The Functional Design of A Mobile App for College English Reading

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Abstract: Mobile learning has become a hot issue in the field of education, especially in language learning. How to promote English learning with the development of blended learning and mobile learning is one of the focuses. An English learning app based on mobile phone can provide learners with a new opportunity to learn. As we all know, reading ability is also very important in the process of English language learning and use. Therefore, this paper proposes to design the functions of a mobile app based on blended learning in order to improve the reading ability of college English learners in their fragmented rearning.

1. Introduction

According to *Requirements for College English Teaching* published by the Ministry of Education of China, learners are supposed to read articles in English newspapers and magazines, even English literature and materials of their major. English reading is not only to learn the language knowledge, but also to get the information learners want and broaden their vision. However, there are many problems in English reading class at present in China. First of all, there is less time for interaction between teachers and learners in classroom. The teaching strategy adopted by teachers ignores the interest of learners and cannot stimulate their learning motivation. Secondly, the intensive reading pays more attention to English vocabulary and grammar, thus neglecting the linguistic and cultural background and discourse knowledge. Last but not least, besides textbooks, teachers can hardly provide learners with English newspapers and magazines, English literature and materials in their major in class. Therefore, to solve the problems in English reading class, a new teaching and learning mode is required to meet the learners' personalized learning needs.

With the development of computer and network technology, online learning has been used and developed in the field of education. Educators use online learning to bring about the reform in traditional classroom teaching, however, network learning is not so effective as we expected. Therefore, blended learning is advocated to support and improve teaching, that is, the combination of the advantages of online learning and traditional classroom teaching. And with the development of mobile terminal technology, smart phones not only realize people's contact, but also are convenient for learners' learning anytime and anywhere, for instance, the fragmented reading. What's more, large numbers of college learners are accustomed to using apps (short name for applications) for multipurpose like shopping, games, books, restaurant's menus, news, and etc. Consequently, this paper focuses on how to use an app to promote learners' English reading ability, and meet their personalized learning needs, helping them gradually accept the mobile learning, make full use of the fragmented reading, and develop their independent and self-regulated learning habits.

2. Blended learning

Blended learning means matching existing knowledge and learning style with new educational resources and information technologies to help learners achieve their teaching goals. Blended learning is a kind of efficient management and distribution of educational resources for teachers to achieve teaching objectives. Blended learning is a kind of learning method that uses appropriate network technology and personalized learning to match and transfer appropriate knowledge and skills to learners in an appropriate time to achieve the best learning effect. Blended learning is the

combination of the advantages of traditional classroom teaching and online learning. In the process of blended learning, teachers should play a guiding role, and learners' initiative and creativity should be the first priority. The key to blended learning is that teachers should optimize the combination of teaching material, information and communications technology and learning strategies. In the actual teaching process, teachers and learners should use these combination of elements reasonably to achieve efficient teaching and effective learning.

Only by combining the advantages of traditional classroom teaching with the advantages of online learning, can we achieve the best learning. There is no unified mode in the mixed teaching reform, but there is a unified pursuit. That is to give full play to the advantages of online and offline teaching, changing the classroom teaching process, improving learning initiative of learners, their insufficient cognitive participation, and narrow the gap among learning results of different learners. In a word, blended learning is a mixture of various learning theories, learning methods, learning environments, learning resources and information and communications technology. However, blended learning does integrate the advantages of traditional classroom teaching and online learning, and adopts the teaching form of traditional teaching as the main part, group cooperative learning and individual independent learning as the auxiliary one.

3. Mobile learning & fragmented reading

The definition of mobile learning first came into being in the 1990s, and then many experts and scholars have defined mobile learning, but their definitions of mobile learning vary. Mobile learning is a kind of network learning through mobile computing devices such as PDA, Windows CE and even digital mobile phones. It can offer ubiquitous learning resources, instant interaction, strong learning support and performance-based evaluation. Mobile learning is a kind of learning that can be carried out in any place and at any time with the help of mobile terminal devices. The devices used in mobile learning must be able to show the learning content and provide two-way interaction between teachers and learners. Mobile education in China now refers to the use of mobile devices inside and outside the classroom by teachers and learners in order to achieve more flexible interactive teaching activities with the help of wireless mobile network and multimedia technology. Mobile learning should be a process in which learners can acquire learning resources by connecting with mobile devices through wireless communication network when they want to learn anytime and anywhere, and it can also realize knowledge construction between individuals and society through interaction with others. In a word, mobile learning is a relatively new learning method, which can transfer digital education information and resources to learners by means of mobile network technology and mobile portable devices. Mobile learning enables learners to learn different content in any way at any time and anywhere with its certain situational and interactive nature.

Fragmented reading, that is, incomplete and intermittent reading mode through mobile phones, e-books, Internet, and etc. In fact, the so-called "fragmented reading", in a sense, is not a new thing. Traditional newspaper and periodical reading can also be classified into this category. As People's demand for digital resources such as e-books is growing rapidly, fragmented reading represents a reading trend with distinctive characteristics of the times. Most of the traditional books are targeted at one subject, but fragmented reading can provide massive and diversified information we need from astronomy, arts to life Encyclopedia. Therte are lots of advantages in the fragmented reading such as immediacy, rapidity, interaction and full use of fragmented time, which the traditional reading does not have. Fragmented reading not only increases the time utilization, but also brings us many benefits. However, the demand for paper books and resources always exists. The enjoyment brought by traditional reading materials such as books and periodicals to the spiritual world is irreplaceable. Fragmented reading paves the way for the completion of in-depth reading. Nonetheless, there are randomness, systematic incompletion and nonprofessionalism in the acquisition of knowledge through fragmented reading. This is particularly obvious in English learning. For example, some English learners recited new words yesterday and read an article today. Although it seems that they are learning English every day, and they have learned a lot, there is no systematic connection in the knowledge they acquired. As a result, when they are faced up with specific

language applications, such as theme writing or oral presentations, those learners can't gather the unsystematic knowledge together as if they have never learned that. So how should we systematize the fragmented English reading? The design of a targeted app is desperately required to complement classroom teaching of College English reading.

4. The Functional design of app for college English reading

According to the full consideration of the characteristics of mobile learning and fragmented reading, the design of app mainly includes two parts: client and server. As the C / S technology is mature and is characterized with fast response and strong interaction, the English reading app adopts the C / S, i.e. Client/Server. English reading app system is composed of an app running on Android device terminal and backstage server management. Besides, this English reading app is designed for college students to improve English reading on their own. Hence, its functional modules include registration, login, learning, test, and personal center.

The module of registration and login is mainly for the users who started to use the app for learning. In this way, the backstage management system can obtain the user's information according to the account information, and some learning tracks or historical records of the user can be well saved. After the English reading app is started, it will directly enter the registration and login interface, and the user name and password can be entered to log in. Then the client-side app will send the user's login request to the server to verify the login information. If the data returned by the server is passed, the user can enter the app home page.

The learning module of this English reading app is the most important part, which mainly provides the learners with reading practice content. The learning module includes three parts: newspapers and periodicals reading, appreciation of masterpieces, and written text of speeches of celebrities. The first part is the reading part of newspapers and periodicals. Different genres with pictures and audio are selected to arouse the learners' interest in reading. The learners pracice their reading with fast reading skills. Learners can use this part of content flexibly according to their own actual proficiency. They can not only follow the audio, but also refer to the translation after reading. They can both exercise their English pronunciation, and deepen their understanding of the article. The second part is the appreciation of masterpieces. The content is a little bit more difficult than the part of newspapers and periodicals reading. It provides a few tips for the learners, and the learners can read in-depth. Finally, there are celebrity speeches with both texts and videos. Learners can use this part to accumulate some beautiful sentences, which is very helpful for their English writing. Every day, the learning unit includes the above three parts. Learners can choose different modules according to their own plans or interests.

The test module mainly provides self-test content for learners, which is divided into two parts: banked cloze and reading comprehension. Banked cloze requires learners to choose the right from the given words and fill in the blanks. If the selected word is correct, it will be displayed in green and the translation of the sentence in which the word is located will be given; if the selected word is wrong, it will be displayed in red and needs to be done again. Learners will have a new understanding of their vocabulary, sentence patterns and have a strong ability of paragraph reading comprehension by filling in blanks, and a good review of what they don't master in time. Reading comprehension is mainly to ask the learners questions about the reading content. The questions are presented in the form of multiple choice questions. If the answers are correct, the content of the item selected by the learners will be marked in green and the analysis of the item will be given. If the answers are wrong, the item selected will be marked in red and the correct answers and analysis of the item will be given. By answering questions, learners can have a clear understanding of their ability in reading comprehension, text analysis and inference. The learners' performance in the test module will be part of the formative evaluation, which is combined with the summative evaluation.

The personal center module consists of three parts. The first part is learners' log, which mainly records the new vocabulary in the learners' reading, the articles they are interested in, and their reading notes. The second is learning achievement. This part mainly records the students' answers in the test module, and draws the curve chart according to their learning achievement. The third is task

center, which includes individual task and group task. The teacher will assign some tasks to the learners every day so that the learners can finish them after class. The task center can record the learners' completion of tasks every day. For group tasks, learners can invite their peers to their own group on line. The team members can collaboratively finish the learning tasks or take part in competitions with other groups, which is conducive to mobilize the learning enthusiasm of learners.

5. Conclusions

With the rapid development of information technology, it is far from enough for learners to acquire English knowledge only through traditional English reading teaching. It is necessary to make full use of network resources for English reading learning. So the English reading app not only meets the requirements of the times, but also meets the personalized learning needs of learners anytime and anywhere. Under the guidance of mobile learning, English reading teachers can take the advantage of integration of mobile learning app and traditional curriculum. Teachers should design an English reading class combined with mobile learning apps according to teaching contents, and guide learners to use the characteristics of the English reading app to promote their English learning, so as to stimulate learners' enthusiasm for learning and improve their English reading. The English reading app can make English reading more convenient and enhance learners' ability of the language use, also improve learners' autonomous learning ability imperceptibly.

References

[1] Heinz, A., & Procter, C. 2006. Online communication and information technology education. Journal of Information Technology Education, 5, 235–249.

[2] Cheung, W. S., & Hew, K. F. 2009. A review of research methodologies used in studies on mobile handheld devices in K-12 and higher education settings. Australasian Journal of Educational Technology, 25(2), 153-183.

[3] Song, Y., Wong, L. H., & Looi, C. K. 2012. Fostering personalized learning in science inquiry supported by mobile technologies. Educational Technology Research and Development, 60(4), 679-701.

[4] Wu, W. H., Jim Wu, Y. C., Chen, C. Y., Kao, H. Y., Lin, C. H., & Huang, S. H. 2012. Review of trends from mobile learning studies: a meta-analysis. Computers & Education, 59(2), 817-827

[5] Hsu, Y. C., & Ching, Y. H. 2013. Mobile computer-supported collaborative learning: a review of experimental research. British Journal of Educational Technology, 44(5), 111-114.

[6] Graham, C. R. 2013. Emerging practice and research in blended learning. In M. G. Moore (Ed.), *Handbook of distance education* (3rd ed., pp. 333–350).

[7] Arney, L. 2015. *Go blended! A handbook for blending technology in schools*. San Francisco: Jossey-Bass.