Investigating the Role of Electronic Education Infrastructures in Enhancement of Mobile Learning and Education at Islamic Azad University Electronic Branch

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Abstract: The production, distribution, and consumption of information are the most important development indices of any nation. Plenty of opportunities were created by e-learning which have overall paved the grounds for and enriched the presentation of learning materials through advanced audiovisual educational facilities. Such learning environments are by and large flexible and provide more appropriate learning opportunities for those who, due to their work commitments and/or personal reasons, are unable to attend actual classes. Taking advantage of the capabilities of technological tools such as the Internet and other educational software, the learners can now be benefited from more standard virtual e-learning environments. Mobile learning is a branch of e-learning which provides education through wireless and computerized media. The present article is an attempt to have a closer look at e-learning and mobile education and to examine its mutual relationship with mobile learning. The main question of this study is, however, to enhance education through mobile learning. To provide a plausible answer to this question, students at the Islamic Azad University, Electronic Branch were asked for their attitude towards the possible role of e-learning infrastructures on the development of mobile learning and education. Descriptive method of research was utilized for the purpose of this study. The results obtained from the correlation analyses revealed a statistically significant relationship between electronic education infrastructures and enhancement of education and mobile learning.

Keywords: E-learning, e-learning infrastructures, e-learning procedures, mobile technologies, mobile learning, mobile learning standards.

Introduction

The emergence of the information age has changed the world forever. The Internet and frantic growth in communication technologies have had one of the most profound and visible effects of any invention in modern history. Web technologies have changed how we communicate, how we make purchases, and how we learn and educate ourselves. The power of e-Learning is more than technology—it is the social dynamics of networking. The revolutionary impact of e-Learning lies not simply in having a multimedia platform on a single desktop. It is the power of a world-wide network that connects individuals globally with the immediacy of text, graphics, audio and video, as well as interactivity and collaborative sharing. Instructors and curriculum developers can now share resources more easily and together build learning-object repositories. Multimedia and expanded resources from the network can enhance the traditional classroom experience dramatically. In the meantime, online synchronous tools create a new kind of cyber-classroom, connecting distance learners from many people in peer-to-peer engagement. Furthermore, online self-paced tutorials create enriched interactive and exploratory learning experiences that are accessible any time when a learner is ready.

E-Learning can be done in any geographic which makes it more cost effective than traditional learning because less time and money is spent traveling. Flexibility is another major benefit of e-learning. Under a virtual environment, education is available when and where it is needed. Learners like e-learning because it accommodates different types of learning styles. They have the advantage of learning at their own pace. Students can also learn through a variety of activities that apply to many different learning styles. They are able to find information relevant to their personal situations and interest. This sort of education allows selection of learning materials that meet their level of knowledge, interest and what they need to know to perform more effectively in an activity. Through e-Learning we may make use of PowerPoint slides, audio-video files, chat rooms and make learning easier (Gerami, 2006, p. 37). Under e-Learning, the pace of learning increases as the content to be learned
is divided into smaller manageable sections. The quality of instruction is of prime importance since the traditional approach is replaced by the new method of instruction. It is assumed that the new method of instruction would act better than and more efficient than the previous models of instruction. Each nation has its own infrastructures and consequently the type of e-Learning changes from country to country. In a country like Australia, where the lands are sparsely populated, the need for e-Learning is more tangible. While in countries like China and India, the inclination towards e-Learning is because of inadequate higher education and limited financial resources. In countries like Germany, the United States, Japan, France and England there is an increasing attention to adult learning and incessant learning of modern sciences and skills play a big role in internet-based education. In most African countries inadequacies in the system of education and financial problems have motivated e-Learning as a panacea to traditional education. In Iran, however, the ever-increasing number of university applicants, the need for training educational staff at schools, and providing the opportunity for the white-collars for further education played a significant role in enhancing e-Learning. There are about 3,135,000 (aged 11 through 17) underachievers in Iran who could not finish high school and a lot more who are waiting for higher education at Centers of Excellence. It is thought that e-Learning can have a decisive role in providing a solution to the problem. This article is an attempt to present a scientific definition of e-Learning and to discuss the objectives behind such learning (Adihan-Bahar, 2004, p. 12). The main issue under investigation in this article is the enhancement of efficiency in education and mobile learning at Iranian universities. The article also aims at analyzing the possible role of e-Learning infrastructures in enhancement of efficiency in education and mobile learning through the analysis of views held by e-Learning students at Islamic Azad University, Electronic Branch.

Training and Learning

Traditional approaches to teaching focus more on training aspects and have proved to be less productive as they rely on involuntary attempts on the part of the students which eventually result in educational underachievement inside the class and some difficulties outside the classroom. In modern approaches, however, the focus is on learning and the students are not forced to learn and evidently problems will not occur (Asgharzadeh, 2006, p. 43). Another very important issue is the type and the level of learning among students. The difference in learning styles is rooted in the individual differences among learners. Obviously, an efficient education system is observant to the individual differences. In a traditional classroom, owing to the type of the lesson and limited number of available resources, only some of the learning styles and techniques are developed and less time is invested on student interaction (Derpry, Stephensd, 1990, p. 94). In this day and age the traditional approaches to teaching fall short of providing all qualitative and quantitative students’ needs and consequently face challenges and destitutions (Afzalzadeh, 2005, p. 14). Some of these shortcomings are:

1. Highly skillful teachers are required to run the school and the classes both easily and efficiently.
2. Quality teaching requires highly professional teachers who are not easily available.
3. Learning has a sophisticated process which might be delimited to time, place, and educational facilities.
4. The learning process is controlled by the school, but the time allocated to the learning process is determined by the school.
5. The level of achievement and the ability to learn is totally related to the quality of instruction.
6. The learning materials have to be proved to be inadequate at the present time. Yet there are no preconditions for the educational settings and the content of learning.
7. The learning needs are usually provided with the school and the university and sources are available to the teachers. This way of mobilizing information might be erroneous.
8. Usually, transfer of science and more specifically education is from the instructor to the students, leading to the removal of creativity and innovation.
9. The quantity of the information is taken into association.
10. The students are trained in the same way and by the same token.

E-Learning and mobile learning provide a quick access and a top-notch solution to issues such as accessibility, speed, time, budget, but these are still effective in teaching and the institutes are willing to be on their own and keep the track with the society, and to fulfill the requirements of. Human life can develop together with the escalating situation of the information and can foreshadow development of the social needs (Melton, 2002).

Mobile Learning and Mobile Education

Traditional approaches to education which comparatively teacher-centered and materials-oriented are now gradually losing their importance and value. Advancements in industries and technology have attracted the attention of many including those who are involved in educating masses. There is serious attempt to mobilize more
advanced technologies as to the development of newer forms of mobile communication and mobile-based instruction. Many technological innovations of the 20th century have promised breakthroughs in the methods and effectiveness of teaching. Some of the most promising innovations included filmstrips and motion pictures, teaching machines, and programmed instruction. But the promise generated by much of this new technology proved illusory, and most changes in teaching methods became nothing more than short-lived fads. One very different technology, however, may have far greater effects on educational practice than their predecessors. The revolution in computer and communications technology especially cellphones and mobile communication holds out hope that all students will connect with more information and more people than ever before, and that learning might become more individualized.

Educational institutions in Britain, Sweden, and Italy are increasingly offering schooling opportunities to people who cannot attend schools for many different reasons. This rise of schooling parallels the increase in individuals aged between 16 through 24. Enrollment has similarly increased in adult education programs, which are usually defined as part-time study not directed toward a degree. Adult education programs vary substantially. Many adults enroll in such programs for job-related reasons, often because companies provide incentives for employees to upgrade skills through training. Many adults also attend school to pursue personal interests and hobbies. A growing number of older and relatively affluent people have created a new market for reading and other kinds of self-development.

Teaching becomes easier through cellphones. The teacher can send and receive feedback over the phone and provide instruction and practice. This project is in fact part of a larger project in Europe (Information Society Technologies Program). Along with activating such a project, World Wide Web Consortium (W3C) has followed serious attempts in the development and enhancement of using electronic devices in education. More recently, W3C initiated a project (Mobile Web Initiative) to use mobile web through cellphones, which reiterates the use and role of the Internet in nearly every aspect of modern life. Currently, many advanced software are developed to promote the project into a versatile system to cope with recent-day necessities of the Web-based mobile education (Pahlevanzadeh, 2006, p. 14).

Cellular telephone services have achieved great commercial success because users recognize that mobile telephone access can improve productivity and enhance safety. Delivery drivers, repair technicians, lawyers, and other professionals were early adopters of mobile telephone service. As more geographic areas are covered by cellular networks and as rates drop, new subscribers are using cellular services for personal security, safety on the road, general convenience, and most important of all for education. Mobile education has proved to be helpful in teaching the basic requirements and skills like driving, travelling, social security, and health concerns to individuals. Mobile education is now surpassing internet-based education and is forcing other technologies away, as it is more convenient to use and it provides a gamut of learning opportunities for the learners. Even illiterates can be benefited from mobile education and other facilities provided by the cellphones.

The Necessary Infrastructures

Since mobile learning is new to societies, teachers and educational staff as well as the parents need to be sure of their positive role in educating children. There is growing concern on the availability of necessary infrastructures to both run and support the education at schools and other learning environments. We also need to develop guidelines and promote legal requirements for the producers and end users of the mobile education technology. Mobile education does not take place at school setting or even in front of desktop computers. It happens over a very advanced telecommunications system. So anywhere we talk about mobile education, we should be taking care of the necessary communications technologies, in this case the wireless technology, PDA, and so on and so forth. The mobile technology should support the learning content and the Internet academically. They should also offer learner-teacher interaction. According to Baker (2006), the structure of a mobile learning must provide at least a teacher, the learners, educational instruments, a guide, and a telecommunications system.

The most important advantage of mobile learning is its ubiquity, which means existing anytime, anywhere. Evidently, with more convergence on the part of network providers, mobile education and learning becomes more efficient. This convergence helps us to bring together all necessary requirements and support mobile learning throughout a large geographical area. The most important aspect of mobile learning, i.e. the quality of services (QOS), is the reliability and the speed of communication. QOS directly affects media-generated data and will consequently influence mobile learning: for example, video streaming is only feasible under high speed communication networks.
And since mobile devices have limited screen size and resolution, functional systems and software capabilities have to be used to show data. Therefore, as in other fields of digital technology development, infrastructures are vital in reaching the efficiency of the devices.

Utilizing the basic literacy in using computer and the Internet can be regarded as software infrastructures, whereas, accessibility of high speed and inexpensive internet connection with adequate bandwidth can be called hardware infrastructures. Researches show that majority of experts regard education factors as barriers to mobile education development. (Parsons, 2006) Therefore, it is recommended that there should be no rush in utilizing mobile education, that before equipping schools with hardware, evaluation on education issues must be carried out the to develop and publish educational software suitable and in accordance with current curriculum. It is recommended that an appropriate criterion be reached to evaluate the degree to which such technologies are being applied by students. Moreover, since teachers play the key role in applying mobile education to schools, it is suggested that teachers be familiarized with e-learning and mobile systems and, that their IT skills be enhanced through on-duty-time classes.

It is noteworthy that Eizi research (2008) shows that more than half of respondents have mentioned the inadequacy of network educational materials as hindering the development of mobile learning. Accordingly, a team is recommended consisting of strategy committee, which plans the overall objectives and financial aspects, education designers and technologist and program managers to propose network educational materials. (Gharabaghi 2008, p. 37)

**Conceptual Model of Research: E-learning Infrastructure**

For implementing e-learning infrastructure, they must first be identified and then implemented as in accordance with education objectives. The experiences of the major universities around in applying electronic education can be used. In countries where traditional education is replaced by e-learning, the problem had been inadequate number of students and costs of holding classes. That is why e-universities are established. The problem, in Iran, is great deal of students. Therefore, it is recommended to hold traditional classes even in the furthest part of the country, if there is any chance. Because e-learning, despite its advantages, has its own disadvantages, and must be used alongside the traditional education. One of the fundamental problems of e-learning in Iran is its standardization, no such measure has been carried out yet, and many institutions and organizations are involved in e-learning standardization. Other cases to be dealt with in this field include:

1. **Infrastructure hardware, software and telecommunications;** e-learning is based on appropriate telecommunications, hardware and software facilities. This is still an issue in our country. Moreover, telecommunication facilities in the country are not widespread throughout the country as to be able to apply e-learning in all cities. Consequently, to spread e-learning, hardware, software and communications facilities are needed to gain the maximum benefit of e-learning. (Ashna, 2008, p. 21)

2. **Educational materials;** an important issue in e-learning is the educational material and content. 40 to 50 percent of educational materials in traditional education is delivered by teachers and the rest is reached though participating in discussions and researches. The e-learning, students play the main role in education is and teachers role is shifted from “scientific source” to a “learning supervises and facilitator”.

Education materials should be designed in a way their productivity is similar to traditional learning. The purpose of e-learning is not to change traditional materials into electronic texts, but to establish specialized training with new methods. Therefore, to develop such materials, qualified teachers in each subject, need to be accompanied by experts who are familiar with educational technology, so to ensure the lessons are effective. So educational materials have to be carefully designed so the learner can learn subjects and materials he learns in traditional learning.

3. **Educational fields;** Educational fields need to be reviewed as to their applicability through e-learning. E-learning is not to be a substitute for traditional learning. E-learning in Iran should primarily focus on courses for which less educational facilities are available, and its application can be a solution in holding such courses.

Student admission Methods; student admission methods in e-universities are based on attracting students who have willingness and readiness for e-training. Students are yet to be introduced to and familiarized with e-learning. Students cannot be admitted in the traditional universities to be trained and taught under e-learning. As students in Payame Noor University (PNU) who are well-aware of e-learning methods, other students need to be provided
with sufficient information regarding e-learning. Students must have sufficient knowledge of the teaching methods of e-universities.

Assessment of e-learners; One of the e-learning problems is how to assess the students at the end of their course. There are two fundamental problems in giving online exams: The first problem is that the examinee’s identity is not clear in this way so they have to be given in the presence of the examinee. Students should also refer to their main centers, which will cause problems for them. Secondly, network security should be so high is that questions and answers will remain unchanged or untouched while being transferred between the teacher and the student. The solution to the first problem is to establish a non-cheating culture and spirit among the student and to change the scoring system. The second problem is solvable through the advances being made in network security. Therefore, solving the two problems holding exams online will be possible. (Harun, 2002)

Social Communication and Cooperation Methods; an essential infrastructure e-learning is based on is cooperation methods. Such methods are implicitly carried out in universities through cooperation between students and teachers in their researches, and in the classrooms, while in e-learning such possibilities do not exist. For example, if a person obtains his Ph.D. though e-learning, he may face problems when a certain company is to hire a person with high social communication abilities, he may have difficulty in managing his staff, because while studying he had had low social contacts. This is one of the major disadvantages of e-learning compared to the traditional learning. Studying the needs and necessities lead the society towards a serious use of new methods of education and e-learning. Since e-learning does not face limitations of traditional e-learning such as: construction of buildings and physical facilities, costs and expenses, shortage of experienced teachers, there is no boundaries for learning in this method and everyone can easily achieve any academic information in any field in the shortest time possible.

Conceptual Method of Research

![Conceptual Method of Research](image-url)

Figure (1): Researcher-constructed conceptual model of research
Research Method

This study utilized a descriptive method of research and carried out a sample survey of e-learning students studying at Islamic Azad University.

Participants

All e-learning students studying at Islamic Azad University, Electronic Branch (about 100) participated in this study. Owing to the limited number of students, intact group designed was used for the purpose of sampling and the student population was considered as the sample.

Instrumentation and Data Analysis

The obtained data were analyzed and reported through descriptive and inferential statistics. Pearson product moment coefficient of correlation is used to check for the analysis of the data.

Goals of Research

The main objective of this research was to investigate the role of electronic education infrastructures in enhancement of mobile learning and education at Islamic Azad University, Electronic Branch. However, the following micro-level objectives are proposed in this study:

1. To investigate the possible relationship between hardware and software infrastructures and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
2. To investigate the possible relationship between content materials and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
3. To investigate the possible relationship between various majors and fields of study and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
4. To investigate the relationship between student selection methods in enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
5. To investigate the relationship between student evaluation criteria and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
6. To investigate the relationship between social relations and cooperation techniques and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch

Research Questions

This research was to an attempt to find appropriate answers to the following main research question: What possible role(s) do electronic education infrastructures play in enhancement of education and mobile learning at Islamic Azad University, Electronic Branch?

Nevertheless, the following micro-level objectives are proposed in this study:

1. Is there any statistically significant relationship between hardware and software infrastructures have and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
2. Is there any statistically significant relationship between content materials play and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
3. Is there any statistically significant relationship between various majors and fields of study serve and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
4. Is there any statistically significant relationship between student selection methods fulfill and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
5. Is there any statistically significant relationship between student evaluation criteria perform and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
6. Is there any statistically significant relationship between social relations and cooperation techniques play and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch
Research Hypotheses

This main hypothesis of this study was:

There is no statistically significant relationship between electronic education infrastructures and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.

The following micro-level null hypotheses are proposed:

1. There is no statistically significant relationship between hardware and software infrastructures and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.
2. There is no statistically significant relationship between content materials and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.
3. There is no statistically significant relationship between various majors and fields of study and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.
4. There is no statistically significant relationship between student selection methods and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.
5. There is no statistically significant relationship between student evaluation criteria and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.
6. There is no statistically significant relationship between social relations and cooperation techniques and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.

Hypotheses Testing

The first null hypothesis

There is no statistically significant relationship between hardware and software infrastructures and mobile learning at Islamic Azad University, Electronic Branch.

Table (1): Pearson product moment coefficient of correlation: hardware infrastructures, software infrastructures, knowledge enhancement, and mobile learning

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Statistical indices</th>
<th>Intercultural improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between hardware and software infrastructures and knowledge enhancement and mobile learning</td>
<td>Pearson coefficient</td>
<td>0.579</td>
</tr>
<tr>
<td></td>
<td>Level of significance</td>
<td>0.000</td>
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<td>Number</td>
<td>100</td>
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</table>

As presented in Table 1, a positive relation exists between the two main variables (r: 0.57). In other words, the more the number and volume of hardware and software infrastructures, the more enhanced the education and mobile learning would be. This happens and is generalizable in 57% of the cases. Therefore, the relationship between hardware and software infrastructures and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch is confirmed, yet the relationship is estimated at an average level.

The second null hypothesis

There is no statistically significant relationship between content materials and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.

Table (2): Pearson product moment coefficient of correlation: content materials and enhancement of education and mobile learning

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Statistical indices</th>
<th>Intercultural improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between content materials and knowledge enhancement and mobile learning</td>
<td>Pearson coefficient</td>
<td>0.133</td>
</tr>
<tr>
<td></td>
<td>Level of significance</td>
<td>0.361</td>
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<td>Number</td>
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The results reveal that the coefficient of correlation between the two variables is insignificant (0.361) and we may conclude that there is no direct and positive relationship between them. Accordingly, the relationship between the content materials and enhancement of education and mobile learning is not confirmed.
The third null hypothesis
There is no statistically significant relationship between co various majors and fields of study and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.

Table (3): Pearson product moment coefficient of correlation: field of study and enhancement of education and mobile learning

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Statistical indices</th>
<th>Intercultural improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between various majors and fields of study and knowledge enhancement and mobile learning</td>
<td>Pearson coefficient</td>
<td>0.288</td>
</tr>
<tr>
<td></td>
<td>Level of significance</td>
<td>0.04</td>
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<td>Number</td>
<td>100</td>
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</table>

As presented in Table 3, a positive relation exists between the two main variables (r: 0.28, α= 0.04). In other words, a direct and positive relationship exists between them: the more the number fields of study, the more enhanced the education and mobile learning would be. This is generalizable in 28% of the cases. Therefore, the relationship between is confirmed but estimated at a low level.

The fourth null hypothesis
There is no statistically significant relationship between student selection methods and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.

Table 4. Pearson product moment coefficient of correlation: student selection methods and enhancement of education and mobile learning

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Statistical indices</th>
<th>Intercultural improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between student selection methods and knowledge enhancement and mobile learning</td>
<td>Pearson coefficient</td>
<td>0.321</td>
</tr>
<tr>
<td></td>
<td>Level of significance</td>
<td>0.024</td>
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<td></td>
<td>Number</td>
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</table>

As it is observed in Table 4, a positive relationship exists between the two main variables (r: 0.32, α= 0.024 level of significance). A direct and positive relationship exists between the variables: the better the student selection methods, the more enhanced the education and mobile learning would be. This is only generalizable to 32% of the cases. Therefore, the relationship between is confirmed but estimated at a low level.

The fifth null hypothesis
There is no statistically significant relationship between student evaluation criteria and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.

Table 5. Pearson product moment coefficient of correlation: student evaluation criteria and enhancement of education and mobile learning

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Statistical indices</th>
<th>Intercultural improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between student evaluation criteria and knowledge enhancement and mobile learning</td>
<td>Pearson coefficient</td>
<td>0.656</td>
</tr>
<tr>
<td></td>
<td>Level of significance</td>
<td>0.000</td>
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<td>Number</td>
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</table>

It might be concluded from Table 5 that a positive relation exists between the two main variables (r: 0.65). The more improved student evaluation criteria, the more enhanced the education and mobile learning will be. This happens and is generalizable in 57% of the cases. Therefore, the relationship between student evaluation criteria and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch is confirmed, yet the relationship is estimated at a quite high level.

The sixth null hypothesis
There is no statistically significant relationship between social relations and cooperation techniques and enhancement of education and mobile learning at Islamic Azad University, Electronic Branch.

Table 6. Pearson product moment coefficient of correlation: social relations and cooperation techniques and enhancement of education and mobile learning

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<tr>
<th>VARIABLE</th>
<th>Statistical indices</th>
<th>Intercultural improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between social relations and cooperation techniques and knowledge enhancement and mobile learning</td>
<td>Pearson coefficient</td>
<td>0.60</td>
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<tr>
<td></td>
<td>Level of significance</td>
<td>0.000</td>
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<td>Number</td>
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</table>
As it is illustrated in Table 6, a positive relationship exists between the two main variables (r: 0.32, α= 0.024 level of significance). A direct and positive relationship exists between the variables: the better the social relations and cooperation techniques, the more enhanced the education and mobile learning would be. This is only generalizable to 60% of the cases. Therefore, the relationship between social relations and cooperation techniques and enhancement of education and mobile learning is confirmed but estimated at a high level.

Conclusion

The innovation and growth on the mobile phones front is astonishing. Many institutions are working to explore cutting edge intersections between mobiles, education and development and to promote collective knowledge sharing. The mobile provides accessibility to nearly everyone, rich or poor, and is easily on sale. In addition to telephony, modern mobile phones also support a wide variety of other services such as text messaging, MMS, email, Internet access, short-range wireless communications (infrared, Bluetooth), business applications, gaming and photography. Mobile phones that offer these and more general computing and educational capabilities are referred to as smartphones. Today, you do not need to invest a lot of money to purchase the required instruments. It is interesting to know that the most important issue here is to provide the content which is applicable to a cell phone environment, especially for the places where the local mobile operators do not support all of the facilities. E-Learning is not unlike any other form of education - and it is widely accepted that e-Learning can be as rich and as valuable as the classroom experience or even more so. With its unique features e-Learning is an experience that leads to comprehension and mastery of new skills and knowledge, just like its traditional counterpart.

Educational programmers and materials developers might use this technology to enhance education and fulfill structural as well as conceptual requirements. Moreover, the increase in the transfer of data in wireless networks has doubled the motivation and interest among the learners to learn through mobile learning. Mobile learning is evidently at the beginning of a very long road towards future to succeed in its objectives, we need to develop quality standards, prioritize the educational needs based on the market and finance projects. There is a need for educational bodies to further mobile learning in the countries. Access to wireless technology has given and new shape to the science and art of mobile learning and education. The teachers have now more options to at hand to transfer the education materials to the learners and mobile learning environments are providing more flexible methods of teaching which are seemingly more effective and efficient as compared to the traditional approaches to teaching, specifically to younger learners.

Despite all these benefits, there are still some dissatisfaction and disagreements with the use of this technology. It should be reiterated that mobile learning can no way be replaced with the normal ways of teaching and learning. On the contrary, this method of teaching and learning will be at the service of the traditional approaches to teaching and learning and to help those underachievers with better learning conditions. Today, most materials developers believe that mobile learning will reduce shyness among such learners. The learners can easily read the content and send their tasks to the teacher and receive feedback. This can be done under a more private condition and the teacher is able to provide a more privatized teaching and feedback. The learners are also interested in a more privatized ways. With respect to UNISEF’s guidelines for the third millennium (learning to know, to do, to be and to move towards mutual coexistence), new doors are now open to the global village: moving from traditional learning to mobile learning. No one can ignore the role of the Internet and wireless technologies in the lives of the individuals. The Net Generation is now technologically intelligent, while many teachers are still waiting to know and to earn about this technological advancement. Today the use of IT and ICT in education is a must, as the presence of the Internet and more technically advanced learning instruments have paved the way for better learning.

Instructional Design for e-Learning has been perfected and refined over many years using established teaching principles, with many benefits to students. As a result colleges, universities, businesses, and organizations worldwide now offer their students fully accredited online degree, vocational, and continuing education programs in abundance. The spread of information technology has prepared the grounds for globalizing learning by providing opportunities to learn for people from all walks of life, eradicating unfair education and learning inequalities, and implementation of educational programs at schools and universities. Web-based e-learning is able to support a long range of activities for the learners anytime of the day and anywhere.
References: