HyperSign

An Interactive Dictionary of American Sign Language

Personal Version Table of Contents

Chapter 1
Introduction

Mainstreaming, the Americans with Disabilities Act, the Rehabilitation Act, inclusion, and equal employment have all had a profound influence on public awareness of handicapped persons, including Deaf persons.

Deafness is often referred to as an invisible handicap since the physical signs of the handicap are not apparent. A dramatic increase in its public awareness resulted from the Deaf President Now (DPN) movement. When the presidential vacancy at Gallaudet University was filled with a hearing person even though equally qualified Deaf persons existed, the DPN was born and a revolution took place. Because of national and international media coverage of the DPN protest, millions of persons around the world became aware of deafness and the Deaf culture. Interest in American Sign Language (ASL, the language of the Deaf culture) increased in part because voiced interpretation of the protests were provided.

Until the mid 1960's, ASL was not seen as a true language. It was only considered to be a gestured form of English. The work of William Stokoe and his associates at Gallaudet University in 1965 lead to the identification of the elements in ASL which comprised its content, form, and function. These three features are said to be the minimal constituents of any language.

Ursula Bellugi has continued this work by investigating the processing of sign language in the language center of the brain (left hemisphere), the documentation of the movements which give unique meaning to a sign or sign movement, and the mapping of the processing of ASL in the brains of Deaf persons who have had strokes. The research has confirmed that ASL is a true language even though it is unlike English in its grammar and, unlike other languages, it has no written or spoken form.

Laws mandating accessibility to mainstream services and education for handicapped persons and their parents have necessitated the development
of effective ways to implement change. The need for hearing persons to learn ASL has grown and there is an increasing need for professional
sign interpreters who can understand and use ASL in business, service industries, and schools.

The recognition of ASL as a real language and the greater visibility and involvement of Deaf persons in society has led to an increased interest in learning ASL by hearing persons. The traditional instructional format for teaching ASL has been watch me and imitate. Because of limited contact with Deaf signers and minimal practice outside of class, students in these classes often exhibit poor retention of sign vocabulary.

Why HyperSign?

Many texts and videotaped lexicons of ASL exist. The texts are one dimensional and do not adequately illustrate the motion or the changes in meaning which facial expressions add to the sign. While video tapes add motion and the facial expressions, their inherent linear nature is a significant detriment to their effective use in learning ASL.

People learn and retain best what they need and what serves a purpose in their daily lives. When sign language is taught to hearing adults, one method used is to teach vocabulary in categories. When these same adults go to use this vocabulary either with their own hearing-impaired children or with Deaf adults, their communication is limited to only known vocabulary.

In this manual, "deaf" is capitalized when referring to cultural aspects or the Deaf community and lower case when referring to the audiological condition of deafness.

HyperSign was written to address some of the needs of sign language learners. Specifically, we feel these needs include:

- repeated exposure to the sign vocabulary (learners retain signs that they use frequently)
- exposure to Deaf signers in order to learn the appropriate, correct signs
- extensive practice reading and using signs in many different contexts
- an opportunity to see the motion of the sign
- an opportunity to view and review the suprasegmental aspects of each sign which can change the meaning of the base sign
- an understanding of the rules which govern the use of signs
- an understanding of the culture of Deaf persons
- access to on-demand individualized, private, and self-paced instruction for peers and family members

The signs used in HyperSign were taken from the curriculum of A Basic Course in Communication (NAD) and were recorded at NTID by Deaf and hearing members of the Sign Communication Department. The authors of this program, as well as the members of the Communication Training Program at NTID, realize that ASL dialects exist. Some sign synonyms
are signed in ASL and SEE.

Learning Features of HyperSign

Under no circumstances are we suggesting that a person can learn and be proficient in sign language simply by using this program any more than any dictionary can be used solely in teaching any language. Nor are we suggesting that persons using this dictionary could or should replace professional interpreters who, alone, can provide Deaf persons access to clear and complete communication skills.

HyperSign was developed to meet many of the needs we perceived as hearing people attempt to learn a language of another culture ... a language very different in content, form, and use from English or other spoken languages.

While this product is centered around a video dictionary of approximately 2000 basic ASL signs, many features have been included to enhance the learning experience and increase the potential for success in learning, retaining and using ASL. Some of the features that we feel set this program apart from others are outlined below.

- ***Full Motion Video***
  The full motion video of ASL signs include the suprasegmental features (facial expressions or gestures accompanying the sign) which change their meanings. Each sign has a base sign representing the one most commonly used in daily conversation. If there is more than one sign which fits that word, the dialectical or semantic variations of the signs are also available.
- ***Age Level Specific Vocabulary***
  Since vocabulary varies with age, HyperSign provides access to the video dictionary at three levels. Users of the adult's dictionary have access to all 2000 signs. The teen dictionary is a subset of the adult dictionary. The child's dictionary was specially designed for nonreaders and pre-readers with each word accompanied by an easily recognizable picture.

- ***Spanish and English***
  Since Spanish is the second most commonly used first language in this country, the program is designed to provide instructional text in either Spanish or English.

- ***Activities***
  Games are fun. They enhance the learning process and they increase retention. We have included games for children (Which One?, Matching Game and Tic Tac Toe), and teenagers and adults (Crossword Puzzle, Name That Sign , What's My Sign?, and You First!).

- ***Custom Word Lists***
  Often teachers or parents will want to focus attention on certain specific lists of words. This program allows teachers or parents to create lessons containing specific lists of signs selected from either the adult, teen or child's dictionaries for classroom or in-home use.

- **Everyday Phrases**
  Language learning includes more than learning the words of a language. The words need to be combined to form sentences. We have included a number of everyday phrases chosen to give users something to say.

- **ASL Conventions**
  All languages have rules: rules of grammar and rules of usage. Some of the rules that govern the use of ASL have been included in an on-line document titled More Than Meets the Hand: A Guide for New Users of ASL which offers both written and signed examples of the uses of ASL.

- **On-Line Bibliography**
  Language learning is enhanced if (or incomplete unless) the features of the culture are known. The culture of Deaf persons is just beginning to be appreciated and studied. Deaf persons usually learn about their culture from their Deaf peers since only 3% of Deaf children have one or more Deaf parents. As a service to teachers and especially parents, an extensive bibliography on Deafness and Deaf Culture is accessible from the program. This bibliography includes books for children, sign language learning books, books about deafness, videotapes, etc.

Potential Users and Suggested Uses

There are many potential beneficiaries of a program that could be used to effectively learn ASL. Listed below are some of the groups of people we think could benefit from this program and what we think their benefit might be. This list is certainly not exhaustive.

- **Family Members of Hearing-Impaired Children (grandparents, aunts,uncles, cousins, mothers, fathers, sisters, brothers)**
  Since communication is the key in the life of a family, we consider this the most important user group for this product.

  Years of experience have shown that fluent, effective communication is a primary concern of the parents of hearing impaired children. Parents often feel they can't communicate with their hearing-impaired child (How could s/he hear what I am saying?) or that the signs they use will not be correct. This is especially frustrating since early stimulation and communication is a necessity in establishing the parent-child bond and building a foundation for skills learned later in life. Children learn about the world and themselves through language.

  It is often difficult for parents to schedule time to take sign language classes and the classes themselves are often intimidating. Parents are often afraid to imitate, ask for repetitions, or try out their skills at home.

  This program provides a confidential, self-paced learning tool for parents and other family members. It allows them to design their own lessons and practice at home and provides instant access to signs they need in the home ... not merely those listed in a book or taught in a class.

- **Medical Care-givers Working with Doctors or in Hospitals**
  These personnel may have contact with Deaf persons in both emergency and non-emergency situations. A knowledge of the basic vocabulary relating to illness and injury would make their care of Deaf individuals more effective and more efficient. Deaf persons would also feel less threatened if someone in the medical environment could communicate with them until a professional interpreter arrived.

- **Peers (Playmates) of Hearing-Impaired Children**
  Through play children learn about things and how they work. Important social skills including sharing, rules, competition, losing, and negotiating are also learned through play. Piaget said "play is a child's work". Even though language is not a prerequisite for play, it enhances the value of play and stimulates the development of interpersonal relationships.

- **Classroom Teachers and Other School Personnel**
  Since the passage of PL 94-142, the Education of All Children Act, in 1972, handicapped children, including Deaf children, are mainstreamed into neighborhood schools.

Even though Deaf children are provided with professional interpreters, they still report feeling like outsiders in school. These feelings of isolation and loneliness could be significantly reduced if classroom teachers knew and could use conversational signing and if other school personnel (cafeteria people, secretaries, bus drivers, school nurses, playground supervisors, etc.) would learn basic conversational signs.

- *Sign Language Learners*
  Learning sign language (or any language) is difficult unless there are opportunities for repeated exposure to both the vocabulary and the rules of use. People also learn and retain vocabulary and language that serve a purpose in their daily lives. This program provides a tool through which vocabulary can be learned and reviewed.

- *Pre-professionals or Professionals in Speech-Language Pathology, Audiology, and Special Education*
  A familiarity with ASL would be advantageous for these professionals since professional interpreters are usually not available when they are consulting with Deaf persons. In addition, sign language has also been used successfully to establish communication with persons who are retarded, autistic, or who display other problems which prohibit or impede ordinary spoken communication.

- *Personnel Directors, Co-workers, Supervisors, and Managers*
  The implementation of ADA and the Equal Employment Act has increased the numbers of handicapped (Deaf included) persons in the workplace. The ADA mandates that companies make certain that their services are accessible to handicapped consumers.

  While employment of Deaf persons has increased, these employees often report feelings of isolation and loneliness unless there is someone with whom they can communicate. Although interpreters should always be used for job related communication, the learning of basic conversational signing by employers would send a positive message concerning a company's commitment to making their Deaf employees feel more comfortable and an integral part of their own workplace.

  Not surprisingly, some business people have found that training their sales staff in basic sign communication not only generates good public relations but also increases their sales. Such a practice sends the message that the owner values the business of the Deaf customer.

Chapter 2
Getting Started

Minimum Hardware Requirements

- 386DX/33 MHz with 8 MB RAM (16 MB recommended)
- 6 MB of free hard disk space
- 2X (minimum) CD-ROM drive
- VGA monitor running in 256 colors (thousands of colors recommended)
- Windows 3.1 or Windows 95/98
- Windows compatible sound card
- QuickTime™ for Windows

Installing HyperSign

Place Installation Disk #1 in your disk drive. Choose **_Run..._** from the **File** menu (Win 3.1) or click on the **Start** button and choose **_Run..._** from the Start Menu (Win 95/98/NT/ME). Enter X:\SETUP (where X: is the drive designation of your disk drive) and click on the **OK** button. Follow the on-screen prompts.

Checking Your Video Drivers

The video used in HyperSign are in the QuickTime™ format and require the 16-bit version (Version 2.x) of QuickTime for Windows. If you do not have this version of QuickTime installed on your system, you can install it from the HyperSign CD. Open the HyperSign CD and then open the folder HSUTILS. Double click on the SETUP.EXE program to install QuickTime for Windows on your computer.

Starting the HyperSign Program

Make sure the HyperSign CD is in the CD ROM drive. If you are running Windows 3.1, open the HyperSign program group and double click on the icon for the HyperSign program. If you are running Windows 95/98/NT/ME, click on the Start button, choose Programs from the Start menu, select HyperSign and finally choose the HyperSign menu item. The main HyperSign dictionary window is displayed.

Setting the Program Preferences

Select **_Preferences..._** from the **File** menu. The features offered here deal with the dictionary displayed when the program first starts, the language used and the sound options. Whenever you save the preferences, your selections become the default or start-up settings for the program.

Age at Start-Up

The first thing to specify is the default dictionary which determines what the main dictionary screen looks like (child, teen or adult) and the vocabulary available when the program starts. This option takes effect the next time you start HyperSign. Click on the appropriate age icon to select the default dictionary. If the child dictionary is the default dictionary, you must enter the password (hypersign) to change to the teen or adult dictionaries. When the teen dictionary is the default dictionary, you must enter the password to change to the adult dictionary.

Language

The language option determines the language used in the menu items and for the written words accompanying the signs. Select the language (English or Spanish) you prefer from the pop-up button.

Sound

The program provides audio responses (bell and buzzer sounds, etc.) to user's answers in the various activities, Clicking on the **Game Feedback** check box toggles this option on (a √ is displayed in the check box) and off. Use the slide bar to set the default volume and click on the picture of the little girl to hear a phrase spoken.

The Help Menu

General and activity specific help are available from the Help menu. The actual help screen displayed depends on the dictionary you have open. In addition, the program provides specific help on the Preference and the Student Sign In screens.

Chapter 3
Adult/Teen Dictionary & Activities

HyperSign is a dictionary of approximately 2000 basic signs of American Sign Language. The adult dictionary allows unrestricted access to most of the signs. The teen dictionary and activities are identical to those available to adults with the exception that the dictionary is a subset with certain words removed that the authors felt were inappropriate.

The Adult/Teen Dictionaries

Click on a letter above the scrolling field on the left to show the dictionary entries associated with that letter. The sign for words displayed in all capital letters are the gloss (the sign most frequently used for that word). Words followed by (a), (b), etc. are signed by different persons or are variations of the sign. Any of these variations is acceptable.

When you click on a word or phrase in the scrolling field, the program displays the movie for the sign in the movie window (clicking on the left-most button below the movie window plays the entire movie) and its English name and other words sharing the same sign beneath the movie window. For example, if you selected the word "rural", the English name of the sign is "country" and the words "rural" and "country" both share this same sign.

You can also use the Find option to find words in the dictionary. Click in the text box to the right of the Find label, type in the word you want to find, specify if you want to match parts of words or whole words and then click on the **Find** button. The program searches the dictionary, loads the matches in the pop-up button labelled Matches, and highlights the first match in the appropriate dictionary index card.

Here is an example. Type in the word room and click on the **Find** button. After the search is complete, the dictionary index card is refreshed and the first entry, bathroom, is highlighted. If you click on the pop-up button below the **Find** button, six entries are listed. You can select the word whose sign you want to view from this pop-up button or from the dictionary index card.

That's all there is to using the HyperSign dictionary. It is very easy and yet very powerful. If you need any kind of help or are having difficulties, check the Help menu at the right of the menu bar.

The Adult/Teen Activities

Learning sign language is not just watching a TV screen and drilling and practicing. To add diversity and excitement we have also included a variety of activities for each age group as options on the Activities menu.

Crossword Puzzle

When Crossword Puzzle is chosen from the **Activities** menu, the crossword puzzle screen is displayed with the default game, constructed from the current activity word list, chosen. Below the movie window are numbered buttons representing the ACROSS and DOWN words.
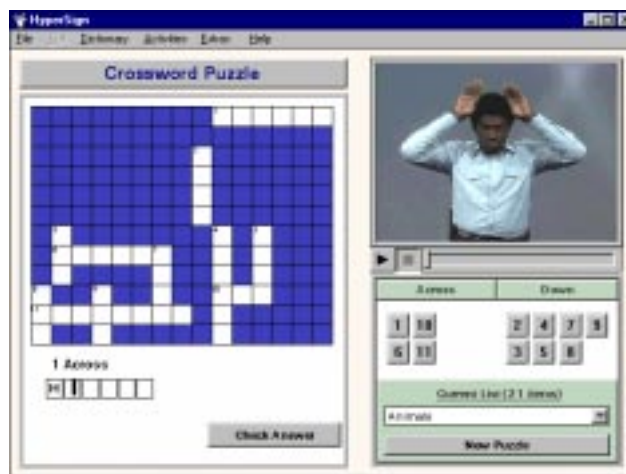
Click on the corresponding numbered button and then the movie **Play** button to see a clue for a word in the puzzle. After viewing the movie clue, type the name of the sign in the boxes below the crossword puzzle and click on the **Check Answer** button. If you are correct name, the letters will be entered in the crossword puzzle. If you have entered an incorrect answer, a message is displayed. After two incorrect responses, the correct answer is entered into the puzzle in red. You can review the movie by clicking on the **Play** button. When you are ready, select another across/down button and continue until you complete the entire cross-word puzzle.

After the puzzle is solved, you can play again by clicking on the **New Puzzle** button to clear the screen and display a new puzzle constructed from the current word list. If you want to try a puzzle based on a different category of signs, click on the **Current List** pop-up button and select the category of your choice.

Name That Sign

This activity is similar to the crossword puzzle in that you are shown a movie and you must enter the name of the sign. However, this is a little more difficult because you don't have any clues as to how many letters are in the name of the sign.

View the movie clue by clicking on the movie **Play** button. Then, enter the name of the sign in the box on the left and press the Enter key. You have two chances to correctly name the sign. A tally of your responses is displayed on the Score Board below the movie window.

Each game consists of the number of signs in the current word list or a maximum of 10 randomly chosen signs if the word list has more than 10 signs. The number of signs (items) in the chosen category is displayed in the heading above the **Current List** pop-up button. Clicking on the **New Game** button starts a new game based on the current word list or you can choose a different category of signs from the **Current List** pop-up button.

What's My Sign?

In this activity you view a sign movie and identify which sign was played by choosing its word equivalent from the 3 choices offered. You will be told if your answer was correct or not. After two incorrect answers, the correct answer is highlighted. Click on the **Next Sign** button for the next sign.
A tally of your responses is displayed on the Score Board. Clicking the **New Game** button starts a new game based on the current word list or you can choose a different category of signs from the **Current List** pop-up button.

You First!

This exercise has been included to provide practice making the signs. In this activity you are shown a word and you are to make the sign for that word. The computer will wait 3 seconds for you to make the sign. Check the accuracy of your signing by watching the sign movie. Then, evaluate (objectively, of course) how well you did by choosing Yes or No on either side of the phrase "Were you right?".

As in each activity, each game consists of the number of signs in the current word list or a maximum of 10 randomly chosen signs if the word list has more than 10 signs. The signs are randomly selected so you can practice the signs in any category as many times as you wish. You can easily choose a different category of signs by clicking on the **Current List** pop-up button.

Vocabulary Review

Here you review the signs included in each category. Choose a category from the **Current List** pop-up button to display the words in the list in the scrolling field. Click on a word in the scrolling list to display the name for the sign and any other words or phrases that share the same sign beneath the movie window and the first frame of the movie in the movie window. Use the movie controls to play the movie. The word list chosen when you leave the review section is the default word list used in the other games.
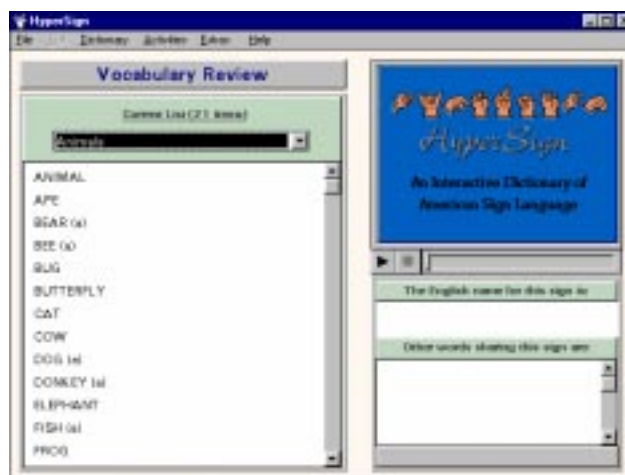
The Adult/Teen Extras

HyperSign offers some special features on the **Extras** menu including a unit on fingerspelling, everyday phrases, and some information and examples of how to use ASL (Conversing in ASL).

Fingerspelling

The fingerspelling module helps you learn to form the hand-shapes for each letter of the alphabet. Fingerspelling is used by Deaf persons to spell a proper noun (the name of a city or person), or a word which has no sign. The beginning signer will use fingerspelling a great deal until his/her vocabulary of signs is large enough for conversational purposes.

The Fingerspelling screen shows the letters of the alphabet and the movie window. When you click on a letter on the left of the screen, that letter and a few words containing that letter are listed below the movie window. Click on an item in this list and then the **Play** button to see the letter or word fingerspelled.

By watching these words spelled you can see how the hand-shape for the letter you have chosen is formed when it occurs with other letters. This will also give you practice in reading someone else's fingerspelling.

Everyday Phrases

After learning a few signs and some fingerspelling, you will want to use your signing skills with a Deaf person. You can use the phrases in this exercise to practice understanding someone else's signs and putting signs together.

These phrases are signed by a teenager and an adult and they may sign some of the phrases a bit differently. The adult is using pure American Sign Language and the other is using American Sign Language signs and putting them into English. Deaf persons understand either version.

Click on a phrase in the scrolling list and the first frame of the movie will be displayed in the movie window. Click on the **Play** button to see the whole phrase signed.

Conversing in ASL

Before you begin using ASL with Deaf persons, there are some rules of conversation you will need to know. Like any other language, ASL has rules that govern who talks, when to talk, how to introduce yourself, and how to change the topic of conversation.

While it was not our intent to include all these rules, those you need as you start to learn and to use sign language are discussed when you select *Conversing in ASL* from the **Extras** menu. On the top left of this screen is a pop-up button from which you can select a specific topic. When you make a choice from this button, the information relevant to that topic is displayed in the scrolling text field.


As you read about the different rules, you will notice that certain words or phrases are colored (red). If you click on red colored word or phrase, the first frame of the movie that demonstrates that rule or concept is shown in the movie window and a brief description is displayed under the movie window. Click on the **Play** button to see the rule or concept demonstrated. Do this for all red colored words for each topic or rule.

Bibliography

It may be helpful to the sign language learner to have access to books, videos, and other reference materials that describe deafness and Deaf culture. Included with HyperSign is a bibliography of about 200 references to enhance your learning of sign language and Deaf culture.

When you select *Bibliography* from the **Extras** menu, a form view of the bibliography is displayed with fields (category, title, authors, source, citation, year of publication, key words and comments) filled with data from the first entry in the database.

As you browse the database, you can mark entries you want to save or print out by clicking on the **Marked** check box to the far right of the record category. If an entry is marked and you want to un-mark it, click on the **Marked** check box again. All the references marked in this manner can be viewed, saved as a text file, or printed out as a group.
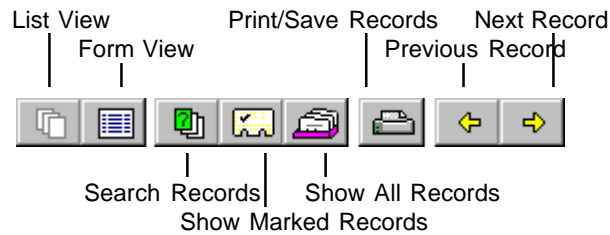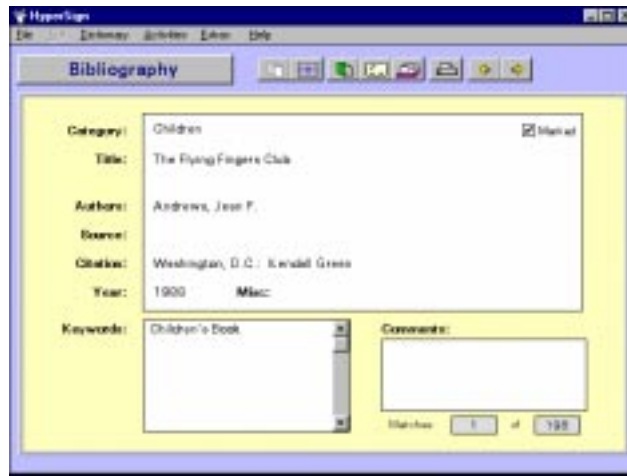
Click on the **View List** button. In the list view only the title, author and year are displayed. You can still mark records on the list view by clicking in the left-most column opposite the record you want to mark. Marked records display a bullet (•) in this column. To un-mark a record in the list view, just click in this column again and the bullet will be removed. If you double click on a record in the list view, the form view is displayed with the information from the selected record filled in.

You can use the search capabilities to find all the records pertinent to a specific topic. Click on the **Search Records** button Then:

1) First choose the field (category, title, author, source, citation, year, keywords, comments) to compare from the first pop-up button.
2) Then select a how to compare (contains, doesn't contain, is or isn't) from the second pop-up button.
3) If the field is "category" or "keyword", choose what should be matched from a third pop-up button. Otherwise, you type in what it is you wish to match in the text box in this slot.
4) Finally, click on the **OK** button. In the form view, the fields are filled with data from the first matching entry in the database. Use the forward and reverse arrows to browse the matched records. All matching records are displayed in this view.

Let's look at an example. Suppose you wanted to see all the records in the database that have the word "deaf" in their titles. You would choose "Title" from the first pop-up button, "contains" from the second pop-up button and type "deaf" into the third slot. When you click on the **OK** button, the first matched record is displayed and the tally at the bottom of the screen shows that you are viewing match number 1 out of 89 matched records found.

You can further narrow a search by filling in the lower set of pop-up buttons on the search dialog screen. When you specify two sets of matching criteria you must also specify whether you want to find all the references that match both of the criteria (click on the **And** radio button) or only those references that match either of the criteria (click on the **Or** radio button).

You can print out records you are interested in or save them as a file. Click on the **Print/Save Records** button. Specify the items you want to appear in the report by clicking on the desired item in the text field on the left, holding down the mouse button, dragging it to the text field on the right and releasing the mouse button. Next, decide if you want the report to include the currently selected record (the one displayed in the form view or highlighted in the list view), all the matched records or just the records you have marked. Just

click on the button of your choice. Finally, click on the **Print** button to print out the report or the **Save to Disk** button to save the report as a text file on disk which you can open in a word processing program. If you choose this option, a standard save dialog box is displayed. Name the file, choose where you want it saved and click on the **OK** button.

When you are finished printing or saving reports, click on the **Done** button to dismiss the print dialog box.

Chapter 4
Child's Dictionary & Activities

The Child's dictionary was specially designed for nonreaders and pre-readers. If HyperSign is going to be used predominately by children fitting into this category, you should set the preferences (see page 8) so that the Child's Dictionary is automatically displayed when the program starts. If you have started HyperSign and the Adult/Teen ASL Dictionary screen is displayed, choose the *Child* item from the **Dictionary** menu.

The Child's Dictionary

The Child's dictionary provides a visual interface. Each word in this dictionary has been carefully chosen so that it can be accompanied by an easily recognizable picture (from the Mayer-Johnson library). The words were chosen from the text *Basic Vocabulary and Language Thesaurus for Hearing-Impaired Children* by Daniel Ling and Agnes Ling (Alexander G. Bell Association for the Deaf, Washington, D.C., 1977).

The vocabulary has been grouped into 26 categories, each containing about 25 words. Each category title is represented in picture and written forms.

Child's Dictionary Categories		
Action Words (a-g)	Everyday Verbs (h-z)	People
Action Words (h-z)	Family	Places
Animals	Foods	Pronouns
Body	Fruits & Vegetables	School
Clothes	Holidays	Time
Colors	House	Transportation
Descriptions (people)	How Much	When
Descriptions (things)	Miscellaneous	Where
Everyday Verbs (a-g)	Outside	

When the Child's dictionary screen is displayed, the Action Words (A-G) book is removed from the book-shelf. Click on the book cover to open it to the first entry (ask). The written form of the word is displayed on the left-hand page of the open book and a picture of the word is displayed on the right-hand page.

Click on the little girl on the left page of the open book to have the word pronounced. Click on the picture on the right page to show the first frame of the sign in the movie window. Clicking on the left-most button beneath the movie window plays the entire movie.

Click on the arrows on either side of the scroll bar beneath the book or on the dog-ear corners of the pages to turn the pages of the book. Click the pop-up button at the far right of the scroll bar to display a list of all the words in the book. Click on the word you are interested in and the book page changes to display the word you selected.

The bookshelf contains other books organized by categories children easily recognize. Click on the arrows below the bookshelf to choose a different book. Each time you click on these arrows, a new book is removed from the bookshelf and its cover is shown. When the book cover for the category of words you are interested in is displayed, click on it to open it so you can page through the book and find the words whose signs you want to review.

At the far right of this scroll bar is a pop-up button. Click on this button to display a list of all the categories. Click on the category you are interested in and the book cover for that category will be displayed.

To find a word quickly, type it in the text box above the **Find** button and press the Enter key. The program will search the dictionary and, if the word is found, display the appropriate book opened to that word.

That's all there is to using the Child's Dictionary. It's easy and children have no problem finding words they are interested in and viewing the signs.

The Child's Activities

Learning sign language is a lot of fun for children. To add to the excitement of learning a new language we have included three activities especially designed for children. These are available from the Activities menu.

Which One?

This game gives children additional practice on recognizing signs and is appropriate for even very young children. When you choose *Which One?* from the **Activities** menu, a new screen is displayed with 3 pictures in the middle of the screen and the movie window on the right. Click on the **Play** button beneath the movie window to see a person signing one of the words represented by the pictures.

You can view the movie as many times as you wish. When you recognize the sign, click on the picture representing the sign from the three choices. If you are correct, the happy face lights up, a bell rings and a happy face is displayed in the counter under the faces. If you are wrong, the sad face lights up and a message is spoken. No marker is placed in the counter. After two wrong guesses, the picture for the correct answer is highlighted and the movie showing the sign is played before proceeding with the game.

Each game consists of nine questions unless there are fewer than nine items in the chosen word list. After the completion of the game, you can play another game with the same list by clicking on the **New Game** button or choose a different group of signs from the **Current List** scrolling field just below the movie window.

Tic Tac Toe

Children of all ages know how to play Tic Tac Toe. HyperSign's version of Tic Tac Toe is a little different in that the goal is to help children learn various signs within the context of this familiar children's game. When you chose *Tic Tac Toe* from the **Activities** menu a screen is displayed showing the typical "tic tac toe" game board with all nine spots occupied with the same picture of a little girl.

To start the game, click on the picture occupying the position on the game board you would like to place a "happy face". The program places a question mark in the chosen position on the game board, displays three pictures in the boxes below the game board and displays the first frame of a movie in the movie window.

To place a "happy face" in the chosen game board position, you need to identify which of the three pictures represents the sign shown in the movie. Click on the **Play** button to view the sign. Then click on the picture that represents the sign shown. You get two chances to identify the correct picture. If you correctly identify the sign, a "happy face" is displayed in the chosen game board position; if you are incorrect, a "sad face" is displayed.

The game continues while you try to get three "happy faces" vertically, horizontally, or diagonally. After the completion of the game, you can choose to play another game with the same word list by clicking on the **New Game** button. Since most lists will contain more than nine signs and the signs are presented randomly, you can play the game with the same list many times and continue to see different signs. The **Current List** scrolling field offers other lists of related signs for use in this game.

Match Game

This game is a little more difficult. Children will learn signs as well as the fingerspelling alphabet while playing. When a child selects *Match Game* from the **Activities** menu, a new screen is displayed showing 12 small squares. Behind each square is a picture of a fingerspelled letter of the alphabet. There are 6 pairs of matching pictures hidden on the game board.

The first challenge is to find matching pictures of the fingerspelling alphabet. To do this, you click on two of the game board squares. If the two picture don't match, the sad face is highlighted and the pictures are covered up. If the two pictures match, the happy face is highlighted, a bell rings, the two pictures are moved to the box above the game board.

Matching all 6 pairs uncovers a fingerspelled word on the game board, displays three pictures in the boxes below the game board and the first frame of a movie is displayed. If you click on the little-girl button in the center of the game board, the word will be fingerspelled. You can also click on the **Play** button to view the movie of the sign. In order to win the game, you must identify the fingerspelled word by clicking on the picture that correctly represents it.

After the completion of the game, you can choose to play another game by clicking on the **New Game** button or choosing a new word list from the **Current List** scrolling field.

Learn the Words

This activity is provided so that children can view and practice the signs that make up the specific lists used in the other Activities. This is especially useful if an adult or instructor has created special lists for the children to use in the Activities. (See Chapter 5 for a discussion on how to create specific lists of words for different Activities.)
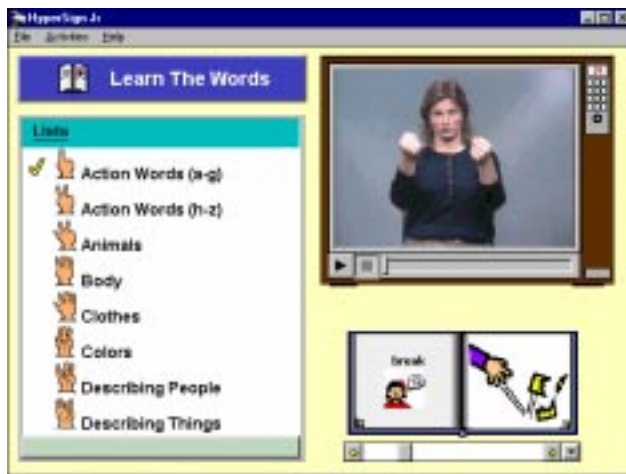
When you choose *Learn The Words* from the **Activity** menu, a screen is displayed that is similar to Child's Dictionary screen. At the left is a field listing all the currently available lists of words. Below the movie window is the familiar open book showing the written form of the word on the left-hand page and the pictured form on the right-hand page.

If you click on the little girl icon on the left-hand page of the open book, the word is pronounced. If you click on the picture on the right-hand page of the open book, the first frame of the sign will appear in the movie window. Beneath this window are the buttons for controlling the movie. Clicking on the **Play** button plays the entire movie.

To turn the pages of the book, click on the arrows on either side of the scroll bar beneath the book or on the dog-ear corners of the pages. At the far right of the scroll bar is a pop-up button. Click on this pop-up button to display a list of all the words in the chosen list. Click on the word you are interested in and the book page changes to display the word you selected.

The Child's Extras

HyperSign also includes units on fingerspelling and everyday phrases for children. These options are available from the **Extras** menu.

Fingerspelling

The fingerspelling module helps children learn to form the hand-shapes for each letter of the alphabet. Fingerspelling is used by Deaf persons to spell a proper noun (the name of a city or person), or to spell a word which has no sign. The beginning signer will use fingerspelling a great deal until his vocabulary of signs is large enough for conversational purposes.

The Fingerspelling screen shows the letters of the alphabet, the movie window and a scrolling text field below the movie window. When you click on a letter on the left of the screen, the letter and a list of words containing that letter are displayed. Click on the letter or one of these words in the list to see a signer fingerspell that letter or word. By watching these words spelled you can see how the hand-shape for the letter you have chosen is formed when it occurs with other letters. This will also give you practice in reading someone else's fingerspelling.

Everyday Phrases

After you learn a few signs and some fingerspelling, you will want to use your signing skills with a Deaf person. When you select Everyday Phrases from the Extras menu, a list of common phrases is displayed. You can use these phrases to practice understanding someone else's signs and putting signs together.

Click on a phrase in the scrolling list and the first frame of the movie is displayed in the movie window. Click on the **Play** button to see the whole phrase signed.

Chapter 5
The Activity Word List Manager Utility

Word lists are used in HyperSign as a way of choosing sets of signs for the games and vocabulary review items listed on the Activities menu. Word lists are groups of words that are in some way related to one another. The relationship among the words is up to you. For example, teachers might want to build lists of words and signs for their students to review or practice at a later time. Parents or teachers who have hearing impaired children in their classes might want to build lists of signs specific for peers, grandparents, baby-sitters, medical personnel, etc.

While HyperSign comes with a number of pre-built lists, this utility allows you to edit the pre-built lists or create your own. Access to this program is password protected to prohibit access by unauthorized users. To gain access to this program, start the program, select ***Enter Password...*** from the **File** menu and enter the password **hypersign**.
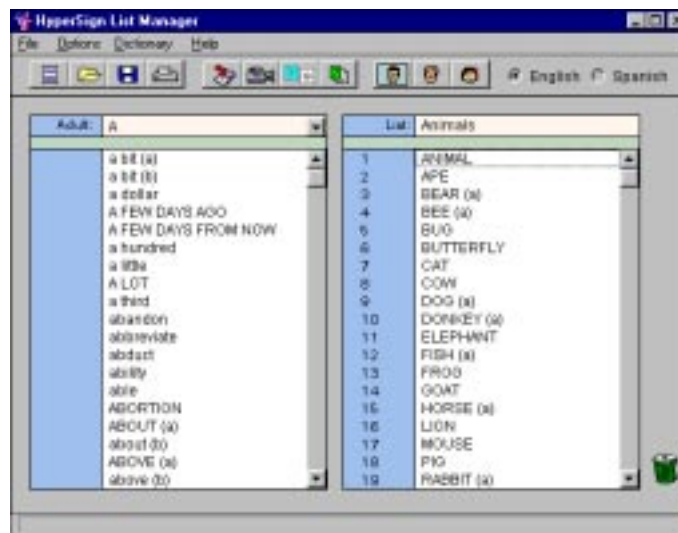
With this program you can build lists for adults, teens or children using a sinple four-step process:

Step 1   Selecting the Dictionary & Language

Select the dictionary you want to edit from the Dictionary menu. Select the language by clicking on the appropriate radio button at the top tright of the screen.

Step 2   Choosing, Creating or Deleting Activity Word Lists

(a) Creating a New Activity Word List

Select ***New Activity Word List...*** from the **File** menu. Enter the name of the new list in the dialog box and click on the **Add List** button. This creates a new, empty list. You may continue adding new lists. When you are finished, click on the **Done** button. *Note, you must create and name an Activity Word List before you can add words to it.*

(b) Choosing an Activity Word List for Editing

To choose a list for editing, select ***Open Activity Word List...*** from the **File** menu, click on the name of the Activity Word List you wish to edit and then click on the **OK** button. The name of the list selected is displayed at the top right of the screen and the words in the list are shown in the scrolling field on the right of the screen.

(c) Deleting an Activity Word List

Choose *Delete Activity Word List...* from the **File** menu. A dialog box is displayed with all the activity word lists in a scrolling field. Click on the name(s) of the activity word lists you wish to delete. When you click on a name in the list, a red Del flag is displayed just to the left of the list name. If you change your mind about deleting a particular word list, just click on its name again to toggle the Del flag off. After marking all of the lists you wish to delete, click on the **Delete Lists** button and confirm that you wish to delete these lists.

Step 3   Adding (or Removing) Words to an Activity Word List

After selecting an activity word list, the words in the list are displayed in the scrolling field at the right of the screen and you can proceed to add or remove words to this list.

To add a word to the named list, you first find the word in the dictionary at the top left of the screen or use the *Find a Word* item on the **Options** menu. Once you have found the word you want to add to the list, click on it in the scrolling field on the left, hold down the mouse button, drag it to the scrolling field on the right and release the mouse button. You can continue to add as many words to the list as you wish. All changes are automatically saved.

To remove a word from a list, click on it in the scrolling field on the right, hold down the mouse button and drag it to the trash can. No confirmation is required.

You may view the sign movie of any of the words in the scrolling field on the left of the screen. Click on the word to highlight it and then choose *View Sign Movie...* from the **Options** menu.

Step 4   Specifying Which Word Lists are Active in HyperSign

Select *Choose Active Word Lists...* from the **Options** menu to specify which word lists are active in HyperSign Jr. A blue dot to the left of the name of the activity word list means that it is active in HyperSign Jr. To activate an activity word list, just click on its name in the list. The blue dot will be placed to the left of its name. To deactivate a particular word list, click on its name again and the blue dot will be removed.

For the Adult and Teen dictionaries you can specify as many word lists as you wish to be active. However, you can only specify a maximum of nine activity word lists as active at one time for the Child dictionary. You can, of course, change the active lists at any time using this option.

Designating Alternate Pictures and/or Recordings

Each word in the Child's Dictionary has a picture and recording associated with it. Both the picture and recording are used in the main dictionary page and in the *Learn the Words* activity. The pictures are also used in all of the other Activities (games). Some users may want to use different pictures or different recordings for a particular word in the child's dictionary and so you have the option of designating an alternate picture or recording for any of the words child's dictionary.

Choose *Assign Alternate Wav/Picture...* from the **Options** menu to display a dialog box. In this dialog box, the word (or phrase) from the Child's Dictionary is displayed at the top. On the left is a button to play the default recording for this word and default picture is displayed at the bottom. If there is an alternate recording (WAV file) clicking on the radio icon in the middle of the dialog box will play it. And, if there is an alternate picture (BMP file) for this word it is shown at the bottom-middle of the screen.

Only one alternate recording and/or picture can be assigned to a word. If you have defined an alternate recording or picture and chosen to use it, the **Alternate WAV** (and/or **Alternate BMP**) radio button will be checked. To use the alternate recording and/or picture, make sure the **Alternate WAV** and/or **Alternate BMP** radio buttons are checked and click on the **Done** button.

Alternate Recordings

The alternate recordings must be WAV files. You can create these recordings using the Sound Recorder utility (click on the **Start** button and choose *Accessories/Multimedia*). You can also click on the **Record** button (top, right) and make your recording from within this program. If you make a recording in this way, it is automatically stored in the *TempWavs* folder (located in the HyperSign folder on your hard drive).

To use a recording you have made as the alternate WAV, click on the **Browse for WAVs** button, navigate to the folder where you have saved the recording, click on any WAV file and then click on the **OK** button. All of the WAV files in the folder selected will be displayed in the scrollable field at the top right of the screen. Click on one of these to highlight it and click on the icon of a radio to hear it played back.

To use this alternate recording, make sure the **Alternate WAV** radio button is checked before you click on the **Done** button. After clicking Done, the program will copy the WAV file to the *Altfiles* folder and name it so that it is recognized by the HyperSign program.

Alternate Pictures

The alternate pictures must be BMP files. You can create these pictures using your Paint program if you choose. Ideally the BMP file should be 135 x 115 pixels (width x height).

To choose a picture as the alternate BMP, click on the **Browse for BMPs** button, navigate to the folder where you have saved the pictures, click on any BMP file and then click on the **OK** button. All of the BMP files in the folder selected will be displayed in the scrollable field to the bottom right of the screen. Click on one of these to highlight and display it. To use this alternate picture, make sure the **Alternate BMP** radio button is checked before you click on the **Done** button. After clicking **Done**, the program will copy the BMP file to the *Altfiles* folder and name it so that it is recognized by the HyperSign program.

Restoring Defaults

If you wish to restore the default recording and/or picture, make sure the **Default WAV** radio button (and/or the **Default BMP** radio button) is checked and click on the **Done** button. When the default recording (and/or picture) is restored, the alternate recording (and/or picture) is *irreversibly* removed from the *Altfiles* folder.

Chapter 6
Software License & Copyright Information

Trinity Software License

The software is protected by the United States Copyright Laws. This software may be used by any number of people and may be freely moved from one computer to another so long as there is no possibility of it being used by two different people at two different locations at the same time.

Copyright Information

MS-DOS and Windows are trademarks of Microsoft Corporation.

QuickTime is a registered trademark of Apple Computer, Inc.

The signing videos used in HyperSign were digitized from the laser disc produced by the National Technical Institute for the Deaf, Rochester, NY and are used with their permission.

The pictures in the Child's Dictionary are taken from the BoardMaker Library produced by the Mayer-Johnson Company, Solana Beach, CA and are used with their permission.

Chapter 7
Common Problems & Solutions

The following are the most common issues raised with technical support for HyperSign and the recommended solutions.

1) ***A system error is displayed when the program tries to display a video clip.***
   The video used requires QuickTime for Windows. If the QuickTime for Windows driver is not installed on your computer system, from File Manager (Windows 3.x) or Windows Explorer (Win 95/98), open the HyperSign CD and then open the folder HSUTILS. Double click on the QTINSTAL.EXE program to install QuickTime for Windows on your computer.

2) ***When I try to play a video I get a fatal exception error message and blue screen.***
   This problem has been reported by some users with Pentium II and Pentium III processors. The folowing work-around seems to work in all cases. There are 2 places where changes need to be made: (a) in the Quicktime Control Panel and (2) in the QTW.INI file (in the WIndows folder):

   a) Changes to the Quicktime Control Panel:
      1. Click on **Start** button. Choose ***Settings/Control Panels***
      2. From the control panel screen, double click on the quicktime icon. (If you have icons for both QT32 and QT16, double click on the QT16 icon.
      3. Click on the **More** button at the bottom right of the dialog box displayed. This will display some tabs at the top of the dialog box.
      4. Click on the **Video** tab.
      5. In the middle of the dialog box is an area called ***Optimization*** and a scrollable field showing the various ***Draw Methods*** available.
      6. Click on (highlight) the **Windows DIB** item in this scrolling field. (If this doesn't work, select the RAW item in this field.)
      7. Click on the **Apply** button at the bottom of the dialog box.
      8. Click on the **Close** button at the bottom of the dialog box.

   b) Changes to the QTW.INI file:
      1. Open the QTW.INI file in the Windows folder in NotePad.
      2. Under the [Video] section, change the optimize value to RAW (others have used Driver), that is, Optimize=RAW
      3. Save the changes.

   Restart your computer. You may have to try a couple of different setting to resolve this problem.

3) ***I get error messages saying that a variable has been set to a null value or that the variable is out of range.***
   This error has only occurred with Windows 3.1 users. The program makes extensive use of a variety of databases and the database engine employed requires that the SHARE.EXE program is running. Refer to your MS DOS Reference manual for the correct method for installing SHARE.EXE on your system.

4) ***The screen flashes when changing activities and the videos aren't very clear.***
   This occurs when your system is configured to display 256 or fewer colors. The only way to fix it is to set up your system to display more than 256 colors. Open the Start Menu and choose Settings: Control Panels. Then open the Display control panel. Click on the Settings tab at the top, right of the control panel. Then, set the Color Palette to at least high color (16 bit). Close the control panel.

5) ***The bottom of the HyperSign window seems to go off the bottom of the screen.***
This occurs when the Windows 95/98 task bar covers up the bottom of the HyperSign window. To correct this, open the Start Menu and choose Settings: Taskbar. Then make sure the Auto hide check box is checked. Now the Taskbar should be hidden and the entire HyperSign window will be visible. To access the Taskbar, just move the cursor to the very bottom (by default) of the screen and the Taskbar will appear.

If you need further help or have other questions regarding technical support, please send an e-mail message to support@trinitysoftware.com. Be sure to specify that you are using HyperSign For Kids and carefully and completely describe the problem you encountered.

revised 7/2001

How to Best Use Our Technical Support Staff

1. First check the manual and the README file. This file, if present, contains updated information not in the manual.

2. If you still need technical assistance, help is available by:

   MAIL: Technical Support, 800 Virginia Avenue, Suite 52
   Fort Pierce FL 34982
   FAX: Trinity Software at 561-464-6703
   PHONE: Trinity Software at 888-874-6484 between the hours of
   9 am and 5 pm EST from a phone next to your computer.

How to Prepare for Technical Support

If you have the following information written down before contacting our Technical Support Department, we will be able to help you more easily.

1. Product name and Version Number (usually on the program's Title Page and/or the disk label)
   _____

2. Product Registration Number
   _____

   Computer Name and Model
   _____

   Operating System and Version Number
   _____

   Type of Audio Input Device
   _____

   Type of Printer
   _____

3. Does the problem occur only on this one machine? If yes, is there anything peculiar about this machine?

4. Write down the exact wording of any error messages displayed.

5. To correct problems we must first be able to reproduce them, Describe the problem accurately. Explain carefully when and where it occurs. Can you consistently reproduce the problem? If yes, specifically how?