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İngiltere ve Türkiye'deki Sınıflarda Mobil Teknolojiler Arasındaki Farklılıklar

Şafak KILIÇ[1]

[1] Siirt Üniversitesi, Türkiye

Özet

Son yıllardaki muazzam gelişmeler ile birlikte "nasıl öğreniyoruz" sorusu da büyük ölçüde etkilenmiştir. Bunu sonucunda öğrenene, öğrenmesi gereken bilgi en etkili yollarla sunulması hedeflenmiş ve gelişen mobil teknolojilerde eğitime bütünleşmiştir, bu bütünleşme sayesinde mobil teknolojiler öğrenmek için amaç olmamış araç olarak kullanarak sınıf sistemine entegre edilmiştir. Bu çalışmada, PDA'lar ve cep telefonları gibi öğeleri kullanan personel olarak yeni trend teknolojilerine odaklanacağız ve eğitim materyalleri olarak bunların eğitime nasıl entegre edilebileceğini inceleyeceğiz. Buna ek olarak, mobil ürünler açısından ve bir dersin parçası olarak nasıl kullanılabileceği konusunda iki farklı ülke hakkında bilgi verilecektir. İngiltere'de, mobil öğrenme sağlamak için birçok proje var ve bu projelerin ana amacı, daha etkili öğrenme sağlamaktır. Buna ek olarak, bu ülkenin teknolojik imkânları yönetmek için dikkate değer bir bütçe ayrılmıştır. Türkiye'de zorunlu eğitimde mobil öğrenim sağlamak için büyük bir proje bulunmaktadır, ancak üniversite seviyesinde yeterli sayıda proje bulunmamaktadır.

Anahtar Kelimeler
Mobil Cihazlar, Öğrenme ve Teknoloji, İnformal Öğrenme, Etkileşimli Sınıf

The Differences in Mobile Technologies in Classroom between the United Kingdom and Turkey

Abstract

With the gigantic advance in development in the past couple of decades, "how we learn" has been enormously influenced. Advancement helped learning has taken strolls in giving understudies access to learning – as indicated by their necessities. With learning available on mobile phones and a lot of new methodology like gamification being gotten, the significance of classroom learning is not diminishing. There are a couple of trainings that can be best passed on inside a classroom space, where understudies feel most connected with the instructor and their partners. That being expressed, thought of flexible advancements in classroom learning can extend the impact of learning. In addition, we will give information about two different countries in terms of mobile items and how they can be used as part of a lesson. In the UK, there are many projects to provide mobile learning and the main aim of these projects is to achieve more effective learning. In addition, this country has a remarkable budget to manage technological facilities. In Turkey there is a one huge project to provide mobile learning in compulsory education, but there are few projects at university level.

Key words
Mobile Devices, Learning And Technology, Informal Learning, Interactive Classroom

[1]Arş.Gör. Siirt Üniversitesi Mühendislik mimarlık Fakültesi, Siirt, Türkiye, safakkilic@outlook.com

INTRODUCTION

When looking for a definition of mobile technologies, we find that mobile technology is any kind of technology of mobility, such as the technology in the car industry, PDAs, notebooks and mobile phones. This kind of technology is used specifically as communications technology using media transmissions such as Bluetooth, radio wave, infra-red or microwave, so someone can transfer any kind of data with mobile technology such as text, voice, videos and so on. In addition, when we focus on mobile technologies from the last decade to the near future, many specialists have the same idea that the potential of processor technology rests in portable computing with wireless networking. Mobile computers, by way of tablet computers, are becoming more popular. Tablets are available on the 3G and 4G networks. In addition, I would like to give some information about mobile devices. According to Wikipedia, mobile devices is say generally as a handheld computer or more simply handheld. It has typical properties which consist of display screens with a small keyboard to input some data or having a touch screen to provide interaction. Also, weight is an important property for these devices; it is approximately less than 2 pounds (0.91kg) and this weight will slowly go down. Furthermore, these gadgets have an operating system (OS) and can run different kinds of software program (applications) which are known as apps. In the last decade or so, the majority of these devices are also equipped with Wi-Fi, GPS abilities that can allow connection to other devices help with these properties. Some devices also have a camera and video media players. Therefore, these innovations have led to a new communication type which is not only voice, but can also provide like face to face although people are in different areas. Before making a presentation of information on this subject, I would like to say that a lot of research on mobile technologies and other learning technologies has shown that more effective learning is provided by teachers than technologies. However, the nature of students' learning experiences can change if we treat technology as a learning tool. That is, pupils learn with technology, not from it. There are no differences between computer and mobile technologies in terms of using them in the classroom because these gadgets are used to make learning available efficiently. That is to say mobile learning items are only materials for delivering information to pupils. It should be noted that mobile technologies must be device to provide education; these cannot be purpose on education. The British Educational Suppliers Association (BESA) say that the latest versions of tablet and smart cellular phones are presenting the opportunity to right to use a wealth of resources and information that can support learner guide learning and a diversity of learning methods. Mobile devices are no longer just from consuming media. They allow the user to document edit and create. This means learners can make obvious their perception and understanding in any area of the curriculum through creative means. If we focus on the development of mobile communication gadgets from the past to the present day, we can see a great diversity of devices, because mobile devices have changed swiftly in the process of time. Before the invention of the first public mobile phone, according to wave guide, since 1921 mobile radio had been used to provide communication between the police and the military. After this, some experts who worked in Bell Labs started a specific system to allow transportable users to put and

receive telephone calls from cars on 17 June 1946 in the United States. A little later, the Mobile Telephone Service was provided by AT&T. However, there were some weak points in the first mobile car phones and it is important that the main problem is area for it due to the fact that a wide range of mostly incompatible mobile telephone services offered limited coverage area and only a few available channels in urban areas (The history of mobile, 2009). After that, in 1973 the first portable mobile phone was made by Martin Cooper and this gadget weighed 11 kg and measured 23 cm long, 13 cm deep and 4.45 cm wide. The user could talk for 30 minutes with the help of this phone. Afterwards, a commercial cell phone was made in 1983. Another important step was the first personal digital assistant which provided organisational tools, e-mail access as well as games, and this innovation was made by Apple in 1992. Then came Bluetooth, which provides a connection among several devices to send data without cables and was created by Ericsson in 1994. In 1997, mobile phones could be used like a camera with the addition of this feature in mobile items. Another important innovation of mobile phone like first personal mobile phone was the 3G network, which was launched in 2001 and provided faster communication and mobile items could use the faster internet help of a 3G network. Thus mobile items were not only used to provide communication but also mobile computer features. In addition, the first smart phone was made by BlackBerry in 2003 and this product offered pushing e mail, text messaging, mobile telephone, internet faxing, web browsing and other internet services. Lastly, the 4g system was developed in 2007.This system allowed for USB wireless modems, and mobile ultra-fast internet access and this internet could share other mobile devices, such as laptops. Both 3G and 4G systems innovations bring up new mobile devices such as Tablet PC. Two decades ago, mobile phones had one main duty, which was to provide communication, whereas these gadgets offer not only communication, but can also be used as a computer nowadays. For this reason, it is very difficult to predict about featured items, but we can say something about the weak aspects of present day gadgets. One most likely change about screens and mobile phone has a flexible screen in the future. Smart phones which have large screens give an opportunity to watch and play while remaining pocket-sized. Screens can be folded and unfolded, all thanks to Organic Light-Emitting Diode (OLED) technology. In addition, mobile items can be integrated projector feature to take huge screens helps of digital light projection. Another development is the charging of mobile items because the main problem is the lack of energy when someone needs it. Experts can take precautions to provide a long battery time. With the development of computer technologies and wireless communication, technology offers a wide range of possibilities to its user, such as in the educational area. More and more educators are using mobile learning as part of the lesson in the classroom to achieve the advantages of new trends of electronic items that provide portability and are simple to utilise on a budget (Mobile Learning Technologies, 2014). Everyone knows that a coin has two faces, so every situation brings up positive and negative aspects. When learners are using mobile devices in the classroom as educational materials they can obtain several advantages from them. First and foremost, these devices offer various learning styles, such as visual, auditory, reading and so on (Savill, 2010). Secondly, pupils eliminate technology barriers because they who use owns mobile devices are good at using its. The materials are designed only once and then these are delivered on multiple

platforms and many different devices. Another advantage is that 'mobile learning is cheaper than booking the resources required for face-to-face training or supplying laptops and other computing devices for e-learning. And it can be easily pushed out to learners' personal devices' (Elias, 2011). Next, nowadays the majority of mobile items have touch screens to provide interaction, meaning that pupils literally interact with their education. Supported decision making: mobile devices offer timely access to information, which enables the quick double-checking of a decision, and so better professional judgments. Mobile technologies also have some drawbacks in the classroom and we can divide these drawbacks into two groups. One of them is pedagogical. That is, 'Currently, no widely accepted learning theory for mobile technologies has been established, hampering the effective assessment, pedagogy, and design of new applications for learning' (The Importance of Mobile, 2013). Therefore, in this study, we will focus on the drawback result from mobile items. The main problem results from mobile items being so small that they can be lost or stolen more easily than other bigger devices. In addition, the touch screen is smaller than computer screens and it can damage the eyes of those who use it for a long period of time. Also, small percentages of information are displayed on a small screen (Jones et al., 2013). Additionally, mobile items are difficult to use due to their undersized buttons. They can be fraudulence to utilise even for pupils. Even though portable keyboards are available, they come at a high price. There is also another problem about charging because most items just have roughly 3 hours of productivity and the learner has to plug it in to provide continued learning. Even though technology is still progressing, humanity's uses of it are limited. Most items have limited capacity for storing large or multiple files. The pupils have to spend more in order to have bigger capacity break. Additionally, there are various operational systems or platforms out there. Content is not every bit of one and the same. So, if a learner prefers Apple, they use the iOS operating system or application; if they prefer android items, they only like the Android operating system or application. Although mobile learning can really help a student in their studies, it can be limiting in such a way that only the privileged few can afford to have a mobile device. Yes, smart phones and tablet computers are great tools for learning, but then again students have to consider the budget to see if mobile learning is really worth it or not ("Mobile Learning Basis," 2013). In this part of research, I would like to compare two countries which have a different economic level and developing status, so I have decided to compare the United Kingdom and Turkey.

Mobile education in the United Kingdom

In this section, I will examine the education system in terms of mobile learning in the United Kingdom. In addition, the education system is divided into three categories: school (compulsory education from the age of 6 to 16), TVET (technical and vocational education and training) and higher education. Some information is given for each segment of the education system and the general situation is presented on the use of mobile technology. I would also like say that the UK education policy is divided into four segments: England, Northern Ireland, Wales and Scotland, but I will focus on England because this system can be used to represent all of them. I will give some key points on education and mobile education in the UK. In general, educational

institutions have an opportunity to make decisions about their education system and they can support new innovations and adaptations to provide effective education in their institution. Then, from recently to following decade, education providers will have quality ICT equipment due to government policy. In university, the growing number of mobile applications provides connection their central learning systems helps of own mobile products. A huge amount of students prefer public school to take education and only 7% of schools are private. There is also compulsory full-time education from 5 years old to 16 years old and this level of education is delivered by public schools in general (1). Schools can have an opportunity to make decisions about information technology strategy and they can manage their budget for IT services, even though the Local Authorities also have the prerogative to manage IT strategy and budget in their area. In mobile education, the majority of projects are supported by teachers on a small scale represent in their classrooms. On the other hand, there are examples of whole school projects designed propitiously for mobile education by school management. In one of them, at Cedars School, each learner has an IPad which is provided by the school and, another example of a whole school project, students have an iPod touch in the Essa Academy. In addition, I am going to focus on a case study to explain mobile education in the school.

Case 1: Cedars School Project

This is the only school project to provide mobile learning in the school. The main aim of this project is to give an opportunity to have quality equipment to provide effective mobile learning. IPad are provided by the school and learners can join the school internet network. Student also uses IPad in every lesson and they can do their homework on it. Student-centred education is vastly provided by this project and collaboration is also provided between learners. However, there is one weak point: this system cannot be used for exams, so learners can only take exams in the classic style.

Case 2: The Learning 2 Go project

This project started in 2003 across the whole of the United Kingdom to provide mobile learning. In the beginning, as a pilot, 120 mobile items were distributed to four primary and secondary schools. Then, the supply of mobile items was increased gradually to classrooms because of increasing school numbers. Learners had these devices during two years with 7 day, 24 hour internet access and they had an opportunity to choose when to contact the mobile items for learning. In addition, both teachers and schools were free to decide how to utilise these items for learning. The weak point in this project was the operating system, because the operating system was not consistent with full-sized education from teaching to examine. The Learning2go project has been completed.

Mobile education in Technical and Vocational Education and Training (TVET)

Technical and vocational education and training systems are very different from other school systems in the UK because these systems came into existence huge and sophisticate set of organisations and these systems provide a great diversity of courses for learners. There is no policy for mobile learning to be provided by the

government in TVET, but some coordination is offered to obtain new technologies by British Educational Communications and the Technology Agency (BECTA) and each institution has a claim to manage their technological infrastructure to give mobile education. According to the BECTA survey in 2011, 8% of TVET colleges use mobile technologies to deliver education and most colleges also use e-portfolio to have review about students. The Joint Information Systems Committee is a key part of mobile education in the TVET and this system is also an important part of higher education in terms of using mobile education. This system is called JISC. The main aim of this organisation is to encourage the UK universities and colleges in terms of using mobile technologies in their institutions. In addition, JIVC search for ways to increase the impact of mobile education so that technology can provide effective assistance with learning. I will give one specific example to explain mobile learning in TVET in the UK. This project was done by Lewisham College. This system gives an opportunity with wireless blended learning for learners who use mobile items in the college. The college also provides HTC Touch PDAs and mobile office software programs and learners can see their e-portfolio to improve their study by means of mobile devices. There was a 10 percent gap in attendance between before and after using mobile items in classrooms. This system also gives an easy way to collect information of learning both learner and teacher. Funding ran out so this project has also come to an end.

The Mobile Learning Network Project

This was called MoLeNET and it was the biggest mobile learning project in the world. The project was launched in 2007 by the UK and completed in 2010.The main aim of this project was to encourage and support the use of mobile devices to provide more effective learning in education and training institutions. This programme had 104 projects and these projects covered 147 colleges, 37 schools, 40,000 learners and over 7,000 staff (2). These projects also covered a wide range of mobile devices from PDAs to game consoles. The main advantage of these projects was increased student motivation and engagement during learning time. There is one important key point for these projects, that planning had to be done carefully and every part of the project had to be examined at each step. Even though a great many individual projects continue to provide mobile learning, this programme has come to an end.

Universities

In the United Kingdom, universities have a different structure from other countries. Even though the majority of universities in the UK are public institutions, they have an independent policy from government and they can also decide their education policy. As a result, these universities can manage their budget to achieve a better learning environment and they can improve their technological staff. In some universities, mobile phones have been used to provide connections to a Virtual Learning Environment and this system gives a connection opportunity in terms of sending and receiving messages between staff and learners. The majority of UK universities also use the Blackboard education platform to deliver education and 17% of university level students can connect to Blackboard by way of mobile devices. The first Blackboard application for mobile devices was started by Sheffield Hallam University in 2010 and this application gave an opportunity

not only to deliver education but also to give feedback about learner improving details. Then, the increasing number of universities has improved the suitable material to deliver on the mobile platform. In addition, both the University of Oxford and University of Lincoln have established their online applications to deliver education.

Case study: Assessment and Learning Practice Settings

This is one of mobile technologies project which is called. The main aim of this project was to provide innovation to a new type of mobile education and mobile assessment. One thousand learners were chosen by the Department of Social and Healthcare in five different universities. Learners could access materials with mobile devices and they could also upload assignment and communicate with each other and conduct tutorials by way of mobile items on internet application. This project gives training in the use of mobile items to staff.

Mobile Education in Turkey

Before we start talking about mobile learning in Turkey, I would like to give some information about the Turkish educational system. That is, we can divide it into two categories at the educational level. First of all, there is compulsory education from primary school to higher school and each educational requirement is provided by the government at these levels because compulsory education is free for all learners. There is one educational policy in the whole of Turkey and this policy is done by the Ministry of Education of Turkey. There are also a huge number of private schools to deliver education at all levels of school and these give more opportunity than public schools to provide effective learning with the same educational policy. Secondly, in further education, if someone wants to continue education they can apply to universities and each university has its own educational policies. These level schools can also be divided into public and private, and private universities are keen on all kinds of technologies to provide learning for their learners. In general, the Turkish educational system has solely focused on mobile items in classrooms as educational materials. In addition, it can be chosen project how has a less owing cost and less complexity (Keskin et al., 2011). However, there is one project, which started in 2011, which has a huge cost and background. It is said the FATIH project (Movement for Enhancing Opportunities and Improving Technology) and is offered by the government to every school and every place. The main aim of this project is that the government wants to give one tablet to each student in primary school and all applications are also provided by the government. Moreover, some private school have just started using mobile phones to continue lessons.

Case: Doga Colleges

Doga colleges are part of the private school sector in Turkey and they have 50 branches in the whole of Turkey. There is competition between private schools in Turkey because each of them wants to have more students. For this reason, Doga colleges have just started mobile learning in all their branches. These colleges have built up new applications to provide mobile learning as a pilot. These applications, which do not include

complex programming, use only macromedia flash to prepare material to deliver education. Consequently, these applications do not give an opportunity for evaluating student outcomes by way of the mobile application. Doga colleges have a relationship with Turkcell (mobile network branch) to offer faster internet for learners because the internet is very important in mobile learning. In addition, when learners apply to start education in Doga College, they are given an Ipad free by the Doga colleges. This project is trying to provide mobile learning. If this project achieves better learning outcomes than other types of technological education, these colleges can invest to improve their mobile learning structure and deliver education.

Case: FATIH project (Movement for Enhancing Opportunities and Improving Technology)

We can say that this project is the most remarkable investment in improving technological structures to increase learning outcomes in education in the history of Turkey. Smart classes, which include all kinds of educational technologies from interactive white board to interactive Pad's, are being built up in all the schools (42,000 schools and 570,000 classes) throughout Turkey by the Ministry of Education. In addition, both learners and staff members have a free tablet PC as part of this project. The main aim of this project is to provide equality for each learner. Consequently, each learner can have the same mobile device and all online applications and materials are done by the Ministry of Education. These materials are shared with all learners. Students can follow the results of their assignments on online applications at their mobile item whether they are at school or not. They can also see their e-portfolio to improve their learning outcomes thanks to mobile applications. This project also gives self-confidence to learners so they have responsibilities at during the learning process. That is, the teacher only need to prepare lesson requirements and upload them on online platforms so learners can download them and they can learn themselves.

Turkey has private and public universities. Even though public universities use technologies to provide learning, they are not good at educational technologies because they have not enough money to build up complex technological structures. However, they will use e-investment to improve their technological network and to improve learning outcomes in the near future to compete with world universities. In the private universities, the majority of universities are trying to use mobile technologies as part of the lessons to compete with other universities.

Case: Kadir Has University

Kadir Has University has just started mobile learning as a pilot. This university uses the Blackboard mobile application to deliver education and provide access to learners and staff. This application can use different types of operating system, from IOS to WebOS, so each learner can use their private mobile devices to contact the Blackboard application. This application gives an opportunity to use DROPBOX and learners can share their studies with each other thanks to it. Learner can take online exams via this application to learn their learning outcomes about lesson module.

Both countries know how important mobile learning in education is and they have projects to provide mobile learning in their education systems. Even though both countries have invested to improve their technological infrastructure, the United Kingdom has a better technological structure than Turkey. In the UK each school can manage their budget to improve its technology facilities. However, in Turkey each school does not have the opportunity to manage its budget to improve technological facilities. In the compulsory education in the UK, even though there are so many projects involving mobile learning, there is no project for the whole country by way of the Ministry of Education. However, in Turkey there is a one huge project to provide mobile learning at each school in Turkey. At the university level, in the UK there are many projects as well at this level, but there are few projects to offer mobile learning in Turkey. In addition, the UK has a much bigger budget than Turkey to improve their technological facilities to provide mobile and new types of technological learning.

CONCLUSION

This study has given information about mobile technology and it has examined mobile technologies from the past to the near future. Also, this study has focused on how mobile items can be used in the classroom as educational materials. That is, we could examine from first mobile phones to smart interactive phones. We can say from this study that mobile items must only be used as tools in the classroom; they cannot be reason in the classroom. In addition, while mobile items have some advantages, they have some disadvantages as well. Lastly, this study also focused on two different countries in terms of mobile technology in the classroom and these countries have different levels of development. In the UK, there are many projects to provide mobile learning and the main aim of these projects is to achieve more effective learning. In addition, this country has a remarkable budget to manage technological facilities. In Turkey there is a one huge project to provide mobile learning in compulsory education, but there are few projects at university level. In the future, all countries in the world will start mobile education because everyone has at least one mobile device and they use it all the time and educators would like to use these devices as part of their lessons.

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