

Cue Speech and Language Achievement of Hearing-Impaired Children

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Abstract

The purpose of this study was to identify the achievement in Malay Language among hearing-impaired students who uses cue speech as communication tools. Observations and interviews were used throughout the research. Samples involved in this study consisted of 6 students who have hearing impairment that used cue speech as a tools of communication, 4 parents of students either mother or father, a teacher who teach Malay Language and 2 teachers who teach other than Malay Language such as Mathematics and Music. Besides that, the headmaster of the school was also interviewed. All six students who were involved in this study were students from primary school. Two students were from standard four, two students were from standard five and two students were from standard 6. All of these students were randomly chosen with the purpose to view their achievement as a whole. Suggestions for future researches were also proposed to increase the level of language achievement for students with hearing-impairment that uses cue speech as communication tools.

Keywords: cue speech, achievement, sign language

1. Introduction

Hearing-impaired children are unable to speak and have poor in command of the language. This is caused by the inability of them to hear (Hallahan & Kauffman, 1997). Reed (1994) said children with hearing impairment are showing poor performance in subjects involving the usage of language because of their inability to hear and to speak. Most of the gifted children need teaching and learning methods which are different from typical children. Among these gifted children are those children with hearing-impairment. For most of these children, their main communication tool is sign language. However, there is another alternative to communicate with deaf people, it is through cue speech.

Teaching language to students with hearing-impairment is very different from teaching language to typical students. It can be seen in the context of the approach as well as method and strategy that be used to deliver the lesson. This situation exists because of the disability being faced in auditory sense. From functional aspect, language is a communication tool that acts as a medium to express feelings and thoughts. From structural aspect, language consists of numbers of sentences and there are various approaches of teaching language that had been implemented in education system for students who have hearing-impairment (Tan Chin Guan, 1981).

According to Hasnah (1988), gifted children usually use hand gesture and finger spelling to communicate. This causes the gifted children to have a big problem to communicate with others. However, sign language and finger spelling usage causes a problem for society to communicate with them because not everyone can understand and know the meaning of sign language that they use. This might happen because they do not learn the sign language or the cue speech that is used by deaf people.

Cue speech is use in Cued Speech Centre located at Malaysian Council for Child Welfare, Jalan Kampung Pandan, Kuala Lumpur. Cue speech was established on 1967 by Dr. R. Orin Cornett from Gallaudet University, Washington, America. It aims to help the hearing-impaired students in the country to read lip movement in English. According Kamarudin (1993) understanding is a process of getting meaning from oral communication, writing or the use of certain symbols. Listening comprehension is one of the four basic skills in learning language (Reed, 1994).

Based on the importance of this communication, there are problems among Malaysian hearing-impaired students

in studying the same syllabus as the typical student. They need to sit for major examinations such as UPSR, PMR and SPM. However, they are often left behind, especially in terms of learning because of deafness. Heward and Orlansky (1992) noted that many researchers have found that hearing-impaired students' academic achievements are poorer than the typical student. This situation caused deaf students to face learning difficulties and difficulties in understanding the meaning of a word.

2. Objectives of the Study

- 1) To look at the language achievement of hearing-impaired students who use cue speech.
- 2) To see the level of confidence and language ability of hearing-impaired students who use cue speech.
- 3) To identify the factors that influence the socialization of hearing-impaired students who use cue speech.

3. Operational Definition

3.1 Cue Speech

Cue speech is a hand movement's method that can distinguish sounds by looking at the movement of the lips. For example, the sound of the letters / p /, / b / and / m / which is a distinctive feature sounds like vocals and nasal sound. Hand will be moved close to the face of the speaker as a way to identify phoneme distinctive sounds. Communication using cue speech is only trained at the Cued Speech Centre in Kampung Pandan. It is a way for hearing-impaired students to communicate. It involves four hand positions to distinguish 11 English vowels and 8 forms of hand to distinguish 25 consonants with the addition of movements for some diphthongs. Vision of this organization is to ensure that every deaf student have an equal opportunities to achieve success in the development of mind, social, educational and career (Cued Speech Centre).

Its mission also is to help family members communicate with hearing-impaired children by using speech as well as mastering the ability to speak with hearing-impaired students at home and at school. It is also to identify hearing impairment as early as possible and continue with intervention program between departments to adopt an inclusive education system for hearing-impaired students at all levels of school. According Hasuria Che Omar (2009) cue speech is not a sign language as BIM and KTBM but is a method that uses speech reading aid containing a hand signal that indicating speech sounds being spoken.

4. Literature Review

4.1 Related Theory

Behaviourism theory or usually known as behaviour theory is a theory that focuses on aspects of behaviour that can be observed. We cannot see the reasoning, but we can make an observation to the behaviour that being showed. This theory was pioneered by Ivan Pavlov through classical conditioning theory and B.F. Skinner through operant conditioning theory. In this theory, teachers should analyze student behaviour and alter unwanted behaviour during lessons. Desired behaviour or the target behaviour can be obtained by applying positive reinforcement or negative reinforcement every time the behaviour shown.

Then, cognitive theory looking at the development of the brain from thinking aspect and can be seen through changes in behaviour and speech. This theory was introduced by Jean Piaget and according to her children's cognitive development occurs in an orderly and teachers need to understand the differences between students in terms of cognitive. There is a quick learner and slow learner students who have weak memory that caused them hard to remember what they had learnt.

Jean Piaget was a psychologist who has contributed a lot to the understanding of how children learn. From researches and observations, Piaget found that cognitive development of children are different and changing through four levels which are sensory motor (0-2 years), pre-operational (2-7 years), concrete operational (7-11 years) and formal operational (11 years to adulthood). However, age is not fixed as it is in accordance with the student's ability. By applying this Piaget concept, we can see it has relation with the concept of constructivism.

Constructivism is a theory about knowledge and learning attract, motivate and facilitate students' understanding. In addition, constructivism suggests to children for actively construct their knowledge based on existing knowledge they have. In constructivism approach, child-centred learning environment is important while the teacher acts as a facilitator. Children are also encouraged to give ideas and theories to solve problems. Learning based on culture that based on constructivism will bring different culture of learning from culture of learning that was occurred over the years.

In Humanistic theory, it's more concerned about the development of the individual as a whole. Basis of this model is the belief that every human being is inclined towards achieving self-esteem. Personal and social factors

are also important in determining the development of gifted children as a whole.

Learning theory is a combination of cognitive theory and social environment. This theory was introduced by Vygotsky to see the importance of the social environment on child development. Vygotsky said that children's development depends on the interaction of a child with the surrounding people. The environment actually became a delivery tool of cultures that help them build a view of the surrounding. This theory emphasizes that process of mental development such as memory, attention and reasoning involves learning that uses the findings of the community such as language, mathematics systems and so forth. Moreover, this theory also emphasizes on how a child's development occurs under the guidance of an experienced person in a particular area or field.

Vygotsky had introduced a number of concepts related to learning. Among them are Zone of Proximal Development and scaffolding. Vygotsky believed that development of a child would be better and grow due to the interaction with other people. Through this concept, he saw whether a child is able to do things without the help of an adult and whether the child is able to do something with the instructions given by an adult or collaboration with their peers. Thus it can be seen that the zone actually emphasizes social interaction that will facilitate the development of children.

He also introduced the concept of scaffolding. Scaffolding was associated with a zone of proximal development. Scaffolding can be viewed as a framework support. Raymond (2000) says scaffolding according Vygotsky means it is related to the role of teachers and others in supporting the development of students. The use of scaffolding is actually just for temporary. When a child showing better performance therefore scaffolding aid will be reduced until the child mastered learning without the assistance of others.

5. Methodology

This study is a qualitative study that uses observation and interview method, the sample was randomly selected from cue speech centre population in Pandan village. It was conducted on 6 hearing-impaired students that use cue speech, 4 guardians either parent, a teacher of Malay Language and 2 teachers in subject other than the Malay Language which were Mathematics and Music Education. Then, the headmaster of the school was also interviewed.

5.1 Interview Protocol

Interviews of students

- 1) What communication approaches that you use in school and at home?
- 2) How do you get guidance from family members, particularly your parents about learning in school?
- 3) How do you interact with peers or people around you?
- 4) Do you understand what is delivered in school? If not, what makes you not understand?

Interviews of teachers

- 1) What problems are you often encountered in teaching cue speech students?
- 2) What is your opinion about the approach used at this school is it good for your students?
- 3) In terms of socialization, how a student interacts with you and other students in the class?
- 4) What are your recommendations to improve achievement of students with hearing problems?

Interviews with parents

- 1) How do you communicate with your son at home and at school?
- 2) How do you see your son's social development, especially when interacting with the people around him?
- 3) How is your son proficiency when using cue speech?

6. Findings

6.1 Hearing Speaking Student Achievement

The finding of this study has focused on academic achievement, the ability to interact and curriculum achievement. Perceptions of Mathematics teacher on ability of academic education in aspects of students' understanding found that:

"... They're quickly forgot for example it always happen in paper 2 for mathematics calculation. Like today's they know how to solve it but it got quite long time to make them understand, in an hour it takes half hour to explain until they understand. Then they managed to do the exercise given, but tomorrow when I asked again,

they couldn't solve it, they forget again ".

However Malay Language teacher stating the hearing-impaired students of secondary schools' achievement who are using cue speech are much better from the achievement of deaf students who use the sign language. Similarly, the mathematics teacher also felt the use of cue speech is the best for students because it is easier for them to understand a lesson. This can be proved by his experience, "... I have joined the association of deaf children Kuala Lumpur using sign language. Their children are much more different from our children, and they easily feel inferior because our children are a step ahead but their children are still behind".

While the administrators' perception on cue speech students' achievement are as same as a typical student. "... If you see performance by subject, they have no problem mastering mathematics, Malay or English. But the real weakness is in writing or making sentences. "Weaknesses in making sentences clearly show that deaf students are lack of new verbs and language acquisition. However, he stated "I think if compared to the deaf students using sign language, I think they are quite a bit further ahead in terms of academic achievement. Not on par with a normal student, but I think they more forward than those who only use sign language ". In terms of students' performance in the UPSR, he said that so far, no students scored 5As but there are cue speech students who get A in a variety of subjects.

Achievement of speaking in perception context is, the first parent stated that previously her son been shunned because he cannot read and speak. However, the situation began to change when her son began to understand and can read now. The second parent explained that her son achievement is very good in Malay while in English her son may able to be a good listener but not a good speaker. The third parent also stated:

"... Indeed, he shows much improvement. Now I look him myself, before this not much. Now his grown up, he is clever. He already knew a lot of things. Sometimes don't need a cue, we talk like talking to normal people because he can understand it. But with a condition, he must wear hearing aid "(R3). The fourth parent also gave a positive response when told that his son had changed from year to year.

6.2 Level of Confidence and Speaking Ability

Besides the academic aspect, student achievement in curriculum also found to be active. Cue students are active in Taekwondo, badminton, table tennis and running as well as computer clubs. The students at cue centre are encouraged to actively participate in competition and co-curricular activities. On every Wednesday, teachers will conduct fard ayn classes and the teachers are come from JAWI. "We encourage them to be active and confident". We have a prayer or spiritual contest that related to religion, storytelling competition, we are encouraged them to act in drama or do role play. We do not want them to feel inferior. We are often being invited to perform at the banquet feast for example in a program of joyfully Eid that held every year. These children will be invited to perform. According to school administrators:

"... It's been two years we been invited by Maxis to sing Eid song, we also got an invitation from F&N". This statement clearly shows the cue speech students here are active in outdoor activities while also applied the proper religious education.

6.3 Factors Influencing the Socialization

Observation findings seen in terms of students' ability to interact during the student's socialization with people around them using cue speech with friends and their teachers. Observation was made through student activities when they had singing performance on Excellent Students Ceremony's Day. Findings of this study showed that there are students who speak like a typical student. Students were seen are capable of interacting and socializing with their classmates. In fact, when observations are made, students work together in practicing singing performance other than working together to give information to researchers through interviews. Students also were seen listening to the instruction given by teacher for example teachers ask students to do performance. Students began singing when the teacher asked them to sing the song and abide by the instructions given by the teacher. Similarly, when the teacher asked the students to take wudhu'. Students were seen can interact with the teacher where there is two-way communication.

Socialization of respondents with their peers found that 4 out of 6 respondents have friends at home. Respondents who expressed through interviews that they have friends other than in school is respondent 1 from year 4, respondent 3 and 4 from year 5 and respondent 6 from year 6. There are respondents who could not find a friend in the house due to the position of the respondent house that away from others home because the house in the neighbourhood was built one by one and located far from another. According to the respondent 6, he has many friends because at home he always playing football in the evening.

Teachers of Malay Language stated that students communicate in a cue speech and they can find their own group.

Teachers of Mathematics stated students afraid to ask him question. Therefore, he would ask students whether the students understand or not. According to him, students who good in mathematics will teach students who are weak and usually students are more understand when their own friends giving explanation. For music teachers, cue speech students are very friendly because they believe they can speak.

Socialization perceptions of parents about their child's development when interacting with people around them are as follows: Parent 1 said her son has a friend in the house about 2 to 3 people and they are all typical children. Parent 2 stated that her son is not easily sociable with people he does not know. According to him, "He cannot be the first person who start talking to people he do not know. If people around him start talking with him first then he will talk to them back ". However, he likes to bully his sister at home. This shows the close relationship between the deaf students with their own sister. For parent 3, her son has many friends. "It is because at my neighbourhood there were many children have same age with him. They are around 2, 3, 4, 6". She does not limit his interactions as she often let his son to play like typical children at his age. Parent 4 also expressed "So far, if given a question, he will give the answer we want. So even with his friends he can play with normal boy ".

7. Discussion and Summary

7.1 Language Achievement Students with Hearing Problems

Interviews with administrators through question 4 shows that in terms of academic achievement of deaf students who use cue speech are same as a typical student. This is due to there are deaf students who use cue speech gets an A in a variety of subjects. However, the weakness of deaf students who use cue speech remains the same with deaf students who use sign language because according to him, the weakness of the students are in making sentences or constructing verse. The statement of the administrator is similar to Malay Language teachers who also stated that the weakness of these deaf students is in constructing sentences and writing. This statement is supported by Abdullah (2001) who found it is difficult for deaf students to write essays and they are weak in writing.

7.2 Socialization of Deaf Students

The findings indicate that deaf students who use cue speech easy to interact with people around them. Through questions about respondents' socialization with their friends found that 4 out of 6 respondents have friends at home. From that it shows deaf students who use cue speeches are able to socialize and make friends with the typical student. This statement is supported by Ruijs & Peetsma (2009) which states that all students either gifted students and normal students have the same aspirations and needs of their peers.

For question 3, Music teacher stated that cue speech students are a step ahead of the deaf students using sign language. He stated that the sign language students feel inferior when they are in community. This situation is recognized by Michael S. Stinson, Liu Yufang (1999) that students with hearing problems seem to be afraid to interact with typical students due to not knowing how to communicate. This assertion is supported by Abdullah (2001) which states that the use of different languages between deaf students and typical students cause them have difficulty to communicate with each other and the community.

Interview result also shows that when students are able to acquire language, students can interact with people around them. The findings show that there is a cue speech students previously was isolated because they not know how to speak and to interact with their peers in preschool. Students who are not able to communicate with those around them may feel inferior. These students are less active in the classroom, and outside the classroom. When students are not active in the class so it is impossible for them to be an active student when outside the classroom. This assertion is supported by Lewis & Doorlag (2006) which states that a student who feels inferior may not actively participate in learning activities.

8. Conclusion

Overall, the study showed that language plays an important role in the education of hearing-impaired students. Their academic achievement also declined due to their poor development of language. The present study adds to the existing knowledge on hearing-impaired students' language proficiency; it is expected to provide an understanding and awareness of the parties involved in helping to raise the achievement of gifted students in Malaysia. This study is also expected to help various parties who involved with deaf student's education system other than an example for the next studies especially in terms of cue speech.

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