# **Chapter Two**

### Literature Review

This study aims to investigate student's perceptions about instructional media used in the process of teaching and learning. To get the framework of the issue, this literature review discusses some important aspects related to the study. First, this chapter presents some definitions of the terminology used in this paper that are definition of instructional media, types of instructional media, advantages of instructional media in teaching and learning and disadvantages of instructional media in teaching and learning. Second, this chapter presents the review of related studies and followed by the conceptual framework of the study.

## **Instructional Media in Teaching and Learning**

This part of literature review provides the view of some expert related to instructional media in teaching and learning. There are four topics discussed in this part of literature review. The first topic discussed is definition of instructional media, followed by types of instructional media, advantages of instructional media in teaching and learning and the last is disadvantages of instructional media in teaching and learning.

**Definition of instructional media.** Instructional media is something that can be used in teaching and learning process to help teacher in giving instruction. Farhadi (2014) highlighted educational media as an instrument of teaching and learning and also a part of learning process and technology. Seth (2009) stated

that instructional media is "the collection of materials and equipment that can be used effectively for communication. These materials are used in the planning process of giving instruction" (p.13). Further, Wamalwa & Wamalwa (2014) refers the instructional media as "the kind of media used in teaching to aid in learners' easier understanding according to the set objectives" (p.141). Instructional media is something that deliver information from a source to a receiver and they transfer an information in an instructional purpose such as video, television, diagrams, printed materials, computers and instructor, (Heinich, Molenda, Russel, & Smaldino, 2002). Reiser (2001) defines instructional media as "every physical means of instructional delivery, from the live instructor to the text book to the computer and so on" (p. 54).

From the statements above, the researcher can conclude that instructional media is tools that can help lecturer to deliver instructional information through media such as audio, video, printed materials, Television, diagrams, whiteboard and LCD projector.

Types of instructional media. Instructional media has few different types. There are two experts that have already discussed types of instructional media. The first one is Heinich, Molenda, Russel, & Smaldino (2002) who highlighted that types of instructional media include visuals, audio, video, computer, and multimedia. The second expert Ruis, Muhyidin, and Waluyo (2009) who mentioned pictures, realia, drawing, chart poster and cartoon, blackboard or whiteboard, audio, overhead projector and LCD projector as the media that can be used to give instruction.

Heinich, Molenda, Russel, & Smaldino (2002). Heinich, Molenda, Russel, & Smaldino (2002) highlighted that types of instructional media include visual, audio, video, computer, and multimedia. Those types of instructional media discussed below.

Visual. The first instructional media as mentioned by Heinich, Molenda, Russel, & Smaldino (2002) is visuals. Visuals are traditional media associated into classroom. Types of visual media can be divided into non-projected visuals, projected visuals, document cameras, overhead projection, slides, digital images, and digital images projection. The first type of visual media is non-projected visuals which are easy to use in many ways at all levels of instruction and there are six types of visuals commonly used in classroom includes still pictures, drawings, charts, graphs, posters, and cartoons. Then the second visual is projected visuals that are media format in which still images are enlarged and projected on a screen which also suitable for all levels of instruction in all curriculum areas. The third visual media is document cameras which is a video camera pointed on document, pictures, or graphics to project them into a bigger screen. The following visual is overhead projection which become the most widely used audiovisual device in North American classrooms as it is easy to use and can project some materials. The fifth visual aid is slides which is a small photographic transparency for one-at-a-time projection that can be used to conduct individualized instruction programs. The next visual aid is digital image, it is a format in which the image can be stored digitally into digital storage such as CD-ROM, DVD-ROM, and computer disks and it can be shown on a computer or

television monitor. And the last visual media is digital image projection that can be used to project individuals digital image format using computer monitor, an LCD panel, overhead projector, or a data projector.

Audio. The second instructional media as stated by Heinich, Molenda, Russel, & Smaldino (2002) is audio media that can make several unique contributions to both teaching and learning. Audio media format usually used in giving instruction are audiotapes, compact disc (CD), and MP3. Audiotapes can be used to record your own audio easily and cheaply and are not easily damaged and the content of audiotapes can be edited easily. Compact disc is an attractive educational program as the user can quickly choose the desired program or contents to be played. The disadvantage of compact disc is that a scratch can damage the quality of the content in the disc. The last audio media type is MP3 or MPEG audio layer 3, it is an audio format which can easily take on the internet and can be played using computer programs.

Video. Then, the third instructional media type highlighted by Heinich, Molenda, Russel, & Smaldino (2002) is video. Video can cover all types of objectives includes cognitive, affective, psychomotor, and interpersonal. The most common formats of videos are videotapes, DVD, videodisc, and internet video. The first format of video is VHS. It is the preferred format for amateur and non-studio production of video in education. Then, DVD (digital videodisc) is a medium offering digital storage and playback of full-motion video. The fourth video format is videodisc or laser disc images which is significantly better than the videotapes and have several educationally valuable features which videotapes

do not have. The last video format is internet video that can be viewed through internet using video streaming as the user do not need to download the file as the contents starts playing shortly as the user clicks on the link.

Computer. The fourth type of instructional media according to Heinich, Molenda, Russel, & Smaldino (2002) is computer that can provide virtually instantaneous response to student input, has extensive capacity to store and manipulate information, and is unmatched in its ability to serve many students simultaneously. The roles of computers in learning are as an object of instruction, as a tool, as an instructional device, and as a means of teaching logical thinking.

Multimedia. Then, the last instructional media based on the statement of Heinich, Molenda, Russel, & Smaldino (2002) is multimedia which refers to the sequential or simultaneous use of a variety of media formats in a given presentation or self-study program. The goal of multimedia in education is to immerse the learner in a multisensory experience to promote learning.

Ruis, Muhyidin, and Waluyo (2009). The second expert that highlighted some types of instructional media is Ruis, Muhyidin, and Waluyo (2009) who mentioned pictures, realia, drawing, chart poster and cartoon, blackboard or whiteboard, audio, overhead projector and LCD projector as the media that can be used to give instruction. The first media is picture that can be in the form of photograph of people or places, that used in magazines, newspapers or calendars. Then, the second one is realia which means real object that teachers can bring into classroom to make the material more clearly, meaningful and memorable. The

third type is drawing that should be simple but consist of rich information. Then, chart, poster, and cartoon are visual media that can be used in four language skills. The fifth is blackboard or whiteboard which can be used to present drawing, diagram and written language. Audio media can be a very valuable media for listening activities since teachers can provide authentic materials from radio or create a listening material using a recorder. The next one is Over Head Projector which is very useful to be used in large classes because OHP allows teachers to face students all the time while presenting the material. And the last, LCD projector which is often used to show presentation because it is more practice and efficient.

Advantages of instructional media in teaching and learning. There are many advantages of using instructional media in teaching and learning. There are two experts discussed advantages of instructional media. Those experts are Pun (2013) and Liu (2010).

Pun (2013). The first expert, Pun (2013), stated that there are seven advantages of using media. The first is to motivates students to learn English as implementation of new multimedia technology in teaching that includes audio, visual and animation effects encourages students to learn English efficiently. The second one is developing students' communicative competence through employment of media in language classroom that may increase students' activity and students' communicative competence. The third is to widens students' knowledge about the culture of English so that students do not only improve their ability in English but students can also learn the cultural background of the

language that can make them motivated to learn. Then, improves teaching efficiency as media in language classroom provide real-life environment for students, could give students more information and improves teaching efficiency. Enhances interaction among students and between teachers and students since the use of media can attract students to be more active in classroom and it improves communication between teacher and students. Then, creates a conducive teaching environment in the classrooms since using media while teaching will develop dynamic involvement of teacher and students and it can produce positive language classroom. And the last is to provides opportunities for English teaching outside the classrooms so that teacher able to conduct teaching outside classroom since the students can contact the teacher using the internet.

*Liu* (2010). Liu (2010), the second expert, argued that the advantages of using multimedia are English teaching and learning become more efficient, provide a lot of useful information and saving a lot of time.

**Disadvantages of instructional media in teaching and learning.** Apart from the advantages of the use of instructional media in teaching and learning, there is also disadvantages. Statements of three experts who discussed disadvantages of instructional media presented in this study. Those experts are Pun (2013), Liu (2010), and Reddi and Mishra (2003).

**Pun** (2013). Pun (2013) explained that there are some disadvantages of using media in language classroom. The first disadvantages id emphasis on the supplementary of effective teaching because the teacher will lose their key role as

facilitator because the teacher perhaps become very dependent to multimedia in classroom. The second one is lack of communication between teachers and students as the use of multimedia technology in language classroom may create an exciting classroom by the help of audio, visual and text but it may limit the communication between teachers and students. Then, lack of real-time teaching because the use of multimedia in classroom by teacher, there will be lack of real-time teaching by teacher and it could give students difficulties since there will be no feedback. Loss of students' logical thinking may occur because the use of multimedia may help students to understand the material easily but it can reduce students' logical thinking. The last is expensive way of conducting language classes as the use of multimedia in language classroom can be very expensive because the school need to buy hardware, software etc. to support the use of multimedia in classroom.

*Liu* (2010). Liu (2010), the second expert, stated that the disadvantages of using multimedia is that students can feel lost and they do not know what to choose because there is so many information provided by multimedia.

**Reddi and Mishra (2003).** Reddi and Mishra (2003) highlighted some disadvantages of multimedia such as; multimedia requires high-computer system; multimedia-capable machine not accessible; development costs of multimedia are very high and require a training for educator.

#### **Review of Related Studies**

There are three research which carried out a topic related to instructional media will be discussed in this research. The first research was conducted by Aini in (2013) with the title Instructional Media in Teaching English to Young Learners: A Case Study in Elementary Schools in Kuningan. The research was conducted in Kuningan, Indonesia and the researcher was investigating three things which are the use of instructional media in teaching English to young learners, problem encountered in using instructional media, and problem solving toward the challenge of media utilization. The research was conducted in three elementary school. The researcher use observation and interview as the technique of data collection. This research mentioned some instructional media which can be used by teacher such as the students themselves, realia, pictures, course book, boards, overhead projector, flipcharts and computer-based presentation technology. This research was also discussed the problem encountered by teacher such as problem in choosing instructional media and utilization of instructional media. Then, the researcher concluded that the use of instructional media by teacher in elementary still needs improvements. The researcher was also stated that problems encountered by teachers was caused by the lack of available instructional media.

Then, the second research was done by Erastus Juma Walmawa and Eric W. Wamalwa in (2014) entitled Toward the utilization of Instructional Media for Effective Teaching and Learning of English in Kenya. This research discusses the use of instructional media in teaching and learning of English in Kenya. The research aims to assess the place and the role of instructional media in enhancing teaching and learning of English in Kenya. The researcher discovers that the lack of instructional media in teaching and learning gives big learning challenge to learner. Thus, this research urges the use of instructional media in teaching and learning. The researcher classifies instructional media into three types that are unprocessed materials, projected media, and non-projected media. This research discusses the role of instructional media in teaching and learning as it can enhance and facilitate the learning process. Then this research discusses about the criteria for selection and the use of instructional media should be based on lesson objectives according to learners' ability. This research also discusses theories to the use of instructional media in teaching includes the component display theory and cognitive load theory. Then, this research discusses instructional media in teaching and learning, teaching language skills with selected instructional media, using instructional media to teach English in schools, and classroom language learning. At the end of the research, the researcher concludes that instructional media is an integral part to teaching and learning process as it can enhance learning. Thus, the teacher should correctly select instructional media to be able to use them effectively in teaching and learning process.

The third research was conducted by Adegbija and Fakomogbon in (2012) entitled Instructional Media in teaching and learning: A Nigerian perspective. The research discussed the use of instructional media in teaching and learning in Nigeria as a developing country. The researcher found that the inconsistency of government policies in education, corruption, mismanagement of oil resources, and also the lack of vision of the Nigerian leaders leads to the lack of attention toward instructional media and education in general. Then, the researcher mentioned some media which used in other developed countries such as real equipment, simulator, training device, computer, interactive multimedia, virtual reality, radio or TV broadcast, motion picture, programmed text, slide tape or filmstrip, audio poster or chart whiteboard, and overhead transparencies. The researcher also discussed about choosing appropriate media for a lesson, sources of instructional media for tertiary institutions, print resources, and resources centers and the virtual library. At the end of the research, the researcher concluded that lecturers have the responsibility to determine appropriate teaching methods and provide suitable instructional media which will fit in the implementation of the method. The researcher suggested that lecturers and students should be more exposed to the use of every form of instructional media through training and retraining whether at the local or international setting, and the government should encourage the use of instructional media for teaching and learning by implementing all its policies as well as procuring and providing enough and appropriate media for the lecturers.

This research is different from three related studies mentioned above in terms of the setting of the research. This research focuses to investigate the types of instructional media used by lecturers, advantages and disadvantages of instructional media in teaching and learning process. Qualitative research method employed in this research and the researcher use interview to collect the data. The participants of this research are students of a private university in Yogyakarta.

# **Conceptual Framework**

There are three objectives which are to identify students' perception toward types of instructional media used in teaching and learning process and to investigate advantages and disadvantages of the media in teaching and learning process Seth (2009) stated that instructional media is "the collection of materials and equipment that can be used effectively for communication. These materials are used in the planning process of giving instruction" (p.13). Wamalwa & Wamalwa (2014) refers the instructional media as "the kind of media used in teaching to aid in learners' easier understanding according to the set objectives" (p.141). Instructional media is something that deliver information from a source to a receiver and they transfer an information in an instructional purpose such as video, television, diagrams, printed materials, computers and instructor, (Heinich, Molenda, Russel, & Smaldino, 2002). Media in teaching and learning, according to Farhadi (2014) is an instrument of teaching and learning and also a part of learning process and technology. Further, Yang and Fang (2008), argued that

using multimedia in English Language Teaching able to make students elaborate easily in the process of teaching and learning. Pun (2013) stated that technology offers a lot of selection which create a dynamic teaching and learning process. Wamalwa & Wamalwa (2014) classifies materials or media for instruction into three types such as unprocessed materials, projected media, and non-projected media.

Then, the use of media in teaching and learning process can provide advantages and disadvantages. There are many advantages of using media in teaching and learning process as Pun (2013) highlighted some advantages such as motivate students to learn English, develop students' communicative competence, widens students' knowledge about the culture of English, improves teaching efficiency, enhance interaction among students and between teacher and students, creates a conducive teaching environment, and provide opportunities for English teaching outside the classroom. Pun (2013) argued that there are some disadvantages from the use of media such as emphasis on supplementary of effective teaching, lack of communication between teachers and students, lack of real-time teaching, loss of students' logical thinking and expensive way of conducting language classes.

Figure 1: Conceptual Framework

