

A Study On The Application Of Digital Learning In English

Kuo Yi Tsen

Abstract

Learning English as a second language is very common in Taiwan and there is a tendency to learning English since early childhood. According to the principles of cognitive development, the designing strategies of Web-based program for high school students' English should fulfill the needs and characteristics of students' learning style to obtain effective learning. World Wide Web has become an increasing dynamic, interactive and powerful medium for deliver instruction. A well-designed web-based instruction can make learning simple and convenient and inappropriate design will bring frustration and anxiety for students. The purpose of this study was to design, develop, and evaluate a web-based multimedia courseware for students' English learning abilities. First of all, the study evaluated three web-based multimedia courseware and developed designing principles on contents and interface for student's English web-based multimedia courseware. Second, the study analyzed, designed, developed, implemented and evaluated the web-based multimedia courseware according to the instructional system design model, and provided strategies related to courseware design and evaluation aspects of web-based student's English learning. This program was developed based on the strategies of cognitive development of student's language learning. To provide multiplex exercise of English learning for students, the program constructed a framework with 'learn' and 'game', and 'characters' and 'vocabularies'. Lovely programs figures were used as friendly guides and motivators to present dramatic and lively subject matter to enhance the effects.

o

Key words: Learning 、Multimedia 、Digital 、Computer Assisted Instruction

Introduction

In response to the prevail use of World-Wide-Web (WWW), English has being recognized as a common language on the Internet among cross-culture interactions. Therefore, prompting the proficiency of spoken English in Taiwan is one of the major policies for internationalization that government has taken part in. Along with the continue developments of networking information technology, English learning has gradually adopted computer-aided technology to design an interactive learning mode in replace of traditional teaching method.

Most of research indicated that the development of interactive learning material involved complex factors, such as user schema, difficulty of curriculum, combination of media, layout design, hypertext, etc. The adoption of computer-aided language learning for content information design has considered many factors, such as space disorientation, cognitive loading, memory lost, distraction and learning interest, to affect the effectiveness of digital learning.

Current research for computer-aided learning mainly focused on the comparison between tradition and new method, or among various computer-aided learning methods. The purpose of the study was to investigate how computer-aided narration affects the learning effectiveness of interactive English conversation program. The study used "Go2School" online curriculum as tested material. 159 undergraduate students were selected to participate into the research. The psychological experiment was designed to test the effect of computer-aided narration including English spoken sound and Chinese script. Participants were randomly divided into 6 groups. Each of participants was asked to take a test after experiment.

The collected data was analyzed by using SPSS 10.0 statistic tool. The result of the study showed that the adoption of computer-aided narration significantly improved the learning effectiveness of English learners and no relation to the proficiency of learner background. But, computer-aided narration had obtained a better improvement while learning in short dialogue than learning in long dialogue. On the other hand, if computer-aided narration contained irrelevant messages, the learning effectiveness was decreased.

The conclusions of the study indicated that the adoption of computer-aided narration certainly helped to improve the learning effectiveness of interactive English conversation. The inference of previous studies was verified. The present study could

help further research better understand the difficulty and usability of online learning material, and develop interactive teaching material.

The primary findings of the study were showed as following:

1. The experimental group scored higher on English motivation scale than the control group.
2. The experimental group scored higher on English motivation subscale “intrinsic goal orientation” and “task value” than the control group.
3. No significant difference was found between experimental group and control group on the total scores of English achievement test.
4. The experimental group scored higher on English achievement subtest “sentence pattern discrimination”.
5. The experimental group hold positive attitude toward multimedia-based English songs instruction. They consider instruction of English songs in multimedia-based system as a good way to learn English, and hope this way of instruction could continue.

English is taught as a foreign language in Taiwan. It is especially important for all the students. With the rise of computer network, Computer-Mediated Communication (CMC) is now gaining more and more attention in the English teaching and learning field. It is claimed that CMC promotes learner empowerment and literacy on the basis of collaborative learning.

Conclusions

The effects of Computer Assisted Instruction (CAI) were better than those of Lecture Teaching, and the effects of Lecture Teaching were better than those of self-Education. The study shows the student's preference of the activities in the internet-assisted instruction from the highest to the lowest were games, songs, vocabulary, sentence patterns, dialogues, and phonics. And the students consider that the greatest advantage of the internet-assisted instruction was "I can learn and look for vocabulary or information all by myself". Students liked the internet-assisted instruction more than common English teaching. Most students were willing to spend more time using the web site to practice English.

With the development of information technology, more and more Internet resources are available for foreign language learners. It liberates students from teacher-centered instruction and encourages students to become responsible for their own language learning. Researcher also considers that students liked English activities done in the study, such as watching movies, playing games, and learning English on the Internet. Teachers need to use more digital textbooks or some multimedia in the English class.

Finally, based on the findings of this study, suggestions for administrators, teachers, and future research were discussed.

The suggestions of the study for future studies to take into account include:

1. The Computer Assisted teaching software can be designed and developed cooperatively.
2. Teachers may apply various teaching methods and materials to increase the interaction between students and teachers.
3. The classroom space should be able to accommodate students and the multimedia classroom should be well-established.

In conclusion, digital learning course in English can promoting the students' participation in English learning, and increasing interaction between the teachers and students. It also improves students' communicative competence. This research offers pedagogical implications for vocational high school English teachers who are considering using web-based English tasks and effective teaching strategies.

References

- 唐璽惠 (1988)。高中生英語學習動機態度師生互動親子關係與英語科成就之相關研究。國立高雄師範大學，高雄市。
- 羅玕貞 (2001)。國中英語科教師利用資訊科技於教學之研究。國立台灣師範大學，台北市。
- 羅玕貞 (2001)。資訊融入國小學生英語教學之行動研究。國立台灣師範大學，台北市。
- 徐文珊 (2005)。高中生在英語閱讀環境中的字彙習得:單字增強活動與純閱讀練習之影響。國立成功大學，臺南市。
- 方志雄 (2006)。探究電子報在國中英語教學上的應用。國立高雄師範大學，高雄市。
- 徐仕勳 (2006)。具有效提昇英語新聞閱讀能力之個人化智慧型行動學習系統。國立花蓮師範大學，花蓮市。
- 徐智瑩 (2006)。運用多媒體遊戲提升兒童英語認字拼字與學習態度之研究-以桃園縣某國小為例。國立台北教育大學，台北市。
- 陳幹忠 (2006)。資訊融入國小學生英語教學之行動研究。國立高雄師範大學，高雄市。
- 林玉涵 (2017)。英語學習 App 輔助高職英語教學之研究。臺北科技大學技術及職業教育研究所(碩士論文)