CHAPTER II

THEORETICAL BACKGROUND

2.1 Teaching and Learning English with Various Tools and Methods, and Technology

The writer defines that teaching and learning English becomes easier and exciting if both teachers and learners are able to apply and use appropriate tools such as fun methods, new materials, extraordinary equipments and objects, and also supported by motivation and high quality learning environment. In addition, students can create their own attractive and interactive learning process to achieve their goals in learning effectively.

According to Csabay (2006, p. 24), educators believe motivation is necessary for teaching language. One of potent methods to arouse students' interest can be obtained by having something extraordinary and new into the class.

Scott and Ytreberg (1990) write in their book, *Teaching English to Children*, "Lessons will be much easier and much more exciting for the children if you make full use of things and objects as well as language to get your meaning across" (p. 108).

Ashcroft (1995, p. 8) say that the quality of the teaching the student can get depends on the quality of the learning environment, such as equipment and library provision.

Mitchell and Myles (1998, p. 89) discuss learning strategies in their book, *Second language Learning Theories*. According to them, learning strategies are learners' approaches to make their own effective language learning.

Erben, Ban & Castaneda (2009) write in their book, *Teaching English Language Learners through Technology*, "The more a teacher employs instructional technology in the classroom, the less teacher-centered and the more student-centered a classroom will become" (p. 81). Based on this, the writer finds that the more technologies used in classrooms, the fewer roles of teachers as briberies, and the more roles of teachers as facilitators. In addition, the more students do self-study, the more student-centered classrooms will be obtained, and the more students' interests in learning.

2.2 Internet and Online

Dictionary of Computer and Internet Terms (2009) defines, "Internet is a cooperative message-forwarding system linking computer networks all over the world (p. 256), while online is connected to a computer or available through a computer" (p. 341). Internet is a final technology people can use to connect with others. It becomes a media to share information as the fastest one compared to telephones. Internet also used as a media where people can find lots of information: starting from life-tips, global news and education information, also they can learn, sell, buy and do many things two times or even more, faster than when it is done manually. While online is a computer and internet term used to describe a process when people use computers and internet connection. Communication will be easier for people who live in the

distance by doing online. When people do online, they can share audio and visual files and even they can meet face-to-face like in a real by using additional tools.

2.2.1 Internet as a Teaching and Learning Tool

Singhal (1997, *Internet as a Teaching and Learning Tool)* states, "The internet can also be used to retrieve and access information. The internet is a valuable resource to both language teachers and learners. The internet can also be used to acquire information from language resources for a variety of purposes." As a conclusion, the internet is very useful for many sectors in human life including education. The internet can be used as a tool in teaching and learning process. Both teachers and students can use the internet for various activities such as finding information and presenting their works.

Forsyth (1998) says, "The use of the internet as a tool in face - to - face teaching turns the delivery into a more flexible educational and training setting and this becomes as alternative mode of delivery" (p. 14). Besides for finding information and presenting their works, internet can also be used for practicing their abilities and skills in English by communicating with native speakers and accessing culture information from many countries. Moreover internet can support teachers and students in having flexible teaching and learning process.

2.3 Online Learning

Carliner (1999) in Anderson & Elloumi (2004, p. 4) defines online learning as educational material that is presented on a computer. Khan (1997) in Anderson & Elloumi (2004) writes, "Online instruction as an innovative approach for delivering

instruction to a remote audience, using the Web as the medium. However, online learning involves more than just the presentation and delivery of the materials using the Web: the learner and the learning process should be the focus of online learning" (p. 4).

Anderson & Elloumi (2004, p. 5) say, "Online learning is the use of the internet to access learning materials; to interact with the content, instructor, and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience". They add, in asynchronous online learning, it is possible to access internet to get the materials at anytime, while in synchronous online learning, it allows direct interaction between students and the instructor through internet. From these definitions, the writer defines online learning as a process of teaching and learning anytime and anywhere by using computer and internet connection as the mediums to create the interaction between students and instructors to access materials.

2.3.1 Its Advantages

Some studies find that technologies give many advantages to both teachers and learners. Pérez-Prado and Thirunarayanan (2002), Cooper (2001), Smith, Ferguson and Caris (2001) in Wang (2005) point out that students benefited from the technology-enhanced collaborative learning methods and interactive learning process (p. 2).

The technologies support and make them easy in holding a process of teaching and learning. Cole (2000) in Anderson & Elloumi (2004, p. 4) says that online learning allows students in having flexible time for accessing materials, from anywhere and usually at anytime.

Anderson & Elloumi (2004) write, "For learners, online learning knows no time zones, and location and distance are not an issue. Learners can use the internet to access up-to-date and relevant learning materials, and can communicate with experts in the field in which they are studying. For the instructor, tutoring can be done at anytime and from anywhere. Online materials can be updated, and learners are able to see the changes at once" (p. 5). The writer defines some advantages of online learning from these theories. Online learning is one of methods in teaching and learning process in which teachers and students do not have to attend the class or meet face-to-face. The process of teaching and learning is not limited by place and time because they can interact through internet at anytime and anywhere.

2.3.2 Distance Education or Distance Learning

According to Keegan (1995, p. 7), teaching at a distance possibly occurred for the first time in history by separating the teacher and the learner(s) and using technology to establish communication between them. Distance education makes students free travelling to a fixed place, at a fixed time, to meet a fixed person, in order to be trained or educated.

Keegan also write, "Teaching at a distance is characterised by the separation of teacher and learner and of the learner from the learning group, with the interpersonal face-to-face communication of conventional education being replaced

by an apersonal mode of communication mediated by technology" (p. 12). The writer defines distance education or distance learning as a process of teaching and learning between teacher and student by using technology, separated in place and time.

2.4 The *t* Test for Independent Samples and Degrees of Freedom

Ary, Jacobs, Razavieh & Sorensen (2006) in *Introduction to Research in Education*, explain, "The *t* test for independent samples is a straightforward ratio that divides the observed difference between the means by the difference expected through chance alone. In formula form,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{S_{\overline{x}_1 - \overline{x}_2}}$$

$\overline{X}_1 = \frac{\sum X_1}{n_1}$ = sum of scores in group 1 divides number of cases in group 1

$\overline{X}_2 = \frac{\sum X_2}{n_2}$ = sum of scores in group 2 divides number of cases in group 2

This expected value (the error term) is derived from the variance within each of the two groups and the number of subjects in each of the two groups. It is called the standard error of the difference between two independent means $(S_{\overline{x}_1 - \overline{x}_2})$. The standard error of the difference between two means is sometimes referred to as the "error term for the independent *t* test". Its definition formula is

$$S_{\overline{x}_1 - \overline{x}_2} = \sqrt{\frac{\sum x_1^2 - \sum x_2^2}{n_1 + n_2 - 2}\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}$$

$S_{\overline{x}_1 - \overline{x}_2}$ = standard error of the difference between two means

n_1 = number of cases in group 1

n_2 = number of cases in group 2

$\sum x_1^2$ = sum of the squared deviation scores in group 1

$\sum x_2^2$ = sum of the squared deviation scores in group 2

In formula form,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\frac{\sum X_1^2 - \frac{(\sum X_1)^2}{n_1} + \sum X_2^2 - \frac{(\sum X_2)^2}{n_2}}{n_1 + n_2 - 2}(\frac{1}{n_1} + \frac{1}{n_2})}}$$

While the number of degrees of freedom (df) is the number of observations free to vary around a constant parameter. The degree of freedom for the *t* test for independent means is $n_1 + n_2$ -2" (pp. 189-192).