The Kochi Kosen iPod Touch EFL Project:
Fusing Methodologies to Optimize Learning

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Abstract

The Kochi Kosen iPod Touch EFL Project aims to provide the tools necessary to manage and provide diverse content and a variety of learning experiences to over one thousand learners of wide-ranging ability levels. A diverse selection of teaching methodologies is employed including comprehensible input, specific vocabulary study, task-based learning, and content-based study. These methodologies are used throughout classes and teachers and students are able to pursue topics and learning experiences appropriate to ultimately achieving optimal learning experiences.

This paper addresses several specific learning experiences and the tools needed to manage them. These experiences range from vocabulary learning, extensive reading, and content based learning to large tasks including student “companies” that have produced blogs, videos and software available in the real world, iCOCET 3300. The tools needed for implementing such ambitious projects include iOS client and server software. Tools addressing teacher and peer student assessment, student management, class planning, and feedback are important components of our system.

Large tasks, like group video production or student software development are divided into many smaller language tasks and involve a large amount of background information provided as content based teaching in the target language. These tasks and background content are designed to address the needs of learners having a wide range of skills. Basic skills are reviewed for students with low proficiency while advanced learners are challenged with more interesting tasks and encouraged to take on leadership roles within classes and groups.

Enabling large numbers of technology students to be fully engaged in EFL studies is a difficult and complicated challenge that can be met using the appropriate methods and tools. This project uses a heterogeneous selection of teaching methodologies to address a wide range of student interests, learning styles and ability levels. It provides the tools necessary to individually address student needs, student assessment, data collection and program validation.

1. Introduction

The KNCT iPod Touch EFL project is supported by the Program for Promoting University Education and Student Support under the Ministry of Education, Culture, Sports, Science & Technology in Japan. Through this grant, all students have been supplied with iPod Touch units and faculty and staff with iPads. The existing campus-wide wireless network provides numerous services and Internet access to all of these devices. Services currently available are attendance records, blogs, wikis, document sharing, teacher customised databases, podcasts, course management, email, calendars, contacts, LDAP authentication among the many other services provided prior to the initiation of this project. The primary aim of the overall project is to explore the ways new mobile technologies can be used in education. Teachers and students are encouraged to use these tools to innovate new learning experiences. This paper describes this project and provides a starting point for further research and validation.
National university and college EFL teachers in Japan generally have large numbers of students with diverse interests and English abilities. Engineering and science students are not expected to be intrinsically motivated to learn English, although they are required to master it. This necessitates limited teaching staff to increase motivation of varied students in large classes. It is not unusual for one teacher to have 400 or more students in classes as large as 55 for only one or two hours each week. In order to provide an individualised, optimised learning experience for each student, a wide variety of learning methods should be employed, immediate feedback supplied, and novel learning experiences provided. This has proven impractical with traditional learning tools, such as a textbook and blackboard or even a fully equipped language laboratory. The Kochi Kosen iPod Touch EFL project addresses these needs by providing a dynamic, media rich, networked learning environment available to all students and teachers all of the time. All students and faculty are encouraged to use these new tools to develop effective and engaging new ways of learning.

Providing individualised, optimised learning experiences to large numbers of students with a limited number of teachers is quite a challenge even with the tools provided with this project. Many students have poor study habits and some, having spent years sitting in the back of large classes, seem to pay no attention at all to what is being taught. Student centred classes are a rare novelty in rural Japan and many students take time to adjust to new learning experiences.

Using iPod Touch, iPad, traditional computers and various client and server software, teachers can provide appropriate comprehensible, timely, high interest materials, student interaction, feedback, and data collection. This has provided the conditions for students to focus on using the target language while enjoying what they are doing.

2. Optimized learning experiences

College of technology students in Japan have a wide variety of interests and a varied range of English skills and aptitudes, so keeping students interested and focused on learning is a substantial challenge. Dörnyei points out in Motivational Strategies in the Language Classroom, a number of important points for generating and maintaining motivation among language learners: enhance language related values, increase expectancy of success, encourage being goal oriented, use relevant teaching materials, create realistic beliefs, make learning enjoyable, present tasks in a motivating way, set specific goals, protect self-esteem, promote cooperation and create autonomy [2]. Doing all of these things while managing large numbers of students doing complex and interesting tasks is easier said than done, however with the proper tools and organisation it is possible.

Csikszentmihalyi [1] defines optimal experience as “order in consciousness” which happens when “a person concentrates attention on a task at hand and momentarily forgets everything else.” In this state of “flow” people are fully engaged in what they are doing. This is an ideal psychological state for learning. Effective teaching therefore needs to remove barriers preventing flow while providing conditions to foster it. This entails a using variety of activities in order to engage widely varied teachers and students. In Flow Csikszentmihalyi [1] states that “goals are usually clear and feedback immediate” therefore students need to define their goals and learning activities should be defined by them. Immediate feedback is necessary through the activity itself and through teacher and peer assessment.
3. Learning Activities

Learning activities we are currently using include content based learning, extensive reading, vocabulary study, and large tasks including student “companies” that have produced blogs, videos and software.

3.1 Content based learning

An important component of all classes involved in this project is comprehensible content-based study. Content is wide-ranging and selected according to the interests and English proficiency levels of the students. A diverse array of materials is used, including traditional textbooks, Wikipedia, commercially available and teacher produced videos, podcasts and print materials. Topic selection ranges from basic world geography and social studies (topics of high interest to students but glossed over in the education system) for lower level students to engineering, video production and software design for advanced level students. Some of this content is generated through cooperation with faculty outside of the English department. Topics are chosen with student interest paramount. Often this results in topics closely related or complimentary to students’ fields of study. Students have ready access to visual reference information such as maps and charts. Intermediate and advanced students access various English news sites such as NPR, BBC and VOA, where they can listen, watch and read news stories. This task is not always truly comprehensible input, however students are encouraged to keep up with Japanese news as well, making understanding English news easier. They are encouraged to comment on the news in their personal blogs.

3.2 Extensive reading

Generally students in Japan will avoid doing extensive reading unless they are graded for doing it, thereby defeating a core principle of extensive reading, for the reading itself to provide feedback and joy. This is a serious conundrum because reading is a common and natural flow activity and a powerful stimulant for cognitive growth and language acquisition.

According to student and faculty comments, in contrast to iPad, iPod Touch is not appropriate for reading more than a few short passages. It is far less suited to actual extensive reading than traditional printed graded readers. It is however, useful for activities such as rating a book or taking short quizzes in order to gauge whether or not a student has read a certain title. They are also adequate for or writing short comments or blog entries.

3.3 Vocabulary

Surprisingly, a majority of our students enjoy vocabulary study and vocabulary study has proven to improve our students standardised test scores over the years. As an inter disciplinary large task undertaken with his advisor, one of our advanced students designed and developed a vocabulary study app, based on the COCET 3300 word list. The server component of this app allows students to see how they compare to their peers in their race to learn all 3300 words. The iCOCET 3300 app is very popular among our students. 58% of current students described using it as a pleasant experience, a four on a five-point scale. Since it has been in use for less than a year, conclusive results are forthcoming.

3.4 Large tasks

A central component of all classes in this program are communicative tasks. Important aspects of tasks are interaction, cognitive processing and negotiation of meaning [3]. Tasks have proven most
successful when they fully engage and stimulate students. Large immersive tasks are very popular with students especially when they begin to use the target language without thinking about it as a language activity. Breaking large tasks into smaller focused tasks gives teachers many opportunities for student interaction, critical thinking and negotiation of meaning while giving students immediate feedback, appropriate challenges and peer support. Simulated life activities over a period of weeks or months have been very successful.

In one example, intermediate students produce a series of short videos. First, everyone in the class fills out an authentic employment application and they apply for a job from a list of available positions: director, writer, videographer, video editor, actor and additional jobs. After interviews, production companies with five to seven members are formed from the applicants. The teacher interviews the potential directors and chooses them according to their ability. Only outgoing and motivated students usually apply to be directors and they are the ones who are chosen. The directors then interview the rest of the students to fill each position within each production company. Students write, produce and edit videos on numerous topics chosen by the students and approved by the teacher. Within each group, students assess each other paying particular attention to whether or not they are using the target language. After each video is produced, each company is assessed by their peers and by the teacher. This kind of assessment steers most everyone to use the target language and fully focus on the task. Some classes are dedicated to content based lessons on video pre-production, including brainstorming, writing and planning, production, including lighting, sound and camera use, and post-production including video editing.

Tasks can vary greatly in complexity from simple information mapping and critical thinking based exercises to even more complex tasks like software development. The iCOCET 3300 vocabulary study app is a result of one student following through on a large task that involved cooperation between departments.

4. Tools

In order to provide a diverse range of individualised learning activities and manage large numbers of students with limited faculty, tools have been developed and are evolving to realise these ambitious goals.

4.1 iPod touch and iPad

All students have been provided with iPod Touches connected to our secure campus-wide wireless network. Software, including reference, news applications, and custom applications developed on site by faculty and students. All faculty are equipped with iPod Touches and iPads.

4.1.1 iCOCET 3300

This application is a vocabulary study app based on the COCET 3300 word list developed as a learning task by one of our advanced students. It connects to a server and allows students to compete and compare their progress with their peers.

4.1.2 RollBook

RollBook is a custom-made attendance application that allows teachers to record student attendance and students to view their individual records, using iPods, iPads or other computers.
4.1.3 eTotal
This wholly student developed student response system allows teachers and students to ask and answer questions, send responses from iPods to a teacher’s iPad and graphically display the results on an iPad and connected HDTV or projector.

4.1.4 Handout
This application allows teachers to distribute any kind of iPod Touch compatible files to students including pdfs, images, docs, and various media files. As with the above, this application was developed in-house.

4.1.5 FileMaker Go
FileMaker Go is a commercial application for iPad that teachers can use to interact with custom teacher created databases. It is exceptionally useful for collecting and organising student data of all kinds. Full records of students’ diverse work including writing, audio files, other media files and any other files or online links can be collected in one place and accessed conveniently.

4.1.6 Media playback and recording
Users can play media from many different sources as well as create, edit and share it easily. In addition to having access to many kinds of media, users can easily record and edit video and audio files that can easily be shared with other users or uploaded to the Course Management System or other servers.

4.2 Classroom
In order to facilitate group work and a communicative atmosphere, we converted the former language lab into a comfortable media laboratory with large round tables for group work, a projector, sound system, HDTV and several computer workstations. This classroom is in stark contrast with common teacher centred classrooms or CALL labs.

4.3 Network and servers
The KNCT campus-wide wireless network was one of the first of its kind and Japan and is continuously upgraded to keep up with increasing load. It is the backbone of the system as it allows everyone to be connected while on campus. It provides secure access via MAC address verification and LDAP authentication and directory services; iOS profile management, web servers, file servers, filtered Internet access, email, Skype, and many other services. Specific to the English program, it provides blogs, wikis, CMS, FileMaker Server, iCOCET 3300 ranking, and podcast and media sharing.

5. Conclusion
Fully engaging large numbers of students individually in EFL study is a formidable undertaking, however using various tools and combining methodologies gives teachers and learners a wide pallet from which to choose interesting, engaging, language learning activities. The Kochi Kosen iPod Touch project provides these tools necessary to fully engage large numbers of students in interesting and appropriate EFL study. These tools also allow teachers to easily collect and analyse large amounts of student data in order to validate methods chosen by teachers, while providing many avenues of innovation in learning for everyone involved.
References

