THE USE OF ASSISTIVE TECHNOLOGY FOR SPECIAL NEED STUDENTS

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Abstract: This study focused on the use of assistive technology in language teaching. Moreover, the aim of this study was to analyze the students' perception toward the use of assistive technology in English listening skill. The participant of this study was all of the students of special school (SMA Luar Biasa) consist of disable and blind. The research method used was a descriptive qualitative design. In addition, the interview is used to know the students' perception toward the use of assistive technology and then observation was applied to confirm the data from process of teaching listening using assistive technology.

Keywords: *Students' perception, Assistive technology, Listening skill, Special need students.*

Listening is one of the four English skills which has a great effect on the language learner. In this skill, the learner have to deal with a lot of input, such as: speakers' expression, speakers' volume, speakers' speed in speaking, speakers' diction, and also speakers' culture background that is brought in conversation. Listening also is the most frequently used skill in our everyday activities. Studies show that we spend 80% of our waking hours communicating, and according to research, at least 45% of that time is spent listening (Lawson, 2007:3).

Commonly, teaching listening in Indonesia begin with listening some material which is given by the teacher. Usually, students cannot understand directly what the speaker says in the recording. They listen one recording not only twice but also more than that until they find some sort of comprehension about the content. After that, the teacher provide a several questions related to the topic that must be answered by the students. Then, the teacher give an evaluation whether the students understand or not the topic based on the students' answer.

In line with this, Arnold (2000) stated that for low level listeners, this approach seems not to work effectively to improve students' listening comprehension skills; thus, when the listener is incapable of keeping with speech rate, this will create anxiety. In this situation, the students are forced to answer questions of listening comprehension correctly without considering listening strategies that they may use to cope with their listening difficulties. Therefore, it is obviously understood that most learners face a difficulties in listening, especially when they deal with the material of daily conversation.

Fortunately, the development of technology provide us with various media which are very useful and helpful for teaching learning activities, especially in listening skill. A related research Baehaqi (2012) points out that by combining appropriate and interesting listening materials from podcasts and process-based approach in the teaching learning process can help students to overcome the difficulties in listening comprehension. Another researcher, Hanani (2011) stated that using VCD "Daily Conversation Living English" as an Audio Visual Media in Teaching Listening is an effective technique to improve students' listening skill as it can help students to understand the spoken language. In short, by considering the result of the related studies, using technology is good to be applied in teaching and learning activity.

According to Hopkins (2004) assistive technology has become the more widely used term for the broad range of supports available to assist people with various cognitive, sensory, physical, communication, learning, and other challenges that limit participation and learning opportunities. Assistive technology helps many students to access information, connect with others, and participate in ways that would not be possible without the use of assistive technology (Hopkins, 2004). Moreover, the use of assistive technology in teaching listening in the classroom has already being a regular activity.

In line with this, some teachers only implement the use of assistive technology in the

class without even consider the students' perception toward the use of it. This situation also happens at special school, the researcher interviews the English teacher and finds out that the students use kinds of assistive technology in the process of teaching listening. Furthermore, this situation has become a regular treatment for them. Consequently, this study was aimed to analyze students' perception toward the use of assistive technology in teaching listening and kinds of assistive technology which is used. In order to analyze the data, some related theories and reference will be presented.

Perception

Jacobs et al (2004:231) refer to perception as one of the most important elements underpinning effective teaching and learning. Learning can only occur after exposure to stimuli, and each person is exposed daily to a variety of stimuli that affect the different senses. Moreover, Robbins and Judge (2008) defined perception as a process in which individuals organize and interpret their sensory impressions to give meaning to their environment.

Similarly, Hamacheck (1995:199) defines perception as how individuals experience stimuli by the sensory receptors, from the world around them. What is experienced consciously is not always the same as what is experienced auditorily, visually or tactically. People's perception is affected by the way in which they view the world around them. Therefore individuals' interpretation of sensory stimuli will be affected by their own views (Hamacheck 1995:199). Stepens (2006:23) stated that perception is how we view and interpret the events and situations in the world about us. It can be looked upon as a cognitive process and a social information process of: picking up some external stimuli, such as some event or perhaps some personal interaction., screening, when we only acknowledge the stimuli we choose to acknowledge., some interpretation and categorisation of these stimuli, possibly based on previous experience or on our upbringing.

Teaching Listening Using Technology

Myers and Myers (1999:143 cited in Hanani, 2011) state that listening is not only hearing, but also including the added dimensions of understanding, paying attention, analyzing, and evaluating the spoken messages, and possibly acting on the basis of what has been heard.

Similarly, Lucas (2009:43) defines that listening is paying close attention to, and making sense of, what we hear. Another definition of listening proposes that listening is a word that we use every day without giving it much thought (Muntaha, 2012:12, citing Rost, 1994:1).

Nowadays, a feature of part of teaching listening is the use of technology. Radio, tape, tv programs, laptop, youtube video, podcasts, videocasts, audioblogs, iPods are kinds of technology used in language teaching. Those tools are used to enable an English Language Learners (ELL) to play with and use language in a creative way.

Kinds of Listening

There are four kinds of listening according to Lucas (2009:46) as one of the ways which can serve you to enhance your skills as a critical thinker. 1) Appreciative listening: listening for pleasure or enjoyment, as when we listen to music, to a comedy routine, or to an entertaining speech; 2) Empathic listening: listening to provide emotional support for the speaker, as when a psychiatrist listens to a patient or when we lend a sympathetic ear to a friend in distress; 3) Comprehensive listening: listening to understand the message of a speaker, as when we attend a classroom lecture or listen to directions for finding a friend's house; 4) Critical listening: listening to evaluate a message for purposes of accepting or rejecting it, as when we listen to the sales pitch of a used-car dealer or the campaign speech of a political candidate.

Assistive Technology for Special Need Students

Assistive technology is also known as adaptive technology differs substantially from other types of technology that assist students (Robbins and Judge, 2008). Instructional technology, for instance, uses innovative tools such as videotapes, computer assisted instruction, projectors, modalities in the classroom, without regard to specific students' needs. Assistive technology also differs from assistance such as wheelchairs, hearing aids, and glasses for vision, which are, of course, essential to the students who require them. Some assistive technology changes the environment so that a person can function (adaptive technology) some technology adds to the environment.

In addition, the use of assistive technology for special need students may have a significant effect on their individual education plans.

According to Young (2015:1), assistive technology helps in two ways: it can help the student learn how to complete the task and it can help to bypass an area of difficulty. For example, when a student decides to listen to a digital version of a book, they are bypassing an area of difficulty. However, if the students focuses on the computer screen as highlighted words are read aloud, they can learn unfamiliar words.

Method

Qualitative research is the research design that deals with the understanding of social phenomena emerged in natural setting.This design tries to examine the phenomenon in detail. Moreover, Creswell (2012:16) states that the qualitative research is used because the researcher needs to investigate the participants or subject of study to get more information about a phenomenon of study.Additionally, Wahyuni (2012:1) said that, "qualitative research is an inductive approach and its goal is to gain a deeper understanding of a person's or a group's experience".Derive from the experts' explanation above; the researcher concludes that qualitative research focuses on describing a phenomenon from participants of the study in order to get deeperunderstanding and information about it.

Interview is one of the methods to collect the data in qualitative research design. According to Ary et al (2010:438) interview assists the researcher to collect the data of people' opinions, beliefs, and feelings about situations to understand the experience of the subject of the study. In this study, the researcher use semi-structured interview to gather the data. Semi structured interview is the type of interview which is more flexible than structured interview because the interviewer is allowed to add new questions during the interview (Ary et al, 2010:438).

Moreover, this study use non participant observation. Non-participant observation or usually called indirect observation is the observation in which the observer does not involve himself as participant in the context being observed, and the interaction with the people being observed is limited (Wahyuni:2012). This observation will be done during the teaching learning process in the classroom. This observation was used to confirm the data from interview.

In analyzing the data, the researcher applied several steps: transcribing the data of the interview in the form of note, interpreting the data from interview, confirming all of the data from interview and observation with the literature study, then drawing the conclusion based on the data that were obtained.

Finding

This section presents the data that the writer found in the interview and observation related to the statement of problem. Based on the result of the interview (see appendix I), the students stated that listening is one of their favourite course in the school. Because they can listen some material in form of song, story line, and daily conversation that related with the topic of discussion. Moreover, the students were enjoy with listening class that used various type of material and the teacher always combine it with an interesting way of teaching. This data was also the same with the data that obtained from the observation. The researcher found that the students were comfortable in joining listening class. It can be seen from their enthusiastic when the teaching learning process was held.

The use of assistive technolgy in teaching learning process enable teacher to explain the material. Furthermore, the result of the interview pointed that most of the students do not understand well with the term assistive technology. However, after some explanation from the interviewer, it makes them comprehend the term. Assistive technology that used in listening class by the students are tape recorder, language laboratory, laptop, and so forth.

Assistive technology really help students to understand the listening material easily. Especially students with physical or cognitive difficulties. It helped them in learning to get a deeply understanding of the material. The use of assistive technology tools can be an effective way in learning, especially for a blind students, the tools enable them to understand the listening material well. Moreover, the students also initiate the teacher to prepare listening comprehension by using braille code.

The technical problem such as electricity off sometime take a trouble toward the use of assistive technology in the class. Another problem is some students has difficulty in using the assistive technolgy because they need someone else to help them using the tools. Sometimes, the files recording are not clear. To overcome with those problems the teacher were helped by an assistent to guide the disable students when teaching learning process was held. Because the assistive technology tools

used by the students with disability, the teaching learning process is getting more easily for both teachers and students. When the teacher does not use the assistive technology, the students with dissability will find difficulty in understanding the material.

Discussion

This section explains further discussion about the research finding that the researcher has explained above. The researcher tried to interpret the finding based on review of related literature. The researcher found that the students who taught at special school are enthusiastic with the listening class because they can enjoy listening to the song, story, and daily conversation. By this approach, it can enhance their listening skill. In line with this, Lucas (2009:46) said that appreciative listening: listening for pleasure or enjoyment, as when we listen to music, to a comedy routine, or to an entertaining speech is as one of the ways which can serve you to enhance your skills as a critical thinker.

Moreover,the researcher found that the students who taught at special school applied assistive technology for learning English, especially in listening skill. Moreover, this tools also has an important role for them. It is used to assist students. Robbins and Judge (2008) proposed that assistive technology is differs substantially from other types of technology that assist students, for instance, uses innovative tools such as videotapes, computer assisted instruction, projectors, modalities in the classroom, without regard to specific students' needs.

Conclusion

In listening classrooms, students can easily become passive and disinterest from the active process of learning. This condition can makes the students become bored and lost their attention in learning the material. That is why, finding an appropiate method in teaching listening and combining them with an attractive materials will create a better environment to study.

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