The SignWriting
Literacy Project
For Deaf People

An Innovative New Way of Teaching

Profoundly Deaf People To Read & Write

...Special Software, Videos, Books & Instruction...

Plus an Educational Library For Deaf Students Online

Above: Fernando, a Deaf student at Chaparral Elementary School, in Albuquerque, New Mexico, is participating in the SignWriting Literacy Project. Books, videos and software are donated to schools with Deaf students, in return for documented feedback. Fernando is reading from one of the children's stories donated to his class. Students are eager to learn and are reading, writing and typing for the joy of it...

Literacy For The Born-Deaf

It is hard for hearing people to imagine what it must be like to be born-deaf. Many of us take speaking, reading and writing for granted. But actually all three are dependent upon good hearing. Reading is not based on sight alone - it is based on sounds. When hearing people learn to read, they "sound-out" the letters in each word, plus they are learning to read a language they already know how to speak.
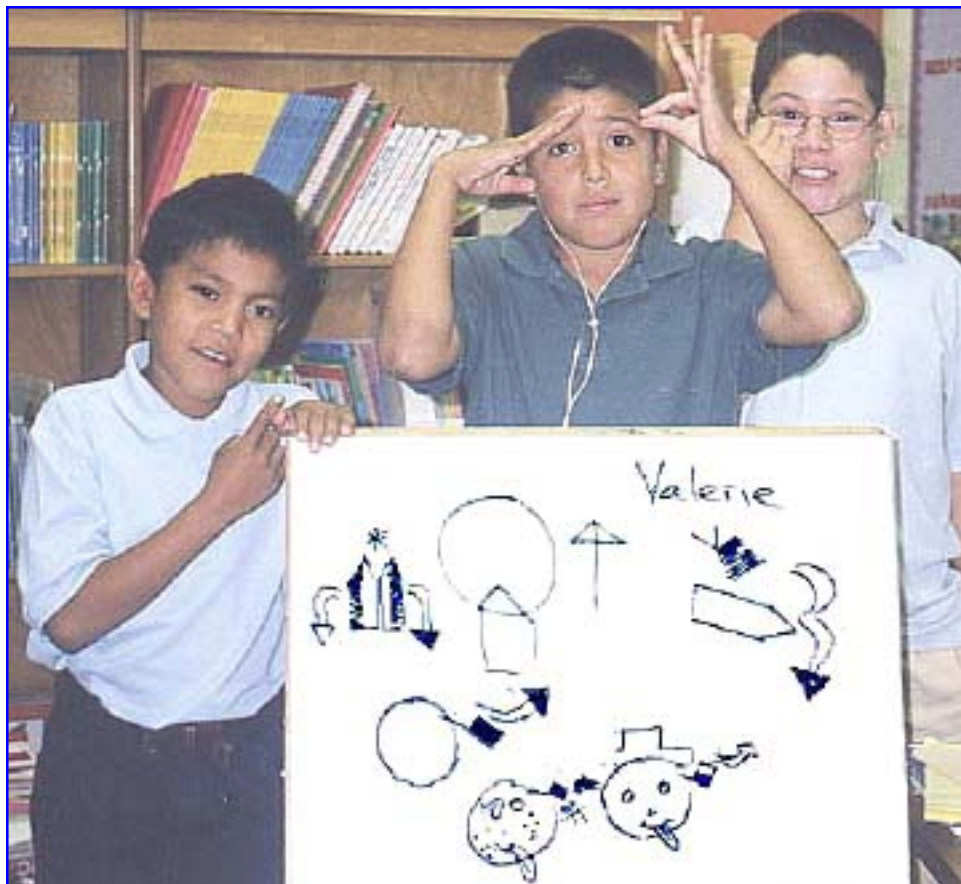

Deaf students Simon, Jazmine, Joe and Desi read SignWriting books while waiting to use the computers at Mark Twain Elementary School in Albuquerque, New Mexico.

For born-deaf people to function in a hearing world, they must learn to read and write words - words they have never heard. Profoundly deaf people cannot "sound-out" words. They must learn to read from rote-memory, without sounds to help them. The SignWriting Literacy Project develops specially-designed materials teaching literacy to the born-deaf, which are donated to schools.

3

Free To Schools For The Deaf

The SignWriting Literacy Project is pioneering a new concept in Deaf Education. SignWriting books, videos and software are specially-developed for the Deaf, and then donated to classes with Deaf students. In return, teachers, students, parents and administrators provide documented feedback. The results are published on the SignWriting Web Site and in an annual Literacy Project Report.

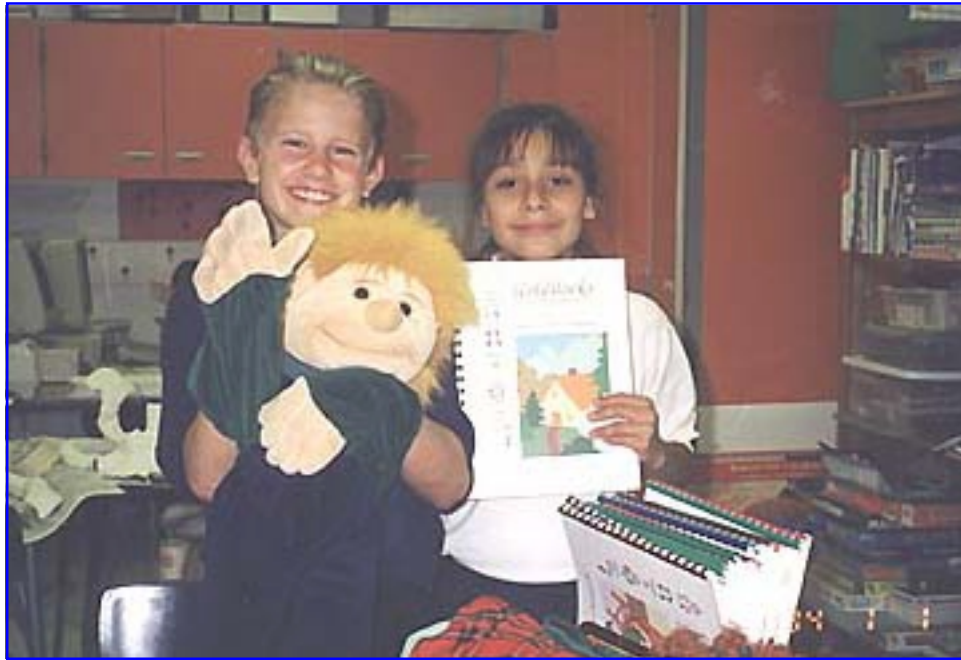Students in Albuquerque, New Mexico showing a message they wrote in SignWriting.

"By the third page of the story, the kids were figuring out the signs by themselves with no assistance from me. They then transferred it to written English and they labeled the SignWriting and wrote in English. IT WAS AWESOME!!"

Patti Togioka
Elementary School Teacher
Oregon School for the Deaf

Deaf students proudly show donated books which they are reading in class.

Donating Materials To Schools

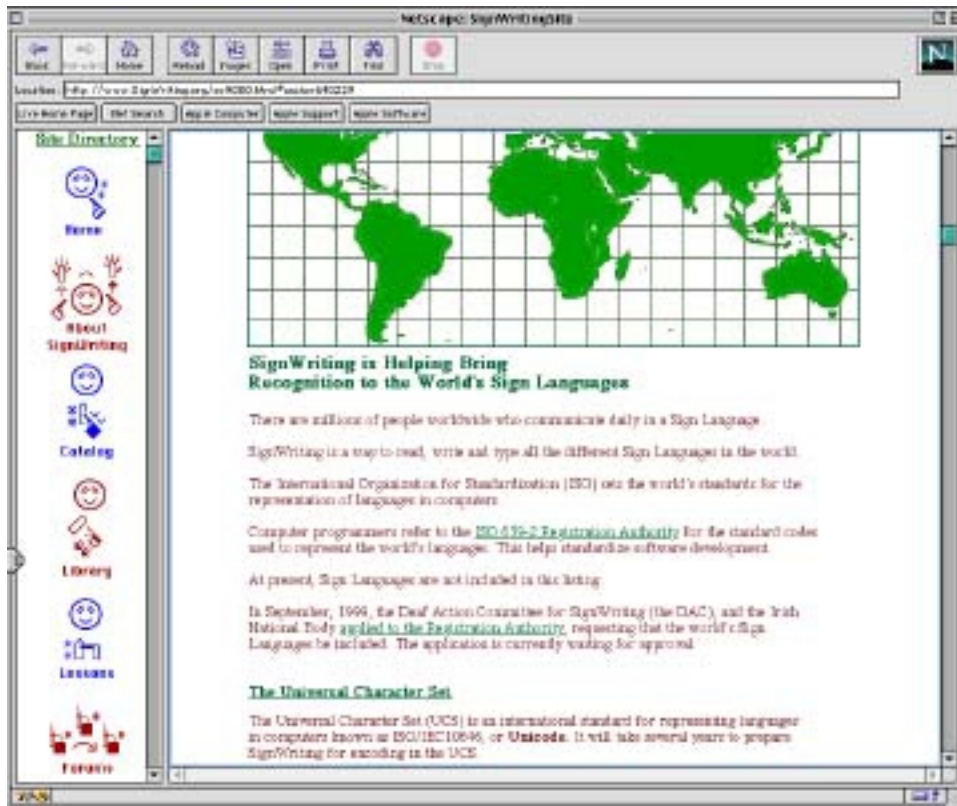The SignWriting Literacy Project donates the following materials to schools:

Each Deaf student receives:

1. Picture Dictionary
2. Workbook Level One
3. Storybook Level Two
4. Storybook Level Three
5. Storybook Level Four

Each classroom receives:

1. Flashcards
2. Educational Videos
3. Learn To Read ASL book
4. SignWriter Computer Program
5. Lessons In SignWriting Textbook
6. A Web Page for the Class
7. Full Technical Support

The SignWriting Web Site
http://www.SignWriting.org

The SignWritingSite is an educational web site with over 300 web pages to explore. It includes a Library of Literature and free SignWriting Lessons Online. Four ongoing courses are featured teaching: 1.Symbols 2.Penmanship 3.Grammar and 4.Reading. Special features are posted twice a month by the system's inventor, Valerie Sutton. The Site also includes seven forums: the Sponsor's Forum, the Teacher's Forum, the Research Forum, the Linguistics Forum, the Software Forum and the SignWriting Email Forum. There are other sections, such as the SignWriting History Archives, Deaf Opinions on SignWriting, Questions & Answers, and web pages for the classrooms participating in the SignWriting Literacy Project. SignWriter Shareware and Fingerspelling Fonts can be downloaded free of charge, and a Catalog Online lists SignWriting publications.

Developing Special Software

SignWriter Computer Program, version 5.0
For Deaf Children, Deaf Adults, & Deaf Educators

We have developed, and are continually improving the SignWriter Computer Program, the first sign language processor in history. It is educational software that teaches reading and writing words and signs, available in nine spoken languages and sixteen signed languages.

Version 5.0 is urgently needed, since the present version of SignWriter, version 4.3, is in MS-DOS, which is quickly becoming out-of-date. SignWriter, version 5.0, will be for both Macintosh and Windows, bringing it up-to-date with present-day technology. It is being programmed as a Java application. The project has seven phases.

Photo left: Classroom teacher Lorraine Crespin assists Deaf student Monica Zuniga at Chapparal Elementary School in Albuquerque, New Mexico.

Photo right: Deaf student Danny is reading from the computer screen with the help of teacher Cecilia Flood.

Cecilia is conducting research on the effectiveness of the SignWriting Literacy Project at University of New Mexico.

SignWriter 5.0

Right now, Deaf People & Teachers In 16 Countries Use SignWriter 4.3 in MS-DOS

Some Deaf people use SignWriter daily and depend upon it.

They are all waiting anxiously for SignWriter 5.0!

• SignWriter 4.3 in MS-DOS was programmed in two old programming languages: Microsoft Pascal and Assembly Language.

• SignWriter 5.0 is being written as a Java application, the new, flexible programming language fitting today's technology. It will be a "cross-platform" program.

• The source code from SignWriter 4.3 in MS-DOS could not be transferred automatically to Java. The majority of the source code has to be re-written.

• So ten years of work developing SignWriter 4.3 in MS-DOS now has to be improved in Java. Old files, typed with SignWriter 4.3, need to "convert" into the new SignWriter 5.0 format. Dictionaries are complex in SignWriter and must convert too.

• There are also new features being built into SignWriter 5.0, such as a new Multi-Lingual User Interface, and typing down the page in vertical columns.

Programming SignWriting
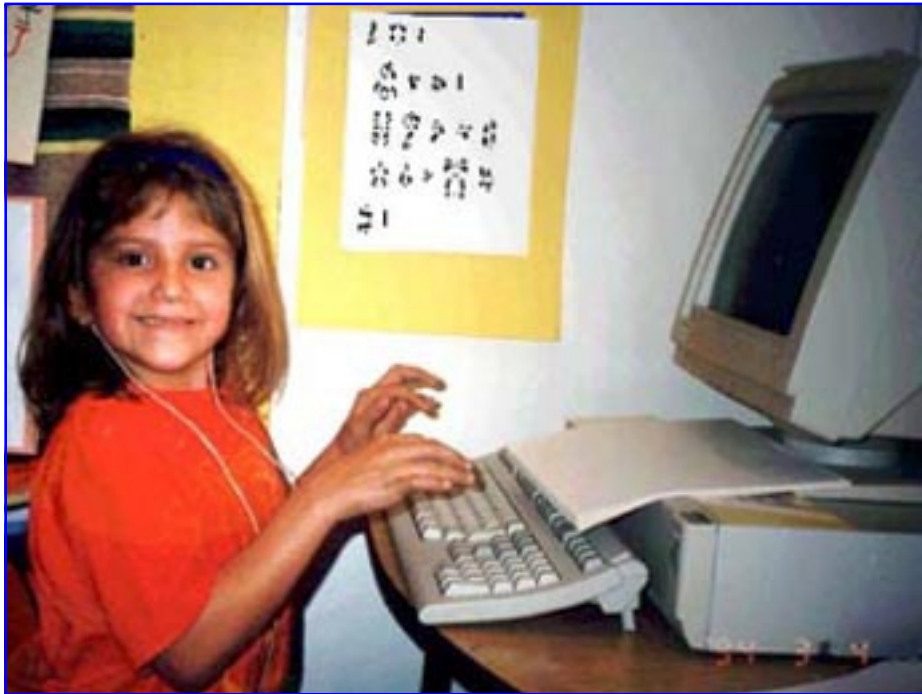## To Become "Text"
In Word Processing Programs

SignWriting symbols need to become "text", so that commonly-used "text editors" can include written Sign Language. At present, the symbols are considered "graphics" by other computer programs.

Why Is This Needed?
To further literacy skills of Deaf people who use Sign Language, SignWriting needs to be easily accessible in popular word processing programs, such as Microsoft Word and WordPerfect. At present, the only way SignWriting can be placed in a word processor, is to turn it into a "graphics file" and paste it into a word document as a "picture".

SignWriter 4.3.
Presently, SignWriting is typed daily by deaf adults, deaf children, and their teachers, using SignWriter 4.3 in MS-DOS. Teachers tell us that there are some deaf children who sit for hours and "type and type and type" with SignWriter, like little Myra, age 6:

Deaf kids love SignWriting!

But all of the hundreds of typed files in SignWriting, called .SGN files, are only considered "text" inside the SignWriter Computer Program. Within the isolated environment of SignWriter, visual symbols can be searched for, and replaced, just as if

they were "text". In that sense, SignWriter is considered the world's first "Sign Language Processor"....but until SignWriting symbols can be considered "text" in **other** commonly-used word processing programs, the Deaf will continue to be isolated from the rest of the world.

To Solve This Problem....

This can be solved with funding, with two programmers working for two years. And some of the work has already started, but is at a standstill until further funds can be obtained.

The project is divided into three parts, and several phases:

Part One:
Programming SignWriter 5.0

...a Java application...

Five Programming Phases

Phase 1: Multi-Lingual User Interface.

Flexible interface in icons, signed languages, & spoken languages.

Phase 2: Typing Signs, Fingerspelling & Words.

Typing in three modes: Sign Language, Fingerspelling and the Roman Alphabet. This also includes converting old files typed with SignWriter 4.3 in MS-DOS.

Phase 3: Words-to-Signs Dictionaries.

Sign Language dictionaries from many countries will be available. These dictionaries are bilingual. A Deaf student can look up words to find signs. The dictionary is also used as a way to type documents. Signs can be pasted into sentences as you type.

Phase 4: Printing & Exporting.

Printing in multiple languages vertically & horizontally, in 7 document formats, & 4 dictionary formats. Exporting SignWriting documents in several graphics formats.

Phase 5: Signs-to-Words Dictionaries.

Sign Language users have requested this for years! Bilingual dictionaries that sort by SignWriting symbols (Sign-Symbol-Sequence) & other advanced sorting features.

Part Two:
TrueType
& Unicode
Development

Phase 6
With Several
Sub-Phases

Phase 6: TrueType & Unicode Development

The SignWriting Universal Character Set will improve and increase the exchange of SignWriting data. First, it has to be developed and approved by the International Organization for Standardization. It then has to be implemented into the SignWriter Computer Program, which at present has its own self-contained symbol editor that isolates SignWriter from being used by other programs.

TrueType and Unicode Development is a complex project involving a number of substages:

Phase 6.1. Analysis of the character and glyph repertoire Sutton SignWriting (SSW) provides unique characters for all of the physical parts of the body used as basic elements in Sign Languages (such as the head, hands, shoulders, arms, and legs) and specific characters for the configurations of these (such as facial expression or handshapes). SSW also provides characters for directional movement of these elements (such as linear direction and rotation). It also provides glyph variants of all of these characters in different orientations (such as a handshape pointing at 45, 90, 135, 180, 225, 270 degrees). Current SignWriter software offers only a subset of these elements, but the Generic Symbol Set (GSS) will be developed during this phase, with initial analysis as to which elements are properly unique characters and which are modified glyph variants. Deliverable: a glyph repertoire.

Phase 6.2. Provision of TrueType fonts. Concurrent with Phase 6.1, outline-format fonts will be developed for each required glyph. At present, only bitmap-format symbols are available hard-coded into the SignWriter software. Currently, the number of required glyphs is unknown; it is certainly many thousands. Some of these will require complete design, but many of them (the glyphs at different orientations of arc) can be generated automatically once the base glyph is available. Deliverable: a set of TrueType font databases.

Phase 6.3. Analysis of the coding conventions As text elements, rather than graphic elements, the coding of SSW characters conformant to Unicode principles of encoding will be compared with the conventions used in the SignWriter 5.0 program. It is unknown at this time how close or how far from Unicode coding conventions the SignWriter coding conventions are. What we do know is that the configuration of SignWriter 5.0 (Java-based) to handle the coding of conventions of SignWriter 4.3 (MS-DOS-based) has been complex and time-consuming. The deliverable for this Phase will be a mapping table or set of mapping tables from SignWriter 5.0 to Unicode conventions. Reverse mapping tables will be made available only if practical (as the goal is to move to Unicode coding).

Phase 6.4. Sign-Symbol-Sequence (SSS). This Phase will arrange the deliverables of Phases 6.1 and 6.2 in "alphabetical" order according to the Sign-Symbol-Sequence (SSS) already defined for the SignWriting subset of the GSS. Analysis may suggest revision of the SSS since the principles of ISO/IEC 14651 (Algorithms for ordering the UCS) will be respected. Deliverable: a table of ordered characters assigned to UCS code positions in the Private Use Area.

Phase 6.5. Unicode implementation. This Phase dovetails with Phase 7, which is the conversion of SignWriter 5.0 to Unicode-compliant SignWriter 6.0 as an reference implementation prototype using the Private Use Area characters defined in Phase 6.4.

Phase 6.6. Formal application for encoding. The character set will be presented to the Unicode Technical Committee and ISO/IEC JTC1/SC2/WG2 for approval and assignment of UCS code positions.

Proud of her typing!!

Part Three:
Programming SignWriter 6.0

...a Java application...

Phase 7
Mission Accomplished!

Phase 7: Blending Part One With Part Two
The conversion of SignWriter 5.0 to Unicode-compliant SignWriter 6.0. All of the features of SignWriter 5.0 must be designed to work with Unicode, and all older documents typed in SignWriter 4.3 or SignWriter 5.0 must convert to the new Unicode character set.

LETTER OF SUPPORT FOR SIGNWRITING
AS A TOOL FOR LITERACY FOR DEAF STUDENTS

I am a linguist with a particular interest in writing systems; I have followed with interest the development of SignWriting and its recent successes. The work that Ms.Sutton has done over the past twenty-five years in devising this versatile writing system is phenomenal. Over the years, her work as been supported by her own funds, by private contributions and some grants, and by much volunteer labor. Now she must have more monetary support at this crucial time when she is working to get the very idea of the use of written form of signed languages accepted within the Deaf education establishment and Deaf communities.

Ms.Sutton has to convince those with an interest and stake in Deaf education both that it is possible, and that it is desirable, for Deaf children to learn to read first in their own native language, rather than having to spend large amounts of their early years of schooling learning to read whatever language is spoken around them, a language which they cannot hear or speak, before they can be taught the basic school content subjects that all other children concentrate on.

At the same time, Valerie Sutton is working with Deaf scholars and teachers of the Deaf in a number of countries around the world to adapt the symbolic system of SignWriting to other signed languages. As she did with Danish Sign Language and with American Sign Language, Ms. Sutton provides these groups with information and consults with them as they begin to use SignWriting symbols to write their own languages. The same benefits of early literacy that DSL users have experienced and that ASL users are now beginning to experience,, will come to Deaf children in Taiwan, Brazil, Israel, Spain, Nicaragua, and the other countries where SignWritng is adopted: better educated Deaf people will have better opportunities in life.

Ms. Sutton has designed and is continually developing sophisticated computer software that allows one to write and send signed language messages and to publish books using SignWriting. It is crucial that her work not be slowed or halted by lack of funds just at this time when it seems that resistance to writing gestural languages can be overcome and great strides can be made toward providing Deaf children with genuine education. A Deaf child would learn to read first in his/her own native signed language (and later, of course, would also learn to read as a second language the dominant language of the country); textbooks written in the appropriate signed language would be used for mathematics, history, and so forth, and these subjects could be taught up to the normal standards of the country. In this manner the education of the Deaf could expand away from an exclusively 'overcoming a handicap' focus to a comprehensive focus of 'providing the most complete education for this minority group.' The real handicap for Deaf persons is lack of a full education equal to that of hearing persons.

Up until now, the missing ingredient in all of this was a writing system designed specifically for languages that use movement rather than sound; Valerie Sutton and her associates have given us that system in SignWriting. Now is the time to ensure that in the future the Deaf will enjoy the benefits of literacy in their own languages. I urge you to fund Ms.Sutton's valuable continued work in this effort.

Rebecca Larche Moreton
rebeling@mailhost.tcs.tulane.edu

1. Our Mission... Improving literacy levels of the born-deaf.

2. Requested by Teachers.... Our literacy materials are **sorely needed.** Educators have **suggested** and **requested** them.

3. Why Is It Needed?.. Not all born-deaf children learn to read and write well. Many schools graduate born-deaf children with little or no English skills. Why is this? One reason is that the born-deaf's first native language is not English, but Sign Language. Learning to read and write your second language before learning to read and write your first language is very difficult. Before SignWriting was invented, there was no solution.

SignWriting makes it possible for deaf children to read and write Sign Language and English side by side. For many deaf children, SignWriting is the bridge to literacy. The purpose of the Literacy Project is to test this in the schools and to then disseminate the documentation to other educators for review. Documentation already received has been outstanding and the results are quite successful. Kids who could not read before are reading in ways that people would never have dreamed.

4. Target Population... The age of the students varies depending on the school. Our focus is K-12. However, Deaf people of all ages can use our materials, and some Deaf adults have greatly benefited from our materials too. We have created a special web page for each school, to document the student's progress, and to provide information for parents and teachers.

5. How Many Served?
Software & the World Wide Web: 1000's of people receive free software, free lessons online, and free documented feedback posted on our popular **SignWriting Web Site**, which receives 10,000 to 20,000 hits daily.

Donated Materials: 100 deaf children in 1999 plus several groups of Deaf adults, are receiving donated books, videos and software. Their parents and teachers benefit from our donated materials too. This includes two residential schools for the Deaf, four mainstreaming hearing impaired programs at elementary schools, and one private-tutor with 7 deaf children. The schools are all over the USA, but our Deaf staff members, who give them technical support, are from Southern California.

SignWriting Email List: 150 members in 1999 include teachers, administrators and researchers. Issues surrounding literacy for the deaf are discussed. This service is provided free by our non-profit organization, and is helping educators learn of new developments in teaching deaf children.

6. Part-Time Employment For Deaf People
Deaf staff members help prepare the materials.

7. No Duplication... No other agency duplicates our services, since this is a new way to teach the deaf. No funding is received from the United Way.

8. Contact Person... Valerie Sutton, inventor of SignWriting, and President and Executive Director.

Non-Profit Status

Internal Revenue Code
Educational corporation 501 (c) (3)

Identification Number
95-3068257

California Revenue Code
Public benefit educational
corporation, section 23701d

Non-Profit Number
LA: EO: 78: 561

Resale Number
SREA 24-761838

All donations are tax-deductible for both
Federal Income Tax and California Franchise Tax.

Center For Sutton Movement Writing

The Deaf Action Committee For SignWriting (the DAC) is sponsored by the Center For Sutton Movement Writing, Inc., a non-profit, tax-exempt, educational, membership organization founded in Southern California in 1974. Directed by Valerie Sutton, the Center collects funds for publishing books and video tapes, developing computer software, training instructors, paying Deaf staff members to develop educational materials, designing and posting a free educational web site, and presenting free workshops. The SignWriting Literacy Project, directed by the Deaf Action Committee for SignWriting, started in Spring, 1998.

FRANCHISE TAX BOARD
SACRAMENTO, CALIFORNIA 95867
Telephone (916) 355-0392

September 28, 1976

In reply refer to
344:RDM:vc:g

Center For Sutton Movement Writing, Inc.
6097 Deerford Row, La Jolla, CA. 92037
Identification Number: 95-3068257

Purpose:	Charitable & Educational
Form of Organization:	Corporation
Accounting Period Ending:	December 31
Organization Number:	

Based on the information submitted and provided your present operations continue
unchanged or conform to those proposed in your application, you are exempt from
state franchise or income tax under Section 23701d, Revenue and Taxation Code.
Any change in operation, character or purpose of the organization must be reported
immediately to this office so that we may determine the effect on your exempt
status. Any change of name or address also must be reported.

You are required to file Form 199 (Exempt Organization Annual Information Return)
or Form 199B (Exempt Organization Annual Information Statement) on or before the
15th day of the 5th month (4-1/2 months) after the close of your accounting period.
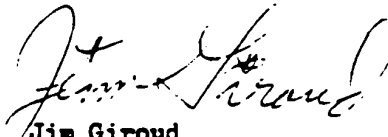See annual instructions with forms for requirements.

You are not required to file state franchise or income tax returns unless you have
income subject to the unrelated business income tax under Section 23731 of the Code.
In this event, you are required to file Form 109 (Exempt Organization Business
Income Tax Return) by the 15th day of the 3rd month (2- 1/2 months) after the
close of your annual accounting period.

Contributions made to you are deductible by donors as provided by Sections 17214
through 17216.2 and 24357 through 24359 of the Code, unless your purpose is test-
ing for Public Safety.

If the organization is incorporating, this approval will expire unless incorporation
is completed with the Secretary of State within 30 days.

Exemption from federal income or other taxes and other state taxes requires separate
applications.

*We are returning duplicates of documents submitted
with the application.

Jim Giroud
Supervisor
Exempt Organizations

XXXcc: Secretary of State (Corp.)   cc: Stanley P. Witkow
   cc: Registrar of Charitable Trusts

FTB 4206 (11-75)

Department of the Treasury

LA:EO:78:*561*

PROOF OF 501 (c) (3) STATUS

District Director

Internal Revenue Service

Date: In reply refer to: J. Jones
    MAR 28 1978   L-178, Code ~~411~~EOG-2:.
~~Determination Section (213) 688-4553~~

▷ Center For Sutton Movement Writing, Inc.
   6097 Deerford Row, La Jolla, CA. 92037
   Identification Number: 95-3068257

Purpose: Educational
Accounting Period Ending: December 31

         Based on information supplied, and assuming your operations will
be as stated in your application for recognition of exemption, we
have determined you are exempt from Federal income tax under section
501(c)(3) of the Internal Revenue Code.

         We have further determined you are not a private foundation within
the meaning of section 509(a) of the Code, because you are an
organization described in section 509(a)(2).

         You are not liable for social security (FICA) taxes unless you
file a waiver of exemption certificate as provided in the Federal
Insurance Contributions Act. You are not liable for the taxes imposed
under the Federal Unemployment Tax Act (FUTA).

         Since you are not a private foundation, you are not subject to
the excise taxes under Chapter 42 of the Code. However, you are not
automatically exempt from other Federal excise taxes. If you have any
questions about excise, employment, or other Federal taxes, please
let us know.

         Donors.may deduct contributions to you as provided in section
170 of the Code. Bequests, legacies, devises, transfers, or gifts to
you or for your use are deductible for Federal estate and gift tax
purposes if they meet the applicable provisions of sections 2055,
2106, and 2522 of the Code.

         If your purposes, character, or method of operation is changed,
please let us know so we can consider the effect of the change on
your exempt status. Also, you should inform us of all changes in your
name or address.

If your gross receipts each year are normally more than $10,000, you are required to file Form 990, Return of Organization Exempt From Income Tax, by the 15th day of the fifth month after the end of your annual accounting period. The law imposes a penalty of $10 a day, up to a maximum of $5,000, for failure to file a return on time.

You are not required to file Federal income tax returns unless you are subject to the tax on unrelated business income under section 511 of the Code. If you are subject to this tax, you must file an income tax return on Form 990-T. In this letter we are not determining whether any of your present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

You need an employer identification number even if you have no employees. If an employer identification number was not entered on your application, a number will be assigned to you and you will be advised of it. Please use that number on all returns you file and in all correspondence with the Internal Revenue Service.

Please keep this determination letter in your permanent records.

Sincerely yours,

W. H. Connett

District Director

Payments made to you for books, instruction, or any other services do not constitute a deductible charitable contribution to the purchaser. They should be so advised.