THE TEACHING AND LEARNING PROCESS OF READING COMPREHENSION TO STUDENTS WITH VISUAL IMPAIRMENT

Dika Pranadwipa Koeswiryono*, Muh. Asrori, Endang Setyaningsih English Education Study Program Sebelas Maret University Surakarta

e-mail: dika.pranadwipa@yahoo.com

Abstract: This study aims to describe (1) the teaching and learning process of reading comprehension to students with visual impairment; (2) the problem faced by the school, the teacher of English and the students in the teaching and learning process of reading comprehension and (3) the solution applied to solve those problems. The research was conducted at SMP YKAB Surakarta. YKAB itself stands for Yayasan Kesejahteraan Anak Buta, or Blind Children Prosperity Foundation. The research subject was the students of the seventh and eighth grade in academic year of 2012/2013. The data of this research are qualitative, which were collected through interview, observation and document review. Those data were analyzed using data reduction, data display as well as drawing conclusion and verification. The result of the research shows that (1) with numbers of modification, the material for the process of teaching and learning of reading comprehension to students with visual impairment was the same as that for normal sighted students; (2) there were some problems in the teaching and learning process of reading comprehension, related with the students' condition of being visually impaired (3) some of the solutions to the problems unfortunately lead to other problem(s) that required more enhanced anticipations.

Keywords: reading comprehension, students, visual impairment

English is becoming more and more important for people as it is considered as an international language. Most information in news paper, books, internet, television and letter also use this language. People use English to communicate with others from different countries. Therefore, having competence in science and technology supported by mastery of English is absolutely needed by everyone to compete in this global world.

For those reasons, the Indonesian government via the Ministry of National Education decided to take English subject as the educational programs. It is taken as the first foreign language in Indonesia and is established as an obligatory subject to learn at school, from elementary school, junior

and senior high school until university. Special needed students at special schools are included.

Special needed students, in this case, the visual impaired are those who require special treatment in obtaining education. As regulated in Government's Regulation of Republic of Indonesia No. 72 in 1991 about Special Education, those visual impaired children, as Indonesian citizen, also have a right, to obtain education at special schools. The special education for the exceptional children is aimed to develop the exceptional children's ability to socialize and improve their potentiality.

Effendi (2006:24) states melalui pendekatan dan strategi khusus dalam mendidik anak berkelainan, diharapkan anak berkelainan: 1) dapat menerima kondisinya, 2) dapat melakukan sosialisasi dengan baik, 3) mampu berjuang dengan sesuai kemampuannya 4)memiliki keterampilan yang sangat dibutuhkan dan 5) menyadari sebagai warga negara dan anggota masyarakat

One of the aspects of the language skills of English is reading. We find something to read every time at books, newspaper, television broadcast, internet, advertising, dictionary etc. According to Bormuth (1969:50, cited in Harris, 1980:479), reading comprehension ability is thought to be a set of generalized knowledge-acquisition skills which permit people to acquire and exhibit information gained as a consequence of reading printed language. This statement is supported by Heilman, Blair and Rupley (1981:242) who say "reading comprehension is a process of making sense of written ideas through meaningful interpretation and interaction with language".

Defining visual impairment, Blackhurt and Berdine (1981:216) theorize legally blind children are defined as (1) Those whose visual acuity is 20/200 or less in the better eye with the best correction, or (2) those whose field of vision is restricted to an angle subtending an area of 20 degrees or less (American Foundation for the Blind, 1961).

According to Hallahan and Kauffman (1994: 348), there are a few subtle differences in the way in which language usually develops in children who are visually impaired compared to sighted children.

For the visual impaired children, as they have lost one of their vital sensory organs, reading comprehension activity becomes a problem. In general sense, reading is what happen when people look at a text and assign meaning to the written symbol in that text (Aebersold&Field, 1977:15). This process definitely requires eyes as the only sensory organ that is capable in processing written symbol as visual input for afterward being constructed in brain. This is what causes impossibility for the visual impaired children to read written text in the way the sighted children do. Finkelstein (1989, cited in Shea & Bauer, 1996:245) postes "(...) learners with visual impairment are less capable or have less potential than those who see".

A number of instructional materials have been designed to meet the needs of visual impairment (Blackhurts & Berdine, 1981: 239). In the process of reading, those with visual impairment requires some devices, they are:

a. Braille

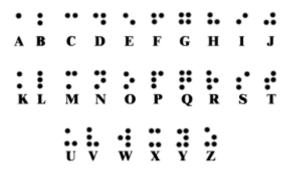


Figure – 1. Braille Alphabet

According to Vaughn, Bos and Schumm (2000:252), Braille is a system of embossed or raised dots that can be read with the tips of the fingers. The system was developed in 1829 by Louis Braille, a student of Paris School for Blind (Hallahan & Kauffman, 1994: 232). Braille is written with the aid of a Braillewriter or a slate and stylus. The slate is a simple metal frame through which Braille dots are punch in with a stylus.

b. Print Reading

Children with partial sight can read print if it is presented to them appropriately (Blackhurts & Berdine, 1981: 234). Two general methods of aiding children with visual impairment to read print are large print books and magnifying devices (Hallahan & Kauffman, 1994: 363).

In Surakarta, there is a special school which accommodates and educates those exceptional children, especially the visually impaired. The school, which is SMP YKAB (Yayasan Kesejahteraan Anak Buta) Surakarta, applies special method and provides facilities for supporting education for visual impaired children. English is one of the subjects that are taught in that school. As an aspect of English that requires eyes to perform, reading activity in this school encounters several problems related with the students' condition. Therefore particular methods and modifications were applied by the school, in order to facilitate the students to learn reading comprehension.

RESEARCH METHOD

The approach used in this research is descriptive study. It is a research concerned with condition or relationship that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing (Best, 1981:93). According to Moleong (2005:6), in descriptive study, the data which is collected are in the form of words and pictures, instead of numbers.

In this research, the data was gotten through observation, interview and review on related documents. Observation was held on the activity and behaviour of the teaching and learning process reading comprehension in the classroom. Interview to the informants, which were the teachers and the students were also conducted to obtain data about the teaching and learning process of reading comprehension, the problem occurring and solution applied to solve. Documents, such as teacher' lesson plan, some training certificate, as well as students' worksheet were also reviewed.

The technique used to check whether the validity of the data has been gotten was triangulation. According to Sukardi (2006:106), triangulation can be defined as the combination of some method or data source in a single study. In this research, the triangulation of the method was performed by clarifying the data obtained through interview with those gotten through observation and document review. Source triangulation was also performed by comparing the information obtained from the teacher with that from the students.

The first step to analyze the data was data reduction, in which the data that had been obtained through the interview, observation and the document review were selected, focused and simplified. The data were then displayed at the second step, to be finally concluded and verified. The aim is to get the data become clear and explicit, which was at the beginning still blur.

RESULT AND DISCUSSION

preparing for the reading comprehension activity, the teacher converted the printed text from book into Braille. As teaching hand book, he used "English Focus", which was scanned with special device, to be converted and printed into Braille text then. It was clarified that it is not necessarily the whole book, and only the reading passages were converted. Due to the limited time, however, the text was no more converted as frequent as before.

In order to match the English material of SMP YKAB with the regency's, beside to formulize and to prepare for the semester's final examination, he regularly participated in *Musyawarah Guru Mata Pelajaran* of Surakarta. It was a committee of approximately fifty English teachers, gathering to design and make teaching material and examination.

According to Blackhurts &Berdine (1981:249), the curriculums for programs for the visually impaired are usually the same as that for the other school programs in a particular state or region. Further, they argue that it is important to remember that many techniques and strategies for seeing children are usually effective for the visually impaired. It means that the visually impaired is able to acquire language learning with curriculum designed for seeing children.

The problem happening here is related with the school's management to arrange teaching schedule. The English teacher had no opportunity to convert a passage, as his time has been spent for teaching the two subjects, thirty six hours a week. As the result, printed passage was incapable of being converted into Braille as frequent as before.

At teaching application, in prereading activity, the English teacher initiated the activity with brief discussion about the topic of the reading text that would be presented. For instance, he would deliver a question, checking whether the students have heard or read about the text being discussed.

At whilst-reading, the teacher had the students read the text. Before, he handed the texts out to the students, the printed text for the low vision students and the Braille version for those who are totally blind. Low vision students could still utilize their eyes to obtain limited visual information. In reading comprehension activity, those students occasionally still read printed text and write with common letter, but in greater size. At another occasion, due to the lack of time to convert the printed text into Braille, the reading comprehension lesson turned into listening activity. The teacher dictated the text and had the students write it in Braille then.

The students then read the text, together with the teacher. There were several difficult words. The teacher commanded some students to get the word's meaning from dictionary installed to their cell phone, while he himself opened his own dictionary. As the time ended, the teacher requested his students to retranslate the text had been discussed, to be submitted at next session. The teacher believed that translating would helps students in comprehending text.

Since the occasion for converting the print text into Braille was very limited, the teacher decided to dictate the reading text for the students to be written in Braille then by them. Writing Braille letters by utilizing reglet and stylus is slower compared with common handwriting, so that the reading text should be dictated slowly and clearly.

However, dictating the text, actually lead to another new problem. Unless the

spelling had been known before, the students are unlikely to write the English words correctly by relying only on their hearing. The word "sea", for instance, might be confused with "see", as the pronunciation is similar. In order to solve this problem, in case the students find a difficult word to write, he or she students ask the teacher to have the words spelled out slower and clearer.

After reading the text, the English teacher had his students translate the English text into Bahasa Indonesia. This assignment of translating was often given as homework. Again, he invited the students to ask for more difficult vocabularies, as he knew that it would be difficult for them to obtain the meaning of English words from dictionary, due to their impairment.

Since vocabulary mastery is required in order to comprehend a text, the absence of vocabulary in Braille version becomes an obstacle for the blind students comprehending text. Without teacher, the students would had a hard time finding the meaning of English words. There is no dictionary printed in Braille in the present, as it would take a great space to produce one. Today, thanks to the development of technology, several dictionary softwares to be installed in particular mobile phones had been established. The software allowed cell phones to produce sounds that help the blinds to type or 'read' the text displayed on the screen, including the text of words on dictionary. For the low vision, the dictionary can be utilized with some adjustments on the letter's size.

Lewis & Norwich (2005:30) recommend ICT utilization on teaching students with visual impairment. It was not optimum, though, but the English teacher has made some efforts on this suggestion.

Dictionary software which was installed to some of the low vision student has helped them obtaining the word meaning at the reading comprehension activities. Also, the utilization of ICT was applied on the facebook account of the school, where some English materials were published.

next The problem in reading comprehension was the students' limited conceptual ability. Sighted students obtain information through their perfect senses, while the blinds can only rely on tactual and auditory information. Consequently, any object which is out of their reach would be unidentifiable. If the blindness was obtained from very early age, the situation would be worse. A reading text containing objects like moon, cloud or mountain, which are unreachable, would be relatively more difficult to be comprehended. observation, a student was found confused aeroplane with train, as he has never touched or seen aeroplane before.

According to Aebersold and Field (1997: 17-18), one of the model of reading is the top-down reading, where the process of reading begin in the mind of the reader with his or her knowledge, expectation, assumptions and question to the text and give the basic understanding of vocabulary. Due to their condition, the reader, in this case the visual impaired students have limited knowledge about their world, so that reading comprehension activity would be more difficult.

In order to solve this problem, the teacher explained that he would try, as clear as possible, to describe the objects which are considered difficult to understand. Toys of animal, fruits — either real or artificial - are introduced to the students to be explored. The English teacher occasionally invited the students to observe their environment either.

He guided his students to touch and explore particular objects, for example trees or car. The English word for the objects were than explained, to afterwards being memorized by the students. These activities were hopefully would help to improve students' conceptual ability, as well as their reading comprehension skill. This activity should be carried on since the very early year the students study at the school.

Hallahan and Kauffman (1994:349) state that persons who are blind rely much more on tactual and auditory information to learn about the world. It means object which was out of their reach would be more difficult to be observed even though it produces sound. Since the students with visual impairment tend to have more limited access to explore their environment, they would posses less knowledge, experiences and conceptual ability. This condition resulted to the blind students' lag in comprehending text.

The solution taken to anticipate this problem had been done long time before the students at the school of YKAB get their first English reading comprehension lesson at classroom. Heward&Orlansky (1988:305) state, "A teacher for the visual impaired must plan and carry out activities that will help their students gain as much information as possible through the non-visual senses and by participation in active, practical experiences".

At the evaluation step it is known that in order to obtain mark of the students, besides measuring their achievement, evaluation were performed. There were two different ways of evaluation that were performed at daily examination and at semester examination. At daily examination, the English teacher performed a modification to evaluate the students. He

commanded them to raise their fingers after the questions about the reading comprehension text dictated. The fingers represent the answer, for example, three fingers for "C", etc. The teacher then obtained students' mark based on their answer.

Problems happening at semester final or mid examination. English tests for normal students were equal with those for the visually impaired at SMP YKAB Surakarta. national or mid/final semester examination, since the questions mostly presented in the examination were related with reading comprehension, problems came about. The examination for special and regular school starts at almost the same time. As the worksheets need to be converted into Braille first, the time has already been wasted, even before the texts were already distributed to the students. If the worksheet came at seven in the morning, the converting process would just finish at ten. Moreover, the great space required for the Braille character would spend a lot of paper.

To solve this problem, again, the printed texts were dictated, due to the limited convert them into Braille. Nevertheless, this solution still raised some other problems. While sighted students can anytime recheck the reading comprehension texts to find the answer of the questions, the blind must rely on their memory, as it was improbable to request the examination supervisor to repeat reading the text yet again. The reader, moreover, was not an English teacher, whose English pronunciation might less correct. Question containing jumbled words or sentence which required to be arranged would be more difficult for the blind, as they could only rely on their listening skill and memory to arrange those words or sentences. A slight noise in the exam might causes problem in listening to the questions. Despite those special difficulties for the blind students in conducting exam, this strategy is considered to be better way in working on reading comprehension text questions, compared with converting it first, which wasted a lot of time and space.

There is a dilemma in conducting evaluation to the visual impaired students. On one side, the conversion of the printed texts wasted a lot of time and paper. On the other side, dictating it changed reading comprehension test into totally listening, which caused many difficulties, either for the teacher or the students. This situation corresponds to the statement of Hallahan and Kauffman, (1994:382), "Comparing the academic achievement of students with visual impairment to that of the sight is difficult because the two are tested under different conditions".

Besides those problems and difficulties that have been discussed above. the researcher observed that there was a missing link, between the students' need for a competent English teacher, with the output from special education department at universities. The English teacher in this school was not graduated from English department that some mistakes on grammar, vocabulary and pronunciation occurred during the reading comprehension learning process, due to his limitation on the target language.

On the other side, teacher from English department were not proficient in dealing with special needed students. In the classroom, the researcher was the only one who could not read anything from the embossed dots on the students' books. The condition surely complicates people with English education background to teach

reading comprehension to the visually impaired.

Responding to this problem, the English, Mr. Sigit explained that a short training for those teachers was organized and financed by the government. The teachers were invited to participate in the training in Semarang, in which in about three or five days the teacher was given a brief coaching on English teaching. The similar thing will also obtained by those with English education background, who would teach the special needed students. The coaching at Semarang would prepare them with skills related to special education. As three days was all it took for the training, it was not necessary to substitute the teacher to teach at the class, during the training at Semarang.

CONCLUSION AND SUGGESTION

Based on the result and discussion above, it can be conclude that Teaching Preparation, the material of English reading comprehension for students with visual impairment was the same as that for their peers at regular schools. It is believed that many techniques and strategies for seeing children are usually as effective as those for the visually impaired. The problem was the lack of time to convert printed reading comprehension text into Braille. In order to solve the problem above, the teacher decided to more frequently dictate the text for the students.

At the teaching application, in reading comprehension activity, due to the students' vision condition, the reading texts were either converted into Braille or being verbalized. The problem was on the difficulties in writing the words in correct spelling. Therefore, the teacher had to spell the words more clearly. Limited conceptual

ability was also indirectly decreased the students' reading comprehension achievement. In order to anticipate the problem, the students were encouraged to explore as many objects as possible in their environment from very early age. The problem on the absence of Braille version of dictionary was solved by the establishment of dictionary software installed to cellular phone. As the English teacher was not from graduated English department program, limitations and inaccuracy in delivering English material happened. To solve the problem, there are training for SLB teachers to be more proficient in teaching English. Special education trainings for English teachers are also provided by government.

In the evaluation steps, the reading comprehension texts and the questions were dictated, as converting the text into Braille would waste a lot of time and papers. Many problems occurred due to this verbalizing of the evaluation text. However, it is considered better to dictate the text rather than converting it into Braille.

There are some recommendations for the teacher. The school should maximize the Braille printing of the reading text, to improve students' comprehension skill. The massage training, as well as the other skills, should be optimized, to prepare the students for independent living in the future.

Due to the students' limitation in written communication, it will be better to put emphasis more on their spoken communication, as it does not require vision. Playing audio media which deliver the speech of English native speaker would improve the students' listening skill.

To the Researchers, this research is only brief introduction to a process of reading comprehension teaching and learning. More advanced researches are hopefully to be able to carry on in the future, to find a method that meets the students' special needs, in order to improve their English.

BIBLIOGRAPHY

- Aebersold Jo Ann & Field, Marry Lee. 1997. From Reader to Reading Teacher. United States of America: Cambridge University Press
- Badan Standar Nasional Pendidikan (BNSP). 2006. Standar Isi untuk Satuan Pendidikan Dasar dan Menengah. Jakarta
- Best, John W. 1981. *Research in Education*. New Jersey: Prentice Hall Inc.
- Blackhurts, A. Edward & Berdine, William H. 1981. *An Introduction to Special Education*. Toronto: Little, Brown and Company
- Hallahan, Daniel P. & James Kauffman. 1994. Exceptional Children. Introduction to Special Education. Massachusetts: Allyn and Bacon
- Harris, Albert J. & Sipay, Edward R. 1980. *How to Increase Reading Ability*. New York: Longman
- Heilman, W. Arthur et al. 1981.

 Principles and Practices of
 Teaching Reading. Ohio: Charles E.
 Merill Publishing Co.
- Mohammad Effendi. 2006. *Pengantar Psikopedagogik Anak Berkelainan*.
 Jakarta: PT Bumi Aksara

- Moleong, J. Lexy. 2002. *Metodologi Penelitian Kualitatif.* Bandung: PT

 Remaja Rosdakarya
- Muljono Abdurrachman & S, Sujadi. 1994. *Pendidikan Luar Biasa Umum*. Jakarta: DEPDIKBUD
- PERATURAN PEMERINTAH
 REPUBLIK INDONESIA NOMOR
 72 TAHUN 1991 TENTANG
 PENDIDIKAN LUAR BIASA
- Shea, Thomas M & Bauer, Anne Marie. 1996. *Special Education. A social* system perspective. Mc Graw Hill

- Sukardi. 2006. *Penelitian Kualitatif-Naturalistik dalam Pendidikan*. Penerbit Usaha Keluarga
- Sutopo, H. B. 2006. Metodologi Penelitian Kualitatif. Dasar teori dan terapannya dalam penelitian. Surakarta. Universitas Sebelas Maret
- Vaughn, Sharon, Boss, Candance S. & Schumm, Jeanne Shay. 2000.

 Teaching Exceptional, Diverse, and At-Risk Student in The General Education Classroom. United States: Allyn & Bacon