

Developing English Language Skill for Children through Information and Communication Technology in Early Childhood Education

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Abstract: The growth of language aspect is an important role that needs to be developed for Early Childhood Education in the aim of stating and understanding mind and feeling not only people but also the children themselves. The children language ability for understanding information is fast, such as understanding English as a foreign language. English for young children has been introduced as international language. The introduction of foreign language to children especially English makes have more chance to learn other knowledge, such as science, to expend their social life in the international scale and also to prepare the children so that they can be ready for the international competition. The growth of Information Technology (ICT) influence to language skill for children. The learning based on Information Technology that integrated with English for young children that adapted based on their age stages as an innovative media between teacher and children. This method use the literature review and analysis by collected other information and research before.

1 INTRODUCTION

Education is a conscious human effort in creating a learning environment in which they developing their potential (Law No. 20. 2003). Education can be given to children from an early age, when they were in the golden stage. This stage will affect the life of child as a whole, has become the basis for the development of their competence and potentials (Wahyudin and Agustin, 2011).

According to 2003 Act, Number 20, on National Education System, Article 1 Section 14 states, that Early Childhood Education is a coaching effort aimed at children from birth up to the age of six that is done through the provision of educational stimuli to assist the physical and spiritual growth and development in order for the children to have readiness in entering further education.

The early childhood education programs encompassing the cognitive, physical-motor, linguistic, emotional, spiritual (religious and moral) and artistic skills (Wahyudin and Agustin, 2011). This study examines the language competence of early childhood. Language is a means of communication, to express and understand the

thoughts and feelings of the individual to other individuals around them, in the for moral, writing, facial expressions, symbol, gestures, pantomimes, and art, such as drawings or paintings (Wahyudin and Mubiar, 2011; Astuti and Habibah, 2015).

Based on the above statement this can be concluded that the development of language is something that need to note, because the language competence of children derived from direct interaction with both humans and objects - such as pictures, books and others - hence the impact is faster than the competence associated with logic.

Language becomes a challenge for children who are living in the modern era, because they are expected to have the quality resources to compete nationally and internationally. In this modern era, children are expected to be able to use English as an international language, to communicate and expand their association globally, and learn various disciplines (Wasitohadi, 2014; Gunawan, 2014).

The development of information and communication technology (ICT) affects the lives of children nowadays, especially during their growth and development stage. A research conducted in Indonesia by UNICEF with partners, including the

Ministry of Communications and Informatics and Harvard University (2014) showed that many children still use computers (69%) or laptops (34%) to access the internet, however mobile phones and smart phones playing an increasingly important role (52%), with children and adolescents have been the major driver of this shift (Panji, 2014; UNICEF, 2014). It constitutes an issue that requires children who were born in the 21st century are expected to be affiliated to the Z generation and alpha, the generation who were intensely familiar with technology and sophisticated gadgets, which indirectly affect their lives and personalities (Putra, 2016; Wasitohadi, 2014).

The information and communication technology (ICT) is a combination of information technology and communication technology. The information technology is an electronic equipment that serves as a tool in processing, storing, analyzing, and transmitting information, either in the form of words, numbers and images. While communication technology is a technological device used in processing and transferring communication through hardware's, software's, processes and systems (Niarsa, 2009; Ermayani and Rusdi, 2016; Herman and Rusmayadi, 2016). NAEYC (2012) claimed that technological tools include a variety of devices, such as computers, tablets, multi touch screens, interactive whiteboards, mobile devices, cameras, DVDs and music players, audio recording, electronic games, and analogous equipment.

ICT can be integrated into the learning process as an innovative and creative learning medium that assists children to apprehend a particular concept. ICT-based learning used in the learning process has a positive impact on the future success of children - specifically in the academic fields, enhancing the readability of study and self-concept. The integration of ICT in the learning process has delivered impact on the developmental and growth aspects of children, one of which is language outgrowth. The effective utilization of ICTs can improve the language teaching and learning activity, especially English, for children. (Blackwell, Lauricella and Wartella, 2014; Wang, et.al., 2010; Keengwe and Onchwari, 2009; Ghasemi and Hashemi, 2011).⁷

Based on the above statement, ICT-based learning can develop children's English competence, in accordance with the principles of learning and the children's developmental theory (Wahyudin and Agustin, 2011). ICT-based learning can guide teachers in teaching English, which is considered the less attractive subject matter all the time (Gunawan, 2014; Nomass, 2012).

2 THE DEVELOPMENT OF ENGLISH LANGUAGE IN EARLY CHILDHOOD EDUCATION

Language is an intermediary utensil for communicating by using symbols, in the forms of oral, written, facial expression, gesture, pantomime and art, to utter and apprehend the thoughts, feelings and desires that are expected (Delfita, 2012; Wahyudin and Mubiar, 2011). According to Hurlock (2008), the important thing in developing the language is the physical and mental preparation to speak, the model that is good to imitate, the opportunity to practice, as well as motivation and guidance.

The children's competence to learn the language, especially foreign languages, can be developed by the time the child is about two to six years old – starting from using symbols to describe the surrounding environment –for at this age the development of the language of children was intensely rapid. One of the foreign languages that can be introduced to children is English. English is an international language used to communicate and interact with people from around the world (Sophya, 2014; Gunawan, 2014). The English language competence can be classified into the language processes that include listening and reading and the capability to speak and write as a result of the language process (Nomass, 2013). Aside from the ability to hear, speak, read and write, there are also linguistic scopes that need to be considered in teaching English to children, i.e. the components of vocabulary, pronunciation and word structure (Sophya, 2014).

3 THE UTILIZATION OF ICT IN THE EARLY CHILDHOOD EDUCATION

The implementation and development of Information and Communication Technology (ICT) in education is one of the Ministry of National Education's policies in order to improve accessibility and quality of education services for the community. The ICT-based learning in early childhood education is part of a learning process that can be tailored to the children's developmental abilities and the developmental stages based on age groups, early childhood learning principles and functions, and it's

capable to create a child-centered learning process (Wang, et.al., 2010; Ermayani and Rusdi, 2016; Kara and Cagiltay, 2017; Law No. 20, 2003). According to the Child Care Initiative (in NAEYC, 2012), children less than two years old are not recommended to use ICT to stimulate their development.

ICT is a set of tools to process - create, manage, distribute, and store - the various information used to communicate (Niarsa, 2009; Ermayani and Rusdi, 2016; Ghasemi and Hashemi, 2011). NAEYC (2012) stated that the technology tools include a variety of devices, such as computers, tablets, multi touch screens, interactive whiteboards, mobile devices, cameras, DVDs and music players, audio recordings, electronic games, and analogous equipment such as tape recorders, VCRs, VHS tapes record and cassette players, table lamps, projectors and microscopes. The utilization of computers, the internet, broadcasting technology (radio and television) and telephony has been widely used in the recent years, to improve the efficiency and effectiveness of education at all levels, both formal and non-formal (Ghasemi and Hashemi, 2011).

The ICT-based learning serves as an aid in the learning of various disciplines, and as a stimulant in the achievement of certain ICT-assisted developments (Herman and Rusmayadi, 2016). The function of ICT in the study of early childhood education can be applied in kindergarten, by considering the principle of learning and the facilities and infrastructure provided by the school. In addition, ICT-based learning needs to be planned, implemented and evaluated, to achieve the learning objectives accordingly.

The utilization of ICT in the learning process has delivered a positive impact on the academic field and the life of the child in the future, such as the accretion of ability to solve problems, the improvement of learning readability, the improvement of self-concept, and enhancing the learning attitude of children (Blackwell, Lauricella and Wartella, 2014; Wang, et.al., 2010; Keengwe and Onchwari, 2009).

4 THE DEVELOPMENT OF ENGLISH LANGUAGE SKILL FOR CHILDREN THROUGH ICT IN EARLY CHILDHOOD EDUCATION

The teaching for early childhood education students uses the thematic learning compiled in the curriculum, it serves as a guidance for the teacher(s) in performing the teaching and learning process. This is intended to make it easier for children to know and understand the various concepts that are tailored to the characteristics of the holistic child development. The selection of themes as learning materials should be focused on the principles of interest, closeness, simplicity and incidental (Directorate of Early Childhood Education, 2015; Sarahaswati and Kusumahwati, 2016).

The English competence development of early childhood education students can be integrated with thematic learning. The theme selection for introducing English using the same principles of the learning theme selection (Sophya, 2014; Kurikulum Taman Kanak-kanak, 2010), namely:

- Proximity; the theme chosen based on concepts, topics and ideas closest to the child's life, such as part of body, part of house, family, school.
- Interest, the theme chosen based on the interests of children, such as animal, occupation, transportation.
- Simplicity, the themes selected sequentially from simple to more complex themes, such as nature, weather, outer space.
- Incidental, the theme is chosen based on events occurred around the child, although those events are not in accordance with the theme of learning, such as the big days or celebrations.

Based on the statement above, the selection of themes has an important role in a learning process. It is should become a consideration for teachers when introducing English to children. Moreover, these themes can be developed in accordance with local conditions, culture, as well as the applicable values and norms.

The utilization of ICT as a learning mediatory in developing English competence is an effort of teachers in overcoming the limited skills and knowledge in teaching English well and appropriately (Naidoo, 2003; Tabatabaei and Gui, 2011). The utilization of media that have features of audio, visual, audio-visual and interactive features was expected in learning English for children

(Sophya, 2014). In addition, the use of ICT as a medium could develop four language skills, namely the ability to speak, hear, read and write with respect to vocabularies, pronunciation and word structure (Nomass, 2013; Sophya, 2014). The ICT that can help teachers introduce English, namely:

4.1 The Utilization of Computer

The utilization of computers supports children in developing their ability to hear, write and read various information. The selection of its software need to be considered in this case, for the principle of children's learning is to play while learning and learn while playing, hence it is advisable to the teachers to choose the software in accordance with that principle and the age of children. The computers can be connected to other devices such as speakers or projector when learning activities are conducted at a large space with large capacity (Nomass, 2013; Wahyudin and Agustin, 2011).

4.2 The Utilization of Broadcasting Technology

The broadcasting technology that is often encountered currently, either at home, school and community environment around children is television and radio. Through those technology devices, children can access various programs to obtain information. Watching TV and listening to the radio could developed the children's ability of hear and speak English. The selection of programs on that technology needs attention and supervision, in accordance with the learning objectives of children (Nomass 2013; NAEYC, 2012).

4.3 The Utilization of DVD Player

DVD Player is an electronic device that can be heard and seen to stimulate children's thoughts, feelings, attention and willingness to understand the content of theme. The use of DVD Player can help children learn through educational songs and videos tailored to the theme of learning (Nomass, 2013; NAEYC, 2012).

4.4 The Utilization of Tape Recorder

The tape recorder is one of the oldest technology that has been rarely used in learning. However, in some cases, the use of tape recorders can aid

learning, especially in early childhood education (Nomass, 2013; NAEYC, 2012).

4.5 The Utilization of Mobile Equipment

Technology is growing rapidly. Currently the use of mobile equipment is accessible to children. The use of this mobile device must be under adult's supervision, hence the purpose of its use can be appropriately achieved. Software provided by this mobile device can help adults in introducing concepts to children, especially the concept of English, such as letters, numbers, or colors (NAEYC, 2012)

Based on research conducted by Kara and Cagiltay (2017), the ICT that is commonly used by teachers in a learning activity is computer and projector. In addition, technological equipment that uses audio visual learning media is also suitable for early childhood education's students, because this technology is the easiest, and most commonly used, such as television, radio and tape recorder. The audio learning media that helps children listen to the content to be delivered, this listening activity affects the child directly. Visually, verbal messages such as written and non-verbal words such as symbols can help the child in developing the sense of sight (Herman and Rusmayadi, 2016).

According to these explanations, it can be concluded that with audio and visual technology, teachers can teach a variety of guidance and direction for children, such as teaching English. The teaching method that used is storytelling, games, show and tell, music and movement in which include singing, chants and rhymes. These teaching methods can be mastered in the form of ICT. The utilization of audio, visual and interactive features can help children in learning English. ICTs help children and teachers to learn English empirically (Sophya, 2014).

5 CONCLUSIONS

Based on the results of the literature review and analysis of previous research, it can be concluded that the use of ICT can support teachers in developing children's English competence, with the limitations they have. The introduction of English can be done early, because the ability of early childhood in receiving various concepts was growing rapidly at this phase. The things that

teachers need to be aware of in introducing English to children are the methods of teaching and learning media that used. ICT helps teachers in introducing English to children through fun learning activities, in line with the learning objectives of English that is taught vocabulary, pronunciation and good word structure.

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