USING DIGITAL STORYTELLING-PHOTOSTORY COMPUTER APPLICATION TO INCREASE THE SPEAKING ABILITY OF THE FIRST YEAR STUDENTS OF SMK DAREL HIKMAH PEKANBARU

Nove Reza[1], Fadly Azhar[2], Erni[3].
Email: novereza8912@gmail.com, Email: fadly.azhr@gmail.com, Email: erni.rosda@yahoo.co.id
Phone: 01275042933, Phone: 08127581850, Phone: 081268997856
English Language Study Program
Language and Literature Program
The Faculty of Teachers' Training and Education
Riau University

Abstract: The aim of this research is to improve the speaking ability of the first year students by using Digital Storytelling-Photostory Computer Application in comprehending the descriptive texts. This is an experimental research with one pre-post test design. The population of the research is the first year students of SMK Darel Hikmah Pekanbaru with 21 samples. To collect the data, the writer administered the pre test, treatments, and the post test at end of the session. In analyzing the data, the t- test formula was used to determine whether the technique applied can significantly increase the students' speaking ability. From the data collected, it can be seen that the average score of pre test is 64.6. Upon the implementation of digital storytelling, there is a significant increase on students' scores. It can be seen from the result of post-test. The average score of the post-test is 76.8. The score also reveals that the students have achieved the minimum mastery criteria required by the school. To sum up, digital storytelling-photostory computer application has significantly increase the speaking ability of the first year students of SMK Darel Hikmah Pekanbaru.

Keywords: Digital Storytelling, Photostory Computer Application, Speaking Ability, Descriptive Texts

MENINGKATKAN KEMAMPUAN BERBICARA DALAM BAHASA INGGRIS SISWA KELAS X SMK DAREL HIKMAH PEKANBARU MELALUI DIGITAL STORYTELLING-PHOTOSTORY COMPUTER APPLICATION

Nove Reza[1],Fadly Azhar[2], Erni[3].
Email: novereza8912@gmail.com, Email: fadly.azhr@gmail.com, Email: erni.rosda@yahoo.co.id
Phone: 01275042933, Phone: 08127581850, Phone: 081268997856
Program Studi Pendidikan Bahasa Inggris
Jurusan Pendidikan Bahasa dan Sastra
Fakultas Keguruan dan Ilmu Pendidikan
Universitas Riau

Abstrak: Tujuan penelitian ini adalah untuk meningkatkan kemampuan berbicara siswa dalam bahasa inggris melalui penerapan metode pembelajaran digital storytelling-photo story computer application dalam memahami teks deskriptif. Penelitian ini adalah penelitian eksperimen dengan menggunakan pre test dan post test. Populasi penelitian merupakan siswa kelas 10 SMK Darel Himkah Pekanbaru dengan jumlah sampel sebanyak 21 siswa. Dalam mengumpulkan data, penulis memberikan pre test, perlakuan dan post test. Sedangkan untuk menganalisa data, penulis menggunakan rumus t-test untuk mengetahui apakah perlakuan yang diberikan memberika hasil yang signifikan terhadap peningkatan kemampuan berbicara siswa. Dari data yang dikumpulkan, dapat dilihat bahwa nilai rata rata siswa dalam pre test adalah 64.6. Setelah diberikan perlakuan menggunakan digital storytelling, ada peningkatan yang signifikan terhadap kemampuan berbicara siswa. Dapat dilihat dari hasil post test 76.8. Hasil post test juga menunjukan bahwa siswa telah mampu mencapai standar ketuntasan minimal yang di wajibkan sekolah. Sebagai kesimpulan, Teknik digital storytelling-photostory computer application mampu meningkatkan kemampuan berbicara siswa dalam bahasa inggris secara signifikan.

Kata kunci: Digital Storytelling, Photostory Aplikasi Komputer, Kemampuan Berbicara, Teks Deskriptif

INTRODUCTION

Speaking is a crucial part of second language learning and teaching. Despite its importance, for many years, teaching speaking has been undervalued and English language teachers have continued to teach speaking just as a repetition of drills or memorization of dialogues. However, today's world requires that the goal of teaching speaking should improve students' communicative skills, because, only in that way, students can express themselves and learn how to follow the social and cultural rules appropriate in every communicative circumstance.

An issue which has been greatly discussed in the study concerns the level of Indonesian learners speaking proficiency. A number of reports show that Indonesian learners commonly have not attained a good level of oral English proficiency. For example, Mukminatien(1999) found that senior high school students have a great number of errors when speaking. The errors include pronunciation (e.g., words stress and intonation), grammatical accuracy (e.g., tenses, preposition and sentence construction), vocabulary (e.g., incorrect word choice), fluency (e.g., frequent repair), and interactive communication (e.g., difficulties in getting the meaning across and keeping the conversation going). Similarly, Ihsan (1999) found that students are likely to make errors which include the misuse of parts of speech, syntactical construction, lexical choice. Both Ihsan and Mukminatien's research studies supported earlier results of research conducted by Eviyuliwati (1997) who reported that students have difficulties in using grammar and applying new vocabulary items in speaking class.

The situation made me eager to carry out a research at SMK Darel Hikmah Pekanbaru. From the observation done, it is found out that English learning in this school is not very successful. There are only 11 % of total students who are enthusiastic and actively involve in the classroom. The students actually comprehend the topic that the teacher is discussing but they tend to be passive and keep silent in the classroom. It is proven when the teacher asks questions to each student, almost every student can answer the questions well. However, the researcher notices some problems that the students encounter during the study in the classroom. 71 % of students make a number of errors in grammar and have limited vocabulary, while the other 29 % have weaknesses in pronunciation and fluency.

The problems can be caused by several reasons. First, the students are bored so they often ask for permission to go to toilet. They try to find any excuses to go out of the class. Second, the students have inadequate vocabularies so that they have difficulty in expressing their ideas or feelings. When the teacher asks them to speak up, most of them feel anxious and speak with a lot of hesitations. Third, the students lack confidence to speak up because of the pressure and humiliation from their peers. They are hesitant to raise hands and answer the teacher's questions even though they have already known the answer. Fourth, the teacher herself delivers materials in the monotonous way. The pattern of the teaching has no variations. She explains the material based on one handbook only on the first stage then asks the students to do the tasks. The method applied is very classic and not interesting at all. Therefore; it cannot engage students' interest and motivation.

In order to cope with these problems, an appropriate technique is needed to apply in the classroom. In teaching speaking, there are some techniques that can be applied to increase students' speaking ability. One of the techniques is Using Digital Storytelling-Photostory Computer Application.

Digital storytelling is a creative language learning technique that can improve

students' level of learning in reading, writing, listening and especially speaking skill. According to Gills (in Harris, 2005), there are many advantages of using digital storytelling in education:

1. To provide more variations than traditional methods in current practice.

   It is known that English teachers need good techniques to teach English especially speaking class. Frequently they lack of teaching technique. Digital storytelling can be one of the techniques that contributes to their teaching process.

2. To personalize learning experience.

   Digital storytelling can make the learning experience precious and memorable for students since they are directly involved in the learning process.

3. To make explanation or practice of certain topics more compelling.

   In using digital storytelling, students are triggered to finish their assignments or projects responsibly. Because once they take the first step, they have to accomplish the whole process.

4. To create real life situations in an easy and cheaper way.

   The life situations look real since students directly describe and tell what they personally see in the pictures that could be their real life experience.

5. To improve the involvement of students in the process of learning.

   Students are encouraged to work in a group in all aspects of learning. They discuss, offer comments and improve their friends' projects or assignments.

The Nature of Speaking

Speaking is to express or communicate opinions, feelings, ideas, etc, by or as talking and it involves the activities in the part of the speaker as psychological, physiological (articulator) and physical (acoustic) stages. (Hornby, 1985). To emphasize the important use of speaking, Nunan (1999) states that among the four skills; listening, speaking, reading, and writing speaking is the most important aspect of learning a second language whose success is measured by the ability to carry out a conversation in a language. Harmer (2001) notes down that from the communicative point of view, speaking has many different aspects including two major categories – accuracy, involving the correct use of vocabulary, grammar and pronunciation practised through controlled and guided activities; and, fluency, considered to be 'the ability to keep going when speaking spontaneously. Bygate (1991) also emphasizes knowledge of the language, and skill in using this knowledge for an effective communication. Language knowledge and skill in using it, are considered two fundamental elements of an effective communication.

According to Florez (1999, in http://www.cal.org/caela/scb/IV), a good speaker of English usually acts as the following:

1. Producing the sounds, stress patterns, rhythmic structures, and intonations of the language;
2. Using grammar/structures accurately;
3. Assessing characteristics of the target audience, including shared knowledge or shared points of reference, status and power relations of participants, interest levels, or differences in perspectives;
4. Selecting vocabulary that is understandable and appropriate for the audience, the topic being discussed, and the setting in which the speech act occurs;

5. Applying strategies to enhance comprehensibility, such as emphasizing key words, rephrasing, or checking for listener comprehension;
6. Using gestures or body language;
7. Paying attention to the success of the interaction and adjusting components of speech such as vocabulary, rate of speech, and complexity of grammar structures to maximize listener comprehension and involvement.

Speaking is one of the main focuses in the English teaching. The principle of teaching English is all processes of teaching should be communicative because the graduates of Schools are directed to have life skill for communication to meet the need for continuing their study to the higher level.

Teaching Speaking

Guidance for Teachers in Teaching Speaking

There is some guidance for English teachers in teaching speaking (Kayi, 2006):

1. Provide maximum opportunity to students to speak the target language by providing a rich environment that contains collaborative work, authentic materials and tasks, and shared knowledge.
2. Try to involve each student in every speaking activity, for this aim, practice different ways of student participation.
3. Reduce teacher speaking time in class while increasing student speaking time. Step back and observe students.
4. Indicate positive signs when commenting on a student's response.
5. Ask eliciting questions such as "what do you mean? How did you reach that conclusion?" in order to prompt students to speak more.
6. Provide written feedback like " your presentation was really great. it was a good job. I really appreciated your efforts in preparing the materials and efficient use of your voice…"
7. Do not correct student's pronunciation very often while they are speaking. Correction should not distract student from his or her speech.
8. Involve speaking activities not only in class but also out of class; contact parents and other people who can help.
9. Circulate around classroom to ensure that students are on the right track and see whether they need your help when they work in groups or pairs
10. Provide the vocabulary beforehand that students need in speaking activities.
11. Diagnose problems faced by students who have difficulty in expressing themselves in the target language and provide more opportunities to practice the spoken language.

Activities of Teaching Speaking

There are many activities to promote speaking. According to Kayi (2006) here are the following activities that can promote speaking:

1. Discussion

After a content-based lesson, a discussion can be held for various reasons. The students may aim to arrive at a conclusion, share ideas about an event, or find solutions in their discussion groups. Before the discussion, it is essential that the purpose of the

discussion activity is set by the teacher. In this way, the discussion points are relevant to this purpose, so that students do not spend their time chatting with each other about irrelevant things.

2. Role Play

Students pretend they are in various social contexts and have a variety of social roles. In role-play activities, the teacher gives information to the learners such as who they are and what they think or feel. Thus, the teacher can tell the student that "You are David, you go to the doctor and tell him what happened last night, and."

3. Simulations

Simulations are very similar to role-plays but what makes simulations different than role plays is that they are more elaborate. In simulations, students can bring items to the class to create a realistic environment. For instance, if a student is acting as a singer, she brings a microphone to sing and so on.

4. Information Gap

In this activity, students are supposed to be working in pairs. One student will have the information that other partner does not have and the partners will share their information. Information gap activities serve many purposes such as solving a problem or collecting information. Also, each partner plays an important role because the task cannot be completed if the partners do not provide the information the others need.

5. Brain Storming

On a given topic, students can produce ideas in a limited time.Depending on the context, either individual or group brainstorming is effective and learners generate ideas quickly and freely. The good characteristic of brainstorming is that the students are not criticized for their ideas so students will be open to sharing new ideas.

6. Storytelling

Students can briefly summarize a tale or story they heard from somebody beforehand, or they may create their own stories to tell their classmates. Story telling fosters creative thinking. It also helps students express ideas in the format of beginning, development, and ending, including the characters and setting a story has to have.

7. Interviews

Students can conduct interviews on selected topics with various people. It is a good idea that the teacher provides a rubric to students so that they know what type of questions they can ask or what path to follow, but students should prepare their own interview questions. After interviews, each student can present his or her study to the class. Moreover, students can interview each other and "introduce" his or her partner to the class.

8. Story Completion

For this activity, a teacher starts to tell a story, but after a few sentences he or she stops

narrating. Then, each student starts to narrate from the point where the previous one stopped. Each student is supposed to add from four to ten sentences. Students can add new characters, events,descriptions and so on.

9. Reporting

Before coming to class, students are asked to read a newspaper or magazine and, in class, they report to their friends what they find as the most interesting news. Students can also talk about whether they have experienced anything worth telling their friends in their daily lives before class.

10. Playing Cards

In this game, students should form groups of four. Each suit will represent a topic. For instance: diamonds represent earning money, hearts represent love and relationships, spades represent an unforgettable memory,and card represent best teacher. Each student in a group will choose a card.Then, each student will write 4-5 questions about that topic to ask the other people in the group. For example: if the topic "diamonds: earning money" is selected, here are some possible questions: .Is money important in your life?Why? Or what is the easiest way of earning money? or .What do you think about lottery?. Etc. However, the teacher should state at the very beginning ofthe activity that students are not allowed to prepare yes-no questions, because by saying yes or no students get little practice in spoken language production.Rather, students ask open-ended questions to each other so that they reply incomplete sentences.

11. Picture Narrating

This activity is based on several sequential pictures. Students are asked to tell the story taking place in the sequential pictures by paying attention to the criteria provided by the teacher as a rubric. Rubrics can include the vocabulary or structures they need to use while narrating.

12. Picture Describing

For this activity students can form groups and each group is given a different picture. Students discuss the picture with their groups, and then a spokes person for each group describes the picture to the whole class. This activity fosters the creativity and imagination of the learners as well as their public speaking skills.

The Nature of Digital Storytelling

Storytelling is the original form of teaching. It is a simple but powerful technique to help students to make sense of life experience by crafting story lines.

Jonassen and Hernandez-Serrano (in Alaa Sadik, 2008) suggested three ways to support learning using stories; first, they can be used as concepts being taught by direct instruction. Second, they can be used as problem cases to be solved by students. Third, stories can be used by students as an advice for students for helping them learn to solve problems. Although storytelling is not new, the idea of digital storytelling is new.

Digital storytelling is a creative language learning technique that can improve students' level of learning in reading, writing, listening and especially speaking skill.

The Digital Storytelling Association (in Alaa Sadik, 2008) describes digital storytelling as a modern expression of the ancient art of storytelling. Throughout history, storytelling has been used to share knowledge, wisdom and values. Stories have taken many different forms. Stories have been adapted to successive medium that has emerged, from the circle of the campfire to the silver green and now the computer screen.

To the extent of storytelling description, Gils (in Harris, 2005) suggests that there many advantages of using digital storytelling in education: (1) to provide more variation than traditional methods in current practice; (2) to personalize learning experience; (3) to make explanation or the practicing of certain topics more compelling; (4) to create real life situations in an easy and cheaper way; and (5) to improve the involvement of students in the process of learning.

In addition, Meadows (2003) believes that digital storytelling is the social practice of telling stories that makes use of low-cost digital cameras, non-linear authoring tools and computers to create short multimedia stories. Compared to conventional storytelling, digital storytelling audiences are viewed not only as listeners but also as learners who can interact and shape the story.

The Procedure of Digital Storytelling Class

Robin (2005) states that there are four steps to create digital stories into learning that help groups create, review and evaluate their stories.

First, teachers begin by dividing their students into small groups and have each group brainstorm the story topic they would like to do based on the school curriculum. Each group of students begins by selecting a topic, event, concept, theory or problem from the book that was the most exciting or most important in shaping a story and writing down a summary of the topic.

Second, each group is asked to bring pictures using the digital camera or from the Web.

Third, students are encouraged to develop scripts by sketching storyboards, writing descriptions and arranging them to show the story sequence. Groups are advised to cooperate in all aspects of the design process, assign a job for each member in the group (e.g., photographer, technical assistance, developer, etc.) and review and discuss their stories and offer comments to improve the quality of the content and design.

Collaboration among groups is emphasized also to share knowledge and improve design skills. All groups are scheduled to meet with the teacher so they can receive personalized feedback regarding their projects. Students are allowed three days to complete each of the activities. When the stories are completed, teachers attach computer to a LCD projector so groups can present, discuss and reflect on the stories. A compilation CD of the digital stories is burned for each class to be shared with other classrooms and members of the school community so they can learn about the project and provide feedback on the stories.

RESEARCH METHODOLOGY

The research has been conducted at SMK Darel Hikmah Pekanbaru from February to March 2015. The population of the research is the first year students of SMK Darel Hikmah with total sampling 21 students. This study is an experimental research with one pre-post test design. The research is cyclical stages that are administering pre test and post test, giving treatments, collecting the data, and analyzing the data. By applying all the cyclical stages can help increase the students' speaking ability. Moreover, Hughes's speaking assessment and t-test formula were taken to calculate the students' score. The teaching materials were adapted from the student's English book. However, the material is also synchronized to the curriculum and simplified. The students were asked to describe photos inserted to their own laptops. Their speaking was assessed based on five speaking criteria; pronunciation, grammar, vocabulary, fluency, and comprehension.

FINDING AND DISCUSSION

The Description of the Data in Pre Test

The data was submitted by the three raters and calculated by the writer. The average score of the first year students of SMK Darel Hikmah Pekanbaru in pretest is 64.6. The score reveals that students' speaking ability is considered mediocre. Moreover, the minimum mastery criteria (MMC) required by the school has not been achieved by the students. They are required to achieve 75. That is why the writer was motivated to help the first year students of SMK Darel Hikmah Pekanbaru increase their speaking ability by applying an interesting teaching technique called digital storytelling-photo story computer application.

The Description of the Data in Post Test

After the students have been given treatments, there is a significant increase on students' speaking ability. It can be proved by the result of post test gained from the three raters. The result shows that the students have passed the school's minimum mastery criteia that is 76.8. The comparison of students' pretest and post test is described in the following chart:

Chart 4.1. Post-test result
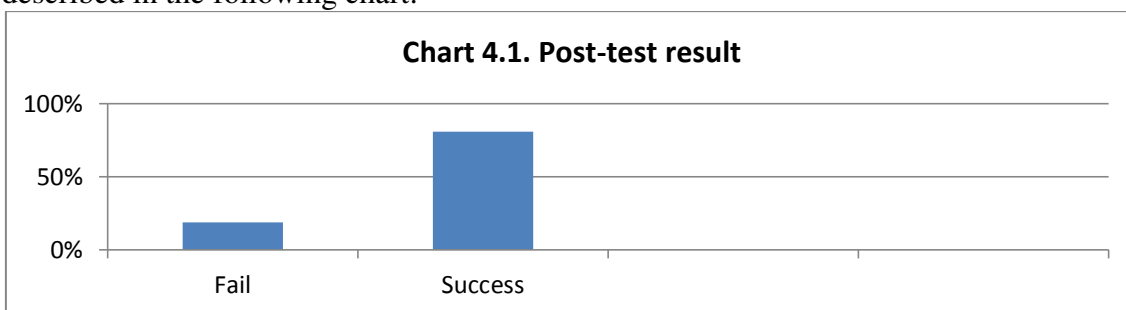
From the chart, it can be seen that the technique applied has successfully increased the students' speaking ability. There are 17 out of 21 students who are able to reach the school's minimum mastery criteria while the other 4 is not. The percentage of students successful in post-test is 81 percents and not successful is 19 percents.

Hypothesis Analysis

In this research, t-test formula is used to find out the difference in pretest and post test. Besides, the t-test is also used by the writer to determine whether the method implemented can bring the positive result to the students.

In conducting quasi experimental research, the writer needs hypothesis to examine whether the method is effective in improving students' ability.

According to Slavin (1995), there are two kinds of hypothesis:
1. Alternative Hypothesis
   It is used to examine whether there is a significant improvement on students' ability after being given treatment shown by the result of post-test.
2. Null Hypothesis
   It is used to examine whether there is not a significant improvement on students' ability after being given treatment shown by the result of post-test.

The t-test formula result is 7.3. It shows that the alternative hypothesis is accepted since the standard of t value is 2.086 < t-test > 2.845. Thus, it can be concluded that using Digital Storytelling Photo Story Computer Application can significantly improve the speaking ability of the first year students of SMK Darel Hikmah Pekanbaru.

The Success of the Research

According to Quasi Experimental method, the success of the research is based on the result of pre-test and post-test. As mentioned in the chapter III, if the result of pretest (t1) < the result of posttest (t2) means successful. Based on the research result, the post-test score is higher than the pretest, 76.8 > 64.6. It clearly shows that there is a significant improvement on the students' ability after the implementation of photo story computer application. To emphasize, the method employed by the researcher is successful.

The Comparison between Pre-test and Post-test

After gaining the result of pre-test and post-test, the writer tried to compare those results to show the improvement done by the students. The comparison of students' pretest and post-test result is illustrated in the following chart:
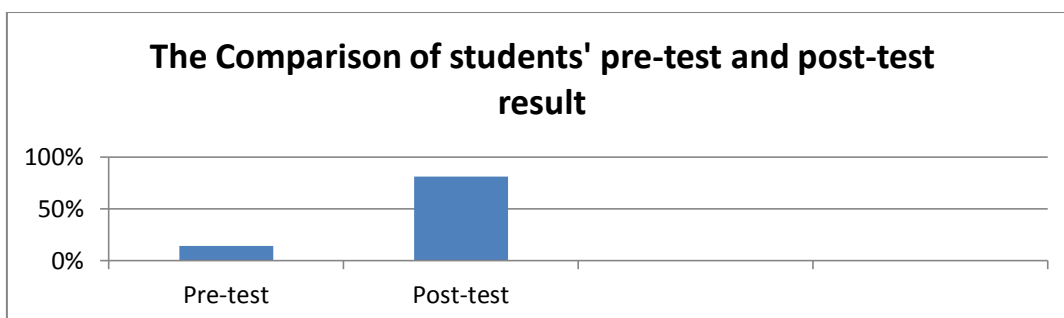
From the chart above, the percentage of students who get scores higher than 75

in pre-test is 14 %. It means there are only 3 students who are successful. Meanwhile, the percentage of students performing better in post-test is 81 % which means that there are 18 students who get scores higher than 75 as the school's minimum mastery criteria.

The Discussion Findings

Upon completing the research, this observation has points to spoil out. From the comparison of pre-test and post-test data, the writer analyzes five assessment criteria including grammar, vocabulary, fluency, pronunciation and comprehension. From the five criteria, vocabulary and comprehension are the easiest parts for students to undertake. While grammar and fluency are still students' most difficult parts they have to struggle. We can take a look at the students' result. Their scores are considerably stable on vocabulary and fluency but it does not happen to the other three criteria. In conclusion, the students are able to speak what are in their minds clearly with different range of vocabulary mastery.

 Conclusion and Suggestions

The writer has conducted an observation in a particular class at SMK Darel Hikmah Pekanbaru to find out the ability of the first year students. When the observation is done, the writer is interested in doing a research at the school in hope to increase the students' speaking ability. In the first stage, the writer administers a pre-test to students prior to giving the treatments. From the pre-test result, it is found out that there are only 3 out of 21 students who are able to pass the school's minimum mastery criteria 75. Realizing that the students are in need of help, the writer intends to give treatments to increase their speaking ability.

The writer chose digital storytelling photostory computer application as the technique to encourage students to learn fun and gives more variations in teaching process. It can also help trigger students' motivation by giving interesting topic with the engagement of technology into class.

After giving treatments through digital storytelling-photo story computer application, there is a significant improvement on students' speaking ability. It can be seen from the students' active involvement in the class and the increase in the scores of post-test. The result can be an indicator to show how the photo story computer application works to help students' progress on their study especially speaking. For the detailed information, it has been included on the list of appendices. To sum up, the students are happy to learn and actively involve in the class since the engagement of technology into classroom brings a fresh environment to their classroom.

In this session, the writer also intended to offer some suggestions that can be helpful for teachers, students and readers who are seeking newly fresh idea in increasing English speaking ability. This is a highly recommended method for all teachers who are still doing their classical method in teaching English. There are some advantages that teachers can obtain from photo story. First, photo story computer application is really an interesting method to attract students to actively involve in the classroom because it integrates technology into classroom. Second, photo story computer application is a newly fresh idea that can contribute to help teacher enrich their knowledge. Third, it gives more variations in teaching English so teacher can be more creative in developing

their own ideas.

　　For students, this is an engaging technology that can trigger their motivation to love English. It can diminish boredom and create a new environment in the class. Unlike monotonous teaching method employed by almost every teacher in Indonesia, this media gives more activities to students. They have to do a number of steps before finalizing their projects. Furthermore, The media keeps students busy so they do not have time to talk and play with their friends. Therefore; they are only focused on their own projects.

REFERENCES

Burkart, 1998. *Modules for the professional preparation of teaching assistants in foreign languages.* Washington, DC: Center for Applied Linguistics.

Bygate, M. (1991). *Speaking.* Oxford: Oxford University Press.

Eviyuliwati, I. (1997). *The teaching of functional skills and communicative expressions at SMU IKIP Malang based on the 1994 English curriculum*: A case study. English Language Education, 3(1), 55-60.

Harris, J. 2005. *Our agenda for technology integration: It's time to choose. Contemporary Issues in Technology and Teacher Education.*http://www.citejournal.org/vol5/iss2/editorial/article1.cfm. Retrieved in 5 December 2010.

Hornby, A.S. 1985. *Oxford Advanced Learner's Dictionary of Current English*. New York: Oxford University Press.

Hughes, Arthur. 1989. *Testing for Language teachers*. United kingdom: Cambridge University Press.

Ihsan, D. (1999). *Speaking and writing errors made by students of English education.* Jurnal Ilmu Pendidikan, 6(3), 222-234.

Lim, P., & Tay, Y. (2003). *Information and communication technologies (ICT) in an elementary school: Students' engagement in higher-order thinking*. Journal of Educational Multimedia and Hypermedia, 12(4), 425–451.

Meadows, D. (2003). *Digital storytelling: Research-based practice in new media*. Visual Communication, 2(2), 189–193.

Mukminatien, N. (1999). *The problem of developing speaking skills: Limitations of second language acquisition in an EFL classroom*. English Language Education, 5(1), 1-10.

Nunan, David. 1999. *Practical English language Teaching*. NY: McGraw-Hill.

Robin, B., & Pierson, M. 2005. *A multilevel approach to using digital storytelling in the classroom. Digital Storytelling Workshop*. University of Houston. http://www.coe.uh.edu/digital-storytelling/ course/SITE2005. Retrieved in 5 December 2010

Sadik, Alaa. 2008. *Digital storytelling: a meaningful technology-integrated approach for engaged student learning.* Sultan Qaboos University, Muscat, Sultanate of Oman: Department of Instructional & Learning Technologies, College of Education.

Schofield, J. (1995). *Computers and classroom culture*. Cambridge, NY: Cambridge University Press.

Slavin. 1995. *Cooperative Learning Theory, Research and Practice.* Allyn Bacon.

Standley, M. (2003). *Digital storytelling using new technology and the power of stories to help our students learn—and teach. Cable in the Classroom.* http://www.ciconline.org/home. Retrieved on 5 December 2010.

Sudijono, A. 1991. *Statistik Pendidikan Pengantar.* Jakarta : Manajemen PT. Raja Grafindo Persada.