

STUDENTS' ACHIEVEMENT OF ELECTRONIC BOOK ON COMMUNICATION SUBJECTS AT GUIZHOU AEROSPACE VOCATIONAL AND TECHNICAL COLLEGE, CHINA

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ABSTRACT

The objectives of this study were 1) to study electronic book on communication subject for students with the criteria of 80/80, 2) to compare learning achievement results of post-test of students by using electronic book, and 3) to study attitudes of students towards the electronic book on communication subject. The population consisted of 100 students in Guizhou Aerospace Vocational and Technical College, China. The samples used in the research were 80 students determined by Krejcie and Morgan table and divided into 2 groups experimental group and control group were of 40 students in each class determined by purposive sampling. The instruments used in the study were the electronic book, the lesson plan, multiple-choice test and aptitude test for electronic book. The statistics used for data analysis were mean, standard deviation, and t-test. The research results revealed that 1) the electronic book had an efficiency level of 82.06/80 according to the criteria value of 80/80. 2) The learning achievement after participating in the lessons with learning from electronic book, the students revealed their higher post-test results than studied in the class by traditional approach, and 3) the students' attitudes towards the electronic book and showed an average level of 4.06 ($X = 4.06$) with a high standard deviation at 0.75 ($S.D. = 0.75$).

Keywords: Students' Achievement, Electronic Book, Communication Subjects, Guizhou Aerospace Vocational and Technical College, China

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INTRODUCTION

The pace of development is accelerating, particularly within communication technology and data transmission. This results in interactions between individuals that are unprecedented. What occurs in one part of the world can have unanticipated repercussions in another part of the world, thousands of miles away. In terms of economics, society, and politics, the rapidity of transnational communication influences every individual, every organization, and every society since no China organization or society exists without a respirator. Consequently, one cannot avoid the trend of this is modifiable. There is a global communication network based on the Internet. Provides rapid access to a large quantity of information. A wireless system that enables us to communicate with flexibility and convenience. Education is a system that can utilize information technology, particularly for information exchange. Looking for documents, fees, research, teacher's guides, and instructional materials Teachers face challenges posed by distance teaching, meetings, distance training, etc. Students and educators have access to a plethora of information (Li zhou, 2015).

Progress in the contemporary world mentioned here is continuous, as is the field's development. Due to the influence of advancements in communication science, telecommunications, and networked information technology, technology emerges frequently and rapidly. Connected throughout the nation until the dawn of a world without borders. Globalization for Educational Administration In order to keep up with the development of information technology in terms of instruction and learning, China must adapt. Learners can engage in knowledge-seeking while fighting for various teaching media that will make teaching and learning as effective as possible. Consequently, information technology It has come to play a role in the fields of economics (e-commerce), society (e-society), and education (e-education), causing the emergence of a new teaching and learning system that emphasizes learning with the participation of students. Both from studying with teachers, media, and classmates. Including changing the role of the teacher from being the one who provides (Impart) content to the students to being the one who helps and gives various suggestions. (Facilitator) for learners. Providing education to develop people of quality is therefore a matter of great importance. It must be quality education that maximizes the potential of each person has been fully developed (Office of the National Education Commission, 1997) 1) mentioned the problem of organizing education in many ways. It consists of centralizing the district at the central level, allowing for the decentralization of authority in both academic and budget matters. Human resource management and administration in general to the school level, causing delays in management, problems, and lack of participation of teachers, parents, communities, and local administrative organizations in management The problem is that the quality of education is quite low. Especially the academic achievement of students in some curriculum-related problems courses that the teaching and learning process still cannot respond to the needs of students are diverse. Measurement and evaluation: Measuring knowledge means more than measuring knowledge that comes from actual practice or evaluating actual conditions. Therefore, participation in teaching and training requires the use of media that allows students to learn in many areas, according to a study by the British Single Education Association. It was found that people could learn 80% of the subjects if they could do both. But if you hear only, you will get only 20%; if you see or just read, you will get only 10% (Wei Li, 2019).

Current advancements in computer technologies have been used for various purposes. In almost every field, whether it's in the field of science, medical and public health, engineering, architecture, or commercial business, mass communication, especially in the field of education has developed, and should be continuously used in teaching as part of the economic development plan, and National Society No. 11 (2012-2016) specifies the goal of developing the quality of education to be Upgrading to international standards Extend knowledge to innovation and trade opportunities through education and Learning in more and more diverse

formats is quality, flexible, diverse, and easily accessible. Have a relationship that is consistent with the culture, way of life, and occupation in each locality. By focusing on development, learners are important. Allow students to learn for themselves. Learn in groups until it becomes a habit to learn. Have skills in solving immediate problems and listening to other people's opinions, and gradually develop into creative thinking, giving importance to learning in the classroom and studying outside the classroom. Teachers must have qualifications that correspond to the subjects they teach. There is a system for producing and developing quality teachers. Continuously develop yourself. Along with adjusting the competency assessment method to reflect efficiency in teaching and learning and student quality development, (Office of the Economic Development Board and National Society, 2012, online)

Nowadays, computers have been developed to be able to work in many forms of multimedia, including multimedia electronic book systems, which are a combination of many methods, including text, sound, images, and animation and computers come to work together systematically. So the book. has many advantages over other types of media, such as being similar to a textbook, conveying meaning quickly, being easy-going, and being able to present moving images realistically There is a sound effect that helps increase motivation in teaching. Electronic books (electronic books) can be considered a new innovation in educational technology that is a new generation of ready-made media that is organized A system that offers interesting content and activities to enhance learning. Readers can read and learn content according to their interests and individual differences. There is an opportunity for readers to practice their skills or exercises or don't ask readers or students to check. Their own knowledge and understanding from the programs contained in electronic books. Creating data with electronic printing is easy, fast, beautiful, low-cost, and, most importantly, able to distribute information all over the world. (Chalong Tubsri, 2016).

Learning management with electronic books and computer-assisted instruction lessons in various media formats with interaction between the learner and the computer In a way called interaction, like teaching between teachers and students in a normal classroom, which is currently a new form of learning that has received interest in being able to use it in teaching. It consists of graphics, still images, animations, sounds, and letters that create motivation for learners and can review the content as needed. When doubts arise, students will be able to study and learn on their own, according to the ability of each person. It reduces the problem of differences. There is quite a lot between people studying. Because each person has different basic knowledge due to their studies at many educational institutions These media have the potential to increase the learning achievement of students. It is a lesson that consists of multimedia and may use multidimensional media features to link to subtopics to facilitate learning. Students can learn from the content which includes text, images, and sound. It responds to the lesson so that lessons can be evaluated by reading tests and receiving immediate feedback. Self-learning this is consistent with the value stated by that computer lessons are developed to solve problems in learning about electronics in the basic electronics content. It helps students understand the use of various types of equipment and tools. Better, which will help reduce the risk and damage that will occur to tools and equipment and to the students themselves. By allowing students to learn from lessons on computers, I expressed the opinion that the characteristics of such computer lessons can be arranged for learning in accordance with and close to normal teaching and can also offer experiments in two situations in various ways so that students understand and can study as often as they want. When students have finished studying all the content, they will be able to apply the knowledge that they have come to actually practice. (Wen Long, 2016). Sometimes teachers have to teach individual learners who are not able to learn in time or who do not understand the poses, which creates an obstacle for those who learn quickly. Boredom in waiting, including education Research from the above is in the form of various teaching media, books, and electronics. It is appropriate to be a

teaching medium that encourages students to have higher academic achievement than teaching in front of the class using interesting programs along with having a good attitude towards Manage learning with electronic books. Therefore, the researcher is interested in using learning management methods with electronic books to organize teaching and learning activities. To solve this problem and study whether this method of organizing learning with electronic books will make a difference in academic achievement when taught in the normal way or not, including students' attitudes towards electronic books and as a way to develop teaching and learning about information and communication technology.

LITERATURE REVIEWS

1) The Evolution of Business English

Business English has emerged as a critical area of study in response to the dynamic landscape of international trade and economic collaboration. In China, the inception of business English dates back to the late 1970s when the country began to open its doors to foreign trade. Initially referred to as foreign trade English, it was primarily focused on facilitating communication in international trade transactions. However, as globalization accelerated and economic activities expanded beyond mere transactions, the scope of business English evolved significantly. Today, business English encompasses a wide array of communication activities within various sectors, including marketing, finance, management, and technology. This evolution reflects the growing complexity of global interactions, necessitating a nuanced understanding of language use in diverse business contexts. As a result, business English has become an integral part of the broader field of English linguistics, serving as a bridge between language and practical applications in the global economy.

2) The Impact of Globalization on Business English

The continuous advancement of globalization has amplified the demand for proficiency in business English across the globe. As nations engage in economic, educational, cultural, and technological exchanges, the ability to communicate effectively in English has become essential. This trend is particularly evident in China, where foreign economic relations have flourished, creating opportunities for both local and international enterprises to collaborate. In this context, English has solidified its position as the lingua franca of business, enabling professionals from different cultural backgrounds to interact and conduct business seamlessly. The rise of multinational corporations and the proliferation of cross-border transactions have underscored the importance of business English as a vital skill for professionals aspiring to succeed in a competitive global market.

3) Business English as an Independent Discipline

As the significance of business English has grown, so too has its recognition as an independent academic discipline. Educational institutions around the world have begun to establish dedicated business English programs to equip students with the skills necessary for effective communication in professional settings. For instance, prestigious universities such as Cambridge and Oxford in the United Kingdom, and Harvard and Stanford in the United States, have developed specialized curricula that encompass not only language proficiency but also cultural awareness, negotiation skills, and business etiquette.

These programs aim to provide students with a comprehensive understanding of the language used in various business contexts, allowing them to navigate the complexities of international communication. Additionally, the establishment of standardized examinations for business English, such as the Cambridge English: Business Certificates, further validates its importance as a measure of competency in the field.

4) The Role of Business English in Economic Communication

Since China's accession to the World Trade Organization (WTO), the demand for business English professionals has surged. The influx of foreign companies entering the Chinese market

has created a pressing need for individuals who can facilitate effective communication between Chinese enterprises and their international counterparts. As a result, the expectations for business English graduates have evolved, requiring them to possess not only linguistic proficiency but also an understanding of the cultural and contextual nuances that influence business interactions.

This demand has led to an increased focus on developing interdisciplinary talent, as employers seek individuals who can blend language skills with specialized knowledge in areas such as marketing, finance, and international relations. Consequently, many colleges and universities in China have established business English majors, reflecting a commitment to preparing graduates for the evolving demands of the labor market.

5) Implications for Educational Practices

The integration of business English into higher education necessitates a fundamental shift in pedagogical approaches. Traditional language instruction often emphasizes grammar and vocabulary in isolation; however, the context of business English requires a more practical and applied focus. Educators must adapt their teaching methodologies to incorporate real-world scenarios, case studies, and experiential learning opportunities that allow students to practice their language skills in relevant contexts.

Moreover, the rise of technology in education presents new opportunities for enhancing business English instruction. Digital platforms and online resources can facilitate interactive learning experiences, enabling students to engage with authentic materials, participate in virtual simulations, and collaborate with peers across geographic boundaries. The incorporation of multimedia tools, such as videos, podcasts, and online forums, can enrich the learning experience and provide students with diverse exposure to the language used in professional settings.

Additionally, educators should emphasize the importance of soft skills, such as teamwork, communication, and problem-solving, as integral components of business English education. These skills are essential for fostering effective collaboration in diverse teams and navigating the complexities of cross-cultural communication. By equipping students with both linguistic proficiency and essential soft skills, educational institutions can better prepare graduates for success in the global business landscape.

6) Future Directions for Research and Practice

As the field of business English continues to evolve, future research should explore the effectiveness of various pedagogical strategies and curricular designs in enhancing students' language proficiency and professional competencies. Additionally, studies should investigate the impact of cultural factors on business communication, as understanding cultural nuances is crucial for successful interactions in a globalized world.

Furthermore, the development of standardized assessments for business English proficiency will be vital in ensuring that graduates meet the expectations of employers. Collaboration between academic institutions and industry stakeholders can facilitate the alignment of curricula with the evolving demands of the labor market, ensuring that graduates possess the skills necessary to thrive in their careers.

In conclusion, the significance of business English in the context of globalization cannot be overstated. As an independent discipline, it plays a crucial role in facilitating effective communication across cultures and sectors. By adapting educational practices to meet the needs of the global economy, institutions can empower students with the skills required for success in an increasingly interconnected world.

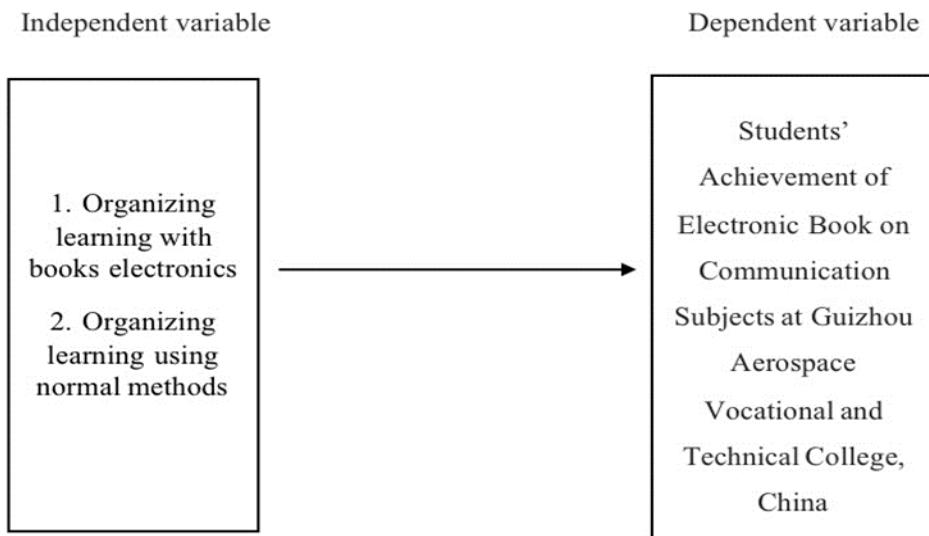


Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

Population and sample Group

The population in this study was 172 students from Business English Class 1, Department of English Chongqing College of International Business and Economic, China. The sample of this study was 40 students in Business English class 1 which was selected by using cluster random sampling method.

Research Instruments

Research instruments were the tools for conducting the research to collect data.

The research instruments used in this study includes the following.

Instruments for experiment

- 1) Instructional innovation was the experiential teaching method.
- 2) Lesson plans based on experiential teaching method. There were six lessons allocated with twelve hours of teaching English speaking skill.

Instruments for collecting data:

- 1) The English speaking ability test

The English speaking ability test was divided into two parts:

Part 1 : A business English knowledge test

Part 2 : An English speaking skills test

- 2) Students 'satisfaction questionnaire on experiential teaching method.

Data Analysis and Statistics

Research instruments were the tools for conducting the research to collect data. The research instruments used in this study includes the following.

RESEARCH RESULTS

This chapter describes the research results according to the research objectives:

- 1) To compare students' business English speaking ability before and after receiving experiential teaching method.
 - 2) To compare students' business English speaking ability with the criterion set at 70 percent of full marks.
 - 3) To assess the student's satisfaction on Experiential teaching method.
- The research tools were 1) A business English knowledge test
- 2) An English speaking ability test and 3) A satisfaction questionnaire on Experiential teaching method.
- The findings of this research were analyzed descriptive statistics and t-test for dependent samples by using statistical package program to response the research objectives.
- The findings were described as follows:

Table 1 shows the Result of comparing English speaking ability before and after receiving Experiential Teaching Method by using t-test for dependent samples.

Group	N	Pretest		Posttest		t	p
		Mean	S.D.	Mean	S.D.		
Experimental group	40	75.04	7.86	82.98	9.53	5.505*	0.000

* Statistical significance at 0.05

From the results of paired samples test, we can say that students have business.

English speaking ability using the Experiential teaching method (post-test) greater than before learning through the Learning management using the Experiential teaching method (pre-test) at.05 statistically significant level ($t_{40} = 5.404$, $p < 0.05$). On Average, Posttest scores were 7.9488 points higher than Pretest scores.

Table 2 Shows the Result of comparing business English speaking ability with the determined criterion set at 70 percent of full marks by using t- test for one sample.

Group	N	Full score	Criteria score	S.D.	t	p
Experimental group	40	100	70%	82.98	9.5	8.507* .000

* Means statistical significance at. 05

From the results of one sample test, we can conclude that the mean score of the sample is significantly different than from the average criterion score of the overall student population. Based on the results, we can make the conclusion that the average score of students' business English speaking ability after using the Experiential teaching method was 82.98 from a full marks of 100 and the standard deviation was 9.53 which was statistically higher than the criterion set at 70 percent of full marks, at the .05 level of statistical significance.

Table 3 shows the result of students' satisfaction on experiential teaching method by using mean and standard deviation.

Variable	N	Full score	M	S.D.	Level of satisfaction
Satisfaction	40	5.00	4.00	3.3	High

As it is shown in table 3, the mean scores of the students' satisfaction of business English of students after learning through the Experiential Teaching Method was 4.00 from a possible full marks of 5.00 and the standard deviation was 3.3 which was a high standard So we can conclude that the student's satisfaction on Experiential Teaching Method is at a high level.

DISCUSSION & CONCLUSION

This chapter discusses the results of the research that aimed to evaluate the effectiveness of the experiential teaching method in enhancing students' business English speaking abilities and their overall satisfaction with the learning process. The study's findings indicate significant improvements in speaking ability following the implementation of the experiential teaching method, which is crucial in the context of modern educational practices that emphasize active learning and student engagement.

1) Impact on Students' Business English Speaking Ability

The results presented in Table 1 show a clear enhancement in students' business English speaking ability. The experimental group exhibited a mean post-test score of 82.98, compared to a pre-test score of 75.04, demonstrating an average increase of approximately 7.95 points. This improvement is statistically significant ($t(40) = 5.505$, $p < 0.05$), indicating that the experiential teaching method effectively facilitated learning and mastery of business English speaking skills.

The experiential teaching method, which emphasizes active participation, practical application, and real-world scenarios, appears to have created an engaging learning environment that enhanced students' confidence and competence in speaking. By allowing students to immerse themselves in authentic business contexts, they were likely able to practice and refine their language skills in ways that traditional teaching methods may not provide. This finding aligns with existing literature that underscores the importance of experiential learning in developing language proficiency, as students often retain information better when they can apply it in relevant contexts (Kolb, 1984).

2) Comparison with Established Criteria

The results from Table 2 further substantiate the effectiveness of the experiential teaching method. The experimental group not only improved their speaking skills but also exceeded the predetermined criterion of 70% full marks, achieving a mean score of 82.98. The significant difference ($t(40) = 8.507, p < 0.05$) indicates that the students' performance is not only above average but also reflects a strong understanding and application of business English speaking skills.

This outcome emphasizes the importance of setting realistic yet challenging benchmarks for student achievement. The students' ability to surpass the 70% criterion illustrates the efficacy of experiential teaching in fostering a learning environment where students feel motivated to excel. Moreover, this result suggests that the experiential teaching method can be effectively integrated into business English curricula to help students meet or exceed expected learning outcomes.

3) Student Satisfaction with the Experiential Teaching Method

The analysis of student satisfaction, as presented in Table 3, reveals a mean satisfaction score of 4.00 out of a possible 5.00, indicating a high level of contentment with the experiential teaching method. This score, alongside a standard deviation of 3.3, demonstrates that students generally perceive this approach to be beneficial for their learning experience.

High student satisfaction is critical as it correlates with motivation, engagement, and the overall learning environment. Satisfied students are more likely to participate actively, invest effort into their studies, and develop a positive attitude toward learning. The experiential teaching method's ability to create a supportive and interactive atmosphere likely contributed to these positive outcomes, reinforcing the importance of pedagogical approaches that prioritize student engagement and satisfaction.

4) Implications for Teaching Practices

The findings of this study have important implications for educators and curriculum developers in the field of business English. The success of the experiential teaching method suggests that educators should consider incorporating more active, student-centered learning strategies into their instructional practices. This could include simulations, role-playing, group projects, and real-world problem-solving activities that allow students to apply their language skills in practical contexts.

Furthermore, professional development opportunities for teachers should emphasize the value of experiential learning techniques. Training programs can equip educators with the necessary tools and strategies to implement such methods effectively, thereby enhancing the overall quality of business English instruction.

Conclusion

In conclusion, this research highlights the significant impact of the experiential teaching method on improving students' business English speaking abilities and their satisfaction with the learning experience. The statistically significant increases in speaking proficiency and the high levels of student satisfaction affirm the value of experiential learning approaches in fostering effective language acquisition.

Given the globalized nature of today's economy, equipping students with strong business English communication skills is essential. This study provides evidence that experiential teaching methods can significantly enhance students' speaking abilities, thereby preparing them for success in their future careers.

Further research could explore long-term retention of language skills acquired through experiential learning, as well as comparative studies with other teaching methodologies. Additionally, expanding the sample size and including diverse educational contexts could yield more comprehensive insights into the effectiveness of experiential teaching across different learner demographics.

Ultimately, the findings underscore the necessity for educational institutions to adapt their teaching methodologies to meet the evolving needs of students in a rapidly changing global landscape, emphasizing the importance of innovation in pedagogy for enhanced learning outcomes.

REFERENCES

- Cambridge English Language Assessment. (2020). *Business English Certificates*. Cambridge: Cambridge University Press.
- Chalong, T. (2016). The role of electronic books in enhancing learning outcomes. *Journal of Educational Technology Development and Exchange*, 9(1), 22-35.
- Li, Z. (2015). The role of information technology in education: A focus on distance learning and teaching. *International Journal of Educational Technology*, 12(3), 145-158.
- Office of the Economic Development Board and National Society. (2015). *Strategies for Educational Improvement and Economic Development*. Bangkok: Economic Development Board.
- Wei, L. (2019). Understanding the impact of experiential learning on academic achievement. *Journal of Business Education Research*, 15(2), 34-50.
- Wen, L. (2016). The effectiveness of computer-assisted instruction in learning basic electronics. *Journal of Science and Education*, 18(4), 201-215.

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