

THE COMPARING STUDY ON THE SIGN LANGUAGE USING STATE OF TEACHERS AND DEAF STUDENTS IN SPECIAL EDUCATION SCHOOLS IN CHINA

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Abstract

Deaf students and sign-language-teaching teachers in 81 special education schools at all levels are selected for sign language usage survey. The results show that: firstly, teachers have the higher proportion of using “Chinese Sign Language” and “two kinds of sign language both” than deaf students, but lower proportion of using “local sign language”. Secondly, the level of teachers using “Chinese sign language” and “local sign language” is significantly higher than the deaf students. Thirdly, with regard to the intelligibility of teachers’ usage of sign language in the teaching, teachers have higher expectation than the deaf students’ understanding. Furthermore, because of the differences of using sign language between teachers and students as well as deaf adults out of school, it is kind of difficult to teach in special education school and communicate with the deaf adults. Finally, most teachers and students in special education schools hope to develop a general sign language that all the deaf can understand. Comparatively speaking, the voice of teachers is louder than others.

Key words: Special Education Schools, type of sign language, level of sign language,

Sign language uses action and visual ability to help deaf people communication in daily life, which is independent from spoken English and play an important role in Special school's teaching. In China, we have two kinds of Sign language: "Chinese Sign Language" and "local sign language". The "Chinese Sign Language" refers to this signs selected by the book which published by the education and employment department of China disabled persons' federation and publishing Of China association for the deaf, "local sign language" means provincialism developed in different local and culture. Actually, the difference of "local sign language" is obvious between different locals, schools and classes. Sign language is significant in knowledge acquisition, cognitive development and social development. This study surveyed the using of Sign language in different special school throughout the country in order to provide a scientific basis for improving the quality of special education school teaching and the research of general sign language.

Method

Sample

There were 81 different special school, 36 were only for deaf students, 29 were for all students with different disabilities, 11 were only for Professional learning, 5 were colleges for students with different disabilities.

Measurement

We adapted a national survey of The questionnaire of how teachers use Sign language and The questionnaire of how deaf students use Sign language, which were designed by China Sign language and Braille research center in 2011. This questionnaire get four kinds information: main type and level of sign language using, the learning way to sign language, the effect of sign language using and the attitude to design general sign language, at the same time, the background information of subjects were collected.

We invited 3000 teachers to participated in this study and 2709 finished the survey, so the recovery rate is 90.3%, 10000 deaf students participated in this study and 9583 students give us feedback, so the recovery rate is 95.8%.

Date analysis

Descriptive statistics and factors analysis were used to determine different groups' using of sign language.

Results

The comparison of sign language using by teachers and students

There were three kinds of sign language using in special school, using "local sign language", using "China Sign language", using both "local sign language" and "China Sign language".

Despite whatever grade phase, using both “local sign language” and “China Sign language” accounted for a very large proportion. With the rise of grade phase, the proportion of using “local sign language” also rise, but the deaf students use less “local sign language”, teachers indicated a different change, which went down first but then rise. On contrast, teachers mainly use "sign language" were lower than that of deaf students, using both “local sign language” and “China Sign language” were higher than that of deaf students. In addition to teachers from high school chose the "Chinese sign language" lower than the proportion of the deaf students, the rest of teachers use "Chinese sign language" more than the deaf students (see Table 1).

Table 1 – the comparison of sign language using between teachers and deaf students

	“local sign language” Teachers/Deaf students	“China Sign language” Teachers/Deaf students	both “local sign language” “China Sign language” Teachers/Deaf students	Total Teachers/Deaf students
Elementary school	3.7%/23.9%	41.3%/35.6%	55.0%/40.5%	41.2%/18.1%
Junior school	6.3%/29.4%	35.6%/34.6%	58.1%/36.0%	28.9%/30.7%
Senior school	11.1%/38.7%	22.4%/23.2%	66.8%/38.1%	25.8%/31.0%
College school	13.0%/39.8%	26.8%/15.0%	60.2%/45.2%	4.1%/20.2%
Total	6.7%/33.4%	34.2%/27.3%	59.1%/39.3%	100.0%/100.0%

Note. Senior school includes general senior and professional school

The results indicated that the proportion of teachers and students in the use of three types of sign language shows obvious difference ($X^2=846.588$, $P<0.01$). In different studying phase, Teachers and students are significantly different on using of three types sign language (Elementary school : $X^2=220.029$, $P<0.01$; Junior school: $X^2=184.271$, $P<0.01$; Senior school: $X^2=240.417$, $P<0.01$; College school: $X^2=31.421$, $P<0.01$).

The comparison of using level between teachers and deaf students

Teachers' use of "Chinese sign language" levels were higher than "local sign language" in all studying phase, but deaf students shows the opposite result. As the studying phase rise, teachers use "local sign language" and "Chinese sign language" levels tend to reduce after the first rise. Deaf students use "local sign language" level gradually improved and the use of "Chinese sign language" reduced but then elevated. In

comparison, teachers' use of "Chinese sign language" levels were higher than that of deaf students in all studying phase. In addition to the college teachers use "local sign language" lower than that of deaf students, in the rest of the studying phase, the teachers' use of "local sign language" are higher than that of deaf students (see Table 2).

Table 2 – the comparison of using level between teachers and deaf students

	“China Sign language” (<i>M</i>±<i>SD</i>)	“local Sign language” (<i>M</i>±<i>SD</i>)
	<i>Teachers/Deaf students</i>	<i>Teachers/Deaf students</i>
<i>Elementary school</i>	2.45±0.51/2.07±0.41	2.26±0.51/2.17±0.48
<i>Junior school</i>	2.49±0.51/2.05±0.38	2.32±0.51/2.20±0.47
<i>Senior school</i>	2.42±0.50/2.04±0.33	2.35±0.51/2.26±0.45
<i>College school</i>	2.31±0.48/2.13±0.35	2.29±0.49/2.37±0.45
<i>Total</i>	2.51±0.43/2.06±0.37	2.27±0.46/2.25±0.47

Note. 1 point means perfective not, 2 point means “can show some signs and understand a little”, 3 point means “can show a lot signs and understand a a lot”.

The interaction between studying phase and types of school shows significant effect on “local sign language” and “China sign language” ($F(3,11737)=19.293, p<.01$; $F(3,11737)=7.630, p<.01$). According to the further examination, the use of “China sign language” has significant differences between teachers and deaf students (deaf students: $F(3,11744)=34.14, p<.01$; teachers: $F(3,11744)=177.37, p<.01$), the same results also showed in “local sign language” (deaf students: $F(3,11744)=46.11, p<.01$; teachers: $F(3,11744)=13.35, p<.01$).

The comparison of using effect between teachers and deaf students

More than 95% of these teachers use sign language basically in oral English. According to this premise, deaf students reported “can understand most of all” and “understand a little” sign language accounted for 31.6% and 62.5% respectively, a bit of deaf students and teachers thought they “totally can’t understand”. In comparison, the teachers’ expectation was higher than that of deaf students understand in the actual situation (see Table 3)

Table 3 – the comparison of understanding rate between teachers and deaf students

	<i>Understand most of all</i>	<i>Understand little</i>	<i>a Can't understand most of all</i>	<i>Total</i>
	<i>Teachers/deaf students</i>	<i>Teachers/deaf students</i>	<i>Teachers/deaf students</i>	<i>Teachers/deaf students</i>
Elementary school	52.2%/36.6%	45.0%/56.7%	2.8%/6.7%	44.6%/18.1%
Junior school	54.0%/31.3%	43.9%/62.3%	2.1%/6.4%	25.2%/30.7%
Senior school	49.0%/30.5%	48.1%/65.5%	2.9%/4.0%	25.9%/30.9%
College school	45.5%/31.2%	53.5%/66.3%	1.0%/2.5%	4.3%/20.3%
Total	51.6%/31.9%	45.9%/63.1%	2.5%/5.0%	100.0%/100.0%

The difficulties of teachers and students to use sign language reflected both in the school teaching and communication with deaf people. In the teachers' aspect, the use of sign language teaching have more difficult than communication with the deaf outside of school, but teachers and students think in the opposite. In terms of communication difficulties, deaf students perceive the degree of difficulties is greater than the teacher.

Table 4 –the comparison between difficulties perceived by teachers and deaf students

	<i>Teaching or learning difficulties (M±SD)</i>	<i>Communication difficulties (M±SD)</i>
	<i>Teachers/ deaf students</i>	<i>Teachers /deaf students</i>
Elementary school	1.95±0.57/1.76±0.35	1.94±0.51/2.01±0.34
Junior school	1.94±0.58/1.85±0.34	1.97±0.51/2.00±0.33
Senior school	1.94±0.60/1.85±0.33	1.99±0.51/2.03±0.31
College school	1.84±0.56/1.95±0.30	2.04±0.57/2.06±0.29
Total	1.93±0.58/ 1.85±0.33	2. 1.96±0.51/2.02±0.32

Note. 1 point means "don't have difficulties", 2 point means " have some difficulties", 3 point means " have a lot of difficulties", the higher of the average shows the greater degree of difficulties.

The interaction between studying phase and types of school shows significant effect on difficulties ($F(3,11737)=17.628, p<.01$). The further examination show that teachers' and deaf students' perception of teaching difficulty level has significant

differences, (deaf-students: $F(3,11744)=66.31, p<.01$; teachers: $F(3,11744)=23.17, p<.01$). As the growth of studying phase, deaf students experienced a sharp growth of perception of difficulties, but the perception of teachers showed downward trend.

The comparison of the attitude to develop general sign language between teachers and deaf students

The results show that 90.9% of teachers and 73.0% of deaf students "hope" to develop general sign language which deaf people around the country all can understand. In terms of teacher group, high school and college teachers' expectations are higher than teachers' from primary school and junior school. In deaf students groups, the "hope" for general language is more consistent (see Table 6).

Table 6 – The comparison of the attitude to develop general sign language between teachers and deaf students

	<i>Hope Teachers/deaf students</i>	<i>Don't Hope Teachers/deaf students</i>	<i>Don't know how to answer Teachers/deaf students</i>	<i>total Teachers/deaf students</i>
<i>Elementary school</i>	91.2%/75.6%	1.9%/11.6%	6.9%/12.8%	42.3%/18.3%
<i>Junior school</i>	92.8%/72.9%	1.8%/11.2%	5.4%/15.9%	29.0%/30.5%
<i>Senior school</i>	88.7%/71.6%	3.2%/8.1%	8.1%/20.3%	25.0%/30.8%
<i>College school</i>	87.6%/73.1%	1.9%/5.9%	10.5%/21.0%	3.7%/20.4%
<i>Total</i>	90.9%/73.0%	2.2%/9.3%	6.9%/17.7%	100.0%/100.0%

The results show that teachers and deaf students have the obvious difference in three options ($X^2=767.271, P<0.01$; $X^2=172.629, P<0.01$; $X^2=384.388, P<0.01$). Teachers and deaf students from primary school, junior school and senior school were significantly different on the attitude of the general sign language (Elementary school: $X^2=140.675, P<0.01$; Junior school: $X^2=96.384, P<0.01$; Senior school: $X^2=158.940, P<0.01$), the attitude from college teachers and the deaf students have no obvious difference.

Discussion

The types and level of sign language using between teachers and deaf students are different

After investigation for 81 special school's teachers and deaf students, we can find that almost all of the special education school teachers and 90% of the deaf students said they could use and understand a lot or part of the "Chinese sign language". Use both of two kinds of sign language accounted highest proportion, the proportion of deaf

students use "local sign language" to be significantly higher than that of teachers, teachers use level and the proportion of the "Chinese sign language" were significantly higher than that of deaf students. Why do teachers and deaf students show differences? Maybe it caused by the training of "China sign language" received by teachers. Since the 1950 s, our country has been committed to the work of sign language's standard and received a lot of achievement, such as the publish of China sign language. In 1991, the ministry of civil affairs, the former state education commission, the state language work committee, the China disabled persons' federation jointly issued The notice of the application of Chinese sign language around the country, which ordered local disabled persons' federation must use Chinese sign language in public, such as meetings and TV show, China sign language should be used in the education and teaching. Besides that, China sign language should be included as teaching content in normal colleges. But "China sign language" not included in the deaf school courses, so deaf students have a hard condition and opportunity system to study "China sign language". Survey research in recent years indicated that it's need to open a sign language course in deaf school, we can teach "the China sign language" through specialized courses and transform the situation of sign language learning(Gu Dingqian et al.,2005). China undertakings for disabled persons——tenth five-year plan outline Put forward the task "to continue promoting China sign language" .With the rise of studying phase, the proportion of use "local sign language" also rise and the proportion of "China sign language" is on the decline, which may Because of the "China sign language" in the book of vocabulary is limited, difficult to meet the needs of the senior teachers and students, so they need to cooperate to use "sign language" for complement.

The difference of the effect of sign language perceived by teachers and deaf students

Sign language is the important tool of learning culture knowledge, and way for access to information. Effective language communication plays an important role in deaf students' learning and living. For the effect of sign language used in teaching, the evaluation of teachers and students are different, teachers 'expectations is higher than that of deaf students understand the actual situation. On the one hand, this kind of phenomenon related to the differences in the type and level of use of sign language; On the other hand, it may also be caused by subjective judgment of "understanding". Teachers determine whether students "understanding" mainly depend on observing the students reaction (e.g., questions). In fact, some students don't ask questions is not equal to "understand", and is likely to be in a state of not total understand. There are 80% of Teachers of special education schools without special education background(Wang Yan et al.,2011) , teachers from deaf school mainly through study form colleagues and self-study learning to learn sign language(Liu Yanhong et al.,2013). Deaf school teachers are not only the disseminator of knowledge but the disseminator of sign language. The state of informal learning way to sign language will naturally affect the

consistency of sign language expression. Especially with the progress of science and technology and the development of the society, the network language and professional term appear constantly, many school teachers and students designed sign language by themselves and this new signs emerge in endlessly. 53.9% of deaf students reported he sign language teachers used are "different" or "different" (Kai Cheng, 2011). Most teachers and students from special school said that there were some differences when they encountered with the outside of the deaf sign language. This situation will affect the signers of effective communication, and teaching in deaf school, and bring a certain degree of difficulty the teachers and students when they communicate with deaf people outside of school. The main duties and responsibilities of a teacher is teaching, and therefore the difficulty of using sign language teaching is more than difficult to communicate with outside of the deaf, Deaf students learning in the school, so they meet more communicate difficult in campus than outside of the school.

Most of teachers and deaf students hope to develop general sign language

In recent years, although China disabled persons' federation and other departments start to promote the use of China sign language in all parts of the country, but due to the lack of publicity and training system, the popularity of *The China Sign Language*, the problems existing in the Chinese sign language itself and other reasons, the promotion of China sign language in all parts of the country's is not ideal. Along with the economic development, social progress, and special education career continuously made new progress, present situation of sign language research and extension with the disabled culture doesn't fit the requirements of the great development of prosperity, with the national education reform and development of special education, especially to speed up the development does not adapt the new situation, and doesn't fit the international influence of China's undertakings for disabled persons, does not adapt with language work in our country's new strategy and rapid informationization development (Shen Yulin, 2008). Develop general sign language, which is standard sign language in our country, refers to the norms for China's social existence of a variety of sign language, we should choose a kind of sign language as a common language, to unify multiple variations of common language specification. The survey results show that the vast majority of special teachers and the students hope to develop standardized general sign language, especially in teacher groups. The expectations of teachers from senior school declined to formulate general sign language, deaf students from high grade also hesitant to support develop general sign language, because they have formed a stable use of sign language habits in daily life. It is imperative to improve the quality of deaf education, to promote the realization of the deaf in different regions between the barrier-free communication between the deaf and the healthy people, we need sign language's specification and unity.

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