Communication mode and noun acquisition in the deaf

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ในเด็กหูหนวก

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บททั่วไป

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาเกี่ยวกับการสื่อความหมายและการเรียนรู้คำนามของเด็กหูหนวกในโรงเรียนเด็กศึกษาขอนแก่น โดยให้ทำการทดลองเด็กหูหนวกทำแบบทดสอบศึกษาปีที่ 1 และ 2 ซึ่งมีอายุระหว่าง 7-14 ปี จำนวน 64 คน ผลการศึกษาพบว่าเด็กหูหนวกส่วนใหญ่ใช้ภาษาในการสื่อความหมายกับการรับรู้และการแสดงออก และสามารถเรียนรู้คำนามที่ใช้ประโยคเป็นประโยคปรากฏได้ ซึ่งอาจช่วยให้เด็กหูหนวกสามารถใช้ภาษาได้เป็นสื่อความหมายอย่างครบถ้วน และใช้การพูดและการฟัง เป็นขั้นตอนการสื่อความหมายอย่างมีประสิทธิภาพ ทั้งนี้ผู้วิจัยเป็นผู้แทนของมหาวิทยาลัยขอนแก่น
Abstract

The purpose of this paper was to study communication mode and noun acquisition in the Khon Kaen Deaf School. The sixty four deaf students studying in grades 1 and 2, were between the ages of 7-14 years, were subjects. The results indicated that the majority of the deaf received and expressed language by sign. All of the deaf could acquire every common noun. The finding showed that most deaf children favoured the use of sign language as the primary communication mode and Oral/Aural, speech reading, and auditor as supplementary communication modes.

Communication mode and noun acquisition in the deaf

In the recent history of the education of the deaf and hearing impaired children around the world, there has been a growing dissatisfaction with the achievement of school leavers. There is general agreement that hearing impaired children are not achieving their potential and are lagging behind their hearing peers. This dissatisfaction has led to questions about the methods used in education of hearing-impaired children, particularly the question of communication. (1)

The five communication methods generally used are defined as follows:

1. The Oral method is the use of amplification, speech, and lipreading without manual cues.
2. The Total Communication method is the use of amplification, speech, and lipreading with manual signs and fingerspelling.
3. Fingerspelling is the use of fingerspelling without signs, in conjunction with speech, lipreading and amplification.

4. Cued speech is the system of hand cues utilized with speech and lipreading developed by Dr. Orn Cornell of Gallaudet College.

5. Paget-Gormull is the manual sign system developed by Sir Richard Paget, used in conjunction with amplification, speech, and lipreading. (2)

The deaf children have obvious disadvantages in speech production: articulation sounds, visual screening, oral reading speed and speech rate. They may be unable to use language to exert control over their own behavior (regulatory function), or to engage in interpersonal communication of information with others (informative function). So simultaneous communication is necessary for these children.

The issue of communication of the deaf children has a long and controversial history. There appear to be two methods of primary communication which are most widely used: The Oral method and the Total Communication. The majority of supplementary communication modes used with the primary mode indicate the use of either Oral/Aural or Total Communication. The data of recent reports made clear that the communication mode in the education of the deaf is a dynamic area (2,4) but indicated a continuing trend towards Total communication in the primary mode and an increased use of supplementary modes (1,2,4,5). Because belief that increased learning potential is achieved with the added dimension of a multisensory approach, particularly in group situations, provisions for individualized communication strategy by allowing for the different levels of ability in the various modes of communication, will increase the likelihood of incidental learning, particularly if teachers and staff members utilize all modes in communication among themselves in the presence of a deaf child (1,5,6).

The Total Communication is a philosophy of incorporation appropriate aural, manual and oral modes of communication in order to ensure effective
communication with and among hearing-impaired persons, to establish communication as early as possible and also to continue expanding the communication process through the use of the spectrum language modes (5,6,7). In addition the communication and the academic achievement of the deaf children are influenced by various factors such as cooperation of family members; socioeconomic status (8); legislative developments, expanded public information on deafness and communication (4).

The purpose of this paper was to study communication mode and noun acquisition in Khon Kaen School for the Deaf.

**Subject and method**

The sixty-four subjects, most of whom came from low socioeconomic backgrounds, were deaf students studying in grades I-III in the Khon Kaen School for the Deaf in 1992. All subjects were between the ages of 7 and 14 years, had a hearing loss of 65 decibels or more (three frequency average) and had not multiple disorders. Only twenty percent of these students had hearing aids: 10 percent were residential students and most of them used hearing aids for an average time of 6 hours/day (in the class), the rest of them lived at home with their families and used hearing aids most of time. Total communication is the primary and sign language is supplementary communication mode in the school.

Inner language was evaluated first to exclude the multiple disorders because the deaf children had normality of perceptual and conceptual functioning and usually reveal good inner language but multiple disordered children do not (9). The sixty-four subjects, who passed an inner language test, were tested in receptive, expressive language and nouns. The tests of receptive and expressive language were applied from Myklebust (9). The test composed of models of real objects because the production of speech or symbolic gestures was significantly better with real objects than with picture. The test of nouns was a test which I established to find the language ability in common nouns of normal children in Khon Kaen (10, 11).

**Results**

Receptive communication mode

The results of this study indicated that the majority of receptive communication mode was sign (90.62%) followed by a combination of speech reading and audition (7.81%), and only speech reading (1.56%) (Figure 1).

![Figure 1 Receptive communication mode](image-url)
Expressive communication mode:
The data showed that the deaf used sign as the main expressive communication mode followed by a combination of sign and speech. (Figure 2).

Figure 2 Expressive communication mode

Noun
The finding indicated that the deaf acquired common nouns in both receptive and expressive language. All of them could receive every common noun (100%) and expressed most of them (96.88-100%) which showed in Table 1.

<table>
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<th>Mode</th>
<th>Animal</th>
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<tr>
<td>Equation</td>
<td>100%</td>
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</tbody>
</table>

Table 1. Data of noun acquisition

Discussion
The results found that the majority of the deaf (93.63%) received language by sign and only five deaf children (7.81%) received language by combination of speech reading and question. It indicated that most of the deaf used sign for receptive communication mode and supported the previous study (7,12). There were 20% of them who had hearing aids and all of them did not always use them. So they did not use residual hearing projectively and could not use audition to be in the receptive mode alone because deaf students might have directed attention mainly to the signed components which contributed to the poor listening and speech reading. In addition most of the subjects, from a lower socioeconomic status might have lower academic achievement and both parents and teachers tend to use sign language more often than speech, so these deaf children received sign language easier than others (9).

Forty deaf children (82.5%) used sign as expressive communication mode and the rest (3.5%) used combination of sign and speech for expression. It indicated that all of them used sign as primary and oral as supplementary communication mode. Non verbal communication is the first system which emerges in all children and continues for an entire lifespan. Most of the deaf children had no hearing aids, they could not use residual hearing projectively. So it was as a compensatory mechanism, they were more likely to employ sign language for reception and expression. This finding supported Christensen's study (12).

According to noun acquisition, all of the deaf children received every common nouns and most of them (96.88-100%) could name them correctly. It might be concluded that they acquired common nouns. The number of nouns which the children received was more than they expressed, this finding is like the acquisition of normal children (13,14).

The results of this study showed that most deaf children favoured the use of sign language as the primary communication mode, and Oral/Aural, speech reading, audition as supplementary communication modes, although Total Communication is the policy of the deaf school. Because several factors are responsible for communication of deaf children, there could be usage of residual hearing;
hearing aids; teacher’s communication; the time of hearing aid usage, verbal instruments of communication, and specific instructions (3.7) etc. Lack of these positive factors would not help the deaf to use Total Communication.

The deaf children should have been encouraged to acquire verbal or Total Communication mode as soon as possible. It depends on the policy of the school, government, and legislative developments. Fortunately, new legislation of abnor-
mal people in Thailand which may help the deaf children has more chance to develop a communica-
tion mode and to be supported by facilities.

Acknowledgement

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