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ABSTRACT

Deaf children come from all races, classes, and backgrounds, but as a group they have a hard time learning to read and write. The more hearing a child has, the better the child performs on tests of reading ability. Parents who can communicate well with their deaf children help them to perform well at school, but beyond "good" communication, there are few specifics. Only about 10 percent of all deaf children have parents who are deaf. Research shows that, on average, the deaf children of deaf parents have better reading abilities than deaf children of hearing parents. Deaf children from middle-class, educated deaf families consistently perform well in reading and writing. For some deaf children, mainstreaming has been a disaster because they are isolated from other deaf children and adults, and their special needs cannot be addressed in classrooms designed primarily for hearing children. For others, it has brought new educational opportunities. Deaf children need to know how hearing people use reading and writing in everyday life. At the same time, they need to learn the uses of literacy among other deaf people. To develop literacy for deaf children, educators need to understand better what kinds of knowledge the children already have about reading and writing before they come to school, how they use sign language and finger spelling, and how they learn about speech. Deaf children must learn the rules of orthography. The first step in producing literacy for deaf children is to recognize that deaf children are not hearing children who do not hear, but children with special sets of knowledge. (Ten references are included.) (CML)

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# LITERACY LESSONS



INTERNATIONAL LITERACY YEAR

## Deaf children and literacy

by Carol A. Padden

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In societies where literacy is important, learning to read and write is a fundamental part of a young child's education. Deaf children are no exception. They, too, face many of the same pressures facing young children who grow up in societies where a great deal of information is stored in writing. By the time they reach childhood, they are expected to be able to read and write. And as they mature, they must acquire more skills which require reading and writing.

We now understand that learning to read and write is not a simple task. Many children do not learn to read easily. We know that family background plays an important role in how children learn to use writing. Children who come from minority groups, or from backgrounds that do not transfer easily to school environments, have a more difficult time learning to read

#### LABELS: 'HEARING-IMPAIRED' AND 'DEAF'

*Over recent years, several labels have been used for deaf children. A common label among teachers of deaf children is 'hearing-impaired', which is used to describe children with different degrees of hearing impairment. Some children are said to be 'profoundly hearing-impaired' and others 'mildly hearing-impaired.'*

*Within certain communities of signing deaf people, such as that in the United States, the term 'deaf' is more commonly used than 'hearing impaired.' The term 'deaf' is used not only to refer to individuals who do not hear, but also is a marker of identity within the group. For members of this community, 'deaf' is used for individuals who use sign language fluently. Those who hear well and can use speech are called 'hard-of-hearing.'*

*In this booklet, we will use the term 'deaf' to refer to children who do not hear. We will also use this term to refer to children who use signed language.*

and write than more economically advantaged children. For deaf children, learning to read and write is a special challenge. Deaf children come from all races, classes and backgrounds, but as a group, they have a hard time learning to read and write.

## DEAF CHILDREN AND LITERACY

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The traditional way of thinking about why deaf children have difficulties learning to read is to think about them in terms of their *condition*. They cannot hear spoken language and since writing is said to be based on speech, this reason is often given for why they have difficulties learning to read.

### *The medical explanation*

The medical explanation has been the basis of many detailed studies of the difficulties deaf children face in learning to read and write. Research in this tradition studies the kinds of hearing impairments deaf children have and tries to show a connection between hearing impairments and failure to read. For example, it has been found that the more hearing the child has, the better the child performs on tests of reading ability. Some have mistakenly used these results to say that being able to hear is necessary in order to learn to read successfully. This is not true. Many deaf children who do not hear speech and do not use oral speech in everyday communication do successfully learn to read and write. How do they master the task? This is what we need to know in order to plan literacy instruction for children.

### *The social-cultural approach*

Another approach to this problem is to understand the special circumstances of deaf children and how this interacts with the ways they learn to read and write. This approach considers the broader social and cultural contexts of deaf children's everyday lives. This approach looks at the major institutions in deaf children's lives: the family, the school and the community and how these influence the ways in which deaf children learn, including how they learn to read and write.

### SIGN LANGUAGES

*Many communities of deaf people throughout the world use a signed language. Because sign languages seem at first glance to be unlike spoken languages, there are many misconceptions about them. To correct one misconception, there is no one universal sign language; instead there may be as many different sign languages as there are spoken languages. Within the country of Canada, for example, there are several different sign languages, including: American Sign Language (which is also used in the United States), French Canadian Sign Language, Nova Scotia Sign Language and Inuit (Eskimo) Sign Language.*

*Because sign languages use hands and the body, they are often compared to pantomime or primitive gestures, but the comparison is not a useful one. Sign languages are more like spoken languages such as English, French or Arabic. They are highly structured languages that have been passed down from one generation of signers to the next. Like spoken languages, they have grammars and extensive vocabularies.*

*Not all deaf children learn a sign language. Some deaf children learn it at birth from their deaf parents who sign, but most deaf children learn sign language for the first time when they go to school. Some learn a sign language later in life, at school or in the community. And some are never exposed to other deaf people and do not have an opportunity to learn a sign language.*

*There are some schools for deaf children which disallow use of sign language in the classrooms because they believe use of sign language will detract from the goal of learning to speak. However, if these schools have groups of deaf children studying and living together, the children may still use a sign language among each other. This unofficial use of sign language in schools is very common. As a consequence, the number of deaf children who use a sign language may be larger than is officially acknowledged.*

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Deaf children are unusual compared to other children in that they are very often born into families that are different from them. Most deaf children have hearing parents. A small but significant percentage of deaf children have parents who are also deaf and can use signed language with them.

Having a deaf child can be a mystifying and frustrating experience for hearing parents, because deaf children do not interact with them in the expected ways. With hearing children, hearing parents can use speech to introduce them to their language but with deaf children, they find they must use other means of communicating with them. It does not take hearing parents long before they discover that deaf children require different kinds of interactions. But what kinds of interactions do deaf children need? How can parents learn to use them? These are questions we need to answer.

One means of interacting with deaf children that some hearing parents acquire is to learn a sign language. Although attitudes are changing, in some countries and educational systems there is still great resistance to allowing deaf children to learn and use a signed language. Speech is still believed among some educators to be the only means of educating deaf children. This belief puts them at odds with communities of deaf people who feel that signed language is essential to the development of a deaf child.

There are other ways that hearing parents can create communicative worlds with their deaf children, including worlds with reading and writing. But the special interactive strategies used by parents with deaf children are not well understood. We know that parents can communicate well with their deaf children

help them to perform well at school but beyond 'good' communication, we have few specifics.

*Deaf children in deaf families*

A small percent of all deaf children, about 10%, have parents who are deaf. In the United States, a majority of these families uses American sign language (ASL). Some use speech aided by signs while others use educationally invented signs. Research on reading and writing skills of deaf children of deaf parents shows that, on the average, they have better reading abilities than deaf children of hearing parents. Deaf children from middle class, educated deaf families consistently perform well in reading and writing. Why do they seem to be more successful at reading than other deaf children? Different explanations have been given: the parents communicate well with their children and help them become better adjusted to the demands of school and literacy. But this explanation is very general and may not be helpful to hearing parents.

In order to help the majority of hearing parents who need to learn ways of interacting with their deaf children, we need to study interactions in deaf families in more detail. We need to know what kinds of communicative worlds deaf parents create for their children and how these worlds help their children acquire literacy.

The school is where many deaf children learn a language for the first time. It is often where many meet other people like themselves, other deaf children and adults who share their communicative needs. In this way, the school plays a central role in linking the different worlds of the deaf child: the home and community together with the school. And like many other hearing children, the school is often where deaf children begin learning about reading and writing for the first time.

### *Schools for deaf children*

Until recently, deaf children were likely to be taught in schools away from home, often called 'institutes for the deaf'. Most lived at the school with other deaf children and had surrogate parents - including deaf adults who lived with them in dormitories. In schools like these, sign language was often the primary means of communication if not in the classroom, then at least in the dormitories.

But in some countries, as in the United States, there has been a new trend toward 'mainstreaming', in which deaf children attend local schools with other hearing children. This approach has had mixed results. For some deaf children, it has been a disaster. They are isolated from other deaf children and adults, and their special needs cannot be addressed in classrooms designed primarily for hearing children. For other deaf children, it has brought new educational opportunities. We must ask ourselves whether an educational policy which requires mainstreaming is too harsh for the many deaf children who cannot survive in such pro-



## DEAF CHILDREN AND THE COMMUNITY

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Many deaf children live in more than one community. For deaf children from hearing families, they are not only learning about their family's community, but may be beginning to enter in a community of other deaf children and adults as well. For deaf children from deaf families, they are beginning to learn about the larger community surrounding deaf people.

Deaf children need not only to learn about different cultures, but also to learn how the various communities use reading and writing. Sometimes they differ. In hearing communities, literacy is an important tool for everyday life. Nearly all institutions require use of writing, from the school to the marketplace to the workplace. Deaf children need to learn how hearing people use writing in their everyday lives. How should they write a letter to a hearing relative? How should they read and understand books written by hearing people?

At the same time, deaf children need to learn the uses of literacy among other deaf people. In the United States deaf community, many deaf people prefer to use writing as a mode of communicating with other hearing people. Instead of speaking, they will use writing to make requests, place orders, or introduce themselves to other hearing people. Also, some deaf communities have invested in special devices that allow them to send typewritten messages across telephone lines. These devices involve writing and reading messages, another important use of literacy. Each of these functions of literacy has special codes and rules which deaf children need to learn.

In some ways, learning to read and write is seen as a crucial goal for deaf children. In the United States, not only do they need to acquire literacy in order to participate in the world around them, but written English is very often an important way to learn English itself. Because many deaf children do not hear speech well enough to use spoken English comfortably, written English becomes an important tool for acquiring English.

Consequently, at the same time deaf children are learning to read and write, they may also be learning about English for the first time. Hearing children can use their knowledge about spoken English to help them form connections with writing, but deaf children need to explore English and writing at almost the same time. In this way, learning to read is a harder task for them.

### *Reading instruction*

A traditional way of thinking about how deaf children acquire literacy is to think about how they should be taught in the classroom. This approach focuses on

#### READING AND WRITING MATERIALS FOR DEAF CHILDREN

*One problem with some instructional materials used with deaf children is that they were initially developed for use with hearing children. Books that use sound-centered strategies, for example phonics, for introducing reading would not seem to be helpful to very young deaf children. Some deaf children use speech and others do not, but it would seem that deaf children's understanding of speech must be different than those of hearing children. Does this play a role in how they learn to read and write? Unfortunately, there has been little research about what kinds of materials we can develop specifically for deaf children.*

methods for helping children to analyse and decode writing. For deaf children, several questions can be asked: what are some instructional methods used to help young deaf children begin to read? What materials should be used with young deaf children? This approach is seen by some educators as too narrow, because it focuses on the child's ability to analyse writing. Other factors are also important in learning to read and write.

### *Literacy development*

Another approach to studying literacy for young deaf children is to think of literacy not only as what is taught, but also what is learned in everyday contexts. This approach focuses on development of literacy. Instead of thinking only about how to teach deaf children, we think about what they already know and how to make use of it. What do deaf children know about literacy before they come to school? What have they learned about literacy in their homes and communities? In societies where writing is important, we are surrounded by things to read and write. It is important to study how young deaf children begin to use literacy materials in different contexts, not just in the school. The first step to developing literacy for deaf children is to understand better what kinds of knowledge they already have about reading and writing before they come to school, and while they are in school.

One important source of knowledge is what some call *print awareness*. This includes all forms of writing that surround us in our environment, from street signs to cereal boxes to restaurant menus. Children play outside near signs. They ride in cars or buses and see signs in front of stores. They see people around them using books, newspapers and menus. We often mistakenly believe that children do not have ideas about print until they begin to learn to write. In fact, they can already recognize shapes of words and they are already

beginning to think about the place of print in the world around them.

Another source of knowledge is *the relationship between natural language and writing*. Natural languages are those that are primary communication systems, learned as a first language. Writing systems are not primary communication systems. Natural languages are either spoken, as in English, Thai or Chinese, or they are signed as in American Sign Language, Hong Kong Sign Language or Danish Sign Language.

Hearing children begin to play with connections between speaking and writing. They begin to wonder about relationships between words they say and letters. For children learning to use the alphabet, they must discover that each letter corresponds to a sound. At first, they think a letter is equivalent to an idea. Later they realize that letters represent smaller units, and slowly they discover that a letter is to be used for a small sound unit.

*A girl learning sign language at a primary school for deaf children in Ethiopia*



Photo Unesco/D. Roger

## LITERACY DEVELOPMENT IN DEAF CHILDREN

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What similar kinds of discoveries do deaf children make? In order to understand what deaf children do, we need to look at what kinds of language knowledge they have and how they use this knowledge to help them tackle reading and writing.

### *Sign language and fingerspelling*

We are beginning to learn how they use sign language to help them think about writing. Sometimes they try to link a sign with a letter or a word. This often takes place through *fingerspelling*. They use a handshape that corresponds to a letter of the alphabet while thinking about the relationship between their signs and letters of the alphabet. Sometimes they use fingerspelling to help them think about how to begin spelling a word. In this way, fingerspelling is like practicing, helping the child form links between the language he uses in his everyday life and the characters he must write on a page.

### FINGERSPELLING

*'Fingerspelling' is a general term for any manual system for representing an alphabet, a system of syllables or ideographic characters. Many deaf communities all over the world use a fingerspelling system in addition to a sign language. But like communities that do not have written systems, there are some deaf communities that communicate without use of a manual system.*

*In the United States, deaf people use a one-handed fingerspelling system for representing the alphabet. One handshape corresponds to each letter of the alphabet. The British deaf community also uses an alphabetic fingerspelling system, but theirs is two-handed rather than one. In Thailand, deaf people use a system that also marks tones. And in Hong Kong, deaf people use a tracing system for representing ideographic Chinese characters.*

### *Speech*

A deaf child's knowledge about speech also plays an important role. From research on good deaf readers, it has been found that they use their knowledge of spoken English to help them read. But what about deaf children who do not speak very well? There has been some research with deaf readers who read very well but do not use speech well. An important feature of these readers is that they seem to use knowledge about speech even if they cannot use speech themselves. This tells us that we need new ways of understanding what young deaf children know not only about sign language, but about spoken language as well. It is not true that they know very little about speech, because this research shows that they know much more than we realize. We need to study how deaf children and adults learn *about* speech, even if they do not speak well.

### *Rules of orthography*

And finally, deaf children need to learn the special rules of the writing system, or the rules of orthography. For example, in English orthography, certain letters cannot appear together in the beginning or the end of a word. CR- or PR- can be used at the beginning of a word in English orthography, but not at the end of a word. These are rules that all children must learn, and deaf children need to learn them too.

### *Uses of literacy*

#### *by deaf children and deaf adults*

There are many uses of literacy for deaf children and adults, some are specific to the community of deaf people. Here is a short list of the different ways that reading and writing have been used by deaf people:

- in books containing grammar rules and dictionaries of their sign language;
- in recording stories and lectures originally told in sign language;

- in conversation with a hearing person;
- in proceedings of conferences about and for deaf people;
- in communication across telephone lines using a special device designed for deaf people (called a telecommunication device for the deaf, or a TDD)
- as subtitles for television programmes;
- in textbooks for teaching sign language and the cultural practices of deaf people.

## LITERACY EDUCATION IN THE 1990s FOR DEAF CHILDREN

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We have learned much about literacy education in the last few decades. We have learned more about how learning to read and write interacts with cultural practices. We also know that the institution of the school is very influential in the acquisition of literacy. We now need to learn more about special populations of children such as deaf children and what it means to plan literacy education for them. Deaf children cross many different communities, so our task is a challenging one. The first step to a new literacy programme for deaf children is to understand that they are not hearing children who do not hear, but children with special sets of knowledge. It is our job as we plan literacy education to look for ways to bring out this knowledge and use it to their advantage. We must always seek to find ways to use literacy not to confine children, but to open up new worlds for them.

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