Since the very beginning of formal approaches to deaf education, the development of literacy has been a priority issue. The history of educational initiatives in this area is entwined with the history of prevailing attitudes and practices toward the impact of deafness on the development of deaf children more generally. In particular, arguments about whether a visual input (reading) can take the place of a diminished auditory input and whether educators should accommodate or seek to ameliorate the effects of the special linguistic characteristics of deaf learner-readers have resulted in a wide variety of practices and perspectives. These varied practices and perspectives continue to have impacts on current educational debate and practice. This article provides a brief historical overview of these educational endeavors, noting the enduring questions and issues that remain for the field to address.

Historically, the beliefs of educators of deaf students about literacy development for deaf learners have been an amalgam of the prevailing theory and practice of literacy education and the beliefs about the impact of deafness on an individual’s ability to acquire literacy skills. This has been particularly true of theory and practice at the school level, where education of deaf students has been concentrated. Continuing education for deaf adults, especially outside formal programs in colleges and universities, has been a relatively recent phenomenon that has been relatively little discussed in the professional or research literature. A review of where we have been in literacy education for deaf people may provide a view of where we might go.

Since the very beginning of education of deaf people, a strong view has been held that reading and writing can substitute for the diminished capacity to hear and speak. One of the very earliest educators, Girolamo Cardano (a Spaniard, 1501–1576, quoted by Bender, 1960) held that

we can accomplish that a mute hear by reading and speak by writing. For by thinking his memory understands that bread, for example, means that thing which is eaten. He thus reads, by reason, even as in a picture; for by this means, although nothing is referred to voices, not only things, but actions and results are made known, and as from a picture the meaning of another picture is formed, so that by reasoning it may be understood, so also in letters. (p. 32)

A century later George Dalgarno, an early British educator, was of a similar view: “I do not doubt but the words, hand, foot, dog, cat, hat, etc., written fair, and . . . often presented to the deaf child's eye, pointing from the words to the things, and vice versa, . . . would be known and remembered” (1680; reprinted in American Annals of the Deaf, Vol. 9, 1857, p. 24).

In modern times these views have not altered greatly. Ervin (1926) was fairly typical of early twentieth century views.

Reading is of the utmost importance as a means of
acquiring language. If sufficient time is given to it, many of the language problems with which we now struggle will solve themselves and the pupils will learn language naturally as hearing children do. (p. 697)

A. G. Bell (1929), one of the most influential figures in education of deaf children early this century, held similar views. I would introduce into the very youngest classes the practice of reading, regardless of the fact that children may not understand the meaning of the words on the printed page before them. By this practice a repetition of words to the eye would be secured, which could not probably be obtained in any other way, and reading would co-operate with the regular instruction of the schoolroom to bring about a gradual comprehension of language. . . . To express the theory in a single sentence: I would have a deaf child read books in order to learn the language, instead of learning in order to read books. . . . I believe that in the acquisition of language by the deaf, reading will perform the function that hearing does for the ordinary child. (pp. 193–195)

More recent commentators tended to agree. Pugh (1945), for example, argued that “it seems logical that reading should become the basis for the development of language usage instead of language instruction being the basis for a reading program” (p. 182). Van Uden (1977), one of the most influential recent commentators, was of the view that for deaf learners, “the enormous arrears of frequency in receiving language [because of deafness] can only be made up by reading. Reading must give them [deaf learners] the fund and ground from which expressive language [both oral and written] can grow” (p. 151).

It is of interest that Bell, Pugh, and Van Uden were advocates of a purely oral education for deaf learners, disallowing the use of signs for communication. There would appear to be a concession by them (albeit unacknowledged) that purely oral methods of communication leave a lot to be desired for deaf learners accessing an auditory–oral language via listening and speechreading and that the lack engendered by these methods must be compensated for by the more stable access to print.

Few writers on this topic in recent years have opposed this line of thought. Groht (1955) was one of the relatively few who demurred and saw reading (and presumably writing) as needing to be built upon a foundation of oral language.

Before reading must come knowledge of the value and meaning of words in the daily life of the child just as, before the child can use language, he must comprehend it. There is no use in teaching the deaf child to pronounce words or recognize them in print if these words have no meaning for him and no interest. We are none of us interested in reading what we do not understand. (p. 296)

Groht’s view marks perhaps the emergence of the influence of current theories of literacy development upon commentators on deaf learners’ literacy development. The earlier views cited before may be characterized as “deafness driven”—determined by the writer’s view of the impact of deafness upon literacy development—rather than “theory driven” by the then prevailing views of the literacy process.

Other commentators adopted a middle ground on whether reading and writing should be used to develop language (spoken and written) or vice versa (Hart, 1969; Power, 1985; Streng, 1964). Hart summed up much of the feeling of teachers of deaf students: “There probably is not a teacher of the deaf anywhere who does not think that reading can be the salvation of the deaf. There probably is not a teacher of the deaf anywhere who has not experienced deep discouragement in his attempt to lead deaf children to such salvation” (p. 1).

From the very early days of deaf education educators have known that deafness created a severe impediment to the acquisition of literacy (see subsequent quote from Fay, 1869). When testing became common in the twentieth century, numerous major studies investigating school achievement have reported significantly lower levels of attainment in literacy in deaf school-leavers when compared with their hearing age-peers. Conrad (1979) reported on the reading levels of an entire cohort of deaf school-leavers in England and Wales. The 468 students (ages 15 to 16 years) had a mean reading level equivalent to an average 9-year-old hearing student, with only five students achieving age-appropriate levels. Conrad also cited studies in Denmark, Sweden, and New Zealand that reported perfor-
mances of deaf school-leavers at levels less than that of an average 10-year-old. Power (1985) reported the results of a survey of 10- and 11-year-old Australian children. He found that less than 3% of students in schools for deaf students got within two years of age-appropriate levels of literacy as opposed to 50% of hearing-impaired students in regular classes. Conversely, 58% of deaf school students were found to be achieving below a 6-year age level in literacy while only 8% of the hearing-impaired group fell into this category. More recent studies (Allen, 1986; Trybus & Karchmer, 1977) indicated some improvement in these levels over time but continued to show that deaf school-leavers do not perform at age-appropriate levels on tests of ability to read or write the spoken language of the society (Holt, 1993).

Power (1985) examined one of the ongoing controversies that is a result of this lack of progress with standard English—the perennial issue of whether to “fit the child to the book or the book to the child”; that is, whether specially simplified reading materials should be provided to meet the “lower language skills” of deaf readers, or whether deaf readers’ language skills can be improved by exposing them to “normal” reading materials. Power examined a long tradition of adapting existing reading materials and of writing materials specially written to meet the perceived special needs of deaf learners. This debate would appear to have had its origins in the very beginnings of education of deaf students in the United States. We find Hutton and Halifax (1869) writing in the Annals, “[S]ome [instructors] regard . . . a complete series of books . . . especially adapted to the Deaf and Dumb . . . as desirable or necessary—others deem . . . special textbooks only needful for the preliminary stages of the course, . . . after which the ordinary textbooks used for hearing and speaking children should be introduced” (p. 211). Later, Hutton and Halifax (1870) apparently firmed their views, arguing that “special text-books are necessary from the nature of the case. The condition and wants of the uneducated deaf-mutes are altogether peculiar, and must therefore, a priori, require peculiar treatment” (p. 2). In passing, for those who consider there to have been a “golden age” in deaf education in the mid-1800s, Edgar Allan Fay’s words in 1869 may provide a salutary pause for thought:

We are none of us satisfied with the attainments in language ordinarily made by the deaf and dumb. The great majority of pupils born deaf graduate from our institutions without the ability to express their ideas in correct idiomatic language, or to understand readily the language of books. (p. 194)

The most recent and probably most extensive and research-based example of special texts is Quigley and King’s (1982), Reading Milestones, a whole series of readers based upon deaf students’ syntactic development as outlined by an extensive research project (Quigley, Wilbur, Power, Montanelli, & Steinkamp, 1976), and said to be keyed to their linguistic skills at a number of developmental stages.

Ewoldt (1984) and Israelite and Helfrich (1988), among others, have argued against “tailoring” texts or writing special texts such as Reading Milestones to meet the lower linguistic skills of deaf students. Ewoldt argued that supposed “simplification” of a story to meet deaf readers’ needs in fact made comprehension more difficult. She suggested that rewriting may destroy the textual coherence of the story and the natural redundancy of written English, effectively reducing the textual cues available to the deaf reader in “natural” texts. Israelite and Helfrich confirmed this view in finding that deaf readers scored less well on tests of comprehension of revised materials than they did on the originals. They noted that “efforts to control readability through stringent syntactic guidelines [for simplification] may result in texts that are more difficult, rather than less difficult, for hearing impaired readers to understand” (p. 261). This is not a new view. Gillett in 1870 had stated that “the pupil is to be educated for the world as he finds it, and should learn, as early as he may, to handle the materials in general use” (p. 242).

The evidence for deaf readers’ ability to make better sense of “real text” than uncontextualized reading test materials is now substantial and there seems little doubt that, with real texts, deaf readers do better than has traditionally been supposed (Ewoldt, 1981; Israelite & Helfrich, 1988; see also other articles in this issue). One must consider, however, that deaf readers still have difficulty interpreting the nuances of complex syntax. They do better “up to a point”: up to a point where the complexity of syntax may foil deaf readers’
attempts to interpret a syntactically complex message, particularly if it is not well contextualized with “real world” support. The fact that deaf readers do better in actual reading than traditional reading tests does not mean they have no problems. Indeed, the situation for deaf people in regard to the development of literacy remains far from desirable.

The current situation in which, as we have seen, a disproportionate percentage of deaf learners experience difficulties in achieving normative standards of literacy, is not new. However, the consequences of low literacy skills for deaf people in the latter half of the twentieth century are arguably far more grave than at any other time. In 1999 we have access to, and a requirement to read, printed materials with a magnitude and diversity unmatched at any point in the past. High levels of literacy achievement are clearly important in this context. The pool of available jobs for people with poor literacy skills—the jobs often sought and gained by deaf people in the past—has all but disappeared. The literacy skills required for life in the latter part of the twentieth century are of an extremely high order. Perhaps more important, however, the skills required to achieve social, economic, or political access vary enormously across the range of social, residential, and employment contexts.

At a time when alternative communication technologies mean that, for many people, access to recreational and interpersonal communication is less dependent on literacy skills, specific literacy skills have become even more salient for deaf people. Indeed, literacy skills have become central to the daily information and recreation requirements of this group. Leigh and Cummins (1992) noted that, for most deaf people, access to telephone communication is via Telephone Typewriters (TTYs or TDDs). In these situations, communication is totally dependent upon their literacy skills and those of their communication partners who, in a large percentage of cases, are themselves deaf (Leigh & Smith, 1989).

Similarly, in regard to news and information on public affairs, a strong dependence on literacy skills is again evident. Leigh and Cummins (1992) found (perhaps surprisingly) that, for the majority of deaf people in an Australian sample, the most used and preferred sources of current affairs information were newspapers, news magazines, and/or text-based information systems such as teletext. In a society where so much news and current affairs information is conveyed through the electronic media, this represents a very high degree of reliance upon print-based media, particularly for a group known to experience considerable difficulties with literacy. Even among deaf people who identified television as their most used/preferred source of current affairs information, the vast majority reported that they required another print-based medium, captions (subtitles), to access this medium (Leigh & Cummins).

It has also been suggested that the reasons for deaf students failing to achieve literacy levels commensurate with their hearing (or even hard of hearing) counterparts relate to inappropriate educational practices—or at least to poor teaching.

Many approaches to developing literacy skills, particularly those used with older children and adults, have focused on a historical preoccupation by the field with the remediation of deaf learners’ weaknesses (or perceived weaknesses) in English syntax. This preoccupation has often lead to confusion about the aim of literacy teaching and the types of pedagogies pursued. Howarth, Wood, Griffiths, and Howarth (1981; see also Wood, Wood, Griffiths, & Howarth, 1986) undertook a detailed examination of the reading lessons of both deaf and hearing children reading the same books and found significant differences between the approaches of the teachers of the deaf and the hearing children. Compared with hearing children’s lessons, reading lessons for deaf children became a language lesson and speech-training exercise. The overall result was a slow disjointed lesson punctuated by long periods of questioning, story telling and demonstration. . . . We were left in considerable doubt how such a lesson could leave the child with a sense of any “story” or even of phrases and sentences in reading. What exactly, we wondered, does the deaf child think reading is? (Wood et al., p. 106)

The emphasis on the remediation of English syntactic abilities and the development of syntactic processing strategies typically had a dual thrust. First, as noted in the example from Wood et al., there was much effort directed at improving student’s syntactic abilities
through oral language (or signed representations of oral language) and/or written activities. Second (and perhaps most commonly), there was, as already discussed, extensive use of what Moores (1996) has called “textual control”—the practice of rewriting reading materials in “simplified” syntax and withholding more complex materials from the students until the syntax has been mastered in other contexts.

There has recently been a considerable debate in the literature about the manner in which deaf students access written materials: a contest between “whole language” (Ewoldt, 1981; 1993) and more “direct instruction” approaches (Dolman, 1992, 1993). Researchers such as Ewoldt (1984) and Yurkowski and Ewoldt (1986) have argued that approaches that strongly emphasize the development of syntactic abilities and/or the development of word-level processing skills (i.e., “bottom up” cues) are inappropriate for developing literacy skills in deaf students. These authors have argued that it is possible for deaf readers to bypass both syntactic cueing systems and phonological decoding strategies and to process print on the basis of meaning through the use of so-called semantic processing strategies (“top down” cues). Such authors argue that syntactic cues, like phonological cues, are secondary to semantic cues and direct lexical access (of known words) for deaf readers. The reading process for deaf students, it has been argued, can then be seen to involve some reference to graphic and syntactic cues but depends heavily on an extensive word knowledge and the ability to bring sufficient background knowledge and semantic awareness to the text to allow the processing of whole texts. Hence, Yurkowski and Ewoldt have argued that, given appropriate strategies and sufficient background knowledge and experience, it is possible for deaf readers to handle the complexities of reading without reference to phonological recoding and without complete facility with English syntax.

Debate continues, however, about the extent to which such higher order processing strategies can be expected to completely compensate for the absence of a well-developed “sublexical” route to word identification (i.e., the ability to use letter-sound generalizations to decode unknown words), and, therefore, the need for “direct instruction” in reading.

This issue is one of the most significant divides between proponents of a whole language philosophy (Ewoldt and others) and those approaches that emphasize the use of basal reading schemes and/or the direct teaching of skills (Dolman and others). Whole language proponents have advocated the provision of an environment in which deaf students develop a range of top-down processing strategies (e.g., semantic processing and prediction). In contrast, advocates of more traditional direct-teaching approaches have emphasized the active development of bottom-up skills such as the use of lexical and sublexical processing through the use of teaching techniques such as sight-word drills, phonics, and reading materials that are controlled for syntactic and phonological complexity (i.e., basal reading books).

Thus, we have seen that decisions about the best way to develop literacy in deaf students are complex and not without controversy over the best methods of approach. The continuing development of the issues discussed here and in the other articles in this issue and the accommodation of new evidence about the relative efficacy of the different models and approaches to literacy acquisition for deaf students will be extremely interesting to observe in the near future. From our perspective, it is to be earnestly desired that progress from this point can be based on dispassionate synthesis and interpretation of theoretical and empirical data. We acknowledge, however, that the history of educational endeavors to this point gives us some cause for pessimism in this regard.

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