started in February 2011 as mass protests and evolved into violent clashes and armed groups, different negative economic and social impacts have outraged the existing fragile situation; however, the situation becomes worse when war has waged in March 2015 (Yemen National Social Protection Monitoring Survey (NSPMS: 2012-2013). Unfortunately, the armed groups which intentionally target schools, teachers, and students violate the rights of the Yemeni students to learn; in addition to putting them at risk of injury or death, they can impede students' chance to get education. Attacks on some schools, teachers, and students can cause them to drop out or go to school less often, force schools to cut their hours, and destroy school buildings and materials. In environments of violence and fear, the quality of young people's education is severely diminished especially children and women.

Despite the efforts by the Yemeni government, before the lately turbulent situation, to improve the educational system in general, girls' education remains in trouble and development is taking place slowly. This paper tries to display the social and cultural reasons behind girls' lack or non-existence in schools. It also suggests and discusses the possibility of applying informal e-learning as an alternative to formal learning in the era of instability due to current conflict in Yemen.

Socio-cultural & Insecurity Impact on Yemeni Women Learning:

Different studies ,done over the last 10 years, clearly show that the main causes for low enrollment and high drop-out rates for girls in Yemen are: 1) lack of accessibility, 2) socio-cultural as well as economic factors and recently 3) the current political situation and instability of the area.

Socio-Cultural factors:

Coming to the fact that a large part of Yemen's population, approximately 72% live in rural areas while the remaining 28% live in cities and towns. Since Yemen is a country with 25 millions of people scattered widely over often difficult terrain, the accessibility of schools is a major challenge in rural areas. In many cases children are made to walk over an hour to reach the nearest school. The distances become further in the higher the grades as not all schools offer both primary and secondary education. Alsabeh (2012) urges that Yemeni women still significantly fall behind in human development particularly in education when compared to men. The illiteracy rate is 69.1% for women, compared to 27.3% of men. She adds that the problem is worse in rural areas, where women's illiteracy is estimated at 80.56% compared to 40.25% in urban areas. Cultural and social norms have a more defining influence in the rural areas. Cultural and traditional perceptions of women and girls as 'vulnerable' have led to a tradition of segregation between the sexes. Al-Aghbari (1993) points out to the feudal or social structures which demands on the education system, such as schools suitable only if within cultural acceptable distances and locations, and the need for female teachers for girls after the fourth grade. Where co-education is considered unacceptable, the lack of separate classes for female students strongly affects girls' initial enrollment and, more significantly, the retention of female students. Al-Aghbari indicates that the relegation of women to domestic chores and the overuse of social prohibitions are other reasons of low number of girls' joining to schools.

Before the current conflict, according to the statistics done by Harkness (2015), many young people were already out of school, and few completed secondary education. Primary enrollment stood at 73.8 percent, with a 60.4 percent completion rate. There was a large gender gap, with 85.2 percent of boys enrolled and only 62 percent of girls. Secondary enrollment was much lower, with only 33.5 percent attending. The gender gap persisted, with 43.6 percent of boys attending and 20.7 percent of girls. Literacy rates were also low: 65 percent of the population over the age of 15 could read and write (Harkness, 2015). On another hand, Lack of female teachers for girls was cited by 4.6% of women and only 1.4% of men mentioned lack of male teachers as a reason. Lack of interest of the family in education was clearly much more decisive for women: 23.4% while only 7.3% for men (Unicef, 2006). The 2013 Demographic Health Survey surveying women aged 15-24 found that 29% left school because they got married, 15% of women who dropped out of school reported that they had had enough of school, while 13% cited a dislike for school. The other important reasons for non-attendance were that the "family need[s] help" (10%), that "schools are not accessible" (9%), and that "parents refused their

daughters continuing school” (9%). In addition, a number of studies have stated that education is not considered an essential asset for girls in their future, particularly in poor families. The last point is supported by Woronowycz (2016) in an essay in Frontlines newspaper who has shown that co-education and the presence of male teachers (especially single men who are not local residents) for the instruction of adolescent girls is a key reason for many Middle Eastern parents to remove their daughters out of school at a later stage. He added that it is important to refurbish schools in Yemen as many students who said they had lost interest in attending classes because of overcrowding and poorly maintained facilities.

From another perspective, the (NSPMS) revealed that data related to families income indicate that there is a significant difference between urban and rural areas but not such a difference between poor and non-poor families in rural areas. It also indicated that the utilization of educational services does not depend on poverty (poor and non-poor families) but on the distance of families to the school, particularly in rural areas. There are different factors which have hindered development and accordingly education in Yemen such as instability and large-scale displacement, as well as weak governance, corruption, resource depletion and poor infrastructure, unemployment, high food prices and limited social services. Poverty has made more than 10 million Yemenis are believed to be food insecure and school leavers (BBC, 2015).

Instability factors:

The obstacles mentioned earlier– lack of accessibility and socio-cultural factors demonstrate clearly that both supply and demand factors are influencing the educational situation of young people especially girls in Yemen since education has started after Yemen’s Independence in 1962 up to 2010. Then, a new turning point has occurred in Yemen which complicates the education process again for youngsters especially women. In 2011, an uprising affected by the Arab Spring revolution has been launched which changes the whole stability of the country up to this moment. Since then conflicts have been going on and even primary education has been badly hindered. Accordingly, a third obstacle appears to stand in front of girls pursuing their education which is the current instability factors throughout the country. Harkness (2015) argues that the conflict has had a large negative impact on the education system in Yemen. More than 1.8 million children are out of school; 3.600 schools have been directly affected: 248 of these schools have been damaged, 270 have been repurposed for housing internally displaced citizens and 68 have been occupied by armed groups. The 2011 World Bank Development Report found that people in fragile and conflict-affected states are more than three times as likely face difficulty to send their children to school as those in other developing countries.

There are multiple ways in which fragile and conflict-affected situations act as barriers to access to and completion of not only secondary and college education but also primary

education. Destroyed and war-affected situations often also result in a big number of refugees who cross borders to other countries. In a report done by Unicef (2016), Madhok explains that after the escalation of the conflict and the closure of nearly 3,600 schools, over 1.8 million school-aged children were forced out of school. Even after the reopening of schools in November 2015, more than 1,600 schools remain closed due to insecurity, infrastructural damages or use as shelters by displaced people, mainly in al-Jawf, Sa'ada and Taiz governments. The Education Cluster estimates that more than 1,000 schools have been damaged and 184 are used as shelters by displaced populations. The closure of schools now impacts nearly 387,000 children (Madhok,2016). It is obvious that without a rush rehabilitation and support for education, the chances of Yemen and its children recovering and building a peaceful future are bleak. This paper attempts to suggest an alternative key of learning for those students for whom going to school is risky and discouraged by parents in the current time especially in the conflict zones. In case of electricity and internet access availability, informal e-learning might have somehow participation in pushing students to like learning and carrying on with their education.

E-learning:

E-learning is the use of technology to enable people to learn anytime and anywhere. E-learning can include training, the delivery of just-in-time information and guidance from experts. Obviously, the implementation of e-learning systems in education has enabled a dramatic change in teaching and learning practice. The success of e-learning adoption across an arrangement depends on several factors, for example, the availability of technology, how students and instructors are supported in its use and the integration of technology within the student learning experience. Transformation of the learning style presents several challenges including changes in the cultural expectations and the continuing development of technological skills of staff and students. These aspects need to be controlled effectively to achieve overall productivity of student and staff learning experiences, which are promoted through the appropriate use of technological mixture. The purpose of this paper is to suggest considering learning using technology in Yemen, as a practical solution to overcome the sociocultural barrier as well as the crisis of education in the conflict zones.

E-learning: Literature Review

E-learning refers to the use of information and communication technologies (ICT) in different processes of education to support and enhance learning in higher education institutions. This includes the use of IC technology as a supplement to traditional classrooms, online learning or mixing the both modes (OECD, 2005). E-learning offers institutions and their students the flexibility of place and time of delivering or receiving learning information. E-learning is beginning to spread widely all over the Middle East region, as access to different technology forms improves. The term 'e-learning' has been applied in different contexts, such as distributed

learning, hybrid learning and online-distance teaching (Maltz et al. 2005). In an e-learning context, a variety of tools and technologies are employed, for example, internet mediated teaching, web-based education, TV and radio broadcast, virtual classrooms and distributed learning (Rosenblit, 2009). Online learning can be more flexible and often involves more technologies, for example, audio chatting, video conferencing and online discussion (Hrastinski, 2008). All these technologies give learners the opportunity to interact with instructors and other learners effectively and flexibly.

E-learning offers additional opportunities for interactivity between students and instructors during content delivery (Wagner et al. 2008). In a hybrid (blended) course, a significant portion of traditional face-to-face class time is replaced by online components (OIT, 2009). From the students' aspect, e-learning allows the exploration of more flexible and enjoyable ways for learning with less need or cost for travel to attend classes. The learning is replaced by interaction opportunities with instructors and other students on an anywhere-anytime-anyhow basis. Hence, e-learning offers pathways for students to continue their learning to acquire new and upgrade existing skills at a time and place of their choice. Zhang et al. (2006) argues that e-learning through interactive video facility allows students to watch any activities conducted inside the classroom and listen to instructors several times if needed. If such an activity had been made possible in conflict zones, educational process would continue with good results. This provides tutors with more ways to interact with students and to provide them with immediate feedback (Brown et al, 2008). Those who adopt advanced technology during the teaching and learning process need to possess a range of ICT skills (Juhadil et al (2007)). This is an essential part of attracting more students and enriching the student learning experience and make e-learning implemented and effective to them.

E-learning can play a crucial role in overcoming the problem of quitting girls to pursue their education. Aljaaidi (2016) conducted a study on adopting E-learning system at Hadhramout University (located at the east of Yemen) as a solution to resolve a part of the illiteracy among girls in Hadhramout governorate. He suggested that E-learning system should be supported by the Republic of Yemen and the international organizations in order for this technique to continuously generate the expected results of spreading knowledge among the girls in Hadhramout city in particular and throughout the republic of Yemen in general.

IC technologies can assist in spreading education among poor communities. Olson, Tarkleson, Sinclair, Suene (2011) state that e-Learning technologies could potentially play an important role in reducing the gap in access to education and in achievement by girls and other underserved communities in developing countries. Currently, the gap in access to education of girls and under-resourced students is mirrored by a gap of them using the Internet and other ICT technologies, due to societal norms and economic situation. Introducing e-learning technologies into schools can assist girl and other underserved students improve their ability to participate in schools. Governments and international organizations are designing e-learning programs to deliberately address the gender gap. The 21st century has witnessed a growing interest in most

countries of Middle East with regard to the adaptation and application of e-learning. E-learning can include students from k-12 and college students. When it comes to institutions of higher education, similar types of variations in e-learning adoption can be seen across the different parts of ME. Three main models of college-level e-learning institutions can be found in different parts of the region. They are a virtual e-learning model, a hybrid e-learning model and a traditional university e-learning model.

Methodology:

Questions:

This study tries to answer following research questions:

- How e-learning can increase the school enrollment of female learners in tertiary education?
- What role e-learning can play in training and development of female academic staff?
- How e-learning can provide economy of scale in education system?
- How e-learning can remove socio-cultural barriers that are hampering the literacy rate of female learners?

To answer the above questions, discussions will be based on the secondary data collected from World Bank.

School enrollment, tertiary, female (% of Gross)	6.07397
School enrollment, tertiary, male (% of Gross)	13.74465
Unemployment Female (% of female labor force) (modeled ILO estimate)	39.2
Unemployment male (% of male labor force) (modeled ILO estimate)	9.8

Source: World Bank (Table1)

Discussion:

1. How e learning can increase the School enrollment of female learners in tertiary education?

It is evident from the data presented in the table (1) that gross enrollment ratio of female learners in Yemen is half of the male learners. The reasons behind dwindling enrollment ratio are social, economical and political. E-learning can enhance the gross enrollment of female learners when providing the following factors:

a. Safety factors:

E-learning at home guarantees safety for learners specifically girls whose parents might stop them from going to schools for security problems. In conflict zones, most children may witness different battles at close quarters when their schools were caught in a crossfire between fighting forces. Accordingly, families do not feel secure to send their children to schools, therefore, e-learning can play a crucial role in this context. Girls can stay in homes pursuing education through e-learning. In case a cooperation has been achieved between IT center and educational institutions, e-learners can get their secondary and high education certificates provided that the local government credits those certificates.

b. Educational factors:

E-learning is a learner-centered approach which fosters learners communication skills & active participation. It also creates group collaboration and sharing activities which make learning more easier and enjoyable. E-learning improves the quality of education by providing improved informational content and learning approaches. Interactive, communicative e-learning may promote the development of skills in students (so called “21st Century Skills”) such as critical thinking and problem solving, communication, collaboration and creativity. ICT through its user-friendly approach will improve student achievement through;

- providing learners with interactive learning, fostering their reading skills and providing feedback.
- providing various interactive teaching methods using Information and Communication Technology (ICT).
- promoting active learning strategies.
- individualizing student learning experiences and their learning styles.
- encouraging more co-operative and project-based learning.
- developing student independence and responsibility for own learning.
- giving students drill and practice exercises.
- making the learning process more interesting and engaging.
- Fostering critical thinking and informal decision
- Addressing the shortage of teachers or female teachers, especially science and other specialty teachers. It can do this by providing high quality teaching materials, such as videos, interactive software or information from a “cloud” on the Internet or a local computer.

c. Mass awareness factors:

Students need to realize this alternative as a new approach which provides for them another opportunity to pursue their education especially in conflicts and instable zones. Spreading awareness among female students through e-learning programs is essential to guarantee their good use of it. When knowledge will be spread among the girls who, in the future, will be the

mothers of other girls, similarly, in the long run, women as mothers can change the perceptions of the society regarding education as well as the benefits of e-learning.

2. *What role e- learning can play in training and development of female academic staff?*

It is evident from the data presented in the table (1) that only 39.2% of women have engaged in labor force. Training and development is a key to successful teaching as teaching is both art and science. Training through e-learning will motivate female teachers by combining text, sound, color, and moving images that enhance content for easier learning. E-learning can facilitate acquisition of basic skills through drill and practice and enhance teacher's training by improving access to subject experts all over the globe. As per most recent data available regarding unemployment rate, it is apparent that female unemployment rate is staggering as compared male unemployment rate. Thus, e learning can act as proper tool of skill development among female labor force. In Yemen context, e-learning project under the ministry of Education and funded by the US embassy and the US agency for international development has completed the 1st phase of its training program. Thus, program between US and Yemen, forging communication and understanding between teachers and students in both countries as well as teachers and students in the Arab world (Aljaaidi, 2016). Therefore, with time passing, society will start realizing the role of those female instructors who will be indirectly one of the reasons behind the increase of the rate number of girls' enrollment in schools.

3. *How e- learning can provide economy of scale in education system?*

In a socially conservative society and conflict zone like Yemen, the investment required to develop state of art educational infrastructure especially for women is impossible. To overcome this economic barrier e-learning is the best option as it requires lesser investment and provides huge scope of economy of scale in educational system because of its mass appeal and enormous outreach. Another obstacle which is poverty and the family's need for children to work to increase family income can be reconsidered when applying e-learning. Families with low income and inability to send their children to schools can be solved by adopting a computer with internet access to acquire knowledge at homes.

The potential economic benefits of e-learning are dual. First, e-learning improves general education through interactive and blended learning. Second, it creates a technology immersed population with modern skills, generates highly employable labor force which results into value added economic returns that ultimately augments the overall Gross domestic product (GDP) of the country. Speaking broadly one laptop with internet is equal to one university working 24X7 thus removing the time limitation and boosting the culture of flexible learning. In economic sense investing in laptop is equal investing in one university. Economically, e-learning provides the following:

a. Lower investment

Using technology at home is less cost than spending money on transportation and study materials. E-learning helps students' families to save their money and time of going to and coming from schools or colleges. It is an economic facility for poor families who can at least provide their children with a computer and internet access rather than spending more money on other schools or colleges costs for a number of years.

b. Faster access

Due to the lack of accessibility of some schools, parents may not send their daughters to schools and prefer them to get married. For those families who fear to send their daughters to remote places, e-learning can be provided at home with faster access as well as electricity facilities. The government should encourage online learning by providing license to some universities to launch their educational links. Blended or hybrid learning can be applied through these universities.

Furthermore, e-learning addresses the shortage of learning material such as textbooks for students. The material could be made available on hand-held devices such as e-readers or mobile phones. Interactive features such as quizzes or games could improve the level of learning and understanding. In sum, e-learning is crucial apparatus for educating the next generation of workers in a knowledge-centered economy.

4. *How e-learning can remove socio-cultural barriers that are hampering the literacy rate of female learners?*

As the table (1) shown only 6% of female learners enroll in schools. Since Yemen is a socially closed society comprising of ultraconservative, tribal and feudal family structure. Stereotyping, cultural bias and gender discrimination in some regions are enormous because of which the mobility, co-education and intermingling of different sexes is restricted. All these socio-cultural log jams are affecting literacy rate of female learners enormously. Implementation of e-learning on mass scale can reduce these socio-cultural obstructions pacifically without disturbing positive value system and social norms of Yemeni society. E-learning contributes in making families realize the possibility of educating their daughters without breaking the society tradition. E-learning can achieve the following:

a. Parents or husbands no objection:

Utilizing e learning female learners can get access to world-class faculty without having direct eye contact with them. Therefore e-learning can advance both literacy rate and quality education among the female learners. For example, girls who have got married or become mothers early can stay at home signing in internet for learning. Parents and husbands would have

no objection as the girls are still under the society tradition and not far from their housework duties.

b. No time constraints

E-learning can be used anytime with no constraints. The essential issue is to make sure how to control the links or apps that are given to students and how to make them educational and applicable, no matter of time use or access.

c. Global access to education

All people with different ages can access to education through e-learning. It provides students information and communications technology skills. The graduates will be better equipped to contribute to the knowledge-centered globalized economy of their countries. E-learning applies the aim of communication approach of learning which encourages real life situations and deal with real-world context.

d. Psychological barriers

It is well-known that most of students especially girls may encounter some psychological problems like anxiety, introversion and less self-confidence. Learning via internet not only can let them overcome their fears and hesitations, but also can provide for them solutions and alternatives. Furthermore, it furnishes for female learners keys for their health problems which girls might get and feel self-conscious to inquire about. Since Yemen is a conservative society using e learning can break gender bias without disturbing cultural values of the country.

Conclusion:

To overcome the current crisis of education in Yemen, it is essential to adopt e-learning in authorized educational institutions as well as homes by the government. Even though the concept of e-learning may not be familiar by many people in society, still efforts should be made by the government and educationists and those who are in charge to make e-learning recognizable and reachable to everyone. In other words, the gap of education in the unsafe area has to be bridged by adopting e-learning system through cooperation among three parties; the government of Yemen, international and national organizations as well as the people of the community themselves.

Suggestions:

Here are some suggestions which can be helpful, in case applied, to foster education for female learners in the affected- conflict areas despite of social and cultural barriers; In the meantime of conflict, the government should provide people with the basic services of electricity and internet access. The government should adopt E-learning system, particularly blended e-

learning, in all government and private schools and universities. Exams and authorized certificates can be issued to push people to enroll their girls in E-learning system. It is advisable to make internet registration cheaper and gradually for free so that poor families can be provided with internet facilities. Furthermore, other organizations either international or national which specialized in girls or women protection should take a step, too. The government of Yemen has to spread awareness on the importance and role of e-learning in spreading knowledge and make education easy and reachable for everyone in society. The government has to arrange training courses and workshops in how to make e-learning effective and reachable. The government has to govern e-learning certificates under law so that people can trust it and be encouraged to participate in it. The IT department has to control the whole process so that only educational links can be open for students to learn. Encouraging people to apply E-learning in their homes so that parents would have no objections on their girls to sign in the Internet for acquiring knowledge as their girls don't break the tradition. For safety reasons due to the conflict in the area, girls can continue their education at homes. Parents would not feel scared to send their girls to schools or colleges in the time of war. The two only things which have to be provided to make it possible is electricity plus internet access to every home.

Works Cited:

- Alsabeh, Suad. Yemeni Women at the Front Lines for Change. Retrieved from <http://www.al-monitor.com/pulse/culture/2012/03/yemeni-women-hope-from-pain.html#ixzz43pPnq0WA>, 2012.
- Al-Aghbari, Badr. Arab Women, Modernity and Democracy. United Nations Educational Scientific and Cultural Organization. SHS-94/WS/2, 1993.
- Al-Arashi, Fakhri. Girls' Education in Yemen: Harsh conditions of girls behind their dropout of school. Retrieved from <http://nationalyemen.com/2012/04/14/girls-education-in-yemen-harsh-conditions-of-girls-behind-their-dropout-of-school> on March 18, 2016.
- Al-Asaadi, Mohammed . After dodging bullets in school, Yemeni children hope for a safer future. UNICEF Yemen 2015. Retrieved from http://www.unicef.org/infobycountry/yemen_78943.html, January 2015.
- Abdul Alim, Kamel Ben Abdallah, Solofo Ramarason, Maman Sidikou & Lieke Van de Wiel. Accelerating Girl's Education In Yemen: Rethinking Policies in Teachers' Recruitment and School Distribution. UNICEF. 2007.
- Aljaaidi, Khaled. Girls' Educational Crisis Solving Through The Adopti<https://Www.Hitpages.Com/Doc/6587680968146944/6on> Of E-Learning System: The Case Of Hadhramout University, Retrieved from on 1 Sep, 2016.

- Abdelmuhdi, Ali Aljarrah, David W. Stephen, Maisson H. Bin Yahya, Maisa M. Aldumairi. Obstacles Facing Yemeni Women in Pursuing their College Education and their Perceptions toward e-Learning as a Solution. Retrieved from http://www.itdl.org/Journal/Mar_10/article05.htm on March 18, 2016.
- Brown, C., Thomas, H., Merwe, A. & Dyk, L. The impact of South Africa's ICT Infrastructure on higher Education. [online]. Available at http://sun025.sun.ac.za/portal/page/portal/Administrative_Divisions/SOL/All%20shared%20documents/Dokumente/Brown.pdf (Accessed 11th April 2011)
- BBC. Yemen crisis: Who is fighting whom? Retrieved from <http://www.bbc.com/news/world-middle-east-29319423> on 26 March 2015. (Accessed 12 Sep 2016).
- JuhadiI, N., Samah, A & Sarah, H. Use of Technology, Job Characteristics and work outcomes: A case of Unitary Instructors. International Review of business Research papers, 3 (2), pp. 184-203. (2007).
https://en.wikipedia.org/wiki/Women_in_Yemen. Retrived on March, 21, 2016.
- Harkness, Jane. Education System in Yemen Suffers in Conflict Zones. Retrieved from <http://borgenproject.org/education-system-in-yemen/2015>.
- Hrastinski, S. Asynchronous and Synchronous E-learning. EDUCAUSE Quarterly, (2008), 31(4), PP.51-55. Source: Learning: The Treasure Within. Report to UNESCO of the International Commission on Education for the Twenty-first Century. Paris, UNESCO, 1996. Retrieved from <http://collections.infocollections.org/ukedu/en/d/Jh1748e/6.html> on 23 March 2016.
- Maltz, L., Deblois, P. & The EDUCAUSE Current Issues Committee. Top Ten IT Issues. EDUCAUSE Review www.educationreview.org.mx/archivos/ACERVO/ElearningPolicybriefenglish.pdf (Accessed 21st April 2011). , 40 (1), pp. 15-28. (2005).
- Mirza, Abdulrahman; Mohammed Abdulkareem. Models of E-learning Adopted in the Middle East. Applied Computing & Informatics (2011), 9, 83-93.
- OECD. (2005). E-learning in tertiary education. [Online]. Available at <http://www.cumex>.
- OIT (2009). Hybrid Courses Definition. [Online]. Available at <http://otal.umd.edu/hybrid-definition> (Accessed on 4th April 2011)
- Olson urt deMaagd1, Eric Tarkleson3, Julie Sinclair2, Suen. An Analysis of e-Learning Impacts & Best Practices in Developing Countries With Reference to Secondary School Education in Tanzania, Michigan State University Board of Trustees. 2011.

Rosenblit, S. Distance Education in the Digital Age: Common Misconceptions and challenging tasks. Journal of Distance Education, 23 (2), pp.105-122. 2009.

The World Bank Group. In Yemen, Breaking Barriers to Girls' Education. Retrieved from <http://www.worldbank.org/en/news/feature/2013/04/11/yemen-breaking-barriers-to-girls-education> (2016). Countries and their cultures. Retrieved from http://www.everyculture.com/To-Z/Yemen.html#Comments_34 on March 23, 2016.

Woronowycz, Roman. Girls in Front Row of Yemen's New Education Drive. Retrieved from <https://www.usaid.gov/>

news-informatin/frontlines/youth-mobile-technology/girls-front-row-yemen%E2%80%99s-new-education-drive-0 on August 30,2016

Wagner, N., Hassanein, K. & Head, M. Who is responsible for E-learning in Higher Education? A Stakeholders' Analysis. Educational Technology & Society, 11 (3), pp. 2636.2008.

Yemen National Social Protection Monitoring Survey (NSPMS): 2012-2013 Final Report. Retrieved from http://www.ipc-undp.org/pub/eng/Yemen_National_Social_Protection_Monitoring_Survey_2012_2013.pdf on 2 Sep, 2016.

Yemeniyati, Recommendations to Improve Yemeni Education for Women 2012.

Zhang, D., Zhou, L., Briggs, R. & Nunamaker, J. Instructional video in e-learning: Assessing the impact of interactive video on learning effectiveness. Information & Management, 43 (1), pp. 15-27.2006.