#### Means of Communication of People with Deafblindness

Jiří Langer Department of Special Education, Faculty of Education, Palacky University in Olomouc, Czech Republic

The World Health Organization (WHO) considers deafblindness to be the second most severe human impairment (the first one is profound mental retardation when the intelligence quotient is below 20). Deafblindness is a serious impairment mainly because the impaired person has an essentially restricted ability to communicate with the environment and a significantly limited possibility to access information. The term deafblindness is understood as the dual impairment of both vision and hearing. According to the functional definition deafblindness can be defined as "the dual impairment of vision and hearing which is substantial for the impaired person in such a way that it causes mental and social problems and problems in everyday life situations. It is an independent category which is characterized by the necessity of an individual specific approach to the impaired people, both in the area of upbringing and consequently in the area of education and social rehabilitation. Deafblind people form a diverse group in which the impairment of each member varies according to the onset of the sensual impairment and its degree" (Souralová 2000, p.8).<sup>1</sup>

The development of the communication abilities of the people with the dual impairment of vision and hearing is considerably changed due to the sensorial character of their impairment (similar to people with hearing disabilities). In contrast to the major intact society, whose natural and basic type of communication is its native language basically transmitted in the form of spoken language, the natural communication means of deafblind people are specific communicational systems. From the above mentioned follows that if the impairment of vision and hearing of the individual obstructs the perceiving of spoken language, the preferred alternative systems of communication chosen by the individual must be accepted.

According to the research done in 2006-2008, it is clear that, as well as the deafblindness itself is a variable and different impairment, also the means of communication of deafblind people are really variable. Therefore deafblind people often face the problem that they can not communicate directly with each other when meeting in person as each of them uses a different communication system (e.g., people with primary vision loss prefer mostly the means of communication derived from the Czech language while people with primary hearing loss prefer modified sign language, or more precisely tactile sign language). While analyzing the video recordings of communication between teachers or special educators and deafblind children or adults, the following characteristics of different means of communication emerged:

### a) Verbal means derived from the spoken language

#### Spoken (oral) speech

The ability of deafblind people to communicate using spoken language is varied depending mainly on the nature of both the vision and hearing impairment and the age of onset. The important factor influencing the development of spoken language is the degree of the hearing impairment. In general, deafblind people with the dominance of the vision impairment who retain some useful hearing can develop oral language better. The

<sup>&</sup>lt;sup>1</sup> For more information see: Ludíková (2000), Souralová (2000), Souralová; Horáková (2008), Langer (2008).

development of spoken language depends on the actual degree of cognitive and social development, as well as on early educational intervention and its quality. Deafblind people often have serious troubles with oral speaking because there is no possibility of its natural imitation in regard of the degree of the impairment.

# Signed Czech, Tactile signed Czech

Signed Czech is an artificial system of communication derived from the Czech language and the use of its grammatical means. Individual signs, taken from the Czech sign language or tactile sign language, are performed by the handshape and its movement simultaneously with audible or soundless articulation of Czech words. Tactile signed Czech can be used as a communication means of deafblind people who can manage the Czech language.

# Braille

Braille is a special kind of alphabet for blind and purblind people. It is based on a system of different combinations of six plastic dots that are read by touch. It is named after the French teacher Louis Braille. A Picht Braille typewriter and so called 'Prague's table' are used to write Braille. Some deafblind people are also able to get information through typing Braille on their fingers. Different techniques of typing Braille vary in the numbers of the fingers on which the letters are transmitted.

# Fingeralphabet, Tactile fingeralphabet

The fingeralphabet is a visual-motor communication system where different locations and positions of the fingers are used to represent letters. The individual letters may be expressed with both hands (two-handed fingeralphabet) or only with one hand (one-handed fingeralphabet). Blind people may use the tactile form of one-handed and two-handed fingeralphabet by placing their hands on the signing to sense the performed letters.

# Lorm alphabet

The Lorm alphabet is a palm tactile alphabet which uses the palm preferably of the left hand (the fingers are slightly stretched and spread). The sender uses his index finger to point the individual letters on the palm or fingers of the receiver. Every single letter of the alphabet has its unique place on the palm. The pause between words is expressed by stroking the palm, a mistake is expressed by a slight tap on the palm and a double stroke means the end of the sentence. If the receiver does not understand, he clenches his fist.

# Writing letters on the palm (Dactylography)

The method of writing letters on the palm is based on spelling out each letter in capital letters onto the receiver's palm using the index finger. Individual words are separated by stroking the palm and the end of the sentence is expressed by a double stroke. A mistake is expressed by a slight tap on the palm. If the receiver does not understand, he clenches his fist, which is the same system as the Lorm alphabet.

# <u>Tadoma</u>

Communication through the use of the vibratory Tadoma method is based on "the tactile reading of spoken language". The deafblind person places his hand on the face and neck of the speaker. His thumb touches speaker's lips and he also feels the movement of the jaw and tongue. The other fingers feel the vibrations of the speaker's face, jaws and throat. This method is sometimes referred to as 'tactile lipreading'. In the case that the deafblind

receiver knows the tactile sign language well, he may feel the speaker's signs with one hand and at the same time he may feel the movement of the speaker's lips with his second hand.

### b) The verbal means derived from sign language

### Sign language

Sign language, a means of communication for deaf people, is a natural and full featured language which is entirely independent of the Czech language. It exists in a visual-motor form and has its own "sign" vocabulary and grammar. The precise meanings are transmitted by individual signs which are performed by the movements of hands. In addition to the signs also the facial expression and the movement of the head and body play a very important role. Sign language can express any kind of information.

# Modified sign language

Modified sign language is derived from the sign language of deaf people; however, it is specifically modified for the needs and conditions of a particular deafblind person. Its users are mainly people who have a narrow field of vision. It differs from the sign language used by deaf people - the articulation area is smaller, the movements are slowed down, fewer nonmanual means are used, etc.

# Tactile sign language

Tactile (haptic) sign language is also derived from the sign language used by deaf people. Unlike the signs of visual sign language, the signs of the tactile sign language are specifically adapted so they can be perceived tactually. The non-manual characteristics of the sign language which can be sensed only by sight (face expression, movements of the body and head) are replaced in the tactile sign language by manual components of the sign – most of all by adjusted movements of hands and the place of articulation.

# Signing hand in hand

Signing hand in hand is a special method of using the sing language when both communicators are in contact "hand by hand" all the time. Unlike the tactile sign language the receiver does not tactile the signs actively but they are performed by his hands (they are shown by the receiver's hands). The method of signing hand in hand uses similar, but not the same, signs as the tactile sign language. Individual signs are modified according to the motor abilities of a particular deafblind person (mostly children with secondary impairment), which differentiates this method from the tactile sign language. It is thus necessary to become familiar with the specifics of the sign communication of the particular client.

# c) Non-verbal means

# Communication through subjects (substitution subjects, reference subjects)

Small particular subjects, their miniatures or parts, which substitute for things, activities or people, are used for this kind of communication. For example, a small shoe may stand for a walk, a spoon symbolizes food etc. The choice of subjects must meet the needs of a particular deafblind person and correspond to his environment. In many cases reference subjects are used as the primary kind of communication and for people with multiple impairment (physical or mental) they often represent the highest level of communication. There is no integrated system of these subjects. They are chosen according to the needs and possibilities of the particular person.

#### Pictograms

Pictograms are generally understandable and simplified pictures of people, animals, things, events, and activities. There is usually a short description under a pictogram. They are mostly black and white; however, they can be in different, contrasting colours or enlarged to meet the needs of deafblind people. There is an integrated system of pictograms which can be used to form individual communicational charts.

Sometimes the communication by pictograms is supplemented with photographs – mainly of particular people or places. The photographs have to be simple and well-arranged.

### Relief pictograms

Relief pictograms are simplified pictures of people, animals, things, events, and activities pictured in relief plastic – areal or outlined. They are used mostly as an additional way of communication and a deafblind person has to know how to work with these pictograms. There are no integrated and standardized systems of pictograms. They are always provided for a particular person in a version meeting the needs of the person (material, colour, size, etc.)

As mentioned in the introduction, the communication methods of deafblind people are quite varied and there are a lot of individual factors which influence them. The most important thing when communicating with a deafblind person is to respect and meet his specific individual needs. A big contribution for deafblind people in the Czech Republic is the amended law Nr. 155/1998 Coll. on the sign language "Act No. 384/2008 Coll. on the Communication Systems of Deaf and Deafblind People" which briefly defines the above mentioned means of communication (except non-verbal means) and gives deafblind people the right of free choice of any above mentioned means of communication.

References:

- LANGER, J. Problematika osob s hluchoslepotou a kontaktní tlumočení [DVD-ROM]. 2. vydání, Praha: Česká komora tlumočníků znakového jazyka, 2008. ISBN 978-80-87153-35-2.
- 2. LUDÍKOVÁ, L. *Vzdělávání hluchoslepých I*. Praha: Scientia, 2000, 74 s. ISBN 80-7183-225-1.
- 3. SOURALOVÁ, E. *Vzdělávání hluchoslepých II*. Praha: Scientia, 2000, 78 s. ISBN 80-7183-226-X.
- SOURALOVÁ, E.; HORÁKOVÁ, R. Problematika osob s hluchoslepotou a kontaktní tlumočení u hluchoslepých preferujících český znakový jazyk. 2. vydání, Praha: Česká komora tlumočníků znakového jazyka, 2008. ISBN 978-80-87153-34-5.

Contact: Mgr. Jiří Langer, Ph.D. Department of Special Education Faculty of Education Palacký University Olomouc Žižkovo nám. 5 711 40 Olomouc tel.: +420 585 635 322 mobile: +420 605 746 518 e-mail: jiri.langer@upol.cz URL: http://www.ksp.upol.cz