

Multimedia Application and Ubiquitous English Education Environment

Michelle Mi-Hee Choi*

Abstract

New and creative skills must be developed, and adapted into a lesson, to motivate learners to acquire a second language easily and enjoyment, Multimedia tools which are of interest to learners, such as; smart phones, computers, and notebooks with wireless internet compatability, will provide learners opportunities to study, and do their work practically anywhere and anytime. Recently, podcasts, which are a type of digital media, consisting of a series of audio episodes or video files, subscribed to and downloaded through web syndication, or streamed online to a computer or mobile device, are used to facilitate ESL (English as a Second Language) learning. Development of a variety of teaching methods, using multimedia tools, is needed. There are advantages and disadvantages to using a variety of multimedia tools. The current research aims to study its characteristics and application, in order to maximize their effective use, in English education. The current study suggests a ubiquitous learning environment using multimedia content tools, internet media, video teleconferencing, cyber-learning, and one-to-one videos used in conjunction with, or as a digital textbook for the English lesson. This study also investigates future educational changes, using state-of-the-art equipment for the self-learning experience, and will present a new direction in English education, through a variety of instructional devices and a marginalized class system model.

Keywords : multimedia tools, ubiquitous learning, English Education

멀티미디어 기기 활용과 유비쿼터스 영어 교육환경

미셸 미희 최*

요약

학생들이 다른 언어를 배우고 익히도록 동기부여를 하기 위해 개발한 독창성과 새로운 기술을 필요로 할 것이다. 멀티미디어를 이용하면 수업과 과제를 모든 학생들에게 흥미롭게 해줄 것 이다. 그들에게 관심이 있는 스마트 폰의 사용과, 노트북과 무선 인터넷의 사용으로 학생들은 그들의 언어 기술을 실제로 어디에서나 공부할 수 있을 것 이다. 예를들어 팟캐스트, 인터넷망을 통해 다양한 콘텐츠를 제공하는 서비스 Podcasts 도구 방법 등을 통해 ESL(English as a Second Language) 학습이 매우 용이하게 되었다. 즉 이러한 멀티미디어 tools를 이용한 외국어 듣기 연습 서비스 등 다양한 교수 학습방법 개발이 필요하다. 효율적인 영어 교육을 위한 도입된 이러한 여러 멀티미디어 기기의 사용은 여러 가지 독특한 장점을 가지고 있다. 본 연구에서 영어 교육을 최대화하기 위해 멀티미디어의 특징과 그 활용에 대해 연구하고자 한다. 디지털교과서 및 영어 수업을 위한 멀티미디어 콘텐츠 도구 활용, 인터넷 방송은 물론 원격화상 수업, 사이버 학습 등 1:1 영상 교육을 이용한 유비쿼터스 학습 환경을 제시하고자 한다. 더 나아가 최첨단 u-러닝 기기의 체험을 통해 미래 교육 변화를 조망하고 또한 다양한 수업기기와 변화된 수업시스템 모델을 통해 영어 교육의 새로운 방향을 제시하고자 한다.

1. Introduction

※ 제일저자(First Author): Michelle Mi-Hee Choi
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완료일:2012년 09월 14일
* 남서울대학교 교양학부
michelle@nsu.ac.kr

Information and communication technology

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are actively applied globally, in the 21st Century, in the field of education, due to its various advantages, such as; accessibility, interactivity, and reality (Bjork, 1979). Online education, general education, or e-learning institutions in particular, at all levels, are activated, in the field of English education, not only in cyber-institutions (McNicol, 2004).

Cyber-education can be defined as when learners can get one's own education through an on-line information media, such as the internet and/or a satellite communication system. Cyber-education can eventually change the framework of traditional education. It can also change the education system, into a form of student-centered, practice-oriented and discussion experience. Common problems, not only in English classes, but in most online classes, appears to be the quality of content, instruction, and management system. (이준, 이충현, 2005; Clark & Mayer, 2003; Lee & Pyo, 2003). In fact, these issues have always been problems both in the traditional classroom, as well as online classes, since the beginning of English education. If the purpose and role of online classes are the replacements, or the expansion of traditional classrooms, then those problems need to be urgently addressed.

The current study examines ubiquitous and cyber-environment classrooms, so that learners can have new learning experiences. This study introduces multimedia techniques such as; IPTV, self-learning, home school cyber-lessons, and digital textbooks, and describes problems in the English learning environment. It will suggest alternatives to improve the learner's learning environment, using a variety of multimedia tools.

2. Theory of English teaching methods and realities

2.1 Grammar-Translation Method

The Grammar-Translation Method is the method used in Latin language education, in the West, with no linguistical or psychological background theory. Many English teachers, in Korea, are familiar with this method however, and have been using it traditionally.

Unlike other teaching methods, characteristics of this method are not based on any special psychological and linguistical theory. The purpose of foreign language education is intellectual development through learning, or reading articles in the foreign target language. Most of the classes are taught in the native language, and the way the lesson is done is by translating the target textbook into the native language. Accuracy of the language is emphasized, rather than fluency. The advantage of this method is that untrained or unskilled teachers can have easy access. However, it is the translation of simple sentences will overlook the authentic reading function, to determine the intent of the work. Until the early '90s, asking questions about the grammar, in a sentence, took up the majority of the questions in the Foreign Language Test. of College Entrance exams, thus the grammar-translation method has been used in most classrooms (Thornton & Houser, 2002).

The purpose of foreign language learning is on literary research, and fostering learners' logical prowess. It is important for students to have a good knowledge of grammar structure, so they will be able to read English and American Literature. Teachers often used difficult grammatical terminology, in the grammar lesson, and students have to practice translating Korean to English, or English to Korean.

Judging from the practicality of foreign language education, listening and speaking skills are important, but reading and writing skills should not be ignored, in order to interact with people from other countries. In

order to read and write well, students should understand basic grammar structure. It is actually more efficient for learners to learn difficult and somewhat unfamiliar grammar, in their native language. However, the grammar-translation method must be accompanied by modern teaching methods, that emphasize the function of listening and speaking.

2.2 Improvement of the English educational environment

There are two types of English educational environments; English as a Foreign Language (EFL), and English as a Second Language (ESL). In the ESL environment, students have less of a chance, to use English outside the classroom, and interaction with a native speaker is also limited. Students are less exposed to real-world situations, where English is used, such as; reading documents, advertisements, newspapers. English, in the ESL environment, is the main communication medium, in everyday life, and there are more opportunities to be exposed to the English language and interact with a native speaker, than in the EFL environment.

In Korea, people don't use English as the second official language. Therefore the environment, where exposure of English can be constant, should be established by introducing ESL into the educational environment, as a way to derive an enhanced effect in the limited English environment. To make this environment, the establishment of the environment, and its role in the motivation of the learners must be set first. Second, authentic language material must be supported. Third, various forms of educational activities, such as; individual and small group activities, etc, should be supported.

3. Multimedia Tools Used in

Class

Creative and new technologies are needed, in order to motivate learners, and provide them with opportunities to practically use multimedia techniques for their language learning, wherever they are. Students, who are taught using multimedia tools, of their interest, such as; smart phones, notebooks, and i-pads with wifi, will be motivated and interested in working on their homework assignments (Qing, 2008).

The following multimedia tools, which can be used as teaching tools, are enumerated. One tool, that can be used in class, are educational or non-instructive video clips, which may include famous movies or dramas. visualizing and listening to a native speaker's speech, is one of the most essential methods of learning another language. Below is a list of internet sites, provided for both learners and teachers, where one may find many practice exercises. These instructive videos provide learners with a variety of quizzes and activities, where learners can check their understanding.

Online Video Links

http://french.yabla.com/?gclid=CLaS98m_1bECFYhMpgodlgcAYg

A second tool are on-line lessons. Many sites provide both free and "for a fee" activities for; grammar, reading, writing, and pronunciation practice. Teachers use the web to present video lessons, and other contents projected on a screen. The Internet is a valuable treasure, for ESL and EFL classes, and can easily be used (Baturay, 2007).

Third, a podcast is a tool that provides a variety of content on the net. Listening services are available through podcasts, on the; computer, iPhone, or iPod. Podcast files can be downloaded and saved to a MP3

player or I-pod, so learners can listen to them at anytime and anywhere. Learners find it easy to use podcasts, because those files can be easily accessed, on the bus, in the sport center, or at home (Chartrand & Pellowe, 2007).



(Figure 1) A pronunciation-oriented software



(Figure 2) Immediate Pronunciation Feedback

The fourth method is the MyET (My English Tutor) tool. MyET is a pronunciation-oriented software, used in the ESL classroom, for students' pronunciation improvement. MyET, as illustrated in (Figure 1), is a speech recognition tool, that records one's learning progress, in speech, and is used to give immediate feedback to the learners on their pronunciation.

Learners can compare and trace their own pronunciation, with the pronunciation of the target language, and clearly understand the difference, between the representation of the original pronunciation and the poor

pronunciation, through the shape and spectrum of the sound (Figure 2). (Fraser, 1999; Nunan, 1988; Willing, 1988).

Finally, computer-assisted learning software programs can be installed on 55 computers. Learners have options to choose to enter suitable classes, on the computer from among four types of learning; English grammar, reading, listening, and speaking. Learners watch different people talking about a certain topic from CDs, and practice a variety of over 20 activities, including quizzes, regarding the contents of the video they watched.

Links

1) Flash Cards

Customize Personal Flash eCards For All Occasions & Send Free!

<http://www.myfuncards.com/dl/index.jhtml?spu=true&partner=ZUxdm589&gclid=C M6h37nF1bECFQEzpQodkHgAEg>

2) Teach Driver Safety

Help Your Teen Become a Safer Driver. Get Involved Today!

<http://www.safeteedriver.co.nz/?gclid=CN 28h9fF1bECFQEzpQodkHgAEg>

3) 420 + Sight Word Pictures

Images make sight words easy for visual learners. Get the cards now!

http://www.child-1st.com/new_site/Sight_Word_Pictures.html?gclid=CIOp8eXF1bE CFSdNpgodaTUAJA

4) Adult Learning Courses

Choose from over 40 Courses & learn valuable new skills from home
<http://www.stotts.co.nz/?gclid=CIPJmv7F1 bECFSdNpgodaTUAJA>

4. Listening system via a Mobile Authoring Tool

4.1 Features of Mobile

Mobile learning is a very informative new form of learning for learners, especially learners with jobs (Anaraki, 2009). The possibility of the use of mobile technology, in the English listening practice system design, is examined in this part. The system provides learners with opportunities to practice repetitive listening skills, during their free time throughout the day. The use of the mobile learning technique, promotes learners' interest as a way to satisfy their needs.

This system is composed of two sub-systems. One is a multimedia material web site, that video files are uploaded to. The other one is the Mobile Multimedia English listening exercise serve system, providing learners with repetitive training, so that the learners can study listening, in a ubiquitous learning environment.

4.2 Ubiquitous and Listening Practice

The primary goal of this study is to maximize the extra time learners have, in learning ESL, through listening practices in a ubiquitous environments. A secondary goal is to use mobile tools or devices that best fit the learners study environment, in order to increase the motivation of learning. A third goal is to adopt the Asynchronous Transfer Mode, which makes it possible to communicate with learners, in order to achieve the goal of lifelong learning.

Mobile Learning is a new form of learning, that takes place at any place, regardless of time or place specified, in everyday life, through a wireless device such as; a computer or laptop, mobile phone, personal digital assistants etc (Nadire and Dogan, 2009). For example, it makes it possible, for students on the move, to practice listening, using a PDA to improve their language skills. In this study, the designs and development, of a mobile multimedia system, are described, and features

of the three mobile technologies are examined.

4.2.1 Second language learning and mobile technology

Mobile technology should be designed and used for learners, and should support the learners' English listening practice exercises, regardless of time and place. Mobile Learning Tools Mobile learning tool (MOLT) is mobile application system, developed for the use of wireless technology in the classroom (Patricia & Chris, 2005).

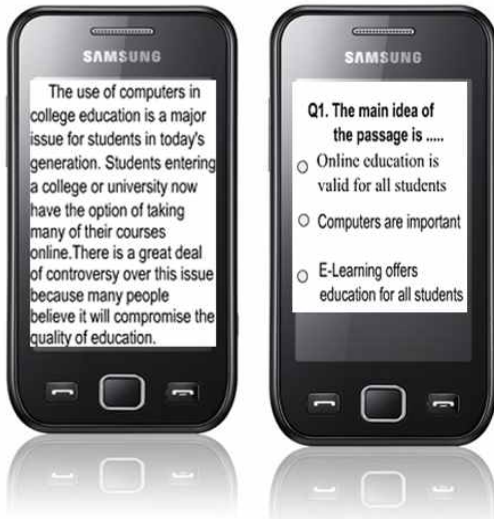
First, a message and phone number received, on the Mobile phone, from the PC via a bluetooth interface, is then sent to the payee(s), or students, from the PC, within the time requested. A project, carried out in Japan, developed two mobile-based systems, for Japanese university students, who were learning English vocabulary and idioms. This study developed English vocabulary lessons, using the E-mail function on mobile phones. In addition, internet enabled English idiom multimedia lesson, using the mobile web function, were developed. Learning on the move, and using mobile devices such as a phone or PDA, can be effective for learners as tools, in transferring learning materials.

4.2.1 Mobile and English Practice

Each learner will receive a user ID and password to log into the system. The user can then open the multimedia page, view section on the server, and download mp3 listening files. The users can also read or order learning materials, and leave messages on the Q&A board.

The purpose, of the Mobile Multimedia English listening practice system, is to provide repetitive listening practice, in a ubiquitous learning environment. In order to avoid any disruptions in internet service, the features of the connection setup must be considered, so that the video materials can be downloaded to

mobile devices, over a wireless network.



(Figure 3) Sample text with narration & sample test Question



(Figure 4) Immediate feed back A & B

To share information and knowledge, users must keep an active connection open, between the mobile device and the server, so that the user can be notified if there is immediate feedback, on the Q&A board (Figure 3 & 4).

The learners curiosity will be piqued when their questions turn into an open discussion, when other learners add their real-time feedback to the question recently up-loaded to the Q&A board. This system makes the ubiquitous learning environment more effective and practical, as learners are able to get immediate answers via mobile tools.

5. Conclusion

Multimedia can be defined as a combination of other media such as; text, sound, picture, image, animation, and video, which is accessible by computer. Petersen & Markiewicz (2008) claims that there are several unique advantages in using various multimedia devices, which can make English education more effective.

First, multimedia enables teachers to easily pass information to students. Using video clips, to convey information, is effective, and allows students to have insights into information that they can quickly and easily absorb.

Secondly, teachers become familiar with the use of effective educational materials, through the use of multimedia tools. A combination of media enables teachers to make lessons interesting and fun, so that students will be able to understand and learn easily.

Finally, Lessons can be easier to follow, as learners are able to view pictures with sounds they can hear.

The current study also looked at the features of multimedia lessons, and the application of multimedia tools, such as mobile techniques, wireless networks, and websites, in the ubiquitous learning environment, in order to maximize listening practice. If you consider the portability of the mobile device, and the simplicity of the connection, mobile learning systems will assist learners in their English listening skills practice. Mobile devices are

very popular, however using a wireless internet connection may end up with a high usage fee.

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Michelle Mi-Hee Choi



2001 The University of Auckland, BA

2005 The University of Auckland, Graduate Diploma in Teaching

2006 The University of Auckland, Postgraduate Diploma in Language Teaching

2007 The University of Auckland, MA in Language Teaching

2009년~현재 : 남서울대학교 교양학부 조교수

관심분야: SLA, ESL, E-learning, Computer interaction, Multimedia Language Learning, TESOL