



Benefits of sign language for the deaf students in classroom learning

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ABSTRACT

This study was conducted to investigate the benefits of sign language for deaf students. The study was descriptive in nature and teachers of deaf were the sample of the study selected by using simple random sampling technique. A total number of 40 teachers of deaf from four schools were the participants of the study. For the purpose of collecting specific information, a structured questionnaire was developed on the basis of 5-Point Likert Scale. Collected data was tabulated and analyzed by using descriptive and inferential statistics. The study revealed that sign language is beneficial instrument for the deaf students in classroom learning.

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1. Introduction

Sign language is a natural language for many deaf and hearing people. It has its own structure, grammar and rules. In many countries, sign languages have got the status of first language for the deaf (Krausneker, 2008). There are many arguments against the sign languages which consider that sign languages are not proper languages in linguistic perspective because of lack of many missing features i.e. arbitrariness, morphology and colors of spoken language. On the counter part of these arguments, many linguistic researches have come forward that proved the sign languages not only have linguistic status (Dotter and Okorn, 2002) but also they are natural languages with complex structures and an independent grammar (Emmorey, 2001).

Often parents of deaf are recommended to communicate with child orally and same mantra of aural and oral is followed in classroom settings. As it is regarded that normal development of spoken language is obscured by use of sign language (Nussbaum et al., 2003). Conversely, research conducted by sign linguistics has led teachers and educators to reevaluate the role of sign language in developing deaf literacy in a written and spoken language in classroom learning environments. Use of sign language in classroom learning environment, believed that it is the most effectual means of achieving higher level of deaf literacy and curriculum knowledge (Wilbur, 2000). To what extent sign language is beneficial for deaf students in classroom learning; debate this subject is not a new phenomenon. Deaf students can learn sign language

incorporate any other spoken language simultaneously, without any problem as long as rules are followed. Researches in spoken language bilingualism have showed that bilingual students get benefits in several aspects from their bilingualism (Openden et al., 2006). They demonstrate higher awareness of language and communicative sensitivity; higher score in various academic tests than their monolingual counterparts. Consequently, these children have more workable and open socio-cultural and behavioral aspects. The same positive effects can be spot with bilingual children of a sign and spoken language (Krausneker, 2008). Cognitive and linguistic research as well as in developmental psychology studies have been proved that for general development of children, using sign language and bilingual education is closely connected (Klaudia, 2013).

Sign language appears an easier mode of communication between the teacher and the students, intrinsically the students get involved more keenly in learning and acquisition of new information and literacy as well (Tang and Yang, 2007). Combining two modalities of communication such as tactile and kinesthetic channels with auditory and visual modalities, is greatest source of learning and improves learning speed as sign language is composed of both modalities. Use of movements in multimode sign language supports Piaget's claim of learning and thinking (Carney et al., 1985; Daniels, 2001). In the words of eminent educators Maria Montessori and Paul Dennison, "Movement is the door to learning" (Daniels, 2001). The research question was addressed in this research work, "What are the benefits of sign language in the learning process of secondary school deaf students?"

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2. Methodology

2.1. Sample and sampling techniques

The sample of the study, 40 teachers (male and female) of deaf students, was selected by using simple random sampling technique. The study was delimited to the teachers of Govt. Schools for hearing impaired in Faisalabad for Boys and Girls sought out the benefits of sign language for deaf in classroom learning.

2.2. Design and Tool of the study

The design of study is descriptive in nature. For the purpose of collecting specific information, a structured questionnaire was developed on the basis of 5-Point Likert Scale such as strongly agreed (5), agreed (4), uncertain (3), disagreed (2), and strongly disagreed (1). To develop a valid and reliable questionnaire, literatures on sign language had been reviewed. The questionnaire consisted of 19 items, e.g. comprehension, communication, participation, speech development, reading and writing, learning environment, confidence, cooperation, engaging students, visual presentation, awareness, intelligent quotient (IQ), mathematics, spatial, behavioral and emotional aspects.

2.3. Procedure of the study

To fulfill the requirements of the current research, teachers of deaf from District Faisalabad were chosen as the population of the study. Sample comprised of N = 40 teachers (male and female) which were chosen by using a simple random sampling method. For the purpose of collecting specific information, a structured questionnaire was developed. Collected data was analyzed through descriptive statistics by using SPSS (Statistical Package for the Social Sciences) 16.

2.4. Data analysis

The purpose of study was to explore the benefits of sign language for deaf in classroom learning. The collected data was analyzed by using SPSS 16. Frequencies, percentages, mean values and standard deviations were also found to highlight the results. Data was tabulated and interpreted according to the results of data analysis to reach at a conclusion.

3. Results and discussion

The responses along with frequencies, mean and standard deviation (SD) of the selected variables are given in the Table 1.

Table 1: Frequencies, mean and standard deviation

No	Variables	Frequencies of Responses					Mean	SD
		SA	A	UC	DA	SDA		
1	Understanding	18	22	0	0	0	4.45	0.50
2	Participation	12	28	0	0	0	4.30	0.46
3	Communication	23	17	0	0	0	4.58	0.50
4	Speech	5	17	7	9	2	3.35	1.12
5	Writing	1	25	8	5	1	3.50	0.85
6	Learning	11	24	3	2	0	4.10	0.74
7	Confidence	13	23	3	1	0	4.20	0.69
8	Cooperation	12	28	0	0	0	4.30	0.46
9	Management	9	26	2	3	0	4.03	0.77
10	Engaging	12	21	3	4	0	4.03	0.89
11	Literacy	3	24	5	5	3	3.48	1.06
12	Peering	15	22	2	1	0	4.27	0.68
13	Perception	8	25	5	2	0	3.98	0.73
14	Awareness	8	17	11	4	0	3.73	0.91
15	Spatial	2	26	12	0	0	3.75	0.54
16	Mathematics	2	18	9	7	4	3.17	1.11
17	Behavior	3	31	5	1	0	3.90	0.54
18	Frustration	6	30	3	1	0	4.03	0.58
19	IQ	0	23	11	6	0	3.42	0.75

SA = Strongly Agree, A = Agree, UC = Uncertain, DA = Disagree, A = Agree, SD = Standard Deviation, IQ = Intelligent Quotient

The results of the study showed that sign language is an important and beneficial tool to improve classroom learning of deaf students. The present results of study are in favor of use of sign language for deaf students in classroom learning. For full access to educational opportunities, are only possible when instructional methods, matching the need of deaf students. These findings are indorsed by the previous researchers also (Nussbaum et al., 2003). Because imparting a pre-lingual deaf student in spoken language does not help in getting ideal outcomes. Thus, the deaf students should be taught

in their first language (i.e. sign language) by combining spoken languages, other instructional methods and services.

Independent-Sample t-test was conducted to compare the male and female. On an average there was no significant difference among the male (M = 75.00, SE = 2.91) than to female (M = 74.47, SE = 1.24), $t(38) = 0.17$, $p > 0.05$ for benefits of sign language. The results showed that gender didn't have effect on the perception of male and female about the benefits of sign language. An Analysis of Variance (ANOVA) was conducted to compare effects

of experience of teachers about the benefits of sign language of the students of hearing. There was a statistically significant difference between the level of experience of teachers with $F(17, 22) = 2.50, p < 0.05$. It showed different perception about the benefits of sign language in the development of hearing impaired students with reference to their experience. This difference might be due to interest of the administration about the implementation of the sign language. Similar interest is present at higher level administrative hierarchy in different countries.

4. Conclusions

The study revealed that many teachers believe, using sign language in classroom not only affects the communication skills but also overall development of students. The sign language is considered an important way of communication in the schools of the deaf children.

5. Recommendations

Teachers of deaf might be trained in sign language before starting teaching deaf students. Sign language may be included as a subject in curriculum of deaf students. The workshops of sign language may be arranged at district level for the teachers the deaf students.

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