

Chapter Two

Literature Review

The purposes of this study are to examine English Education Department of Universitas Muhammadiyah Yogyakarta students' perception on the use of gadgets as tools in learning English and kinds of gadgets that are always used by students. This chapter includes some theories that are related to the topic of the research. First, this chapter discusses the definition of gadgets and types of gadgets. Then, this chapter also provides the related studies.

Perception

Akande (2009) states that perception is a process or use of someone's ability in receiving information through the sense organs. In line with Akande, perception is a process of selecting, organizing, and interpreting stimulus sensory into meaningful information about where the environment is (Unumeri, 2009). It means that perception is a process of receiving information from the environment through sense organs and then it will be selected and organized into a meaningful information.

Bodenhausen and Hugenberg (2009) believed that perception often seems has a strong correlation with consciousness, where people realize that people are seeing and doing something. However, Bodenhausen and Hugenberg also describes that sometimes perception can directly produce an action without any intervening process of appraising the meaning of the perceived stimuli. Therefore, in this case, perception could arise without any process of perceiving stimuli; but,

perception frequently occurs based on the correlation between experiences and awareness. In the end, perception can be a positive or negative assumption.

Gadgets

Gadgets are a part of technology. According to Ferrer and Vlachos (2014), gadgets are a novel technology that has various software applications loaded into hardware and software platforms. It means that gadget is physically a hardware or software platforms that provided a lot of applications that can be installed. There are many kinds of gadget in this world, starting from the oldest products to the newest products. Apart from being used for personal needs, nowadays, the use of gadget is very popular in the world of education. Many schools have already used gadgets as tools in order to facilitate and enhance the process of teaching and learning. Muhanna and Abu-Al-Sha'r (2009) mentioned that tools like PDA, laptop, internet, and smartphone can be used as mobile learning. In line with the statement above, the term gadget refers to electronic portable devices such as mobile phone, mp3 player, console game or any other wireless devices (Ganganahalli, Tondare, & Durgawale, 2014).

Types of gadgets. There are a lot of types of gadget that are recently used by the students. The most popular tools are smartphone, computer, laptop, tablet, mp3 player, and digital camera. Each type of gadgets certainly has the similarities and diversities in their characteristics.

Smartphone. Recently, smartphone or also known as mobile phone become the most popular gadgets. Subsequently, there were developments and evolutions of the basic mobile phone, which produced a smarter phone and this

idea is the reason why people start calling it as a ‘smartphone’ (Pitichat, 2013). Therefore, in this case, a smartphone is more advanced than a mobile phone. According to Litchfield (2010), a smartphone is a modern mobile phone that provides more advanced computing ability and connectivity than the basic mobile phone. A smartphone has an operating system to run the software and to download many applications. Typically, smartphone features will be more useful if it is connected to the internet. Becher, Freiling, Hoffmann, Holz, Uellenbeck, and Wolf (2011) defined a smartphone as a device which contains smart cards as a connection mobile network. In line with Becher et al, Litchfield (2010) stated that a smartphone is an open operating system that runs permanently connected to the internet.

Laptop. Laptop has become one of the most favorite tools in higher education. Laptop is considered as the standard tool used by most universities’ students (Awwad, Ayesh, & Awwad, 2013). Basically, laptop has the same functions as a computer. In form, laptop is even smaller than a computer and a laptop can be folded and easy to carry out. According to Naik (2016), a laptop is a portable computer which runs on battery and has a good performance as good as a personal computer.

Personal computer. A personal computer or also known as desktop computer has been created before the existence of the laptop. Physically, personal computer is bigger than a laptop, but, the main functions are the same. Based on Barata and Cain (1999), “computer is a programmable machine that can receive and store information and change or process it” (p. 5). In addition, Rouse (2011) defined that personal computer is a microcomputer built for one

person. Therefore, personal computer is a microcomputer that runs a programmable machine to change or process information, and develop for one person.

Tablet. One of the familiar gadgets that are widely used by the students as a learning tool is a tablet. A tablet almost has the same functions as a smartphone and laptop. But, tablet is bigger than a smartphone and simpler than a laptop. Tablet can be defined as a type of laptop or notebook computer that includes an LCD screen on which the user can operate using a pen (Weitz, Wachsmuth, & Mirliss, 2006). However, as the developments of technology, today, gadgets are more likely to use touchscreen rather than a pen. Parsons and Oja (as cited in Huber, 2012) defined that “tablet as a portable computing device featuring a touch-sensitive screen that can be used as a writing or drawing pad” (p. 8). Those statements above are also supported by Chen (2013), who concluded that a tablet has a large-size touch screen in order to make the users more convenient in operating the applications.

Mp3 player. MP3 or MPEG-1 audio layer 3 is a format of standard or very small file in compressing a sound (Rouse, 2006). To operate the MP3 format, it needs an assistant tool, namely MP3 player. Usually, this tool is used to play audios and can be used for recorder tool.

Digital camera. Digital camera or also known as digicam basically has the same functions as the analog camera. Nowadays, the use of digital camera is more popular than analog camera, since the resolution and quality have been

steadily improving every year (Swaminathan, Wu, & Ray Liu, 2006). In a digital camera, the files can be stored and displayed on a computer or on a screen.

Advantages of gadgets in education. Gadgets are designed to facilitate human life activities, including in the world of education. For educational purposes, gadgets have both positive and negative sides in the application. There are four advantages to the use of gadgets in the world of education, especially in English language learning.

Increase students' enthusiasm. The presence of gadgets in the world of education gives a lot of benefits for the students. Nowadays, commonly students use their gadgets as tools in order to facilitate their needs in the process of learning especially in English language learning and also keep motivate their willingness to learn something through their gadgets. For example, the use a mobile phone in education increase students' enthusiasm to learn, by taking an initiative in using their device as a learning tool (Jumoke, A., & Blessing, 2015). Meanwhile, Godwin-Jones (2011) stated that as long as gadgets are audio-video and computing devices, gadgets are more popular to explore students use in language learning, since gadgets are tools that frequently used by students in order to find the information. From those statements above, concluded that the presence of gadgets might increase students' enthusiasm in learning English; because of the popularity of gadgets give initiative for students to increase their learning enthusiasm.

Provide alternative ways. Priyadharshini & Krithika (2016) stated that the benefit of electronic gadgets is provided the students to think differently out

of their books and make the students practice their learning skills. Gadgets can also give an assist to micro-learning, a modern and effective way of learning (Habitzel, Mark, Stehno & Prock, 2006). Gadgets have a powerful and effective way for students to think beyond their books and help to build their creativity. By using gadgets, students can involve their learning styles with audio, video, digital camera, and security device.

Provide rich information. Within the development of technology today, gadgets are almost complete tools that provide comprehensive and latest information. Therefore, those things become one of the reasons why students use gadgets as tools in English language learning. As university students need wide and extensive information, using cell phone unconsciously provide critical thinking and pleased their needs (Muhanna & Abu-Al-Sha'r, 2009). In addition, Al-Fahad (2009) stated that mobile technologies such as mobile phones allow students to enrich and expand students' learning circle by serving latest information. From those statements above, it can be concluded that gadgets are provided rich, extensive, and update information for students to facilitate their needs in English language learning. In addition, by using the internet, students can have access to the material sources more extensive than the material that students get in a library in their school and can get advantages of up to date information that is not contained in their textbooks, and perhaps from unfamiliar teacher resources (Ringstaff & Kelley, 2002).

Easy to access. The presence of gadgets brings benefits for the users, especially for students. One of the benefits of gadgets as tools is the accessibility. According to Al-Fahad (2009), the wireless networks provide the flexibility of

access materials in any place; therefore, students can save their time, effort, and even money. In line with Al-Fahad statement, Subramaniam and Harun (2013), proposed that smartphone increases the flexibility to access resources in English oral communication class and also impacts to students' presentation performance. Therefore, gadgets are provided easy accessibility for students. Students can directly access the information through their gadgets, wherever and whenever they are.

Disadvantages of gadgets in education. Although the use of gadgets is good for the educational purpose, sometimes it can be harmful if students applied their gadgets in inappropriate ways. There are three disadvantages on the use of gadgets in the world of education, especially in English language learning.

Source of distraction. Since gadgets provide a lot of applications and have a lot of features, these things can be a source of distraction for the students. Mobile phone gives space for students to change students' roles with other roles thus disrupting and distracting students' academic activities (Jumoke, A., & Blessing, 2015). Also, research by Rabi, Muhammed, Umaru, and Ahmed (2016) added that the use of mobile phone can impact students' time, during and after school hours, by doing free night calls, chatting, instant messaging, social networking, and exam malpractices, which is obviously influencing their academic performance. In line with the statement above, Zavodny (2006) stated that technology decreases adolescents amount of sleep and increase difficulties attention that made them lack of academic achievements. In addition, technology can affect students' homework times and allow students to access negative contents that influence their behaviors (Strasburger, Jordan, & Donnerstein,

2010). Therefore, from those statements above, it can be concluded that gadgets can be the source of distraction for students, since gadgets provide many features and applications that can interrupt students' learning time, and at the end, it might give bad impact for their academic achievements.

Plagiarism issue. The use of technology in education also impact on the intellectual property issue. In this case, the term of technology refers to gadgets. Since the presence of gadgets provides students accessibility to access unlimited information through the internet and perhaps lead students to do something instant, such as do plagiarism. By providing easy accessibility, students will easily access the data and might lead students to do plagiarism (Sudibyo, 2011). Shrivastava (2017) added that “with the use of gadgets, plagiarism is growing epidemic in approach and access” (p. 3). Since gadgets provided faster and accurate material for students, sometimes students are making illegal use which is plagiarism; that can decrease their enthusiasm and effort for stating their original thought and idea. Therefore, in using technology; students should be taught about the intellectual property; because if it is not, unconsciously students will prefer the easiest way to do which is plagiarism in the process of learning.

Review of Related Studies

In this part, the researcher discusses the review of related studies that have been done by previous researchers. The researcher found three studies that are related to the students' perception on the use of gadgets as tools in learning English.

Muhanna and Abu-Al-Sha'r in (2009) investigated Jordanian university graduate and undergraduate students' attitudes towards the learning environment where cell phones are used as learning tools in classroom. The population of this study was university students at the faculty of educational sciences at Al-al-Bayt University. The participants consisted of two groups. The first group is addressed for 30 undergraduate students (12 male and 18 female). The second group is addressed for 20 graduates (7 male and 13 female). This study used quantitative method as a research design and questionnaires as a data collection method. In conclusion, this study shows that the use of mobile phone in the university learning is highly appreciated by both graduate and undergraduate university students. Moreover, this finding indicates that male students are more interested in using a cell phone in a classroom environment.

Chen (2013) investigated how students use tablet computers to learn English in informal settings outside of class and how to foster more effective usage of the tablet for independent language learning. The participants of this study, consisted of 10 freshmen English major (four men and six women) from the author's university. This study used qualitative method and gives the questionnaires, interview guideline, observation sheet, test, and field note as the data collection method. This study found that simply providing students with mobile device did not get an effective usage in language learning. Students need to be taught not only about the technology but also about the way they use a technology. A few students faced a lack of knowledge and experience to solve problems in using new technology. However, this study also found that student's attitudes towards the usability, effectiveness, and satisfaction of tablet computer

were quite positive as a tool for mobile-assisted language learning. In conclusion, this study found that students are able to use tablet computers in interactive and collaborative ways to learn English.

Liu (2014) investigated Chinese college students' attitudes towards, and experience of, computer-assisted autonomous learning. The participants of this study were 160 students from three different higher education in China. This study used qualitative and quantitative method as a research design and used questionnaire and interviews to collect the data. Also, statistical analysis, content analysis, and interpretative methods were employed to analyze the data. The findings found that more than 60% students did not own personal computers, almost 90% participants have already used a computer and access the internet in different places. However, there are 12.5% students who cannot operate computer frequently. Then, the findings indicate that most of the students spent their long time using a computer not for studying English but prefer to play games and chatting during their leisure times. Although they were more likely used computers, not for academic purposes, but, other findings found that nearly 80% students believed that the presence of computers is more effective to learn English; in example, students positively believed that writing email can enhance their English writing proficiency and by chatting over the internet will improve their speaking skill.

In conclusion, despite some differences between the methods, strategies that are used, and the outcomes of those studies, all of them are helpful to be the foundations and references to conduct this study that also related with gadgets. Muhanna and Abu-Al-Sha'r in (2009) investigated Jordanian university graduate

and undergraduate students' attitudes towards the learning environment where cell phones are used as learning tools in the classroom. One of the interesting findings from Muhanna's and Abu-Al-Sha'r's research was male students are more interested in using a cell phone in a classroom environment. Meanwhile, Chen (2013) showed that the students cannot optimize the use of tablet computer in the informal learning situation. In the other side, from Chen's research, the researcher got an idea about the participants that will be used in this study, which is the researcher will choose the number of participants by gender. In addition, Liu (2014) proved that majority of the students are already familiar and able to operate a computer. From the Liu's finding, it tells that this study can be a reference for the researcher. Eventhough, the research took three previous study as the research's guideline, yet, this study was conducted using difference methods such as the number of the participants, the gender of the participants, the way the data were took and analysed.

Conceptual Framework

This study aims to investigate the students' perception on the use of gadgets as tools in learning English. It focuses on the advantages and disadvantages of the use of gadgets as tools in learning English and what kind of gadgets that are always used by the EED of UMY.

