## **Chapter Two**

### **Literature Review**

In this chapter, the researcher puts some theories and information of hearing-impaired student. There are several theories and studies mentioned in this chapter to strengthen one and another. Teaching vocabulary strategies are also mentioned in this chapter. In the last part of this chapter, the researcher establishes some related studies and also theoretical framework.

## **Hearing-impaired Students**

This part is going to discuss three topics. First of all, the researcher discusses the definition of hearing-impaired students. It is description of the definition, characteristics, and classification of hearing-impaired related to the expert point. Secondly, there is explanation of the hearing-impaired students' language learning process which consists of their skills which are listening, speaking, reading and writing. Furthermore, the researcher also discusses the stage of hearing-impaired students' language learning.

**Definition of hearing-impaired students.** Students who lose their hearing are described as hearing-impaired. Their physical appearance is just like the other people. They can see clearly and their body movement is perfect, but they cannot hear and speak. Sometimes, deafness is a kind of physical disability which happens to a child since he was born (Nodoushan, 2008). Nodoushan also said that pre-lingual deafness is a child who is deaf since he was born and happens before the child gets opportunity to acquire language. Birinci (2014) said that "the hearing-impaired students are who have any chronic hearing loss outside of

normal limit (i.e., mild or greater)" (p. 20). Gayamanti (2004) defined that hard of hearing and loss hearing happen because of damage and dysfunction part of ear or all of hearing system. In conclusion, hearing-impaired can be defined as a condition in which a person suffers hard of hearing and loss hearing which results in obstruction in development of students' skill, so they need guidance and special education.

Birinci (2014) mentioned three types of hearing-impaired depend on factors such as place, time, and cause of the loss, as follows:

*Conductive hearing losses*. Conductive hearing loss is caused by diseases or obstructions in the outer or middle ear (the pathways for sound to reach the inner ear). Students with conductive hearing losses are able to use hearing aid well or can be helped medically, such as therapy and hearing aid.

*Sensorineural hearing loss (SNHL).* Sensorineural hearing loss is result from damage to the delicate sensory hair cells of the inner ear or the nerves that supply it (Birinci, 2014). Thus, the students with sensory neural hearing losses may perceive distorted sounds, sometimes making the successful use of a hearing aid is impossible.

*Mixed hearing loss.* Birinci (2014) also mentioned that mixed hearing loss, which refers to a "combination of conductive and sensor neural loss and means that a problem occurs in both the outer or middle and the inner ear" (p.27). Thus, the students with mixed hearing loss are able to communicate using finger spelling as visual aid. The last characteristic is a central hearing loss results from

damage or impairment to the nerves or cochlea of the central nervous system, either in the pathways to the brain or in the brain itself.

Hyjánková (2010) also classified this case into several categories, which are:

*Mild hearing-impaired*. A mild-hearing-impaired person can understand loud speech from at least 4 meters. If the children's hearing loss is greater than 26-40 decibels (dB), they usually find difficulty to hear sounds or speech under unfavourable conditions (i.e. noise, rain, theatre)

*Moderate hearing-impaired.* The children who have hearing loss from 41 to 55 decibels (dB) are categorized into moderate hearing-impaired. They can perceive loud speech from the distance of 2 to 4 meters. There are no significant difficulties with speaking "face to face". Nevertheless, it is necessary to use hearing aids at school. Moderate hearing-impaired students have capacity to hear within 2 meters. The conversation with these students seems to be very problematic, although they use efficient hearing aids. There is no doubt that these students need a professional approach at schools for the hearing-impaired.

*The Hard of Hearing (Severe)*. Children who are categorized into hard of hearing (severe) have hearing loss from 71 to 90 decibels (dB). They need special education. They can hear even very loud sounds and speak only if they are close with a person who speaks. For that reason, they cannot manage the lessons without hearing aids.

*Profound Hearing Loss (Deafness)*. The children whose hearing loss is greater than 90 decibels (dB) are considered as deaf. It prevents students from

hearing despite using hearing aids. They are not able to perceive spoken language by ears. They can feel a vibration of loud sounds only. Their learning is primarily associated with visual perception. As they cannot hear even their own voice, it is obviously difficult to understand their speech.

The hearing-impaired students' language learning process. There are process and stages of hearing-impaired students' language learning. The hearingimpaired students learn not only the national language, but they also learn international language. According to El-Zraigat and Smadi (2012), hearing lost students need support, because in learning process they find the problem or difficulties in understanding the materials. Thus, the hearing lost students need support and assistance in learning. Children who are hard of hearing will find it more difficult than children who have normal hearing to learn vocabulary, grammar, word order, idiomatic expressions, and other aspects (El-Zraigat & Smadi, 2012). Every student has different style and strategy in learning.

Moreover, Soedarso (2002) mentioned that language learning process is divided into two aspects, which are receptive and productive. Receptive aspect is the language that students get and can enrich the student's knowledge, such as listening and reading. It means that reading activity helps students to get the information or data to explore their understanding, for example reading some books to understand the context and foster the ideas. Sometimes, the hearingimpaired students read an academic book and story. Soedarso (2002) added that in doing reading, both eye and brain work together. Moreover, Trezek, Paul, & Wang, 2010 stated that reading is an effective activity to improve vocabulary to learn new words. Sometimes, students do this activity, but reading is not only reading the printed material but also identifying the lip movement and face expression, because (Meadow & Meyberry, 2001) printed material is not used interactively.

In reading activity, students can get more information and enrich their experience about new words. In reading activity, students also apply the reading comprehension. It can help students in learning process. Lip reading begins even from the birth and it replaces their first language input on language acquisition. Paul (2009) stated that lip reading refers to the process of understanding a spoken message through observation of the speakers' face when they do the conversation with other people. This stage includes two steps. The first step is specification of the topic in reading, in order to make students easy to understand the topic. Schirmer and McGough (2003) argued that providing extensive information before reading is considerably more valuable than providing brief information. The second step is discussing the topic that they read to make it easy to get the depth information. Then, elaborative is a meaningful and creative discussion about reading topic before doing the reading task (Paul, 2003). The students can improve their critical thinking or creativity, because they do not only read but also share their opinion to others.

In listening, they can learn how to pronounce the words correctly. The listening is not helpful for all the hearing-impaired, because part of hearingimpaired students who have pre-lingual deafness "does not have the opportunity to hear its parents and because of this lack of auditory input and interaction" (Birinci, 2014, p. 34). Listening is also not the input. Such students acquire even their native tongue by using different methods such as finger spelling, sign language, and gestures. Students acquire their native tongue through visual modality (Fromkin, Rodman, & Hyams, 2011). Finger spelling helps students in learning the language. The study of Padden and Ramsey (2000) showed that "hearing-impaired used finger spelling strategies to record words in print" (p. 3). For example, they pay attention to their finger and the facial expression when communicate with others.

Unlike normal-hearing students, hearing-impaired students do not have good auditory input. Fromkin, Rodman, and Hyams (2011) also stated that "hearing-impaired students of hearing parents who are not exposed to sign language from birth suffer a great handicap in acquiring language" (p. 34). In language development, students learn to use a spoken language or before they encounter a conventional sign language. Fromkin, et.al. (2011) argued that language acquisition is so strong in humans that these hearing students begin to develop their own manual gestures to express their thought and desires. Hence, half of hearing-impaired students are visual learners

Moreover, the productive aspects consist of two skills, which are speaking and writing. Speaking is an activity in which the hearing-impaired students learn how to express or share their idea, but it is not used by the hearing-impaired students as the strategies to learn. Because half of hearing-impaired is bad on auditory, their speaking ability is not well. Then, they are visual learners using finger spelling and sign language which ease them to communicate or share the information. Reitsma (2009) argued that hearing-impaired students can rely on finger spelling that is useful for students to get depth information. By doing finger spelling activity, the students can get information, produce the language well, and get new vocabulary although they cannot hear the spelling. For example, by playing game, students can use attractive and creative simple way. There are three steps in doing the game. First, reading the topic. Second, teachers ask students to play the game and put on the flashcards. Third, exercise by doing the game, like guessing the card by their gesture and body movement. This game is useful to help students in learning the new vocabulary or words. Mole, McColl, and Vale (2005) said that students also memorize what they see easily.

Therefore, language learning process by doing the writing skills is also important. The hearing-impaired students learn language using writing activity. According to Birinci (2014), students remember better when they have written down the vocabulary, because they are visual linguistic learners like learning through reading and writing task. It means that the process in writing is useful for students to know the words and improve their understanding. Hasselbring & Glaser (2000) said that process is more important than result. For example, writing the story or information that they get from reading a book or just write what students want. There are three steps which can be used to express the knowledge they have. First, they write down the idea. In writing activity, students can express their ideas and words reflecting their thinking (Hasselbring & Glaser, 2000), but not for vocabulary, besides that grammar is useful too. Second, they list the new words. Third, they share with the other hearing-impaired students. Therefore, they make a plan what will they write, like a topic. Then, they arrange the setting, plot, and also the story. Besides, in this process students are starting to write the story. After that, students do the editing. Editing is done to check and correct the mistake. The last, they can publish it. In this activity they can learn how to make not only a good sentence or story but they also learn new words. . Finding the correctly entry of the words (Nation, 2001) by opening or checking the dictionary.

The writer concludes this part in a short line. The process of hearingimpaired students has different style and it is related to the level. They use several skills, such as speaking, reading, sign language and writing. Those activities are same with the other students (normal), but the way and process are different.

# Vocabulary

This part is going to show the definition of vocabulary. The vocabulary is basic thing in learning English which plays a crucial role in learning process. According to Faraj (2015), "vocabulary is basic to English language because without adequate vocabulary items learners cannot appreciate others expressions and ideas or express their own ideas" (p. 2). Alqahtani (2015) said that the vocabulary is part of English and it is used to communicate effectively, words in speaking (expressive vocabulary) and words in listening (receptive vocabulary). Moreover, Alqahtani stated that the vocabulary can be defined, roughly, as the words we teach in the foreign language. Alqahtani added "a new item of vocabulary may be more than just a single word: for example, post office, and mother-in-law, which are made up of two or three words but express a single idea" (p. 5). By viewing from those experts, it can be concluded that vocabulary is a small part of language which is a basic one.

The types of vocabulary. In language learning process, the vocabulary defined into two different parts, the first one is receptive vocabulary and the second one is productive vocabulary (Algahtani, 2015 & Faraj, 2015). Every part consists of two skills. The first one is productive, which is result of the students learn, for example they produce the new words in the speaking skills and writing skills. The second one is the receptive vocabulary, which is the process of getting information, consists of listening skills and reading skills.

*Receptive vocabulary.* The first type of vocabulary is receptive vocabulary. The receptive vocabulary consists of reading and listening. Reading is called as receptive, because in doing the reading students can get many new vocabularies. Then, listening also gives many advantages for improving the language and enriching the language knowledge. This is related to Faraj (2015) who argued that "receptive vocabulary is the capability to comprehend a word when the learner hear or see" (p. 3). Receptive vocabularies are words that learners recognize and understand when they use contextually, but they cannot produce it. This situation occurs in reading and listening.

*Productive vocabulary.* The second type of vocabulary is productive vocabulary. The productive vocabulary is the result or students' achievement in learning process. This type consists of speaking and writing. Hence, students can express their understanding in this activity. According to Faraj (2015), productive knowledge means the knowledge to produce a word in their writing or speaking.

Productive vocabularies are the words that the learners understand and they can produce correctly and use constructively in speaking and writing. It involves what is needed for receptive vocabulary plus the ability to speak or write at the appropriate time. Therefore, productive vocabulary can be addressed as an active process, because the learners can produce the words to express their thoughts to others.

In conclusion, there are two types of vocabulary. The first one is the receptive vocabulary. It is the vocabulary in which knowledge as an input, such as listening and reading. Second, the productive vocabulary is the output of vocabulary knowledge like speaking and writing.

## **Teaching Strategies**

Here, the researcher gives definitions of teaching strategies based on some experts. First, teaching is instruction of teacher for students in giving information when doing teaching and learning process. Brown (2000) defined that "teaching is showing or helping someone to learn how to do something, giving instructions, guiding in the study of something, providing with knowledge, causing to know or understand" (p. 7). Brown (2000) said that teaching is guiding and facilitating learning, enabling the learners to learn, and setting the condition for learning the process.

Then, strategy is a way to help teacher in delivering the materials for students. According to Oxford Dictionary (2008) strategy is a plan intended to achieve a particular purpose. It means that strategy is the way to get the teaching plan successful. The strategy in teaching process is used to help teacher as a facilitator in classroom. Teaching strategy is a way of presenting instructional materials or conducting instructional activities (Banks, 1991). In addition, Armstrong (2013) stated that teaching strategy refers to method used to help students learning the desire course contents and be able to develop achievable goals in the future and also an effort to gain success.

After recognizing the definition of teaching and strategy, both of them can help us to define what teaching strategy is. Teaching strategies are used to help to achieve some strategies' goals and effort the success in teaching and learning process. The teaching strategy is used by the teacher to help them in managing learning in order to achieve the goal.

Kinds of strategies to teach English vocabulary for hearing impaired students. Teaching and learning process should be interesting and meaningful for students, so teacher's participations are important for student's achievement. The teacher's strategy is a chance, but strategy helps teachers in teaching process and help students understanding the materials in learning process. In teaching and learning process there are many techniques, methods or strategies. These can make teachers easy to teach hearing students and also for hearing-impaired students. Teacher can do many things to make students understand the materials. Students get bored if the learning process is monotonous, so a strategy is one trick to make students interested. Related to students, (Herrell & Jordan, 2004) strategy is purposed for encouraging students to learning process.

Based on some previous research, there are several visual materials that can be used to teach vocabulary. According to Birinci (2014), Wang and Paul

(2010), Trezek and Wang (2010), the visual materials are flashcards, drawings, picture stories, crossword puzzles, films, and dictionary. These visual aids demonstrations can help students to memorize and enrich the vocabulary in students' minds. It is in line with Sudjana and Rival (2002) who stated that "learning media can improve the learning process. Learning will be more attractive for students so that they can lead to motivation to learn" (p. 2). Then, the strategies can be used by the teacher in teaching English vocabulary for hearing-impaired students are mentioned as follows:

*Teaching vocabulary through flashcard.* One of the strategies to teach vocabulary for hearing-impaired students is flashcard. Flashcard helps students to understand the materials and remember the new vocabulary. Related to the previous study, flashcard can help and support students in learning language process (Grillo & Dieker, 2013). Based on Brown (2000), the advantages of using flashcard are students will not be bored in learning process; it takes almost anywhere; and it can be studied at any times when the students have free time, because flashcard is colourful and full of picture. It is interesting for those who learn new vocabulary.

The teachers can implement the flashcard strategies. The use of flashcard is combined with games. The game is memory tester to find where the words that are written on the flashcard are. First, flashcard are closed and put on a circle. Then, children will receive the request of memorizing the cards in one minute. Students work in groups and work in two minutes to find out the word in flashcard and close it again. The last, students will have to write the words that they remember (Anuthama, 2010). These ways can help students in memorizing what they see in a game.

*Teaching vocabulary with drawing.* Drawing is one strategy useable for teaching vocabulary to students hearing loss. Drawing is interesting, because students can image the difficult words by watching the picture. It can be useful for students in learning process, because they can describe the thing that they want to explain. Drawing is fun and can make students creative. It can make students focus on the teacher's explanation. Drawing enables students to express themselves and represent themselves in a culturally acceptable manner (Matthews, 2003).

Marzano (2005) mentioned steps can be implemented by teacher, as follows: the first step is dividing the class into team which consists of two or three students in each group. Then, the teacher explains that each team's goal is to be the first one in a round to correctly identify vocabulary terms. The next step is choosing one student on each team as the artist. This student is the only one able to see the list of words written on the board or overhead. Then, students identify the clues of word with limited time in one round. Continues to explain the clues of word in illustrate and draws a rough sketch. At the end, a clue of word is identified by the group, the artist continues to the next word. Then, the group explain clues of word after identifying all of the terms team members raise their hands indicating the end of the first round. Rotate the artist role around the team until all students have participated as an artist.

*Teaching vocabulary through picture storybook.* Another strategy to teach vocabulary is by using picture storybook. Birinci (2014) stated that the visual aids, especially picture storybook is one of effective materials for teaching vocabulary. Students can feel enjoyed looking at the story full of pictures. It means that students can pay attention to teacher, feel curious, and want to know what the next story is. Besides, they can identify the meaning of the words that they do not know before. Through picture stories, students also can memorize what they see and then listen. Espouse that the use of storybooks in teaching is an extension of this tradition, and their use in EFL classrooms can have powerful consequences (Mixon & Temu, 2006).

There are several implementations of picture stories by the teacher in teaching vocabulary. Malu (2010) mentioned that there are five steps in using picture storybook with reading activity. The step is started by the teacher dividing the class into groups of 25–30 students in each group. After selecting one member from each group to be group leader, teachers train the leaders to read the book. Then, each leader, one at a time, reads the book to his or her respective small group. Or teachers can have the leaders re-create the book, word for word, page-by-page, printing and sketching the book and then reading their re-created book to the small group while they wait for the "one book" to circulate to their group. It helps students to increase the vocabulary acquisition and enrich new vocabulary.

*Teaching vocabulary through crossword puzzles.* Teacher can use the crossword puzzles to teach vocabulary. It means that students can participate in learning process. Students also can feel enthusiastic by arranging the puzzles.

Arranging the puzzle gives the opportunity for students to participate, practice, and repeat the sentence pattern and the vocabulary. According to Njoroge, Ndung'u, and Gathigia (2013), crossword puzzles, among other things, enhance vocabulary building, orthography. Besides, it is also useful to test the students' knowledge of morphology, which means that puzzles are useful for students' learning.

Richardson and Raymond (1999) and Topping, Donna, and McManus (2002) mentioned the steps of implementing the puzzles activities, as follows: first, construct puzzles using graph paper and write the terms across and down then drawing boxes around each of the letters. Secondly, number the boxes at the beginning of each word in numerical order both of across and down. Third, list definitions alongside the grid according to the across words, then the down words are listed. The crossword puzzles can be adapted to teach vocabulary. The answers for the words going across and down are given and the students write the definition or clues. This can be done in pairs or a small group which enables the students to have rich conversations about the vocabulary words and definitions as they develop clues that are given by the teacher.

*Teaching vocabulary through films.* Another teaching vocabulary strategy to hearing-impaired students is by using films. Barinci (2014) mentioned that the film is a tool of teaching vocabulary by visual aids. In watching film, a student is curious about what the main idea is. Thus, the use of caption in movie film is beneficial for hearing-impaired students in learning to read and learn the language. Caption is also known as the language subtitles, which is beneficial for

watching videos. Other studies also demonstrate cumulative benefits from watching videos with captions, for example, cumulative growth in vocabulary both for hearing-impaired students (Gernsbacher, 2015).

Subtitles in watching films can be implemented to teach vocabulary. The teacher must circulate around the class to solve possible doubt or problem while subtitling activities take place. After that, the students do the oral discussion with the teacher (Zanon, 2006), next students selected randomly based on the teacher's decision. Lastly, students can participate to do subtitling the scenes that they get. This activity improves the students' understanding, concentration and also acquisition of new vocabulary. The other studies mention the implementation of strategy. The hearing-impaired students can get opportunity to choose the parts that they want. The student will be subtitling for all be in order. Perhaps the best terminology will be 'personal subtitling' as proposed by Neves (2008).

*Teaching vocabulary through dictionaries.* Another strategy the teacher can use in teaching vocabulary is using dictionaries. Trezek and Wang (2010) said that dictionaries are also used by the teacher for increasing students' vocabulary improvement. This is the implementation of strategy in increasing reading comprehension. Supported by the previous expert, dictionary is used to support reading and learning vocabulary. The dictionary is useful as their reading improves, which shows that the definitions in the dictionary are actually comprehensible (Beech, 2004). Teacher can combine the tools while reading activities, so they can get unfamiliar vocabularies and then find the meaning on dictionaries. This is supported by Chen (2011) who reported that bilingual dictionary positively affects learning and retention of unknown words encountered during a reading passage with dictionaries.

The use of dictionary can be implemented by teachers to teach vocabulary. Nation (2001) identified four distinct steps to use dictionaries which consist of receptive and productive purpose. The receptive involves analysing the context of the unknown word in some materials that the students learn, such as reading and listening. Then, finding the correct entry and continue choosing the right subentry. The last is applying the meaning to the original context in order to decide if the search was successful to find out in dictionaries. For the productive purposes, these include finding the wanted word form and then checking the constraints on the use of the word, such as writing and speaking. The last is finding out the word to differentiate about its grammar and collocations.

#### **Conceptual Framework**

The writer reviews the literature about definition of hearing-impaired students. The vocabulary consists of definition and kind of vocabulary. Furthermore, the teaching strategies consist of the definition, kind of strategies to teach English vocabulary, and implementation of the strategies. This conceptual framework is made by the writer to summarize what will be researched later.

The first, definition of hearing-impaired students according to Gamayanti (2004) and Hyjánková (2010) is those who are hard and loss-hearing, and then they got difficulties in communication and language learning process. Gayamanti (2004) stated the types of hearing-impaired in different took place and cause, such as conductive hearing losses, sensor neural hearing losses, mixed hearing loss, and

central hearing loss. Besides, the Hyjánková (2010) pointed out the different types of hearing-impaired students and the problems that are faced by the students related to their level. This part also shows the language learning process and the ways to get information.

Secondly, the researcher discusses the definition of vocabulary and the kinds of vocabulary. Faraj (2015) and Algahtani (2015) explained the definition of vocabulary and the kinds of vocabulary. Vocabulary is an important thing on language learning process. After that, they also discussed the types of vocabulary, such as receptive vocabulary (reading and listening) and productive vocabulary (writing and speaking).

Based on the literature review and the review of related study above, there are six strategies that can be used when teachers teach vocabulary and there are some stages of those strategies. According to Brown (2001), teachers can teach vocabulary trough flashcards. Then, teacher can use the drawing as a strategy to teach vocabulay (Matthews, 2003). The next is the teachers' strategies to teach vocabulary through picture storybooks (Birinci, 2014). Another strategy is the use of crossword puzzles to teach vocabulary by Njorage (2013). The next strategy is teachers' strategies to teach vocabulary using film (Birinci, 2014). The teachers can use dictionories to teach vocabulary (Trezek & Wang, 2010)

The researcher's conceptual consists of the kind of strategies to teach vocabulary used by the teacher. The implementation of those strategies is shown by figure one. It means that strategies can be used by the teacher in teaching learning process all the time.

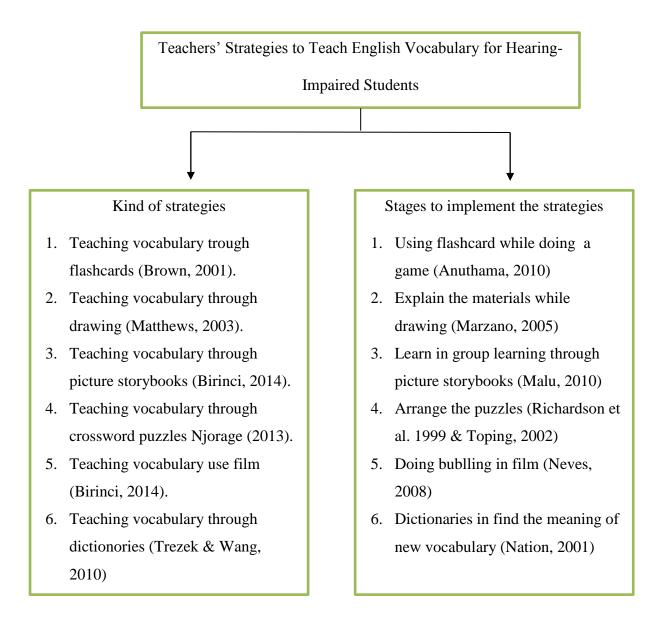


Figure 1 .Conceptual Framework