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Reading between the "signs"

Abstract

Teaching reading to hearing students, with the supplemental support of American Sign • Language, is a relatively new concept. Many components associated with sign language reinforce basic concepts of English. It teaches individual letter sounds, and names, and many of the signs for words emphasize beginning sounds, as well as meaning. Another important component of sign language is its bodily kinesthetic form of learning. Many students in public schools today are not learning through traditional teaching strategies. Incorporating sign language provides a multi-sensory approach to literal hands-on learning.

The following research outlines the principles behind teaching effectively using sign language to hearing students. It provides anecdotal evidence and physiological backing of its success, and provides actual structure of how to implement it within the classroom. Finally, it provides the benefits and positive outcomes sign language can have on students, parents, and teachers.

READING BETWEEN THE "SIGNS"

A Graduate Research Project

Submitted to the

Division of Curriculum and Instruction

In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts

UNIVERSITY OF NORTHERN IOWA

by

Sarah Durchenwald/Williamson

November, 2003

This Project by: Sarah Durchenwald/Williamson

Titled: Reading Between the "Signs"

has been approved as meeting the research requirement for the

Degree of Master of Arts in Education.

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Abstract

Teaching reading to hearing students, with the supplemental support of American Sign

Language, is a relatively new concept. Many components associated with sign language reinforce basic concepts of English. It teaches individual letter sounds, and names, and many of the signs for words emphasize beginning sounds, as well as meaning. Another important component of sign language is it's bodily kinesthetic form of learning. Many students in public schools today, are not learning through traditional teaching strategies.

Incorporating sign language provides a multisensory approach to literal hands-on learning.

The following research outlines the principles behind teaching effectively using sign language to hearing students. It provides anecdotal evidence and physiological backing of its success, and provides actual structure of how to implement it within the classroom. Finally, it provides the benefits and positive outcomes sign language can have on students, parents, and teachers.

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Introduction

Reading is one of the most important academics we teach to young children. From kindergarten where kids are identifying letter sounds, and letter names, up through upper elementary, where they are learning about genres of literature, the concept of teaching a child to read is a complex and intricate one. With the increase of student diversity within the classroom, this process is increasingly becoming more of a challenge. Teachers want each of their students to learn how to read and to be innately motivated to want to learn; unfortunately this is not reality for every child. We are faced more and more with students accompanied with a label, whether it be Asperger's Syndrome, Attention Deficit Hyperactivity Disorder, Autism, or Fetal Alcohol Syndrome, we are met with students who require highly individualized education. Along with this diverse group of children, there is an increasing number of students who come from nontraditional families, and families that do not speak English.

Along with the change in our student population comes the frequent changes of our curriculum. The pendulum has swung from phonics, to whole language, to a combination, and back again. We are told to use basal readers. Then they are considered unacceptable and trade books and an open ended curriculum are to be used. Which of these strategies is truly most effective will always be debated. One thing for sure, is that we need to meet the needs of each child we teach, ensuring that no child is left behind. The current practices we use, are not reaching every child, and the government continues to push us to meet the needs despite our methodology.

DEVELOPMENT OF THE PROJECT

This compilation of factors has led me to believe there has to be a different way to educate our students. I believe all children can learn. It is a matter of reaching their learning style, and pairing that with our curriculum. From my experience of teaching in the primary grade levels, kids enjoy hands on learning, lots of talking, and even more moving. They need and want structure, and enjoy learning about people and their cultures. One way I have found to incorporate each of these things in the classroom is through using American Sign Language. We have used signs for transitioning between activities and brief breaks for movement. As I saw how successful this technique worked, I went on to teach the kids the pledge of allegiance in sign language, and we even performed a song in sign language at the winter concert. This past year, we adopted a new reading series in our school district. Due to the past success with signing in the classroom, I decided to incorporate it into the new reading program.

It should be stated that this idea came about only with intentions of working as a supplement to the current reading series. I do not expect the students to speak fluent sign language, or stop using verbal communication. The intent of using sign language is to provide students with a bodily kinesthetic movement to associate with visuals, such as letters, words, and some sentence structure. By incorporating one more sensory into the process of learning to read, students of all ability levels will be given one more channel for processing, learning, and retaining new information.

Seeing how well the kids used sign language with simple transitions and movements, implementing reading skills with sign should be a motivating experience. In the past, kids have looked forward to learning new movement signs, and were often found

thumbing through the sign language dictionary, searching for new signs to teach others.

Not only did this teach them how to use a dictionary, it also helped them practice following directions, comprehend movement from a picture, associate the word below the sign with the movement, and also gave them a unique form of communication. This communication in turn educated them on a diverse culture of people, and made them familiar with how deaf people communicate.

Using sign, also enhances reading skills, by allowing assessment to be done in a comprehensive, effortless way. When all students talk at once, it's impossible to hear what they are saying. Listening to one student speak at a time, assessment becomes redundant, boring, and time consuming. When children use their hands simultaneously to tell what they know, teachers can glance around and see who understands and who doesn't, making assessment much more efficient.

This simultaneous overview of students, in turn provides a natural classroom management tool. Students must be watching you or others to know what to do or what to sign. If they are not paying attention their lack of follow through will be apparent. Kids who are signing or following a signed request are obviously listening. Those who are not, easily stand apart due to their lack of participation. The teacher no longer has to look around wondering who is looking and actually listening, or who is just looking and daydreaming. This also works very well for transitions. Before lining up to go somewhere, or when coming into the classroom, providing directions in sign language is a silent way to translate information. Students must be watching to know what is expected. Once again, this requires eyes, ears, and minds on the teacher, making student behavior and attention a must.

Sign language has a great deal to offer to the hearing child and regular education classroom teacher. It's silent speech allows students the freedom to incorporate new information through bodily kinesthetic movements, it motivates them to want to learn more, provides the teacher with a quick easy tool for assessment and holds students attention granting a natural form of classroom management. With these benefits, it seems only appropriate to intertwine this approach with teaching children how to read.

The Comprehensive Overview

Kindergarten is the perfect time and place for this process to begin. Starting with letter sound and name, student will learn the hand sign for each. This will provide them with a visual of the letter, the name of the letter, and the sign. Along with these three components for each letter, will be a picture starting with the letter, reinforcing the letter sound. Once children know each of the letters by name, sound, and sign, they will begin to fingerspell words starting with their name. This will reinforce the concept that words are composed of individual letters, and also support their ability to spell new words.

Students will then begin to learn their 36 sight words from the reading series, both by sign, fingerspelling, and in print. Once again reinforcing words with the visual of the word itself, the movement or sign, and the spelling. Identifying letter name and sound, along with reading sight words is all that is required by kindergartners to know by the end of kindergarten. However, the process has been taken step further. Students will practice signing short sentences to one another to see how well they can communicate through sign, and to model an understanding for sentence structure. For those who are ready, short sentences in print, will be presented they will read them aloud, while using sign to

speak them.

Throughout the year more words in sign will be taught aside from just their sight words. These words will be relevant to pieces of literature, holidays, or other special events. The children will be given a signing dictionary of their own with various chapters containing words that are meaningful to them, and that will reinforce their reading skills. Chapter headings such as feelings, family, school, directions, and colors will be included. This will provide students with a visual reference, allowing them to see the word name, the sign, and the spelling.

This project will help students of all ability levels and cultural backgrounds, have a multi sensory approach to learning to read. Students will share the experience of learning a new language together, while reinforcing a familiar one. The intention is to build community within our classroom, provide a motivating strategy for supporting each child's learning style, and enrich children's cognitive development in learning to read.

Methodology

The research available on implementing American Sign Language in a regular education classroom, with hearing students, is minimal, yet concrete. The information that was provided overlap in theory, ideology, function, and perspective. Researchers show an overall favor of incorporating sign into education. It is believed to be a natural transition from infanthood to early language development.

SUPPORTING RESEARCH

Marilyn Daniels is the most prevalent researcher on this topic. She has written many things including a book (2001) entitled, "Dancing With Words: Signing for Hearing Children's Literacy", countless articles, and dozens of studies. She is quoted by Vicki Fong saying "Learning to speak, read and write English takes years, much patience and practice for young children. But they effortlessly use their hands for comfort, communication and acquiring information from birth" (Fong, 2001, para. 2). She goes on to talk about the natural experimentation babies do with their hands from birth. They reach for things, touch their hands together, and attempt to pick things up. Using their hands is a natural reaction to life.

This natural use of infants hands occurs more readily due to an infant's maturation level of the motoric centers. Marilyn Daniels (1997) writes in one of her articles, "Basic motor control of the hands occurs before the voice and the visual cortex matures prior to the auditory cortex. The linguistic functioning in a visual medium requires and results in greater visual-spatial processing abilities" (p. 30). This in turn means, that children are more developmentally able to use their hands than their speech, making sign language a preferred system for communicating. Daniels (1997) mentions that Piaget reports these same findings "gesture and mime ... language in movement ... is the real social language of the child" (p. 31).

Sharing these views is Steve Kokette (2003), writes that before children speak, they develop signs for things such as juice, milk, or things they desire such as having their diapers changed. He believes that by teaching children signs makes them more appreciative to communication in general, and inspires them to begin speaking a language

earlier than normal.

Vicki Fong (2001), author of "Sign Language Enriches Learning For Hearing Children" gives an example of how one mother used sign language with her nine-monthold son to help the lines of communication. She taught him signs for please, eat, and drink. Seeing how quickly he acquired use of these words, she added apple, pasta, and cookie. By the age of one, he was able to sign bath, when it was bath time. By the age of fourteen months, he was able to sign more words than he was able to speak. When he was two and a half, he was speaking very well for a toddler, and had even begun teaching his six month old sister some signs. Daniels (as cited in Fong, 2001), reinforces this excerpt by stating, "Sign does not hinder language development in any way, in fact, it fosters it" (para. 5).

Not only can learning sign language at a young age foster the development of verbal speech, but Kokette (2003) explains how it can also help develop more of the brain. When learning one or more spoken languages, the information is stored in a small portion in the brain's left hemisphere. When learning sign, the visual information is received by the right hemisphere, and then transferred to the left side where the information is processed and stored. This extra sensory modality adds to the development of the brain hemispheres, strengthening the connection between the two.

Marilyn Daniels goes on in her book about this cognitive enhancement. She explains that by using sign for language instruction, brain activity is increased in both the right and left hemispheres due to pairing of visual prompts. This increased language activity stimulates the brain and in turn forms more synapses, or connections among brain cells (Daniels, 2001). Children's brains continue to grow in this manner until about the

age of eight. Their brain cells either die or live due to language experiences they are exposed to. Daniels (2001) says, "Using sign language and English in tandem provides a much richer language base for brain activity and brain growth and development".

Research on the brain continues to show positive findings for using sign to teach reading. Daniels reports on a study done by Hoemann who set out to find how humans cognitively store a spoken language opposed to ASL. He discovered that two separate memory bases were used to house the manual alphabet and ASL, and another storage base was used for the English alphabet characters and English (Daniels, 2001). This is a benefit to young students learning to read with the support of sign, because they now have two separate places to look for language information instead of just one.

Now that the brain has proven to be receptive of using sign language, it is also important to note that incorporating bodily kinesthetics with learning enriches language development. Teaching students letter names and signs through hand signals, provides one more coding system to process and retain information. It can enhance students phonemic awareness and reading skills by providing them an alternative learning strategy. This is done through using kinesthetics along with the auditory and visual senses (Cooper, 2002). For many children, bodily kinesthetics is their strength. This is also the area that most teachers tend to leave out. Finding ways to teach with bodily kinesthetics, and maintain order in the classroom is not always easy. Kids need to move, process, and use a multitude of senses while learning.

Teaching children language through sign allows them to feel the letters, words, and make meaning from gestural cues. They create spatial representations of words and visual symbols allowing them additional sensory channels to process information (Daniels,

1996). When learning how to fingerspell words, children feel the order of letters moving from left to right (Cooper, 2002). When speaking and signing letter names, or words, children are associating auditory, visual, and bodily cues. This multitude of sensory connections leads to increased ability to recall and retain information.

These enriching biological benefits of teaching sign language to young children, have proven to be effective in casual observation as well as several research studies. Barbara Cooper used sign language in her kindergarten classroom to supplement her language arts program. She begins teaching Signed English to her students on the second day of school. Starting with the word "red", Cooper models how to sign the word, and also the letters that spell it. She reinforces the word by reading the book *Mary Wore Her Red Dress* (Cooper, 2002). She continues this process with other color words, and pairs them with relevant pieces of literature. Cooper also teaches sight words using both the sign and fingerspelling.

Since Cooper has started using Signed English to support her reading program, she states that the biggest impact it has had, is that children are able to learn more words in a quicker time frame, and retain them. She also attributes using sign to her students exhibiting higher motivation in learning to read, increased phonetic awareness skills, and reaching more children than traditional teaching (Cooper, 2002).

Below is a collection of more anecdotal excerpts completed by various researchers and educators, showing the positive effects using sign language can have on children's cognitive development.

• After teaching kids to finger spell their words, and practice doing it, kids tested higher on spelling skills both during a weekly test as well as when asked to recall the words

several weeks later (Felzer, 2000).

- Two thirteen year old boys were having difficulty learning to read. They were taught the alphabet and their sight words in sign language, to reinforce phonetic decoding. Both boys showed measurable improvement on comprehension, vocabulary, and overall motivation (Felzer, 2000).
- One struggling student, comments on how recognizing vocabulary words is much easier now that he knows how to sign them. "Now I can feel the words as I see them" (Felzer, 2000).
- Finger spelling also showed improved test scores in phonemic segmentation and reversals (Felzer, 2000).
- Kohler and Lloyd (as cited in Felzer, 2000) support the use of sign as a mnemonic form of instruction. The signs act as a mnemonic and in turn prove to assist in retention and comprehension of words.
- •A study done on kindergarten children showed an increase in their speaking vocabulary and helped them learn sight words, letters, and phonemes. "Children having problems remembering letters, words, or beginning sounds were often able to recall the needed information once they saw the sign" (Daniels, 1996).
- Ohio State School looked at a group of infants attending the laboratory school. The children, ranging from nine months to two years, were taught simple signs for their basic needs such as "eat," "more," "stop," and "share". The care providers commented on how much easier it was to communicate with the children. They were able to communicate their needs through specific nonverbal requests rather than just crying, and others guessing their needs. Parents were very supportive of the program and said that the use of the signs carried over into the home ("Infants Use," 1999).
- One teacher uses a game incorporating sign language to motivate her students to learn sight words. "Sign-O" is a collection of flash cards with the sign on one side, and the sight word on the other. Students have to identify the word by looking at the sign. By providing a physical prompt, students of all abilities are able to be successful (Brennan, Miller, Kathleen B., 2000).
- A group of teachers planned and implemented several units incorporating American Sign Language. The teachers were motivated to use signing to encourage peer interaction between their students with severe emotional disorders, provide a means of communication for those without the ability to speak, and to avoid an abundance of

talking within the classroom. Students were intrinsically motivated to learn and use the signs. They used them both in the classroom to speak to others, in the hallways, and in the lunchroom (Jitendra, Asha, Costa, Da, 1997).

- Rick Morris started using sign language after seeing how successful it had been used in a coworker's classroom. Teaching third grade mathematics, Morris found himself interacting primarily with the students who were higher level thinkers, and not knowing where his average to lower level thinkers were at. He created a system to assist him and his students for communicating both during a lesson, or while others are talking. Instead of just raising their hands, Morris's students use the sign for "i" to represent "I have a question." The sign for "a" means "I have an answer." The sign for "c" signals that student has a comment. This system works great for keeping all students informed on the lesson, and offers each child a chance to communicate his frustration before getting extremely lost. Morris has extended the use of his signs to "one moment please", "lineup", "lights on/off", and "restroom" (Morris, 2003).
- A study done by Marilyn Daniels shows that one group of seventeen kindergartners who had sign language training, scored significantly higher on the Peabody Picture Vocabulary Test than seventeen students in a kindergarten class not receiving sign language instruction (Daniels, 1996).

These examples model how effective the use of sign language can be when used with children of all ages, learning styles, and ability level. Sign language provides a silent, instant type of communication that enables both the signer and the recipient feedback, without adding unnecessary distractions.

This is one area that personal experience has proven that sign decreases distractions and increases control in classroom management. Line up, run, sit down, get out a pencil, yes, no, water, bathroom, are all nonverbal directional cues used in my classroom throughout the year to assist in transitions, routines, and following directions. Teaching children these procedures through sign language makes transitional times flow smoothly. The kids are physically in tune with what's happening and are able to

communicate without verbalizing or interrupting. They are motivated to learn the language, and quickly learn and apply the signs to appropriate situations throughout the day.

Mayer (1999) speaks of a cueing system similar to this in his book, <u>The Promise</u> of Educational Psychology, called "signaling". He describes signaling as a structural framework for selecting and organizing relevant information. Using signals permits students, to pay better attention, comprehend key topics, and be more likely to recall and retain information.

Sign language can be seen as a nonverbal form of signaling. Each hand gesture represents a different meaning, whether it be letters or words. Because students are using bodily kinesthetics, as well as visual and auditorial senses, they are also hitting on a multitude of sensory processing. This allows children of all types of intelligences to be successful through signing. It promotes students awareness of transitional times, accentuates the key points, and encourages kids to pay attention.

Thomas Armstrong (2000) writes in his book, Multiple Intelligences in the Classroom, about how teachers need to be in-tune with their students' learning styles, and accommodate accordingly, both with the curriculum as well as in classroom management. Armstrong (2000) comments that teachers need to create nonverbal cueing systems to cue students. Pictures, graphics, gestures, music, and other social signals will assist in student comprehension.

In the upcoming school year, I will continue using sign language in the classroom as a tool for classroom management, routine, and directional cues. In addition, sign language will be used to also incorporate sign as a method of teaching phonics and letter

sounds, then gradually move into sight words using finger spellings, and signs.

Throughout the research, and planning for next year, I have naturally come across areas of extensions and other ideas for using sign in the classroom. The alphabet book acts as a springboard for teaching beginning sounds, and sight words. Other applications would be to integrate a form of sign-o mentioned earlier. I plan to create a set of letter cards with the letter formation on one side, and the sign on the other. An extension of this would be to use two sets of the cards and have the kids play memory with them, having to match the sign with the letter. This could then carry over into sight words. Using the signs on one side, along with the written word on the back would be great for kids to work interactively on identifying sight words.

One more extension that has been implemented is using signs for our schedule.

Using signs along side the word for our daily schedule gives kids another chance to learn new signs, understand environmental print, as well as comprehend our daily routine. The alphabet books acted as a primary project, however now have been developed into something more in-depth. I have chosen to continue working on this signing book, adding chapters. Additional chapters include a section on feeling words, teacher cues, color words, manners, movement, family words. This alphabet/sight word book is quickly developing into a year long unit!

Using sign language in the classroom is an excellent way to integrate diversity, maintain classroom management, and provide students of all ability levels to succeed. It also enhances regular reading programs by emphasizing phonics and phonemic awareness skills. I look forward to furthering my research and implication of sign language in the classroom, looking closely at connections made between students ability to sign, and their

language development skills.

Project

The idea of teaching hearing students sign language to increase language skills was developed in the nineteenth century by Thomas Hopkins Gallaudet (Felzer, 2000). He originally fathered the concept for children who were deaf and hard of hearing. There have been several theorists since Gallaudet that have had similar observations. Dr. McCay and Joan Coley observed hearing students of average intelligence actually begin to read and write before starting school. The two theorists comment on it's motivational factor. "Because signs are so vivid, dramatic and fascinating they may serve as a powerful motivating force in helping youngsters want to learn to read" (Felzer, 2000).

Not only is using sign effective for children of average intelligence, studies also show it is a beneficial way to teach children with emotional, behavioral, or learning disabilities. McKnight used the manual alphabet and other signs to help three children struggling to learn to read. She used finger spelling for phonetic words, and sign for non phonetic words along with voice inflection while pronouncing the words. The children became more independent, relying on their signs to decode unfamiliar words. McKnight states, "It was easier to connect the visual letter to a manual sign, and then to a verbal sound, than it was to go directly to the verbal sound" (as cited in Felzer, 2000, para, 5).

The Concept and Process Supporting the Use of Sign Language

It is through a combination of this research as well as the findings in Marilyn

Daniels book "Dancing With Words, Signing for Hearing Children's Literacy" that the

following project has been developed.

Teaching reading is a complex and intricate process. Daniels states three different pieces that are required for a child's success in learning to read. The system is composed of orthographic, phonological, and semantic identification of words. With the support of these three processes, students will develop the capacity and comprehension needed to be a successful reader (Daniels, 2001).

The concept behind Daniels approach to teaching reading to hearing students through signing, starts with developing a solid foundation of the individual letter names and sounds. She remarks several times about the strong correlation between students knowledge of letter sounds, and their success as a future reader (Daniels, 2001). This is accomplished through teaching children the manual alphabet, and then signing and signing it simultaneously. Once this is mastered, students are ready to proceed to learning the letter sound, and the handwritten formation of each letter. To establish a solid ground for each of the three processes supporting the system for learning to read, children must have a meaningful representative word to associate with each letter sound (Daniels, 2001). Children learn the letter sign, and the picture sign or key word that goes with the letter. The keyword also enhances students memories for letter sounds by providing a visual association. In our classroom, we use the picture that is above the letters that are displayed on our word wall. For example, for the letter a, we sign the letter a, and say apple while signing. Children also look up on the word wall while we go through the alphabet. This provides them with a visual (the picture of an apple, and both capital and lower case a), an auditory (they hear the letter name, and the beginning sound in the keyword), a verbal (they are pronouncing the letter name, and the sound in the keyword), and a bodily kinesthetic (they are feeling the sign for each letter). This multisensory

approach allows students of all learning styles to reach their potential in building their beginning reading skills.

Once the foundation has been laid for each individual letter, sound, name, and written formation, students move on to fingerspelling words. This means students are introduced to new words, in which they are shown the spelling, and then sign the letters in the word. This process reinforces reading left to right, individual letter sounds and digraphs, as well as strengthening their ability to spell words. Fingerspelling is also a more developmentally appropriate practice for students at this young age, than having to use their fine motor skills to write the words using pencil and paper. It also enables the child to feel the word rather than rely on just seeing it. Daniels (2001) reports that students who learn to spell this way are much more apt to retain proper spelling than to teach it traditionally. Along with the fingerspelling, students are taught the sign for the words, thus providing one more association with the word. This is also important due to the pattern found within American sign language. Typically the signs for words are based on the beginning letter. For example the word, water is the letter w tapped on the chin. This reminds students that water starts with w, and also teaches them the sign for water.

Daniels refers to this process of teaching reading as a "linking system". "Identify letters and link the letters to the sounds, proceed to link the letters to the words, link the words to meanings, and progress to link the words to phrases, and continue the linking process with a complete sentence. Reading is an interrelated process, a linking system" (Daniels, 2001, p. 26).

Once students have mastered each link to the reading system, students next step is to begin building sentences based on words and signs they know. Teachers can enhance students ability to do this through adding new words before reading a story. To enrich the meaning of the words even further, an object can be presented at the time of the new word. For example, if the book "Mouse Mess" were being introduced, the teacher may hold up a toy mouse, teach the sign for mouse, and then have students practice signing the word mouse each time they see one in the story. Once the meaning and sign have been established the object can be removed. This provides a concrete visual for students to associate the with the sign. Students will eventually build up enough signs to sign short sentences.

Daniels (2001) comments on the importance of maintaining a controlled vocabulary, and to use the existing framework for teaching reading and establishing reading objectives defined by your school. As the students' signing vocabulary increases, words from the beginning of the year should be revisited.

Adaptations to the Concept

Marilyn Daniels presents a very convincing review of using sign language in the classroom to teach reading to hearing students. In the past I have used sign in the classroom for transitional responses, some directional cues, and for personal needs of the students. Beginning this year, I have developed a supplemental reading program derived from the work of Daniels. She states the beginning process of teaching reading is to establish a firm understanding of letter sound and name, through sign and keyword association (Daniels, 2001). We have done this in our classroom starting the very first week of school. Each day, during opening, we learned about two to three letters depending on the complexity and ease of fine motor transition. Along with the sign for

the letter, we verbalized and signed the accompanying picture with each letter. The letters are stapled on a word wall spanning the length of the classroom, providing a visual association to both the letter formation and the keyword. After learning the sign for new letters, we chant the letters with the keyword as far as we have learned, eventually reaching the letter Z. For example we start with "a, a, apple, b,b, ball, c, c, car" and continue until the end of the alphabet with "z, z, zebra". Following the chant, we move on to singing the alphabet, using signs for the letters. To reinforce letter recognition, we have one student use a pointer and point to each letter as the rest of us sign, and sing. We then play a mystery letter game. Four letter cards are pulled randomly out of a pocket chart displaying all twenty six letters, and revealed one at a time. Students must reveal the name, the sound, the keyword, and show the sign for each of the four letters. This helps reinforce letter recognition out of context, and also allows for informal individual assessment.

Continuing with our opening, we proceed to calendar. We begin by doing an echo of the months starting with January. Students sign just the beginning sound in each month, and chant. For example, students will say "J-J-January" while signing the letter J. For the days of the week, students actually sign the formal sign for Sunday through Saturday. This also reinforces beginning sounds, due to the sign for each day reflects the beginning letter in each word, with the exception of Thursday which is signed with the letter H. This in itself is a teachable moment, emphasizing the th digraph in Thursday. Along with the days of the week, we practice the words "yesterday, today, and tomorrow". Students then echo me in signing "Yesterday was_______", "Today is ". This teaches sequence of weekdays,

beginning sounds, sentence structure, and reinforces beginning sounds.

Following the calendar, we proceed to the weather graph where we record the types of weather, choosing from hot, sunny, rainy, cloudy, foggy, snowy, cold, and windy. I would sign while verbalizing the question "Is it ______ today?" for each type of weather. Students would then respond with their sign for "yes" or "no". Gradually as the year has progressed students have picked up the signs for each type of weather by watching me sign them, and are able to answer questions about the weather graph using their signs. Questions such as "Which type of weather has it been the most this month?" They respond with the correct answer, spoken with their hands.

We then take a break from sitting and listening, to doing a movement activity. The students have been taught new movement signs throughout the year. I first grasp their attention with a clapping rhythm in which they echo. Once each student is attentive, I proceed to show them signs for various movements. We prompt the activity with the sign for "quiet" as moving can often lead to talking, and noise making in kindergarten. They are given three or four different movements to do before transitioning to our next activity. For example, I may start by signing "stand up", then show the sign for "run" (which they know to do in place). They must continue doing the movement until they see the sign change. Movements include skiing, jumping, dancing, stretching, running, and sit down. If we plan on doing our next activity at the rug, we will just end with sitting down. If they are to go to their tables, I will sign the different colored tables to go back one at a time. Students learned their colors during a story we read previous in the year, "Mary Wore a Red Dress". Another transition we use is by "girl" or "boy".

We end our morning routine with signing a "Good Morning" song, signing

keywords from the song. We sign "good morning to you", the word "day" and "beginning". At one point in the song, the lyrics stop letting just music play. Students then walk around signing "Good morning" to different kids, and then shaking their hands. Recently, we have acquired enough words in sign, that we are now able to speak compliments to other students. Two that we use are, "You are a good friend," and "I like you." To end the compliment, students sign "good-bye" and move on to another student and repeat the process. This has been great at building a caring community within our classroom.

Gradually, we have introduced new words that related to a current story that we were reading, or special event. This year our school district adopted a new reading series, Scott Foresman. This has been a great motivator for implementing new ideas in the classroom. As Marilyn Daniels pointed out earlier, introducing new words at the beginning of each story is a great way to teach new signs while grasping meaning. This has really helped build a bigger vocabulary, and helped comprehension skills. The majority of the time we learn the sign for the character, and some keywords that may be relevant to the story. Along with these words, we learn the designated sight words for each story. We learn them in sign language, fingerspell them, and post them in our room. We frequently revisit the words, and practice making the words using magnetic letters. Students have even started finding the words in books, and rushing up to show me the word in text. One student walked up to me and said, "Mrs. Williamson, I found the word 'the' but it has the letter y at the end. What is that word?" Seeing the students apply what they have learned has been fascinating! Students find the words throughout the school, within the classroom, and are often seen signing them independently when they

hear the words read.

Parent feedback on using sign within the classroom has also been very rewarding. I have had several parents comment on how much their kids use their signs at home. One parent said her child is teaching his younger sister signs to help her communicate. Another parent commented that her son said "Good morning" in sign language to a neighbor who is hard of hearing. One little girl's mom said to me, "She loves learning sign! She always shows me what new signs she has learned that day, and tries speaking to me in sign language. It is very apparent she is learning." This shows how motivating and inspiring it is for students. They want to learn new signs and seem to enjoy speaking in sign in the classroom.

We have recently started using our signs to help solve a class problem, tattling. Kindergartners seem to have first instinct to tell the teacher what another student did instead of dealing with the problem themselves. We had a class meeting and decided that using our signs to talk to others would be less disruptive than whining to the teacher, and would be a great way to solve our own problems. Currently students are using the sign for "stop" or "don't" to communicate to those who are bothering them. We also learned the words for please, thank-you, excuse me, and sorry. These have made a noticeably big difference in the tattling department, and have helped kids become more independent in conflict resolution.

With the ever increasing vocabulary we are developing, I wanted to provide the students with a reference for the signs we know. Also, I wanted it to used as a tool for reading. The project that has developed out of all the research, and classroom experience is a signing book. This signing book has been designed around Daniels concept of

teaching reading, and pulls together all the links within her philosophy.

The book begins with a comprehensive look at the signed alphabet. The letters are then broken up, and one letter, with the sign is presented per page, acting as an alphabet book. After each letter is learned, students add pictures, and/or words that they know beginning with the letter. This provides them the visual, the physical sign, and an illustration kids can use to semantically associate with the letter.

The next page, shows the numbers 1-20. This provides students with a comprehensive overview of each number, with the sign. It also allows students to practice transitioning from one number to the next, and provides the visual for doing so.

The next section focuses on the thirty-seven sight words established by Scott Foresman for kindergarten. The signs are clearly depicted with the word written beneath. Following the pages of signs for each word, is a self check. The page lists the written words within the chapter, without the sign. Students can practice reading the text, and if they are stumped, they can easily flip back to find the sign, thus provoking an association and generating the word.

This system continues throughout the signing book for each chapter. The words were chosen based on relevance to kindergarten, and the function the word may hold. The chapters include movement, people, weather, days of the week, colors, schedule, feelings, manners, and general school words. Each chapter reflects a school objective, focusing mainly on reading, character development, classroom management, and other academic objectives. Each chapter, students are able to check their own progress on reading, by reading the words from a list, without the sign. Even without the ability to read the words, students will be able to comprehend the signs when used independently, making

classroom management, and reading development an easier process.

Overall, the sign language book is a comprehensive reference for students and teachers, for the majority of the signs used in the classroom. There are some signs that we use that don't appear in the book. The words viewed most important, and most relevant are included. This book became bigger than originally anticipated, and even now could potentially go on forever. Each day, more things seem relevant enough to add! However, one of the great things about using sign language in the classroom, is that it can be used to as great extent as one desires. Marilyn Daniels comments on only using it to the point that you are comfortable. You should never feel pressured to do more.

Conclusions and Recommendations

This project has been an exciting progression of learning for both myself and the students. Many of the signs I knew, but many came up in teachable moments, and we learned them together. The philosophy behind Marilyn Daniels, Dancing With Words, has also been fascinating. It makes so much sense when reading the principles behind the process in her book, and comes alive when implementing them in the classroom.

It has always been a mystery to myself and to other teachers, as to finding a strategy to teach reading and other academics to those students who don't learn in a traditional way. Using sign language is one possible solution to this mystery. It provides a multisensory approach, reaching students who learn through visual, auditory, and bodily kinesthetic methods. It captures the students attention, requiring eye contact thus maintaining more student interaction and participation. This also leads to better control of classroom management. Once a number of words have been established in sign, teachers

can also use it for transitional and directional cues. It also provides teachers one more way to informally assess their students progress, and identify weak areas, while teaching students a diverse form of communication.

This project has focused mainly on reading, and classroom management. It would be interesting to see how using sign can enhance other disciplines such as mathematics, social studies, and science. Once a certain vocabulary has been established, and the implementation of sign language has become routine, it will be easier to transfer these skills to other areas. The benefits sign language has on reading and classroom management would predictably parallel those other discipline areas.

Overall, from the research studies, excerpts and direct classroom experience, it is clear that using American Sign Language with hearing students, provides a unique multisensory learning experience. Students of any ability level, or learning style are likely to show improvement with the supplemental enrichment of using sign with the current curriculum. It is motivating, stimulating, and helps maintain respect and order within the classroom.

References

- Abrams, M., Weinstock, J., & Erting, L. (1996). Surround them with language. *Perspectives*, 18(3), 12-15.
- Armstrong, T. (2000). *Multiple intelligences in the classroom*. Alexandria, Virginia: Association for Supervision and Curriculum Development.
- Brennan, & Miller, Kathleen B. (2000, January). How many words can your students read? *Intervention in School & Clinic*, 35(3), 147-151.
- Cooper, B. (2002, October). Teaching ideas. *The Reading Teacher*, 56(2), 116-123.
- Daniels, M. (1996). Bilingual, bimodal education for hearing kindergarten students. *Sign language studies*, *90*, 25-37.
- Daniels, M. (1997). Teacher enrichment of prekindergarten curriculum with sign language. *Journal of Research in Childhood Education*, 12, 27-33.
- Daniels, M. (2001). Dancing with words, signing for hearing children's literacy.

 Westport, Connecticut: Bergin & Garvey.
- Dweck, C. (1999). Self-theories: Their role in motivation, personality, and development. Philadelphia: Psychology Press.
- Felzer, L. (2000). How signing helps hearing children learn to read.

 Retrieved June 20, 2003, from

 http://www.csupomona.edu/~lifelzer/research.html

- Fong, V. (n.d.). Sign language enriches learning for hearing children. Retrieved

 August 15, 2003 from http://www.eurekalert.org/pub_releases/2001-11/ps-sle112001.php
- Guterman, L. (2001). The silent challenge. *Chronicle of Higher Education* 47(26), 16-18.
- Infants use sign language to communicate at ohio state school (n.d.). Retrieved June 20, 2003 from http://www.acs.ohio-state.edu/units/research/archive/signlang.html
- Jitendra, A. (1997). Teaching sign language to children with behavior disorders: a direct instruction approach. *Preventing School Failure* 41(3), 137-141.
- Kokette, S. (n.d.). Sign language: the best second language? Retrieved

 August 15, 2003 from http://www.littlesigners.com/article14.html
- Mayer, R. (2002) The promise of educational psychology: Vol. II: teaching for meaningful learning. Columbus, Ohio:Merrill Prentice Hall.
- Morris, R. (n.d.). Using sign language in the classroom. Retrieved June 20, 2003, from http://www.newmanagement.com/articles/article_signs.html
- Qualls-Mitchell, P. (2002). Reading enhancement for deaf and hard-of-hearing children through multicultural empowerment. *Reading Teacher* 56(1), 76-86.

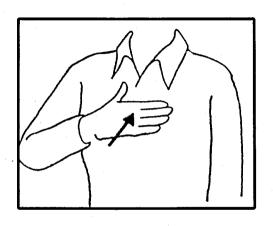
Rodia, B. (2001). Mantua: a school powered by people. *Teaching*K-8 31(5), 36-39.

The Comprehensive Signed English Dictionary (1983).

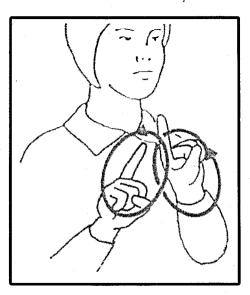
Washington, DC:Gallaudet University Press.

Appendix

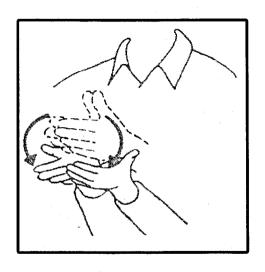
Ciam i	T anaugaa	Distinger		22
Sign.	Language	Dictionary.	 ***************************************	



My

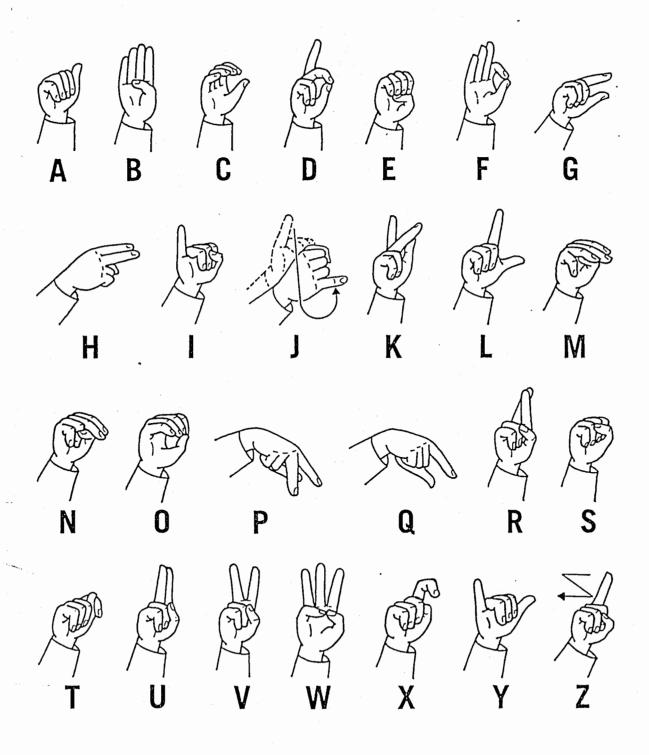


Sign Language



Book

The Manual Alphabet





A



B

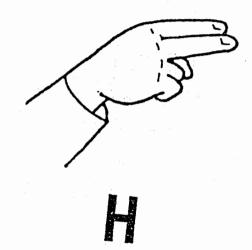




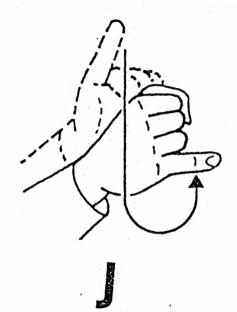






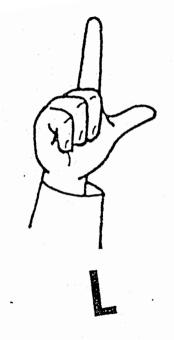








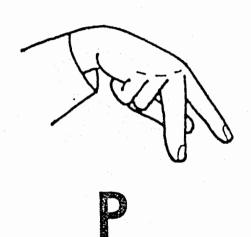
K

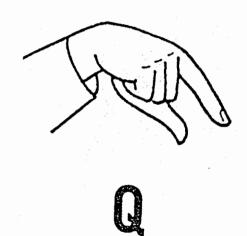














R











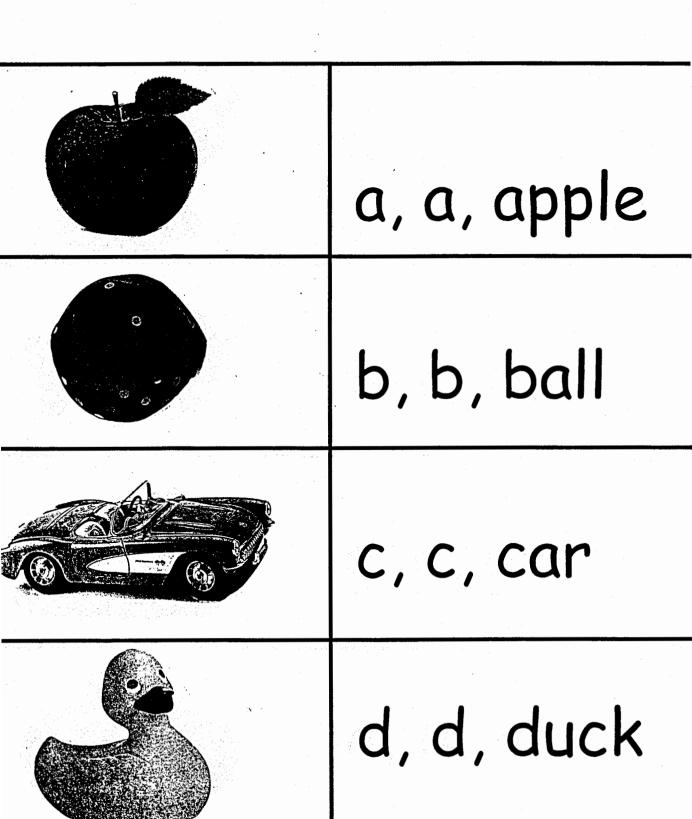


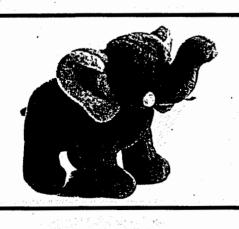




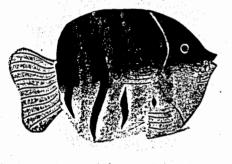
Numbers



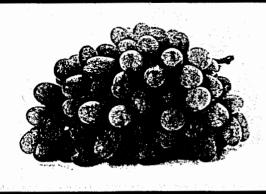




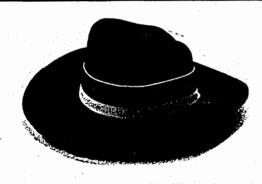
e, e, elephant



f, f, fish



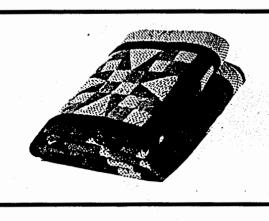
g, g, grapes



h, h, hat

	i, i, ice cream
	j, j, jam
	k, k, kite
	I, I, lemon

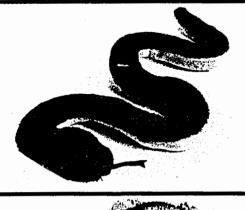
	m, m, monkey
	n, n, nest
	o, o, octopus
	p, p, parrot



q, q, quilt



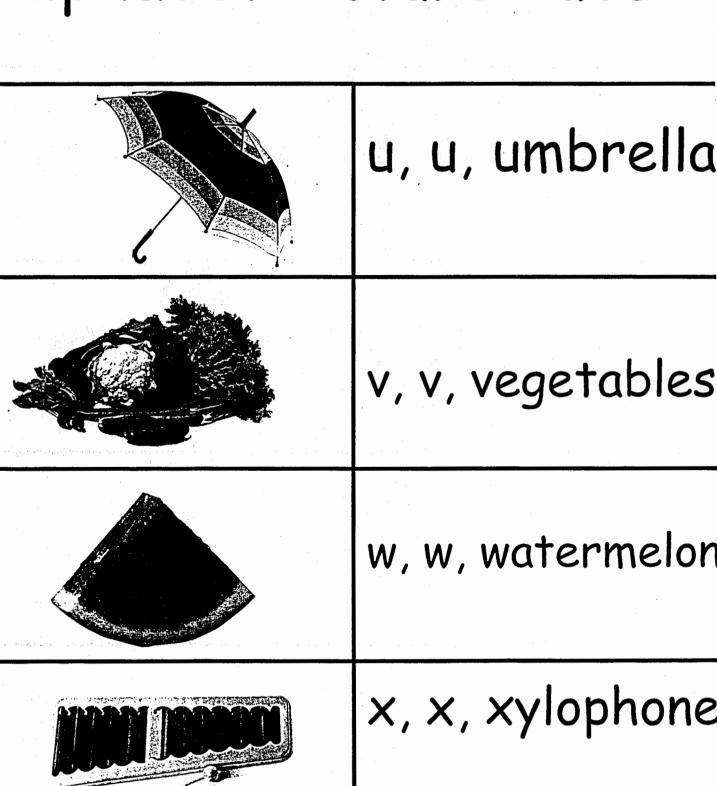
r, r, radio

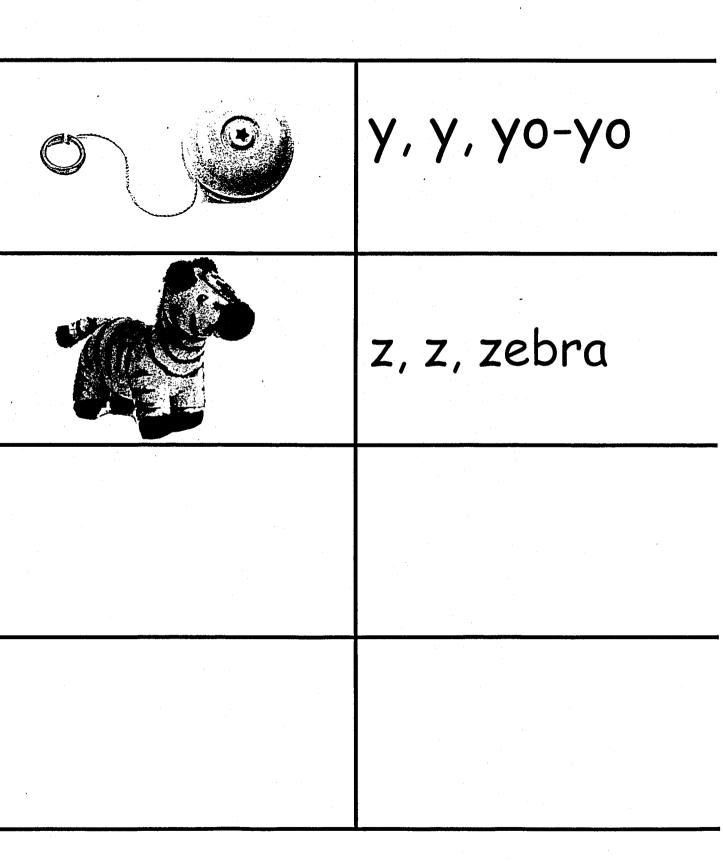


s, s, snake



t, t, tiger







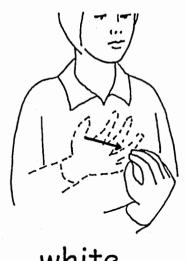
Color

Colors

pink blue green black white gray

red
yellow
orange
purple
brown

Colors



white



gray



brown



black



Colors



red



yellow



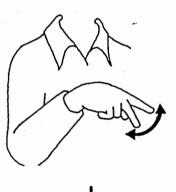
blue



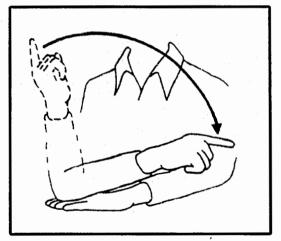
green



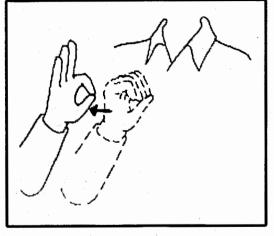
orange

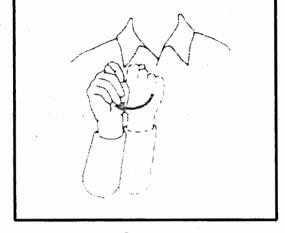


purple

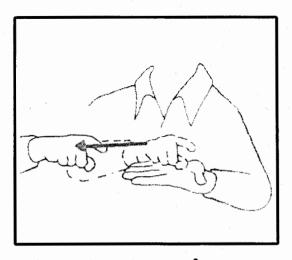


Days





of



Week

the

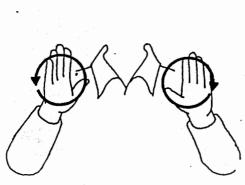
Can you read these words?

Days of the Week

Tuesday Thursday Saturday Monday Sunday Wednesday Friday

Yesterday Tomorrow Morning Today Day Night

Days of the Week



Sunday



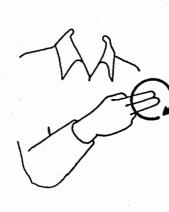
Monday



Tuesday



Wednesday



Thursday



Friday

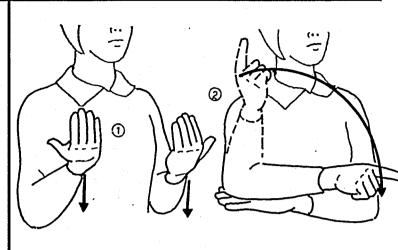


Saturday

Calendar Words



yesterday



today



tomorrow



morning



day



night



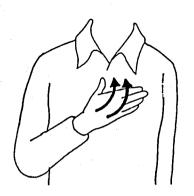
Feelings

Feelings

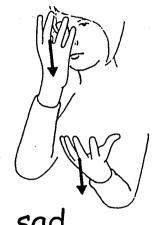
awake
sad
excited
hungry
fine
sick

tired funny happy thirsty laugh cry

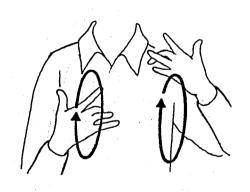
Feelings



happy



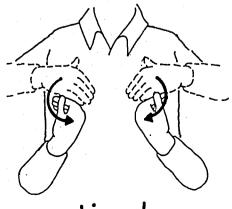
sad



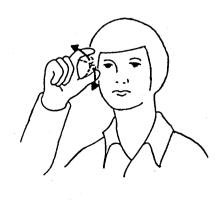
excited



funny



tired



awake

Feelings



hungry



thirsty



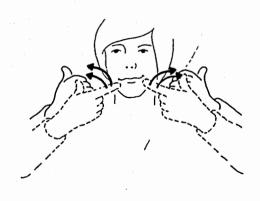
sick



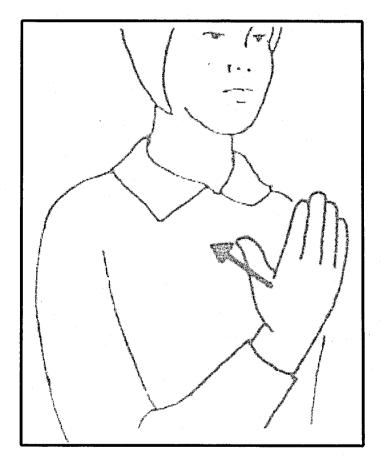
fine



cry



laugh



Manners

Can you read these words?

Manners

wow

please

thank-you

sorry

excuse me

good

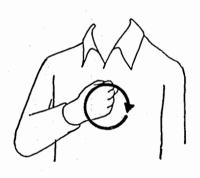
Manners



please



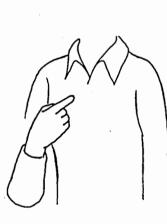
thank-you



sorry



excuse



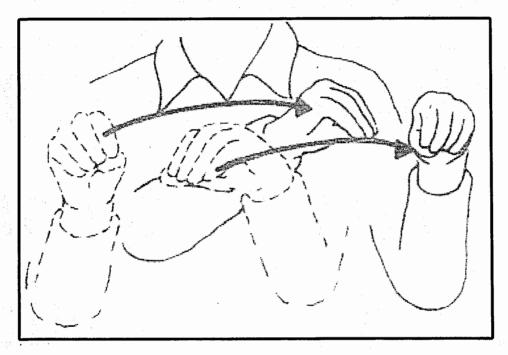
me



good



wow



Movement

Movement

quiet sit line up run walk stand dance ski jump fast slow stretch

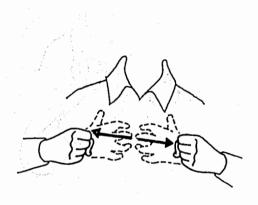
Movement



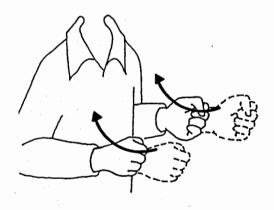
dance



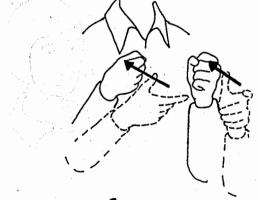
jump



stretch



ski

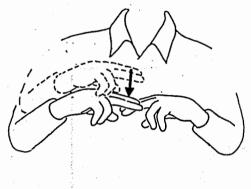


fast



slow

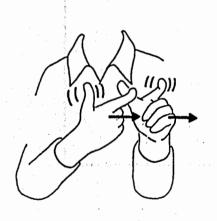
Movement



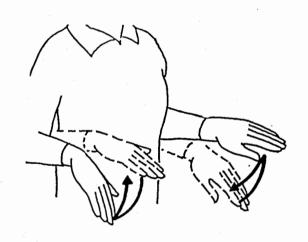
sit



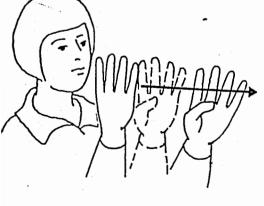
stand



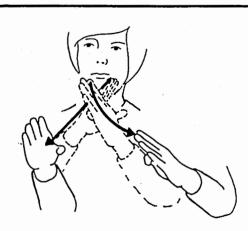
run



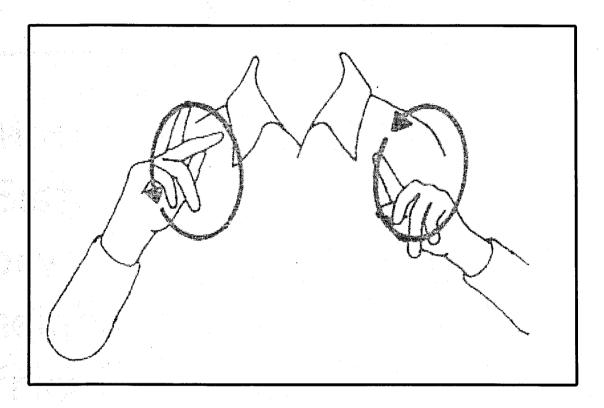
walk



line up



quiet



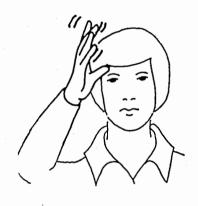
People

Mother Sister boy neighbor friend you they Grandmother

Father girl teacher student me US we brother Grandfather



mother



father



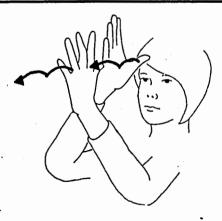
sister



brother



grandmother

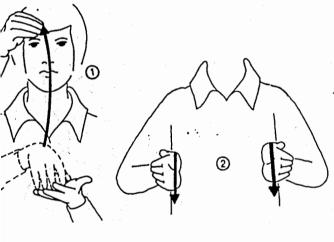


grandfather

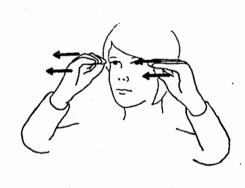




friend



student



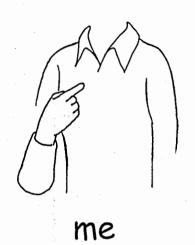
teacher

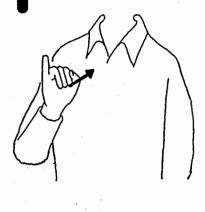


boy

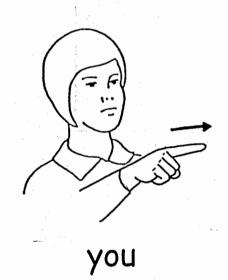


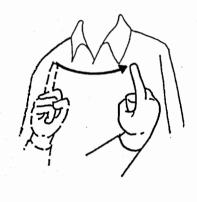
girl



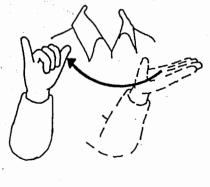


I





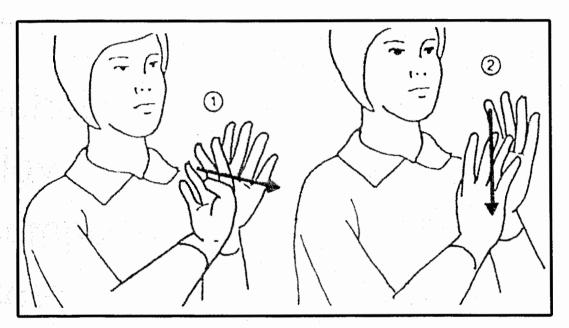
we



they



us



Schedule

Schedule

School

Play

Computer

Rest

Recess

Gym

Library

Work

Snack

Lunch

Music

Art

Schedule



Art



Gym



Music



Computer

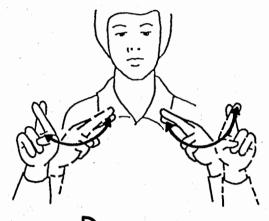


Library

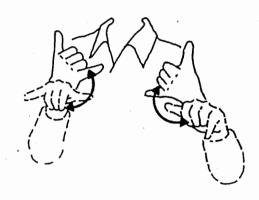


Work

Schedule



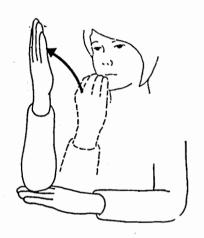
Recess



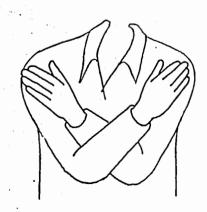
Play



Snack



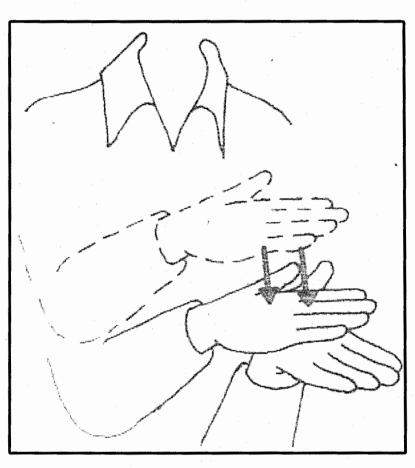
Lunch



Rest



School



School

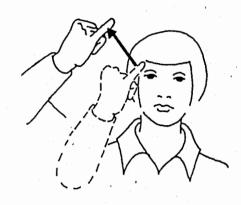
pencil
book
forget
read
talk
cut
crayon
box
chair
put away
clean

attention

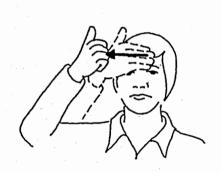
think idea remember write glue draw table scissors look get out listen color



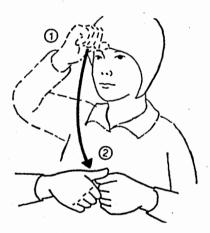
think



idea



forget



remember



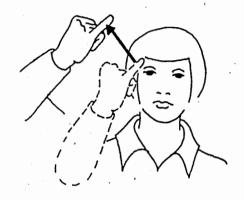
book



pencil



think



idea



forget



remember



book



pencil



read



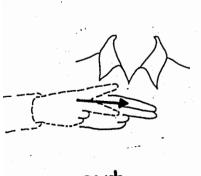
write



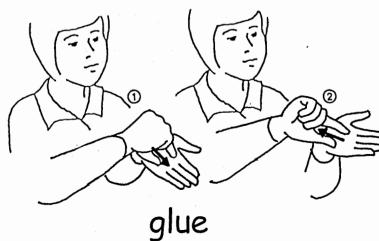
talk



draw



cut





read



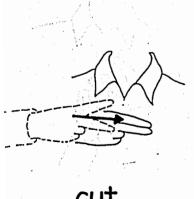
write



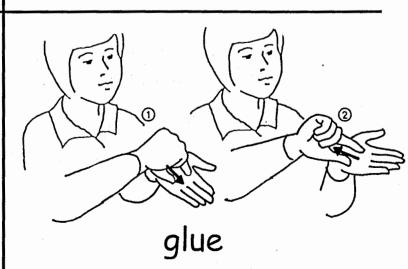
talk

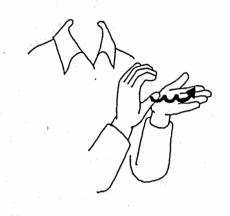


draw

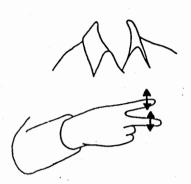


cut





crayons



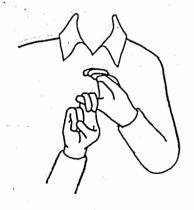
scissors



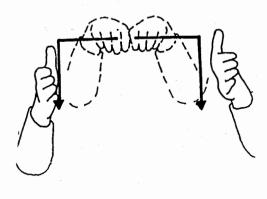
color



box



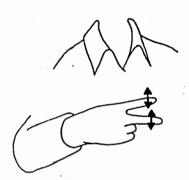
chair



table



crayons



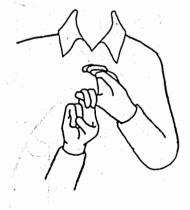
scissors



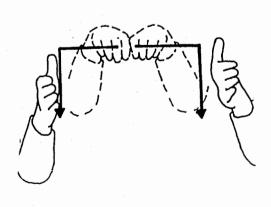
color



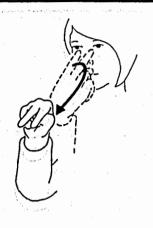
box



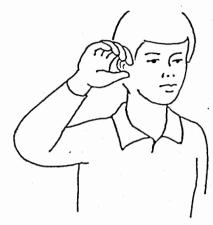
chair



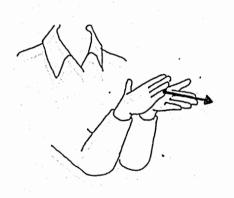
table



look



listen

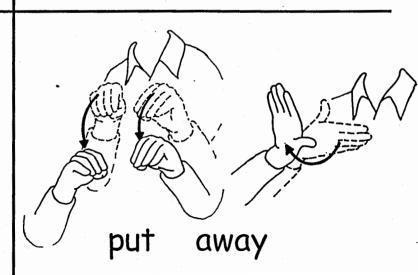


clean



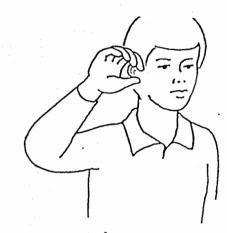
attention



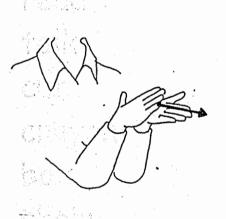




look



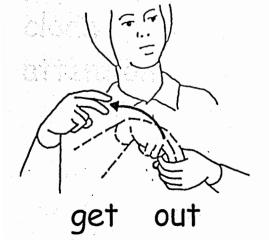
listen



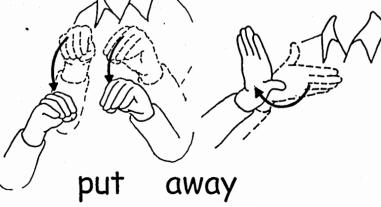
clean



attention







School

pencil

book

forget

read

talk

cut

crayon

box

chair

put away

clean

attention

think

idea

remember

write

glue

draw

table

scissors

·look

get out

listen

color

School

pencil

book

forget

read

talk

cut

crayon

box

chair

put away

clean

attention

think

idea

remember

write

glue

draw

table

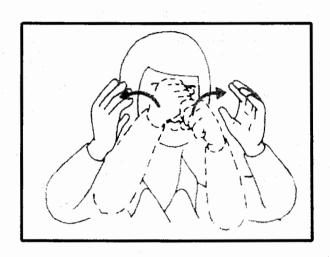
scissors

·look

get out

listen

color



Sight



Words

me

we

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go

red

my

you

yellow

blue

and

big

I

is

but

get

little

look

what

to

up

where

the

that

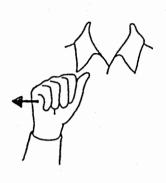
it

can

have

see

not



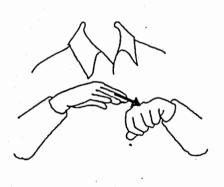
a



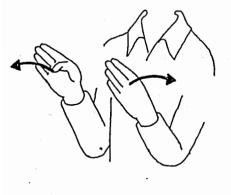
am



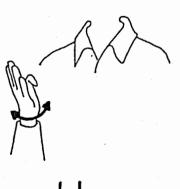
and



at

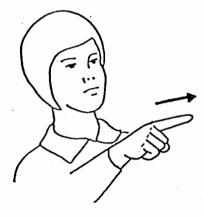


big



blue





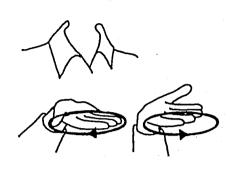
you



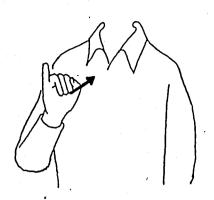
yellow



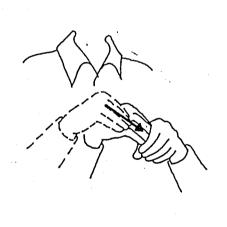
me



here



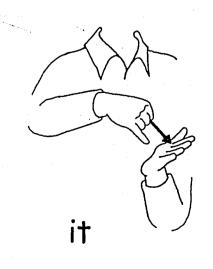
T

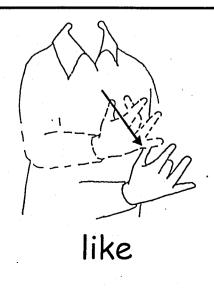


in



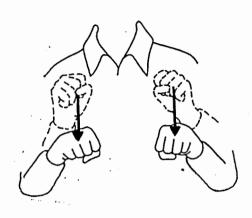
is







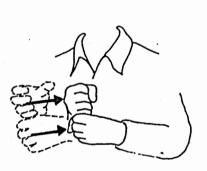
but



can



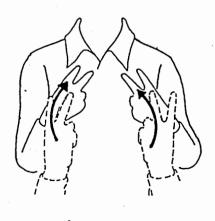
do



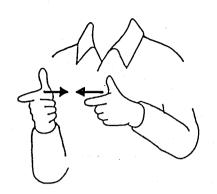
get



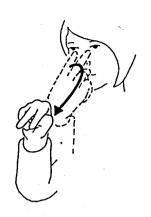
go



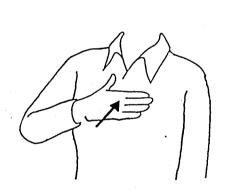
have



little



look



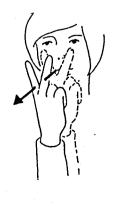
my



not



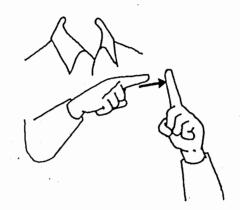
red



see



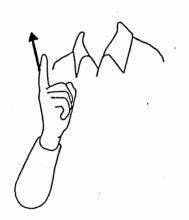
that



to



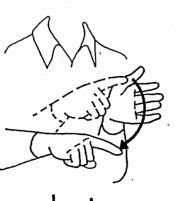
the



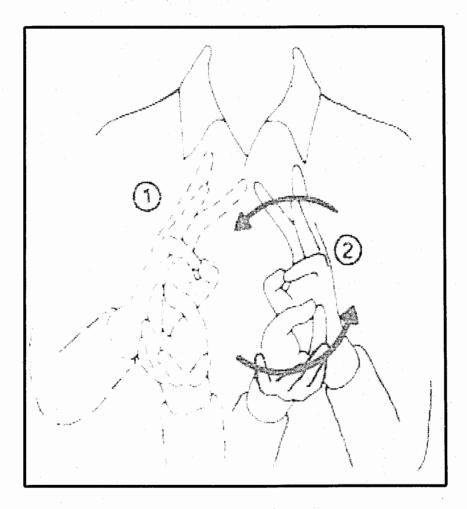
up



where



what



Weather

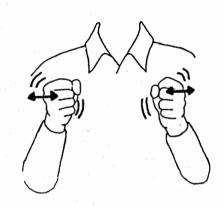
Weather

sunny hot cloudy snowy windy rainy foggy cold

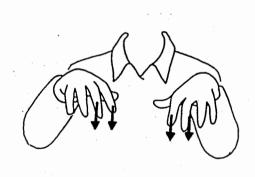
Weather



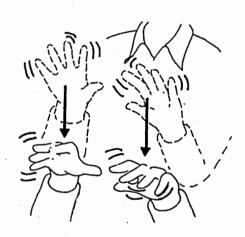
Hot



Cold



Rainy



Snowy



Sunny



Cloudy

Weather

