

## USING E-BOOKS TO MOTIVATE CHILDREN'S LEARNING OF ENGLISH AS A SECOND LANGUAGE

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**Abstract:** The increasingly important position of English language in the world makes children's learning of English a concern of teachers as well as parents. However, due to children's cognitive traits, they are reluctant to spend a long time reading paper books which, from their point of view, seem to be tedious and boring. Gradually, they will probably lose interest in reading and for a long time this issue has vexed many teachers and parents. With the development of computer technology, we have entered into a digital age in which ICT (Information and Communication Technology) tools has been implemented into our lives and has become more accessible to children than ever before. The children who grow up in a digital environment have become affinitive to digital technologies. Many ICT tools have been proven to have the ability to facilitate learning. It is possible to find a kind of technology to help children with reading. An e-book is an ICT tool among them. It combines educational content intended to teach and entertainment. It is a book publication made available in digital form stimulating senses and making learning enjoyable. The concept of using e-books in the process of teaching-learning is in conformity with the didactic principle of audiovisual education and constructivism. In this paper, we will explore the features as well as the benefits of children's e-books, and analyze the theoretical foundation of using e-books in education. We also share previous studies on the use of children's e-books. We come to the conclusion that an e-book is a useful means for supporting and encouraging children's learning of English as a second language. In the end, we will provide the implication on the use of children's e-books.

**Keywords:** e-books, children, English, language, learning, teaching.

### 1 Introduction

With the increasing importance of English language, children's learning of English has become a concern of many parents as well as teachers. It is not uncommon that in many areas and countries, teaching English to young children starts in primary school or even pre-school education. Many children are required by their parents to learn English in a learning center or at home before going to school in order to outperform, or at least not to lag behind their peers.

However, the traditional teaching method characteristic of reading from textbooks is not suited to young children as many children find it difficult to engage with a printed book for a long period of time. This is due, on the one hand, to children's psychological peculiarity, they prefer fun learning to serious learning; on the other hand, to their surroundings. Today the environment that children grow up in is very different than that of the past. They live in a society ubiquitous of digital technology such as computer games, internet, digital toys, videogames, digital music plays, video cams, etc. Different kinds of experiences lead to different brain structures, "says Dr. Bruce D. Perry of Baylor College of Medicine. Their thinking and processing information is far more different than their predecessors (Prensky, 2001). Therefore, the old way of teaching method and teaching materials is difficult to bring productive learning outcome to the digital generations and new methodology and new teaching materials should be adopted.

The advance of Information and Communication Technology (ICT) has brought out fundamental changes in the process of education. Studies have indicated that ICT is an effective teaching tool. Integrating ICT in the process of teaching-learning helps students experience things virtually. For example, if a teacher wants to lecture a topic about Disneyland they can display the scene of Disneyland through a video as not all the students have the opportunity to go there before the lecture. The simulated environment gives student an experience similar to the real experience. Also, the use of ICT can make learning more interesting and therefore attracting the students' attention. Numerous studies have indicated that ICT tools can enhance the outcomes of English as a foreign language education (Wang

&Dostál, 2016). Integration of computer technology into the process of education has become an irreversible trend in this modern world. In current digital world, computer technologies have grown exponentially such as educational DVDs, video, television, computer games, educational series, and other online network. This huge spread of ICT enables learners to gain a rich access to computer technologies, giving them the chance to have more frequent interactions with digital technologies, enabling them to be more affinitive with digital tools than their predecessors. Therefore, it is necessary to take advantage of an appropriate learning technology for supporting children's learning of English. Today's digital living environment and children's cognitive peculiarity brings us insight in the use of digital materials to assist children's learning.

The combination of technology with traditional industry brings out many new things, such as E-business and E-community, in the same vein, the combination of computer technology with book publications brings about e-books. Recent studies have indicated that an e-book can be an effective tool to support children's learning. An e-book, also called an electronic book, is a book publication made available in digital form, readable on the flat-panel display of computers or other electronic devices. The contents of an e-book consist of text, images, or both, and even multimedia resources such as sound, video and interactive games (see Ebook). Nowadays, more and more e-books have penetrated children's lives and have a far-reaching impact on children's learning. Therefore, it is necessary to have a comprehensive understanding of how an e-book can help children's learning and the important role an e-book plays in encouraging and supporting children's learning. In this paper, we will analyze the features as well as the benefits of children's e-books, and also share previous studies on the use of children's e-books. It is concluded that an e-book is a useful means to better children's learning of English. In the end, we will provide the implication on the use of children's e-books.

### 2 Theoretical Framework

Audiovisual education is one of the main methodological principles in pedagogy. It is a method of instruction that advocates the use of audiovisual materials as supplementary teaching aids to help learners' comprehension and retention of words and expressions taught. According to the Webster dictionary, audio-visual aids is defined as "training or educational materials directed at both the senses of hearing and the sense of sight, films, recordings, photographs, etc. used in classroom instructions, library collections or the likes". There are various types of audiovisual materials, such as pictures, flashcards, radios, filmstrips, projected opaque materials, microforms, recording, videos, slides, specimens, demonstrations and other audiovisual tools

Audiovisual education has developed rapidly since the 1920s. The concept of audiovisual education is advocated by John Amos Comenius, a Bohemian educator, who was one of the first to put up with a systematic method of audiovisual education. His *Orbis Sensualium Pictus* ("Picture of the Sensual World"), published in 1658, was profusely illustrated with visual pictures, each playing an important role in teaching the lesson at hand. Comenius was followed by other great educators, including Jean-Jacques Rousseau, John Locke, and J.H. Pestalozzi, who advocated the use of sensory materials to supplement teaching (see Educational entertainment). Studies have indicated that the use of audiovisual aids makes students remember the concept for longer period of time. Although the same meaning can be conveyed through audiovisual materials as well as by paper books, audiovisual aids express concepts vividly so that they benefits students to retain the concepts and knowledge they learned for longer duration than traditional verbal instruction. Research indicates that audiovisual aids, when skillfully used, can improve students' critical thinking, imagination ability and

creativity. It is well known that learning will become more effective when stimulating multi-sensory organs as opposed to single sensory organs. Studies also have shown that there is significant difference between the use and non-use of audiovisual material in teaching and learning (see Educational entertainment).

The effectiveness of audiovisual education can be maximized when it combines with constructivist teaching method. Constructivism views learning as an active process. The earliest proposer of constructivism can be traced back to Swiss psychologist J. Piaget who is an influential psychologist in the field of cognitive development. Piaget's theory is characteristic of materialist dialectics. He studied the cognitive development of children from internal and external causes. From his point of view, children gradually build up knowledge of outside world by interacting with their environment. "The child, at first directly assimilating the external environment to his own activity, later, in order to extend this assimilation, forms an increasing number of schemata which are both more mobile and better able to intercoordinate" (Piaget,1955). Through this process, their cognitive structure develops. Piaget(1983) said, children do not simply mimic everything that is part of the external environment, but rather that developing and learning is an ongoing process and interchange between individuals and their surroundings, a process through which individuals develop increasingly complex schemas. Constructivism holds the belief that knowledge is not given but gained through direct experience in the real world, that learning occurs when learners have an active participation in the process of learning. According to this perspective on teaching, "the learning process of knowledge is also the construction process of knowledge; students are the main body of learning activity and they construct knowledge on their own initiatives; teachers are the helpers and the drivers for students constructing knowledge" (Jia,2010).

According to Bloom's taxonomy (Bloom et al,1956), more than 75% of the knowledge a learner learned can be retained if the learner actively participate in the process of learning. Constructivist teaching technique has been adopted by many instructors in recent years. In current educational settings, the concept of constructivism has begun to penetrate teaching practice based on digital technology and multimedia.

## 2 Features of Children's E-books

In this paper, e-books refer to e-books for children. A children's e-book is an e-book designed specifically for children. In addition to the general characteristics of an e-book, a children's e-book also has its own peculiar characteristics as far as its content and form are concerned. Firstly, the content, the written text, animation and oral reading are designed according to the child's cognitive level. The story setting, events and the characters are affinitive to children's lives and experiences and the music and sound effects help create a joyful atmosphere. The pictures and the multimedia amuse children in the process of reading. In the operation of the device, clear instructions facilitate a natural and harmonious interaction between children and an e-book, so that children can operate it independently. In other words, a children's e-book includes three aspects. First of all, it is still a book in essence so it has a book's basic characteristics. It contains table contents, pages, structure, chapters. Secondly, it is different from the traditional printed book. It is an e-book -a product of modern technology- it needs to be read through an electronic screen which contains multimedia and interactive hotspots. Thirdly, it is an age-oriented product and is designed especially for young children so that it is different from the adult e-books.

Generally speaking, there are mainly two types of children's e-book according to the function an e-book contains. The main feature of children's e-books is the function of reading-aloud, which adult e-books do not possess. There are also buttons on each page of a children's e-book, which when pressed a recorded voice will be heard. The first type of e-book is basic one characterized by the function of read-aloud and a series of static

graphics. This kind of e-book is adapted according to a corresponding printed book as the content in each page of the e-book is in line with that in the paper publication.

The second type of e-books, which is our focus of discussion in this paper, is more advanced than the first type as it contains the above mentioned features as well as other interactional functions. The second type of children's e-books contains animations that bring the story to life. Users can activate the animation to enjoy a fun experience of reading. By clicking on the character or an object on the screen, children can hear a conversation, and they can complete the reading by role play, or communicate with the characters in e-books. This virtually simulative technology not only endows learning with edutainment, but also helps promote language skills and comprehension. A study by Verhallen, Bus, & de Jong, (2006) shows that children's narrative comprehension and language skills gained more improvement by using an e-book with animation than that with a static picture. The authors concluded that e-books with multimedia features (video, sounds, and music) have a potential to support language literacy. In the same vein, studies by Korat, et al ( 2014) show that reading an e-book with a dynamic dictionary is more effective in enhancing children's ability to explain new words compared to reading an e-book with a static dictionary.

An additional feature of the advanced children's e-books is its built-in educational game. This does not mean that students engage in the games only for fun, these games have educational value. Computer games can serve for knowledge development, sense development and thinking development (Dostál&Basler,2015). The games in children's e-books often take on in form of raising questions about texts. The questions will become more difficult when the level of learning increases. Children are expected to answer the questions before further reading. If they can provide a correct answer, they will get rewards. Students would like to learn when their motivation and curiosity about something is lightened. This teaching-learning technique encourages children's learning as most children strive to get more and more rewards. Many recent research articles postulate education and gaming can be joined to provide academic benefits (Paraskeva,2010). Ongoing researches that have included the last 20 years of educational findings have proven that digital games can be educational (Van Eck ,2006)

It is worth to mention that the hidden hotspots which are devices embedded on the screen intended to provide additional information about the text, character, words, themes, or provide entry into games and other activities, is another attractive function of children's e-books (Korat, et al 2014). Most of the interactional type of children's e-books includes the hidden hotspots. By clicking on a glowing word, the word will be explained by the image of a figure or animation emerging on the screen, which helps to sustain longer memory and promote the text's understanding. This function is something that written text does not possess.

With the development of children's e-books, the interactional function in it will be reinforced in the future, which makes reading more like watching a movie or playing a game. Some scholars worry about that a children's e-book is more like a tool of entertainment rather than a tool of learning. The fact is, we must bear in mind that the way young children learn is different from students of any other age; they are inspired by fun learning. Making learning closely connected to playing games is a wise way to encourage children's learning. Reading an e-book with interactional function makes children feel like they're watching a movie or playing a game, which fully endows children's e-book characteristics of "edutainment". The so called "edutainment" is media designed to educate through entertainment (see Educational entertainment). In other words, it means using audiovisual materials to make learning in the form of a story or playing games. Edutainment is a combination of education with entertainment, aiming to make learning more funny and enjoyable by integrating entertainment into the process of learning. It takes into account learning and teaching methods

suiting to children according to the child's cognitive characteristics. This methodology of instruction is student-centered, assuring students' active participation in the process of learning. It is a crystallization of constructivism.

#### 4 Benefits of E-books for Children's Learning of English

##### *Encouraging Reading Engagement*

English Reading Literacy is the most basic and most critical learning ability. Many examples have indicated that children's emergent literacy has a significant impact on later literacy performance. The lack of early childhood reading experiences will lead to reading difficulties in later reading achievement (Blatchford et al, 1987). Therefore, attention should be paid to pre-school children's early reading literacy. As we discuss previously, the content of children's e-books is full of animation, motion pictures and hotspots, which makes reading more enjoyable, thus encouraging children to read. Some e-books with familiar and popular characters such as Ben10 and Angelina Ballerina about whom children are crazy motivate children to read. Scholastic's 2010 reading survey showed that six-to-eight year old children respondents were more likely to have read an e-book than their older counterparts (Guernsey, 2011).

##### *Enhancing Phonological Awareness*

As mentioned previously, most children's e-books, if not all, are featured with hidden hotspots. By clicking on the hotspots, children will see words divided into syllables and sub-syllables. For example, pigeon is divided into two syllables: pi-geon. This function helps improve children's phonological awareness. Korat and Shamir (2008) conducted a research on the effectiveness of an educational e-book for young children's emergent literacy. The result indicated that significant improvement from pre- to post- test was found in children's score on phonological awareness. That means children's phonological awareness improved significantly after using an educational e-book. This finding is correspondent to what Chera and Wood(2003) had found in their research which is concerned with whether an animated multimedia 'talking book' can promote phonological awareness in young children. They found out that young children who engaged in using e-books to read for four weeks showed significantly higher increases in phonological awareness than the control group who read in a normal way.

##### *Developing Vocabulary*

Early childhood is an important stage for children's learning of vocabulary as it will fundamentally affect their later literacy. Multimedia and interactional function in children's e-books help children better learn English vocabulary. When a child encounters a strange word in the text of an e-book, (s)he just needs to click on the word and instantly there is a multimedia interpretation of the word, including its meaning, pronunciation, animation and spelling. Meanwhile, children's e-books provide a meaningful context for learning vocabulary, which not only help understand the vocabulary but also enhance the effectiveness of learning and aids retention of new vocabulary. A study by Segers (2002) was undertaken so as to study the vocabulary acquisition of twenty five immigrant children. They were asked to use e-books to study vocabulary. The result indicated that there was a significant difference between the average scores at pre- versus post-test of children's knowledge of vocabulary. The scores of pre- and post-test when compared show an increase by 54% in the post-test scores. That means, in the study, e-books enhanced children's vocabulary attainment significantly. Israeli educator Ofra Korat (2010) investigated the effectiveness of e-books to foster young children's vocabulary development. The result showed that the improvement in word meaning was greater in the experimental group than in the control group.

##### *Improving Oral English*

A children's e-book is featured with a recorded voice. The text in an e-book is read by a narrator. When an icon is clicked, the words, sentences and phrases are "spoken". The e-book uses a cursor, when the cursor is placed over a particular word, the selected word will be "spoken". They can click on a certain word, phrase or sentence again and again to listen to the pronunciation or follow the reading pace. Repeated listening and reading help some new and strange words be impressed on the learners' brain. Digital stories can improve learner's listening comprehension in learning English as a foreign language (Verdugo&Belmonte,2007). Listening comprehension plays an important role in English learning. Listening ability is closely related to speaking ability. By repeating these words, phrases and sentences, children's speaking skills will be improved. E-books also include a forward button (a colored arrow that points to the right) and a backward button (a colored arrow that points to the left) for repeated reading, which also benefits the improvement of listening skills as well as speaking skills. Vocabularies are considered to be one of the important elements in improving oral English. As mentioned above, an e-book is a proven tool to enrich children's vocabulary. Rich vocabulary volume links to fluent oral English and poor vocabulary not only influences verbal fluency but also appropriateness.

#### 5 Conclusion

In this paper, we discuss the characteristics of e-books and its ability to assist young children's learning of English. We believe the e-book is a proven technology to better children's learning of English. This assumption is based on the premise that an e-book reading activity enables young children enjoy an authentic experience, by providing vivid motion pictures and interactional function, thus helping to bring effectiveness in learning. However, not all current e-books are well designed for educational goals. Some e-books available on the market are not satisfactory as an educational tool because some figures and games in e-books are not so much an attraction as a distraction. Also, some e-books do not contain essential options explaining meanings of words and supporting children's understanding. In some children's e-books, the hotspots are not congruent with the storyline so that they have little educational value. Therefore, we should use a discerning eye to choose quality e-books for children. Moreover, there are different kinds of e-books for different levels of learning. Not one size fits all. An age-oriented and well-designed e-book can maximize the effectiveness and efficiency of learning. We should choose the kind of e-books that are suited to children's level of learning. On the other hand, improper use of e-books will have negative effect on the learning outcome. It is useful only if it is implemented effectively. It is suggested that children's use of e-books should be guided by teachers and parents whose intervention is of paramount significance. Adults can help to check and correct learning performance, which helps to maximize the effectiveness of e-books.

From the trend of its development, we assume that the application of e-books in basic education, even in preschool education is an irreversible trend. It goes without saying that an e-book is an effective tool for teaching-learning process. It makes abstract ideas more concrete to the learners so that knowledge can be remembered for a longer period of time. However, this does not mean that e-books will completely replace real interactive activities and printed books. An e-book is just a supplementary means to foster children's learning and it should be combined with other teaching materials and techniques to promote healthy development of children. There is still a long way to go to study the educational application of children's e-books and shared efforts from educators are needed.

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