

LITERACY AND DEAFNESS

Listening and Spoken Language

Second Edition



LYN ROBERTSON, PhD



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PREFACE

I am pleased to have been asked to create a second edition of *Literacy and Deafness: Listening and Spoken Language*, and I am happy to report that prospects are multiplying rapidly for individuals with hearing loss. For those who choose a listening and spoken language approach, deafness in all its audiogrammatic forms can be treated in some way. Infants and toddlers discovered to be deaf or hard of hearing can be aided or implanted with state-of-the-art technology, and the people in these children's lives can learn to enrich and accentuate their access to sound and learn how to help them listen. These children can learn more than one spoken language and can learn to read, write, sing, and play musical instruments. Unless deafness is the desired outcome for a particular child, no child needs to remain in silence or even in partial sound. This book is about choosing listening and speaking as the most promising route to reading and writing, and I hope it serves to inform and persuade some to make the conscious choice of providing sound and spoken language to children with hearing loss. My intention is that this book be helpful to both parents and professionals.

Literacy and Deafness deals with the evidence of persistent low literacy levels in many individuals with hearing loss and with evidence of higher literacy levels in those with hearing loss who have learned to listen. I have attempted to pull together the dominant literacy research done in the "hearing world" and apply it to the situation of hearing loss. This rich research stretches back many years, and throughout this book I cite what have become classic works along with newer research.

Providing appropriate technology to a child with hearing loss and using it during every waking hour is an essential beginning on the way to literacy, but doing so is not sufficient to stimulate high levels of listening capacity. Education of the parent(s) and child is

necessary, and much listening practice is required. The Alexander Graham Bell Academy for Listening and Spoken Language is working diligently to certify Listening and Spoken Language Specialists (LSLS) to work with parents and children in the clinic and in the classroom. The LSLS Cert. AVT (Auditory Verbal Therapist) “works one-on-one with children and families in all intervention sessions,” and the LSLS Cert. AVEd (Auditory Verbal Educator) “involves the family and works directly with children in individual, group or classroom settings.” A complete description of these certification categories can be found at The Alexander Graham Bell Listening and Spoken Language Knowledge Center (<http://www.agbell.org/AcademyDocument.aspx?id=541>).

The LSLS Cert. AVT and the LSLS Cert. AVEd must master the same foundational knowledge, complete the Certification Route, and pass the qualifying examination; the certifications differ according to the setting in which the LSLS will practice. In particular, I hope that this book will help individuals in their preparation for Domain 9, Emerging Reading, of the qualifying examination for LSLS certification.

The Plan of the Book

Before the development of technology that delivers good, usable sound to people with hearing loss, literacy achievement was routinely reported to be at primary school levels, but higher levels of achievement have been reported in the last 40 years, particularly in children with hearing loss who learn to listen. Chapter 1 presents and comments upon the progression of studies in this area. Chapter 2 describes literacy theories and how they draw from theoretical work in behaviorism, linguistics, psycholinguistics, cognitive psychology, sociolinguistics, literary criticism, and critical theory. It discusses the debate between approaching reading through phonics instruction versus approaching reading through sight word instruction by putting these word identification processes together on one end of the spectrum of approaches and meaning construction on the other end. Chapter 3, written by audiologist Carol Flexer, addresses the necessity of hearing technology that delivers sound to the brain and puts into context the use of amplification tech-

nology as a critical condition for literacy development for today's infants and children with hearing loss. Dr. Flexer discusses the neurologic basis of listening and literacy, a computer analogy for understanding technology, amplification technologies, the auditory feedback loop, distance hearing, and a different way to look at the terms "deaf" and "hard of hearing." Chapter 4 explores how literacy theory links knowledge of the spoken language to be read with learning to read that language and explains why establishing sign language as the first language and then beginning spoken language instruction through the introduction of print is a less promising approach than establishing a spoken language as preparation for literacy. Chapter 5 discusses how hearing connects to listening and listening to literacy. It explains reading and writing as language acts that can be theorized as extensions of listening and speaking. Chapter 6 is contributed by Dr. Gina Dow, a researcher in child development. Having an understanding of early identification of hearing loss and the developmental stages of childhood in children with typical hearing is important for parents and for those who work with parents of children with hearing loss, and this chapter provides background knowledge needed for thinking about the introduction of language and reading. Chapters 7, 8, 9, and 10 explore pedagogies employed in introducing children to reading and writing that grow out of theories about hearing, listening, and speaking. Chapter 8 is new and explains why reading aloud with children is foundational to language learning and literacy development. Chapter 10 is new, as well, and provides practical direction for creating Language Experience Books and experiences with such books related by practicing therapists and teachers.

Much has been written about young children with hearing loss and less about older students in upper elementary, middle, high school, and college/university. Chapter 11 visits the problems such students experience, for example, the "fourth grade slump" in which many students, with and without typical hearing, plateau in reading achievement. Other problems such as access to spoken and written information, study approaches, and school adjustment are also discussed in this chapter. Chapter 12 demonstrates how the people in children's lives can come to understandings that facilitate learning for children in the school environment.

Many teachers and therapists are facing for the first time the problems presented by children with hearing loss whose families

speak a language at home that is different from the language spoken at school, and Chapter 13 deals with the application of multilingual and multicultural theories and analyses with children who use hearing technologies. Chapter 14 is another new chapter; it expands upon a brief section in the first edition of *Literacy and Deafness* and makes the argument that if learning music helps children with typical hearing learn to read and write, the same can happen with children who are learning to listen. Chapter 15 describes theories of assessment and their importance in thinking about children's progress in literacy. Chapter 16 answers the question of what to look for in a reading program in terms of promising literacy practices for children with hearing and argues for putting emphasis on reading comprehension. Chapter 17 takes the position that, ideally, the child with hearing loss should be placed in classes with children with typical hearing, noting that other placements can be suitable, depending upon the situation. Chapters 18 and 19 are new; in Chapter 18, I express some of my thoughts about parenting a child with hearing loss, and Chapter 19 is comprised of reflections by young successful professionals on their lives and hearing loss. Long before technology was developed that brought clear sound to individuals with hearing loss, pioneers such as Helen Beebe and Daniel Ling were developing theory concerning the relationship between hearing, listening, and spoken language and facilitating listening and speaking in children with hearing loss, even children with profound hearing losses. Chapter 20 ends the book with two pieces by Daniel Ling and Helen Beebe written nearly 30 years ago that remain vitally relevant to us today.

A Few Words About Language

In thinking about a new world of accessibility to sound and hearing, we must think about the labels we use. Is a person “deaf” who cannot hear without the cochlear implant in place, but who can hear well with it on? Is a person “hard of hearing” who hears little inside the speech range without a hearing aid, but hears nearly all of it with the hearing aid functioning well? These questions may be a matter of semantics, but I think they also signal the possibility of some categorical changes in the way we think about the phe-

nomenon of hearing loss. Where we used to resign ourselves to a generally diminished use of spoken language and concomitant lesser academic achievement among people with hearing loss, we can now expect language, literacy, and learning achievement commensurate with that of their hearing peers. And so, our language must change. A person can be physical “deaf,” but function as a hearing person with the support of technology.

Throughout this book, I refer to the person or people I am writing about first, realizing that at times doing so results in a kind of wordiness that takes up more space than I might like. Instead of referring to a child as a “deaf child,” I refer to the child as a “child with hearing loss,” or a “child who is deaf or hard of hearing.” This distinction on paper may seem slight, but the distinction in thinking about the child first as a person and second as an individual who has something different about his or her hearing is a tribute to personhood. The same goes for language that includes both male and female. Instead of allowing pronouns such as “he” and “him” to stand for all people, I endeavor to use language throughout that is inclusive of boys and girls, men and women.

When I refer to parents, I also mean siblings, grandparents, aunts, uncles, neighbors, and caregivers, as all the people in a child’s life need to contribute to helping the child learn to listen. All who *interact* with the child using spoken language contribute to the child’s learning of that language, and everyone in the child’s life can collaborate about this.

In this book, I make the argument that helping a child learn to listen provides the best possibility that he or she will learn to read and write. I come at this from both a research-based and a personal point of view, as I am an academic as well as the parent of a now adult daughter in whom a severe-to-profound hearing loss was diagnosed at age 15 months.

With all this in mind, it is my hope that you will find this book to be a celebration of literacy, deafness, and personhood!

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Chapter 2

LITERACY THEORIES

Reading is the complex act of constructing meaning from print. We read in order to better understand ourselves, others, and the world around us; we use the knowledge we gain from reading to change the world in which we live.

Becoming a reader is a gradual process that begins with our first interactions with print. As children, there is no fixed point at which we suddenly become readers. Instead, all of us bring our understanding of spoken language, our knowledge of the world, and our experiences in it to make sense of what we read. We grow in our ability to comprehend and interpret a wide range of reading materials by making appropriate choices from among the extensive repertoire of skills and strategies that develop over time. These strategies include predicting, comprehension monitoring, phonemic awareness, critical thinking, decoding, using context, and making connections to what we already know.

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. . . there is not a single process involved in reading, but instead several operating interactively. Reading research cannot simply track a single process but must study its interaction with other processes over time, as skill unfolds.

Padden & Hanson, 2000, p. 444

Introduction

People who know how to read carry with them ideas about how the process works, and when they think about teaching reading, they usually think about doing so in terms of their own personal understandings. Such informal theorizing works best in the context of knowledge of studies done by researchers and theorists who have published their ideas for intellectual scrutiny, so as you read, keep in mind what you already think you know about reading and writing, and see where you can either fit in more ideas or alter some thoughts you have had. This chapter sets aside deafness for the moment in order to lay out theories of literacy as they have been developed for children and adults with typical hearing, and then Chapter 4 begins making connections essential to understanding the relationship between literacy, deafness, and listening.

Theorizing About Reading

Reading has been studied from many perspectives, including behaviorism, linguistics, psycholinguistics, cognitive psychology, sociolinguistics, literary criticism, and critical theory, and all have something to contribute to our understanding of literacy in the context of deafness. Theories in all of these areas include assumptions about the necessity of development in the reader of the language to be read. By age five, six, or seven, the child with typical hearing who has not been deprived of language in some way has caught on to all of the spoken structures voiced in his or her presence (Fry, 1966, p. 187). By age seven or eight, the child can understand and construct sentences using conventional word order and use the parts of speech in the same ways adults do (Ling, 1989, p. 4). Throughout life, through direct experience and educational experiences, the individual adds conceptual knowledge to this linguistic knowledge in the form of an ever-expanding network of vocabulary. When this child with typical hearing goes to school at age five or six, he or she may be presented with one approach to reading or to a combination of approaches, but all approaches depend on the learner knowing the spoken language to be read and seek to remediate language gaps and delays where they are discovered.

In the United States, the matter of teaching children to read has been and remains controversial, which makes it very interesting. Some of the controversy appears to be at root a power struggle in the political realm, and other aspects of it involve differing definitions of reading and the fact that research done from different points of view produces different results. This chapter begins with definitions of reading and then focuses on word identification and comprehension, which are involved in the two major “camps” in the discussion. Then it discusses the contributions of numerous academic disciplines that study reading. I hope you will see there are many, many ways to think about reading and that you will come to appreciate how they can fit together.

Definitions of Reading

At first glance, it seems easy to define reading. It is the getting of meaning from print. Or, it's the pronouncing of words as they are seen on the page. Or, it's connecting what one sees in print to what one already knows. But could it be an act of interpretation? Could the reader be *bringing* meaning to the print instead of getting meaning from it? The more one thinks about it, the more complex and interesting it gets. How one thinks about reading underlies how one studies it and how one formulates ways of teaching it to children and adults. In this section, we look at various ways some influential researchers have defined reading. These definitions are standing up over time because they deal well with questions that arise about reading as a process and the needs of learners as they acquire reading ability.

During the process of reading, “a mental representation is constructed of the discourse in memory, using both external and internal types of information, with the goal of interpreting (understanding) the discourse” (van Dijk & Kintsch, 1983, p. 6, as cited in Hacker, 2004). This is a goal-oriented definition involving combining information found both within and beyond the reader.

Marie Clay, who developed Reading Recovery, writes about reading:

. . . as a message-getting, problem-solving activity which increases in power and flexibility the more it is practiced. My

definition states that within the directional constraints of the printer's code, language and visual perception responses are purposefully directed by the reader in some integrated way to the problem of extracting meaning from cues in a text, in sequence, so that the reader brings a maximum of understanding to the author's message. (Clay, 1991, p. 6)

Clay goes on to observe that mature reading may be the result in different readers of their having learned its components in different orders and in different ways (p. 16). Therefore, she does not insist on only one approach to teaching reading.

Smith (2004), author of six editions of *Understanding Reading*, maintains that reading is a natural process of "interpreting experience," and that people do this interpreting continuously from infancy in all facets of their lives, not only in dealing with print (p. 2). The reader recognizes something and fits it into his or her knowledge so that, "All reading of print is interpretation, making sense of print" (p. 3). Smith sees reading as a set of active processes employed as needed in different contexts with readers finding what they seek on the page:

Readers find letters in print when they ask one kind of question and select relevant visual information; they find words in print when they ask another kind of question and use the same visual information in a different way; and they find meaning in print, in the same visual information, when they ask a different kind of question again. (p. 181)

From Smith's point of view, fluent reading is related to being able to answer the questions one is asking while reading (p. 182).

In the often cited text, *Beginning to Read*, Adams (1990) writes:

In the course of proficient reading, the processes supporting orthographic, phonological, and semantic identification of words occur interactively and interdependently; without the complete and proper operation of all three, the reader is left with neither capacity nor support for comprehension. (p. 8)

Stanovich sees these definitions of reading as different levels of processing, with one involving perception and the other involving reasoning (1994, p. 261). At the same time that he writes of the

importance of word recognition, he terms reading, “a special type of constrained reasoning” (1994, p. 264).

These views come from different directions, and in some respects they seem truly at odds with each other. I find taking them together to be useful in not getting caught up in arguing about different reading approaches, particularly because accounts of how reading proceeds may or may not be related directly to how reading might be taught. For example, although it may be apparent that the typical reader looks at the letters in the words being read, this understanding may not require teaching reading in a letter-by-letter fashion. It is clear that children with typical hearing learn to read by engaging in many different reading programs (Clay, 1991, p. 3). An ever-present difficulty is that they do not all learn to read at high levels, regardless of the approach or materials used. Given this reality, there is room for definitions that feature word identification and for definitions whose focus is comprehension, *as both are necessary*. It is useful to understand the thinking underlying both.

Word Identification

Word identification is often called “bottom-up” reading; the metaphor proceeds from the text up to the reader, suggesting that letters and words are driving the process. The reader is seen as taking in every letter (Adams, 2002, p. 69) and applying rules that result in constructing the word-by-word speech message of the writer. It is as though the reader “hears” the writer’s voice, or as though the reader is identifying words as whole units and then “hears” the results. Pointing to research done beginning with LaBerge and Samuels (1974), Schwanenflugel et al. (2006) argue that fluency in word identification is the underpinning for comprehension, and that practice in decoding leads to fluency (p. 499). In this view, the goal is reading without thinking about identifying the words. This goal is accomplished by moving, over time and with practice, from identifying words at the letter-to-letter level to identifying them as sets of letters in predictable units. Those who work from this point of view rely on studies that show that readers who can identify words automatically are better at comprehension, and they judge that automaticity in word identification leaves more