

## THE EFFECTS OF AMESLAN VERSUS SIGLISH UPON TEST SCORES

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In a study by Fleischer and Cottrell (1976) it was found that material interpreted to deaf subjects in a sign language system known as American Sign Language (Ameslan) resulted in significantly higher test scores than material interpreted in another system known as Signed English (Siglish). Subjects for this study were 40 deaf students registered through Campus Services for the Deaf at CSUN. Fant (1972) has defined Ameslan (ASL) and Siglish:

ASL – “It is the sign language used by nearly all (signing) deaf people in the United States. It does not follow the English grammatical scheme and is a wholly different language from English.”

Siglish – “Siglish is a sign language that follows the English grammatical system. It is English presented visually on the hands, rather than orally by the voice.”

Fant (1974-75) has further explained Ameslan in this way:

“Ameslan is a legitimate language in and of itself. That is to say, it is not based on English, but stands by itself, on its own feet. If English did not exist, Ameslan could still exist, just as French or Spanish exist independently of English.”

The above finding of Ameslan superiority has significance for those who are responsible for the delivery of interpreting services to deaf students

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in postsecondary institutions, and the training of individuals in sign language and interpreting, including the preparation of media to support training activities.

There are immediate implications for the practices at CSUN, where there are two sign language classes in Ameslan, and two interpreting classes which deal with both Ameslan and Siglish. In addition, CSUN is a founding member of the National Interpreter Training Consortium and is responsible for the training of interpreters in nine western states.

Because of current widespread interest in the training of interpreters across the country, it was felt that a second study comparing Ameslan and Siglish might be conducted because (1) the Fleischer and Cottrell study used high school level material, and results might be different if college level material were used, and (2) the first study did not consider the sign language preference (Amelan or Siglish) of the deaf subjects which could also be a factor in the resulting test scores. It might have been possible in the first study, for example, that a predominant number of students preferred Ameslan.

Therefore, it seemed appropriate to conduct a second study which used college level lectures, and which controlled for sign language preference of the deaf consumer before strong conclusions could be drawn regarding:

- 1) Delivery of interpreter services;
- 2) Sign language and interpreter training.

It was predicted that there would be no significant differences in test scores between those receiving Ameslan treatment versus those receiving Siglish treatment regardless of their stated preference.

### Methodology

Two lectures were scripted and audiotaped by two CSUN professors in their respective areas of expertise. These professors did not know sign language, and no changes were made in the way they would normally deliver a lecture. The lectures were on "Heat Transfer" (approximately 15 minutes) and "Education and Cultural Differences as Reflected in the Education of the Mexican American" (approximately 25 minutes). Each professor constructed a 10-item multiple choice test based on the lecture.

Deaf students enrolled at CSUN during the fall semester of 1975 were invited to participate in this study. All subjects had a better ear hearing loss of greater than 80 dB.

Each deaf student stated a sign language preference on the basis of his preferred "reading" of signs when communicating with deaf friends in a social setting. If a subject indicated equal satisfaction with the two sign language modes, a coin toss determined his inclusion in a research group.

A total of 29 deaf students participated in this study, of whom 16 preferred Ameslan and 13 preferred Siglish.

The Ameslan-preference group (N = 16) was broken into two subgroups (see Figure 1). Half (N = 8) received the two lecture treatments in Ameslan, whereas the other half (N=8) received the two-lecture treatments in Siglish. The Siglish-preference group (N=13) was also broken into two subgroups, of whom seven received the two lecture treatments in Ameslan, and six received the two lecture treatments in Siglish.

The Siglish treatments were delivered without special endings or plural indicators. Subjects were told that the study had to do with the effects of sign language systems upon comprehension of lecture material.

Figure 1 PREFERENCE AND TREATMENT GROUPS		
Treatment		
Preference	Ameslan	Siglish
AMESLAN	N = 8	N = 8
SIGLISH	N = 7	N = 6

The interpreter had carefully rehearsed each audiotape prior to the experiment in order to insure strict adherence to the unique syntax of each language mode. This person had no knowledge of the test items until after the experiment was completed.

In each test situation, the audiotaped lecture on "Education and Cultural Differences as Reflected in the Education of the Mexican-American" preceded the audiotaped lecture on "Heat Transfer". The tape was played at a normal level of sound and rate of speed, and the interpreter interpreted the material as he would in a normal classroom setting, though rendering Ameslan in one case and Siglish in the other. After each lecture, the deaf students took a multiple choice test based on the material presented.

Data were subjected to a 2 x 2 analysis of variance. The independent variables of (1) sign language preference and (2) sign language treatment were analyzed against the combined test scores of the two lectures.

#### Findings and Conclusions

Table 1 MEAN SCORES BY TREATMENT, PREFERENCE, AND LECTURE				
Treatment	Preference	Education of Mexican-American $\bar{X}$	Heat Transfer $\bar{X}$	Combined $\bar{X}$
Siglish	Siglish	4.71	5.57	10.28
Siglish	Ameslan	4.25	4.25	8.50
Ameslan	Siglish	4.50	5.66	10.16
Ameslan	Ameslan	5.87	5.50	11.37

While Table 1 indicates that higher combined mean scores were obtained from the Ameslan treatment, the difference between Ameslan and Siglish combined means did not reach a level of statistical significance (See Table 2).

Source of Variance	SS	df	MS	F	p
Main Effects					
A. Treatment	17.09	1	17.09	2.09	.16
B. Preference	0.89	1	0.89	.11	.99
Interaction Effect (AXB)	16.02	1	16.02	.20	.18

As shown in Tables 1 and 2, there were no statistically significant differences regardless of preference and no statistically significant differences regardless of treatment received. In other words, those who preferred Ameslan and received Ameslan. Those who preferred Siglish and received Ameslan did as well as those who preferred Siglish and received Siglish. Nor were there statistically significant differences attributed to the relationship between "treatment" and "preference."

The present study failed to confirm the superiority of either sign language system. An analysis of the data clearly says that preference for a system had no relationship to the scores obtained.

It is clear that this body of CSUN deaf students performed as a bilingual group, with about equal facility in two distinct manual languages, ASL and Siglish. While an interpreter and deaf student in a one-to-one situation normally would negotiate the nature of the transmission, it is evident that a mixed group of CSUN deaf students could function in either mode.

### REFERENCES

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