Audiovisual Books Have Better Effects Than Teacher-assisted Model in Second Language Acquisition for Preschool Children

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Abstract: This study explores the impact of audiovisual books on second language acquisition in preschool children, addressing challenges related to bilingual teacher availability and high-quality resources in Chinese kindergartens. A comparative analysis between teacher-assisted and instructional audiovisual book methods was conducted in a teaching experiment involving 30 students from a kindergarten in Shenyang, China, who share similar educational backgrounds. The students were divided into two groups, and both groups underwent a pretest and posttest to assess their performance. The findings revealed that audiovisual books were more effective, resulting in significant improvements in letter acquisition for the experimental group. The literature review emphasizes the motivational and convenient aspects of audio-visual books. In the current context of limited teacher resources and the increasing prevalence of electronic devices, audiovisual books offer significant convenience and assistance for educators, parents, and students. This study supports the enhancement of language acquisition in young learners, positioning them for future academic success.

Keywords: second language acquisition, audiovisual books, mobile-assisted, language learning

1. Introduction

Audiovisual books are one of the most effective approaches for children to acquire knowledge and motivation in a meaningful context. However, there are limitations for preschool children in acquiring language knowledge due to the lack of high-quality teacher resources and the promotion of electronic products [1,2]. In China, where the population base is huge, there is a greater demand for high-quality resources than the available supply. Although some kindergartens can be equipped with bilingual teachers, this phenomenon is rare and mainly seen in developed cities or high-income families. In addition, the lack of funding and certified instructors is another problem. In this context, audiovisual books fulfill the need. As mobile technologies continue to advance and become increasingly available, it is crucial for foreign language educators and researchers to remain innovative and thoroughly document the impact and efficacy of tablet-based initiatives on language acquisition [3]. The low cost associated with audiovisual book learning allows for the equitable allocation of resources to schools across all regions simultaneously, regardless of their geographical

location or financial constraints. Audiovisual books have been investigated by language experts for a long time [4-6], but it has not taken much attention in the preschool area.

2. Literature Review

The role of audiovisual books in developing motivation and convenience for second language acquisition is the main focus of the present study. The use of audiovisual books described in this study is similar to other practices of implementing visual and auditory modeling examined in research. Audiovisual books, as part of Mobile-Assisted Language Learning (MALL), have played an effective role [7]. They have been widely recognized as important teachings, too [8]. There are several practical examples to demonstrate their availability [9]. Furthermore, audiovisual books have evolved into hybrid books [10]. For preschool children, second language acquisition deeply impacts language development [11,12]. However, most studies have primarily focused on primary or junior-aged students; at this age, students tend to have more screen time [13], and it's easier to reach university students since they are adults who do not need to require permission s from their parents. Research on preschoolers is relatively rare due to the challenges of practical implementation and obtaining parental permission. Nevertheless, the author was still able to find some relevant studies [14].

3. Methodology

3.1. Participants

Thirty pupils from two intact middle-class groups in the same kindergarten in Shenyang, Liaoning Province, participated in this study. The kindergarten is not bilingual, and the participants are still learning Chinese Pinyin. The participants are Chinese children with a mean age of 4.5 years, ranging from 4 to 5 years old. When the study was conducted, the participants (N=30) had not received systematic English instruction. The individuals involved in this study were deliberately chosen for specific reasons, and some irrelevant data were excluded [15]. Finally, thirty-two students from the same kindergarten were initially recruited for the study with their parents' permission. Nevertheless, only thirty students remained until the end of the study after screening, with fifteen students in each group. These two students were screened out due to exposure to English and absence from school.

4. Procedures

4.1. Preliminary Test

To ensure the validity and reliability of the study, a preliminary test was conducted to assess the English language foundation of each participant. This step was crucial to ensure that the selected students had a relatively similar baseline level of English proficiency. It is worth mentioning that two students in the original sample were already familiar with the alphabet. Consequently, they were excluded from the study to maintain consistency and eliminate potential bias in the results. During the preliminary test, the examiner would not provide any hints or reactions to the participants' answers. This approach was employed to ensure that participants remained unaware of whether their answers were correct. Even though the questions in the two tests were the same, there was no possibility of the test results being influenced.

4.2. Studying

Two groups would study the alphabet in two different ways. In Group One - the teacher-assisted model, the teacher would ask students to sit as they usually do in class, facing the teacher. The content and teaching methods used in this group are the same as those in the audiovisual book, and some actions are incorporated to aid memory retention and foster classroom interaction. In Group Two - the audiovisual books model, students sit in front of the TV and watch the audiovisual book while the teacher stands behind them. During the study sessions, there is no interruption or classroom management. Students simply watch the audiovisual books according to their own preferences. Considering that all the participants have had limited exposure to English, English immersion education would be too challenging for them, increasing the likelihood of distractions. The audiovisual books used in this model are bilingual, featuring both Chinese and English. The presence of various colors and cartoon patterns helps capture the students' attention. By comparing the differences between these two teaching methods, it becomes more evident and achievable to determine which method yields better results.

4.3. Data collection and analysis

The data for this study mainly consisted of pretests and posttests conducted on the participants, taking into account their prior experiences with audiovisual books, exposure to English, and test results. To evaluate the level of improvement in letter mastery by the students, pretests and posttests were conducted using the seven letters (A, B, C, D, E, F, G). For these letters recall activities, the children were shown pictures of the letters from the audiovisual book and asked to orally identify them in English. They had the pretest before the study, and their primary purpose was to examine whether the students could progress in letter acquisition after engaging in independent audiovisual book learning.

The results of the pretests among the two groups were similar, which aligns with the criteria established for this study, indicating that the participants had the same English foundation. In the posttests, the mean score for Group One was 1, while for Group 2, it was 3. This suggests that the overall level of letter mastery with the audiovisual books was higher than that of the teacher-assisted model. Extreme values do not influence this finding and is more representative of the overall performance of the groups.

Table1: Descriptive Statistics of Results for Letters Acquisition Group.

Group		Motivational Level			
		Min.	Max.	M	SD
Teacher-assisted	pretest	0	2	0.33	0.6
(n=15)	posttest	0	4	1.47	1.02
Audiovisual books	pretest	0	3	0.53	1.09
(n=15)	posttest	0	5	3.07	1.29

As shown in Table 1, the mean scores of both groups in terms of letter acquisition increased notably after the study. Furthermore, it is evident that in the posttest, the group that utilized audiovisual books (i.e., 3.07) achieved significantly higher scores compared to the group that utilized the teacher-assisted (i.e., 1.47). As a result, statistically significant differences in letters acquisition were found for both the audiovisual books group ($M_{\text{diff}} = -2.54$, SD = -0.2; t = -6.301,

p < .001) and the teacher-assisted group ($M_{\text{diff}} = -1.14$, SD = 23.25; t = 5.638, p < .001) based on the two groups' scores.

5. Discussion

Based on the findings, it is demonstrated that audiovisual books can provide valuable assistance in preschool language education. This study investigated the effects of audiovisual book-based language learning among preschool-aged children. The results indicate that the participants could focus more on the audiovisual books without requiring excessive order management. They also experienced the convenience offered by Mobile-Assisted Language Learning (MALL)[2,16], which has the potential to enhance language learning opportunities within formal environments. White and Gillard suggest that educational institutions should consider utilizing games [17], simulations, and mobile applications as viable options to expand language learning and instruction, particularly in light of budget constraints and limited language learning resources. The positive findings from audiovisual books imply that this reading format may benefit bilingual children in acquiring tonal languages [18]. Being in the same school environment as children who possess superior language abilities proved to be particularly advantageous for those who already had strong language skills upon entering preschool, as well as for those situated in well-managed classrooms under the guidance of competent teachers [19]. Social and linguistic interactions with peers, along with the guidance of skilled educators, create an environment that fosters language growth and provides opportunities for language modeling and practice. These findings underscore the importance of creating supportive and enriching language learning environments for preschool-aged children. By incorporating audiovisual books, leveraging technology, and promoting peer interactions and competent teaching, preschool language education can be enhanced, thereby promoting linguistic development and preparing children for future academic success.

6. Conclusion

Most importantly, this study has researched the superior effects compared to the teacher-assisted model for preschool students. Audiovisual books provide a multisensory approach to learning, which has been proven effective in reinforcing language acquisition. By incorporating images, animations, and sound effects, these books create a rich and immersive language environment, enabling children to comprehend better and retain the information presented. This dynamic learning experience facilitates a deeper understanding of vocabulary, grammar, and language structure. The widespread use of audiovisual books is further confirmed by the positive results they have achieved in teaching. Audiovisual books serve as both a classroom staple and a teaching aid, offering numerous benefits to schools, educators, and students. They not only facilitate the learning of letters but also the memorization of words, understanding of stories, developing listening skills, and fostering a passion for learning English. For the whole study, there are several limitations. Firstly, the recording of the entire test is not specific enough. It would be better if the examiner recorded which letters the children remembered, as it would help researchers study the alphabet in more detail. However, the author observed that many children were confused about the letters "E" and "F" due to their similar shapes. Additionally, some students confused the pronunciation of English letters with those of Pinyin in Chinese. Considering that they are in the process of learning Pinyin, it is common for them to feel confused. Secondly, since the audiovisual books used in this study focused solely on letter content, it is important to clarify that the findings cannot be extrapolated to other aspects of language proficiency, such as vocabulary acquisition, grammatical accuracy, or oral fluency.

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