

The Impact of Audiovisual Books on English Acquisition for 4-5-year-old Children Compared with Teacher-assisted Model

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Abstract: In recent years, advancements in science and technology have propelled humanity into the digital era, fundamentally transforming the education sector. Notably, kindergartens are beginning to integrate digital teaching methods, replacing traditional teacher-assisted second language acquisition with audio-visual books. The development of children's language skills during early childhood is crucial, and it is imperative to capitalize on this critical period. This study aims to compare the effectiveness of audio-visual books and teacher-assisted teaching methods in facilitating second language acquisition among young learners. By conducting research experiments, we will evaluate the impact of these two teaching approaches on children's language development, focusing on key factors such as visual and auditory stimulation, attention span, and pronunciation accuracy. The experimental design includes pretests and posttests to measure the learning outcomes of 4-5-year-old children exposed to each teaching method. Thirty children from the same kindergarten, divided into two groups, will participate in this study. One group will learn using audio-visual books, while the other will receive teacher-assisted instruction. The findings of this research will provide valuable insights into the most effective teaching practices for enhancing early childhood language education. By identifying the strengths and limitations of each method, we aim to inform educators and policymakers about the optimal strategies for promoting second language acquisition in young children, ultimately contributing to the improvement of educational practices in the digital age.

Keywords: Second language acquisition, kindergarten education, preschool curriculum, visual and auditory stimulation.

1. Introduction

As of 2008, only 25% of elementary and middle schools offered foreign language instruction; programs at the preschool level are not regularly documented because they are so scarce [1]. Today, a clear shift from teacher-led learning to student-led learning that m-learning allowed causes the students feel using the technology more effective and interesting than before. In fact, we can provide a richer learning environment through mobile phones for our language learners [2]. Among the studies conducted with this age group, Mayoral, Flores, Gonzalez, and Sebire found that young children responded naturally to the chosen apps as teaching aids used to present vocabulary items [3-5]. 4-5 years old children are in the stage of rapid language development, and language learning at this stage belongs to the stage of language enlightenment for children, which is very important for children to

construct a basic and complete language structure. Moreover, visual stimulation, auditory stimulation and concentration duration of attention are particularly important in children's language learning. And whether the pronunciation of the teacher is standard will become an important factor in children's second foreign language learning. Nowadays, more and more children cannot find the right way to learn a second foreign language, and teachers cannot master the correct pronunciation in teaching, which leads to the formation of students' Chinese accent and Chinglish.

There may be some problems with the teacher-assisted teaching method in terms of visual stimulation, auditory stimulation, and attention span of 4- and 5-year-olds, at present, there are very few studies on the influence factors of audiovisual book and teacher-assisted on children's second language acquisition, which have received little attention in the field of infant language. extensive studied has focused on the role of Children languages learning 's factors, however, some recent findings suggested that audio visual books might be involved in another important pathway Therefore, we designed a group of experimental studies. For this experimental study, our research question is "How audio visual books impact English acquisition for 4-5-year-old children compared with teacher-assisted model".

2. Methodology

2.1. Methodology introduction

Aiming at the influence of audio visual books and teacher assisted on children's second language acquisition, we designed an experiment: The purpose of the experiment is to know whether audio visual books help children learn English more and faster or teacher assisted helps children learn English more and faster. Two groups were set up to conduct the experiment using letters and words as research points, The two groups studied the same content, learning the English letters A-G, to see which group was more effective, We divided 30 children of the same age into two groups, with 15 Children in each group. One group received audio visual book teaching and the other group received teacher-assisted teaching. To ensure the rigor of the experiment, these children's English foundation is zero, and they do not know the existence of the experiment, we try to let them in a normal, relaxed and pleasant environment.

2.2. Participants

Thirty children of the same age from the same kindergarten, there are 18 girls and 12 boys(We do not have more detailed requirements for the number of genders)and The ratio of male to female in the teacher assisted group was 5:15, and the ratio of male to female in the audio visual book group was 7:13.

2.3. Procedure

About the preparation work: We first contacted the local kindergarten and told the teachers in charge of the experiment, but in order to ensure the rigor and authenticity of the experiment, we did not tell the relevant teachers and children, and in order to protect the privacy of the children, we obtained the permission of the parents and made some videos. As for the preparation of materials, we found a video suitable for children of this age group to learn English letters, and made sure that the length of the video was the same as the teaching time of the teacher assisted group, also we need to make sure the teaching ideas and syllabus of audio visual book teaching and teacher assisted are the same, and make sure the different is their teaching method,(To ensure the consistency of materials, we cut down the pictures in audio visual books and print them out for teacher-assisted handouts.)

About pretest and posttest: In order to ensure the accuracy of the experiment, we set pretest and posttest. pretest will first conduct A simple letter question before the children learn. The teacher will ask the children whether they can read the letters A-G, and the seven letters will be randomly arranged in order, and the teacher will record them after the question and answer. posttest: After the children learn, the teacher asks them A-G spelling questions again. After the question and answer is finished, the teacher records (all the recording process will not be known to the children) give a typical example:

Group1 Audio visual book

① Do the pretest (the teacher pointed the picture and ask: This is...?)

5 questions

② Watch the Audio visual book

③ Do the posttest (the teacher pointed the picture and ask: This is...?) 5 same questions

Group2 teacher-assisted

① Do the pretest (the teacher pointed the picture and ask: This is...?) 5 questions

② Teacher tell the story, emphasize the words.

③ Do the posttest (the teacher pointed the picture and ask: This is...?) 5 same questions.

About the dependent variable and independent variable in the experiment:

The dependent variable is English acquisition(A,B,C,D,E,F,G)

Independent variable: Audio visual books, Teacher assisted.

Control invariant: Children's English foundation

About the experiment time: pretest is 15 minutes long, posttest is 13 minutes long, and the length of the two teaching methods is equal.

2.4. Alternative

Through the observation of the experimental process, some factors affecting children's second language acquisition are found. The first is Audio visual book: video media can produce visual stimulation, auditory stimulation, animation color attraction and attention concentration for children. In the development stage of 4-5 years old children, children tend to be curious about novel things, and the color animation in audio visual book will attract children's attention and stimulate children's curiosity about the thing to focus their attention on audio visual book Children will also be interested in novel background music, will be attracted by background music, and will have memories for some specific sound effects. And then is teacher assisted: There is only one interactive factor influencing face-to-face teaching; Teacher assisted may help children get more help in class, but teacher assessed no background music, visual stimulation, and auditory stimulation, a large part of children lost interest, felt a little bored, and began to lose concentration after a few minutes, which slowed down children's language learning.

2.5. Observation after watching the experiment video

2.5.1. Audio Visual Books

Some children will be distracted because the video is too long or they are not interested in the content. They will look around or play with their fingers, clothes, pants, chairs, or try to interrupt others to perform other activities, and some children will even leave their seats and run to pursue their curiosity. The children will actively follow the video and read the letters without the teacher's guidance. This greatly arouses children's interest in learning and stimulates their independent learning. In the after-school test, students will even draw parallels between words. More effectively help children distinguish between Chinese pinyin and English letters. More effectively help children distinguish

between Chinese pinyin and English letters, Will pronounce the letter in pinyin, like "c", many children will pronounce it as "ci".

2.5.2. Teacher assisted

Like the phenomenon in Audio visual book, they will also be distracted during the teacher's lecture, perhaps because the teacher's lecture is too boring and abstract for them to understand, or their thoughts will be diverted by a certain point said by the teacher, which leads them to do something else. The teacher's pronunciation is not standard enough, so that the child's pronunciation is wrong when following the imitation. For example, they pronounce "c" as "sai". The teacher's explanation method is a little too abstract for the children's understanding of letters. For example, the teacher in the video gives the example that the letter A is like a pyramid, but some children do not know what a pyramid is, they will be very confused and confused, and over time they will lose interest in the content. Teachers can interact with children face to face.

3. Result

3.1. Data analysis

Table 1: The Growth Rate of Posttest and Pretest in Two Teaching Modes.

	Whole groups scores of Pretest	Whole groups scores of Posttest	Growth Rate
Teacher-assisted	5 scores	22 scores	increased 340%
Audio-visual book	8 scores	46 scores	increased 475%

As shown in the table 1, The posttest growth rate of teacher assisted posttest compared to pretest is 340%, The posttest growth rate of audiovisual books compared to pretest is 475%. Compared to teacher-assisted, audiovisual books enable participants to make greater progress and learn more letters.

4. Discussion

4.1. More Engagement

The results of this research should provide reassurance that the engaging features of e-books need not distract preschool children during reading or add to their cognitive load as they process the information in the story.

4.2. Visual stimulation

As the use of sophisticated digital multimedia communication software and audio visual books is becoming increasingly routine in the lives of many children and young people, school systems, teacher education, and curriculum authorities need to adjust to meet the needs of all students in the context of rapidly changing forms of literacy. This has recently been brought into sharp focus in Australia with the release of the new national curriculum in English. In both preschool and primary school.

4.3. Motion and sound

The current study confirmed previous findings that animated eBooks might facilitate children's productive vocabulary learning and attract better attention from them via listening to the stories. This finding is generally in line with the multimedia learning hypothesis that children could use dual channel resources to effectively process the input as long as the verbal and nonverbal information are coherently designed.

5. Conclusion

Audiovisual books indeed work better than teacher-assisted model. According to the research results, audio visual book is indeed more effective in children's second language acquisition, it can help stimulate children's interest and curiosity, and effectively intervene in children's vision, hearing and pronunciation. The significance of this study is not about which method beats which method. Instead, we can find a correct teaching method suitable for children's language development, help more children dare to speak and love to speak, and provide valuable information for helping the study of early childhood language education. Children's language expression is often manifested as inaccurate pronunciation, vague meaning, early childhood, especially 3-6 years old can master all the mother tongue age, if not correct the wrong pronunciation habits, do not pay attention to the purpose of speaking, after the critical period is likely to affect the future "speech value". The creation of audio language in children's audiobooks has a high artistic quality. For example, a poem has a standard and normative voice in creation, which will be conveyed to children's articulation organs through the auditory system. Children will imitate the voice, gradually form their own pronunciation habits in language expression, and feel the power of lip and tongue movements. Listening and saying are a pair of interactive relations, children learn in listening, speaking in learning, listening in saying, and reciprocating, step by step. Affected by the external environment, children's language expression ability will also develop, become want to speak, dare to speak, can speak. Therefore, the study of children's language is necessary and indispensable. Due to the relevant regulations of the kindergarten, we could not record the complete experiment process, so we did not study and analyze the phenomenon of children's cognition of a certain letter this time. However, we have analyzed a small number of samples of this phenomenon through existing materials, and we found that although our primary study involved 30 children, additional observations from a smaller sample of 10 children in video recordings revealed that 4 children struggled to distinguish between the letters E and F, while 3 children had difficulty differentiating between D and C.

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