Developing a Computer-based Interactive Module
as Speaking Learning Materials for Primary School Students

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Abstract: In welcoming AFTA and MEA, Indonesia has to improve Indonesian youths' English communication skill to face the challenge of a more globalized academic and professional world. As observed, ELT practice in Indonesian schools gives less emphasis on the speaking skill compared to the others. It is then predictable that the students' English mastery tends to be passive instead of active. Here lies the gap between the need and reality. A speaking skill in a foreign language cannot be acquired in a short time. Hence, to prepare for high school graduates to communicate English well, an effective learning process must start early, at least from primary education. As by nature young learners have different characteristics from those of the older ones, the former need different methods and materials as well. Thus, English speaking material that is contextual, interactive, effective, and interesting for young learners is needed. The speaking learning materials developed in this research is a computer-based interactive module for primary students. Designed in the form of animation featuring animal characters, the themes were presented in dialogues as well as narrations whereas the speaking activities were designed based on language chunks accompanied with pronunciation practice. The module development up to the product dissemination is done within 2 years. The first year covered (1) need analysis survey, (2) product development (3) expert's validation; and (4) first revision. The second year activities will cover (1) product try out, (2) software effectiveness evaluation and second revision; (3) final product completion; and (4) product dissemination.

Keywords: computer-based interactive module, speaking learning materials

Along with technology advancement, the role of English is getting broader, not only as a subject at schools as that in the past, but has been widening into all aspects of life. The swift of the global information also takes part in the development of the use of English throughout the world including Indonesia. English, which used to be avoided and even seen as a monster by many students, must be faced, heard, understood, and used in daily life. Though not used 100%, technical terms in English have been abundantly used in economics, politics, social media, culture, and, moreover, technology and medical world. The use of the words is not only limited to written technical terms, but also in spoken communication. Take for examples, the society now are quite familiar with and even often use expressions such as 'on the way' or 'by the way' even though usually abbreviated. Some others are like 'gatget', '*netizen*', or *'on line.'* The use of English is much more in printed media and moreover, electronic.

Facing such a development and the ongoing Asean free market, educational institutions are required to prepare more competent graduates to be able to compete with the workforce from foreign countries. Moreover, the Asean Economic Society also opens Indonesian door more widely to welcome expatriate workforce.

Based on the 2013 Curriculum, there are two challenges for Indonesian students nowadays, the internal and external challenge. The internal challenge refers to 8 National Education Standards one of which is the graduates competence standard, while the first external

standard is communication competence. Hence, besides improvements in the competence, English communication skill is absolutely needed in this changing era. As identified by Indonesian Work Force and Transmigration Ministry, Indonesian local work force is qualified but lack in English communication skill. Hence, improving communication skill in English is a crucial need that must be fulfilled.

Communication skill in English cannot be achieved in a short time as learning a foreign language needs a relatively long process. It should, therefore, start early, at least from elementary education so that later the generation will have been ready to compete in the working field with their competence supported by their English communication skill.

Some Asian countries such as Korea and Taiwan have started English teaching to 3rd grade students of primary school and Japan even started it from kindergarten level (Mindari, 2012). As those countries, Indonesia has also started English teaching earlier as compared to that previously which started at grade 7. Since the establishment of the decision letter of Minister of Education and Culture No. 060/U/1993, which states that English could be taught at primary education starting from grade 4, may schools initiated it from grade 1. As a result, even kindergartens followed it.

However, according to the latest government policy as stated in the 2013 Curriculum, English at primary schools is now only an extracurricular subject taught once a week. Meanwhile, globalization is going on and as stated earlier, the need of English communication skill is increasing. In such a situation, a breakthrough is needed to help teachers at primary education to teach English effectively and attractively as well.

As what happens in foreign languages learning in general, if there is no serious attempt, the learners are only able to understand the language without being able to speak it. As mostly happen in Indonesia, after learning English for 6 years or more in the secondary education, students can only comprehend the language but not speak it. The particular condition and the need of English communication skill in the global era has challenged the research team to create a product that can assist primary school students in learning speaking English.

The success of a learning process is influenced by many factors. Those are teacher, students learning motivation, the teaching method, and the environment. This developmental research especially focuses on the material factor, which is closely related to learning activities.

Research on English material development for young learners so far has covered the four skills—listening, speaking, reading, and writing. The broad coverage provides a rich source of information but gives no sufficient concern on sharpening one skill. Referring to the need of communication skill in global era as explained before, the present research focuses on speaking skill to provide interactive exposure that sharpens speaking functional skills in English.

The learning material generated is computer-based interactive module as speaking learning materials for primary school students. The module was designed based on the principles of teaching a foreign language by considering young learners nature and characteristics. The material is in the form of animation using animals as the characters in the dialogues. The themes presented are of children's world so that it is expected that they will enjoy the learning process. The pleasant learning experience manifested through interactive activities with animation characters in the module gives the young learners a pleasant experience and motivates them in learning English so that the input will be more deeply internalized.

Research Problems

In line with the background of the study, the research problems are as follows:

1. The primary school students' English mastery in general is passive or understanding only, far from using it in communication
2. The speaking learning material has been covered in the textbook but not very effective.
3. There is a need of a special learning material to support English speaking skill in the form of computer-based interactive module which is designed based on the principles of teaching English to primary school students.

Research Objectives

This study aims at developing an interactive computer-based module of Speaking material for primary school students. The Speaking materials which physically presents in an audio visual colored animation with animal characters is expected to be liked by young learners. Meanwhile, the content, which was designed in short narrations and dialogues followed by some interactive and enjoyable learning activities is expected to arouse the students' interest and courage to speak in English on their age level.

Being provided with English speaking skill while they are still at the elementary education it is hoped that the students' interest and motivation in using English for communication will develop in accordance with their growing age and education so that later they will become a generation who are competent and able to communicate in English. Thus, they will have bigger self confidence and get more knowledge and experience. The soft skill, combined with their competence in their discipline, will be advantageous and supporting their competitiveness and existence in their career.

Research Significance

The research product, which is DVD of Speaking materials, can be used by primary school students to learn to speak English alone at home or with some friends in the classroom or anywhere as long as a computer is available.

By reading and listening to the narration as the introduction of each dialogue and then listening to the dialogue about a familiar topic in their life, they will not feel burdened but just like watching cartoons and without realizing it, a learning process is happening. In other words, they will undergo an enjoyable learning experience.

The interactive learning activities will train them to speak actively in English in an informal situation. Although designed for young learners, parents can also use the DVD to learn by themselves or together or to accompany their children studying.

How Children Learn Languages

Learning a language is identical with learning speaking in the language. Without neglecting the other three skills, one is said mastering a language if she speaks the language. Every child is provided with the ability to acquire his mother tongue. The device is known as LAD or Language Acquisition Device (Chomsky, 1965). By listening to the people around him speaking while interacting with him every day, a baby learns to understand, imitate, repeat, and gradually speaks.

Research that reexamined the role of imitation and repetition in learning language found that a child's first attempt in learning to speak is by imitating single words spoken by others. When the meaning has been attached, the child will speak the word more frequently, and then repeats it (Clark, 1978). On the next phase, the child will combine the words he has got in that way.

Graduate School, Universitas Negeri Malang

Their creativities can be seen in producing 'tegraphic speech' such as 'Mommy go', 'Daddy sit', atau 'Car go.' Parents usually respond to their child's telegraphic speech then the child will repeat it. That is a child's way of learning language.

Children also imitate short phrases that often accompany a certain situation. Through repeated imitations the phrases are learned and used as they are without being thought so that they are called '*formulaic utterances'* or '*unanalyzed chunks.*' As Pinter (2009) states, all English speakers use chunks or parts of utterances. There are two kinds of chunks, first, fully fixed chunks such as 'See you later' or 'What do you think' that are already completed and ready to use and, second, *partially fixed chunks,* that need completion like 'Have you got …?' or 'I think ….'

General Characteristics of Young Learners

By nature children have their own characteristics. The following points are children's common characteristics set forth by some experts:
1. They live in the imagination world (Halliwell, 1992; Slattery & Willis, 2001).
2. They like to play and learn maximally when doing enjoyable activities (Halliwell, 1992; Slattery & Willis, 2001, Scott&Ytreberg, 2004).
3. They can learn something indirectly *(indirect learning)* through activities. This also called *learning by doing*.
4. They have a big curiosity (Perry, 2001)
5. (http://teacher.scholastic.com/professional/bruceperry/curiosity.htm)
6. They will learn more effectively if the information input involves more than one sense (http://everydaylife.globalpost.com/senses-involved-childs-cognitive-development-2638.html)
7. Meanwhile, Brewster (2007) argues that children tend to be self oriented and busy with themselves, able to imitate something very well, and get bored easily. However, if attracted in something, they can concentrate for a long time.

Principles of Teaching English to Young Learners

To meet the natural characteristics of children, experts on English for Young Learners suggest the principles of teaching English to young learners. The following principles are suggested by McCloskey (2002):
1. Children should be given active and enjoyable roles in learning experience.
2. Children should be suppoted to develop and practice language through collaborations.
3. Multi-dimensional thematic activities should be used in order that they learn English expressively and they have an understanding that is more reinforced by those various activities in the theme.
4. Comprehensible input is given by giving assistance so that children can reach a higher achievement.
5. Language that is integrated with the content makes them learn meaningfully so that they have better comprehension and a longer retention.
6. The mother tongue should be strengthened and integrated with the culture.
7. Clear objectives must be decided to direct the learning process, while the inputs for the children's performance will increase their language skills.

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Social-interactionist View

Some psychology streams view the relation between the process of first language acquisition and that of foreign language. One of them is social-interactionist stream that emphasizes the importance of interaction in language teaching process. Vygotsky in the thirtiest proposed Zone of Proximal Development (ZPD). He believed that in learning something, children will be able to reach a higher achievement with the help of someone who is more knowledgeable. Holding this as the principle, teachers can help and at the same time give challenge to their students through well planned assignments. This idea was supported by Brunner (1938) who showed that without the help of an adult, or scaffolding, LAD cannot function maximally.

RESEARCH METHOD

The learning material, which is **a** computer-based interactive module as Speaking learning materials for primary school students was developed based on Hyland (2003)'s idea that covers (1) conducting a survey, (2) developing the material, (3) experts' validation, (4) first revision, (5) product try out, (6) second revision, (7) generating the final product, and (8) dissemination.

To see the whole process of the material development, a fishbone diagram (Figure 1) is presented below. Basically there were 8 main steps as elaborated above, but in details, the survey had two purposes, first to elicit data about the need of the product and second, to select topics needed to teach Speaking to elementary school students. The data collection was done by using questionnaires and an interview. Besides, the research team also studied the topics in a number of English textbooks and syllabus for primary school students.

The material development covered the elaboration of each topic into dialogues and short narrations, creating the moving animation, dubbing for each character in the dialogues, and putting the music illustration. For product validation, two experts in Teaching English to Young Learners who are experienced in developing materials were involved.

From the preliminary observation about the speaking ability of the seventh graders, the research team found that their English speaking ability on the average was very limited. They rarely communicated naturally in English. They only spoke English when they got their turns to answer questions in the book or from the teacher. Another chance was when they were asked to read a text aloud by the teacher. This fact indicates that the speaking ability of the students of their lower level, the elementary school students in general was also minimal although there must be some exceptions. This could be influenced by the low or even the absence of motivation, the lack of opportunity and courage, or an uninteresting learning material.

Product Development Stage

At the beginning the researchers made a need analysis by using questionnaires distributed to teachers of English at some elementary schools in Surabaya. From the result of the questionnaires, the research team got the inputs about the need of the product, topics, and format of the Speaking materials for elementary school students grade 1 up to 6.

Based on the inputs, the topics were compared with the topics in the syllabus to find the similarities as the base of topic selection. As has been mentioned previously, the material development covered the elaboration of each topic into dialogues and short narrations, creating the moving animation, dubbing for each character in the dialogues, and putting the music illustration.

The Identified Speaking Topics Needed

Based on the gathered results of the questionnaires, the topics needed for Speaking materials in elementary schools were elicited as follows:

THEME CATEGORY	TOPIC
Me and Myself	My Birthday
	Parts of the Body
	What's your Hobby?
	My Diet
Home and Family	My Family
	My House
	My Daily Activities
	This is my cat.
	My Pet
	My Unforgettable Holiday
Places	My Classroom
	At the Dentist
	At the Zoo
	At the Supermarket
	At the Restaurant
	My Beloved City
Nature	My Environment
	It's raining now!
	Weather
Social Life	My Friends
	Playing Games with Friends
	What's on TV?
	I want to be …
	Adventure

The Format of Learning Activities

There are some format designs for computer-based English modules, however, in this research, the format used is the one that encourages the users to speak English. It starts with a short narration to introduce the topic, then it is followed by a dialogue that uses certain language chunks. The language chunks will then be imitated by the learners in a pronunciation exercise. Later, the learners will interact using the expressions they have heard and imitated. At first, the interaction is done by responding to questions asked by a certain character in the video. From the experience of interacting with the character in the module, the learners are expected to use the expressions with their peers in their daily social activities.

The Topic and Learning Format Selection

From the gathered topics as presented in the table above, after being selected, some that were really needed and interesting for young learners were chosen and graded as follows:

NO.	TOPIC	LEVEL
1	My Family	As the prototype of material for Grade 1
2	Vegetables	As the prototype of material for Grade 2
3	Parts of the Body	As the prototype of material for Grade 3
4	What's your hobby?	As the prototype of material for Grade 4
5	My daily activities	As the prototype of material for Grade 5

Graduate School, Universitas Negeri Malang

6	Adventures	As the prototype of material for Grade 6

The Product Physical Performance

The screen shots below are the samples to show the physical appearance of the Speaking materials developed in this research:

CONCLUSION

The applied product research is an attempt to enhance ELT in elementary level of education especially focusing on Speaking skill. From the exposition it could be concluded that the plan and design of Speaking material for elementary school students have been put into realization as seen in the result, a computer-based interactive module as Speaking material for elementary school students. The module that was created based on the principles of teaching English to young learners that considers their characteristics is in the form of moving animation using animals as the characters in the story as well as dialogues. The themes as well as topics presented are suitable with children's world so that it is expected the students will enjoy the learning process. The learning situation in interactive activities with the animation characters in this module gives a pleasant learning experience to the young learners and thus, it is hoped to encourage them to speak English in simple oral communication according to their age. To improve the product, two experts of material development specialized in English for young learners from Sanata Dharma University Yogyakarta gave their valuable feedbacks on the physical appearance as well as the content of the product.

REFERENCES:

Borg, W.R., & Gall, M.D. 1989. *Educational research*. New York: Longman.

Brewster, Jean cs. 2007. *The Primary English Teacher's Guide*. Edinburg Gate: Pearson Education Limited

Bruner, J. 1983. *Child's Talk: Learning to Use Language,* New York: Norton.

Chomsky, N. 1965. *Aspects of the Theory of Syntax*. MIT Pess.

Clark, E.V. 1978. Strategies for communicating. *Child Development 49*, 953-959. Reprinted in: AK.

Pugh, V.J. Lee, & J. Swann (Eds.), *Language and language use*. London: Heinemann Educational Books, 1980. Pp. 164-174.

Halliwell, S. 1992. *1992. Teaching English in the Primary Classroom*. Harlow: Longman.

Hyland, K. 2003. *Second Language Writing*. Cambridge: Cambridge University Press.

McCloskey, M.L. 2002. *Seven Instructional Principles for Teaching Young Learners of English.* www.mlmcc.info.

Mindari, R. 2012. *How Kindergartners Learn to Speak English*. Dissertation

Perry, B.D. 2001. Emotional Development: Curiosoty-The Fuel of Development. *Early Childhood Today*: March, 2001 issue.

Pinter, A. 2009. *Teaching Young Language Learners*. Oxford: Oxford University Press.

Pramono, H. 2012. Developing Interactive Multimedia Software for English Learning. *Magister Scientiae*. ISSN: 0852-078X Edisi No. 32-Oktober 2012

Querales (http:// digitalcommons.brockport. edu/cgi/viewcontent.cgi?article=1398&context=ehd_theses. Retrieved on April 20, 2015.

Scott, W.A & Ytreberg, LH. 1994. *Teaching English to Children*. New York: Longman

Slattery, M. & Willis, J. 2001. *English for Primary Teachers*. Oxford: Oxford University Press.