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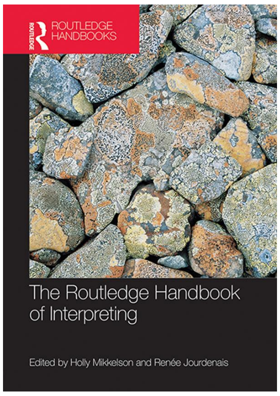

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INTERPRETING IN EDUCATION

Melissa B. Smith

Introduction

This chapter provides an overview of interpreting in educational settings. Not only may interpreters find themselves working with students, parents, and staff in infant or pre-school programs, primary or secondary schools and institutions of higher education, they may find further work opportunities in vocational and adult education or in professional development venues such as conferences, workshops, seminars, and conventions. While the issues presented will apply to all of these settings, interpreting in primary, secondary and post-secondary education will provide the framework for this discussion. Because of legislative mandates for inclusion of Deaf and hard of hearing students in public education, many signed-language interpreters work in educational settings. As a result, much of the research cited is gleaned from the field of signed-language interpretation. However, the challenges in effectively meeting the needs of English Language Learners being educated in the United States and immigrant students learning the language of host countries all over the world in many ways parallel those of Deaf and hard of hearing students.

This chapter will discuss academic achievement in both of these student populations, recognizing that when students depend on interpreters for access to academic and social discourse in educational contexts, interpreters must be prepared to respond to the unique learning needs of dual language learners. As such, the training of spoken- and signed-language interpreters must be both broad enough to prepare them to accurately interpret a wide array of academic content and rich enough to adequately understand the intricacies of interpreting for students with varied language proficiencies in their primary language as well as in the language of accountability.

A note on terminology

As noted in Chapter 7 on sign language interpreting, the word Deaf is often written with a capital "D" and will be used as such throughout this chapter. Padden and Humphries (1988) initially introduced a capital "D" to refer to the group of Deaf people who share a common culture and American Sign Language (ASL). The distinction of deaf with a small "d" has been widely used to refer to deafness as an audiological condition. "Deaf" is an expression that recognizes the shared experiences of those who share the values, norms, and beliefs of Deaf Culture. In this chapter I have chosen to use Deaf and hard of hearing, out of respect for those who generally identify with the Deaf Culture and those who typically identify with the hearing world but still use sign language as a primary means of communication.

Where educational interpreters work

Interpreters work in a wide array of educational settings. They work in primary, secondary, and post-secondary schools to interpret between students, staff, faculty, administrators, parents or guardians, and/or other stakeholders. For spoken language interpreters, the most common form of interpreting in these venues is between parents who do not speak the language of the school and teachers or other staff. For example, they might interpret for parent/teacher conferences, school-wide assemblies and special programs, back to school nights, or commencement and award ceremonies. Signed-language interpreters, on the other hand, frequently work full-time in educational settings, as they interpret for students throughout their daily activities. Other signed-language interpreters interpret between Deaf teachers and hearing parents and school personnel, perhaps interpreting class content into spoken English, or interpreting meetings or school-wide events.

Interpreters might also work in vocational trainings or adult education classes. Conferences and workshops provide another source of employment for both spoken- and signed-language interpreters, as professionals in every field are expected to seek professional development opportunities. Many professions, in fact, require a certain number of hours per year of continuing education to retain licensure and/or certification.

Court-ordered trainings, such as parenting, substance abuse, or anger management classes may also result in a need for qualified interpreters. Additionally, many larger health institutions now provide opportunities for patients to learn about and/or manage various wellness concerns through clinics and classes.

Employers are another potential source for interpreting services. Many businesses provide periodic trainings for their employees. In many companies, for example, the safety of workers is a high priority and safety training must be provided. Technological advances or a decision to use new equipment, software, or protocols may result in yet another need for employers to convey essential information to their employees. Clearly, interpreters must be equipped to effectively interpret in a myriad of educational contexts.

Hiring practices, however, may belie the importance of the professional skills required of educational interpreters. For example, although interpreting in schools is a prevalent practice and predominant source of employment for many signed-language interpreters, permanent jobs for spoken language interpreters in educational settings are scarce. Furthermore, postings for employment vacancies requiring interpretation skills may be unclear. For example, interpreter positions in schools may fall under a range of categories including: (1) Other classified, (2) Language, Hearing, and Speech, (3) Teacher Assistant/Aide/Paraprofessional, and (4) Clerical/Secretarial Staff/Office Technician. These categories and the subsequent descriptions of the positions indicate ambiguous role expectations and raise questions and concerns relating to language proficiency and interpreter qualifications required of candidates. Compensation standards vary considerably as well, ranging from $10 to $35 an hour depending on certification and qualification (California County Superintendents Educational Services Association, 2013), which may reflect a lack of consistency in the quality of service provided.

In fact, many interpretation needs in schools are provided by instructional aides who happen to be fluent in the student's language (e.g., Spanish-speaking aides assigned to classrooms that have one or more students whose home language is Spanish). Yet one may ask whether being a speaker of a language is sufficient to effectively meet the unique language needs of dual language learners, to understand and remain faithful to effective pedagogical strategies, to respectfully mediate cross-cultural interactions, to promote active participation, to facilitate peer interactions, and to accurately interpret academic and social discourse.

Educational interpreter training and qualifications

Unfortunately, as a result of legislation, supply and demand, and public perceptions, interpreters working in public schools in the U.S. have historically been under-qualified and under-prepared. In fact, many people hired to interpret in schools have not yet mastered their working languages.

Effects of legislation

The demand for interpreters as a result of legislative mandates for inclusion of Deaf and hard of hearing students in educational, social service, government, employment, and business sectors between 1976 and 1990 (e.g., Public Law 94-142 or the Individuals with Disabilities in Education Act, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act) rapidly exceeded the supply of working American Sign Language-English interpreters.

The historical view of interpreting as a volunteer service (e.g., provided by family members, classroom aides or volunteers) (see Chapter 27 for further discussion of non-professional interpreters) and the corresponding lack of esteem afforded to the profession, coupled with the exponential increase in demand created by legislation, have made it difficult for school districts to offer attractive compensation rates in competition with standard rates for business and industry. Higher pay rates in other settings lure highly qualified interpreters away from schools. As a result, school districts tend to hire from a pool of less qualified applicants. According to Monikowski and Winston (2003: 354):

> Unfortunately, many environments, most notably the public education system, have failed to move toward recognition of certified interpreters. For many years, the common practice has been to place those not yet ready to interpret for adults in the schools with deaf children … Unwilling to pay for professional, skilled interpreters [and often unable to find them, the schools] have allowed these unskilled people to work without certification or evaluation of any kind.

A growing literature shows that interpreters are exceptionally unprepared for the realities of interpreting in educational settings (Foster, 1988; Hurwitz, 1991; Johnson, 1991; Jones, 1993, 1994, 2004; Kurz and Langer, 2004; La Bue, 1998; Mertens, 1990; Russell, 2008, 2011; Russell and Winston, 2012; Schein, 1992; Schick, Williams, and Bolster, 1999; Schick, Williams and Kupermintz, 2006; Stewart and Kluwin, 1996; Taylor, 2005; Togioka, 1990; Yarger, 2001). In fact, until recently, schools were required only to provide a "qualified" interpreter, with no guidelines as to what skills and knowledge must be demonstrated (see Chapters 23 and 24 on quality and assessment of interpreters, respectively). Yet according to Russell (2014), "Increasingly Deaf children are educated in settings with a sign language interpreter, which is perceived as making the educational environment inclusive. This makes education one of the largest employers of sign language interpreters."

In 1991, and in response to a need for an evaluation designed to assess the interpreting skills of individuals working with students in school settings, Boys Town National Research Hospital in Omaha, Nebraska, designed and piloted an assessment instrument called the Educational

Interpreter Performance Assessment (EIPA). Currently, at least 29 U.S. states use the EIPA to meet state qualification standards for educational sign language interpreters working in primary and secondary settings. According to the EIPA website (retrieved 4/18/14 from http://www.classroominterpreting.org/eipa/performance/index.asp), candidates who take this assessment are rated on:

- Grammatical skills: Use of prosody (or intonation), grammar, and space.
- Sign-to-voice interpreting skills: Ability to understand and convey child/teen sign language.
- Vocabulary: Ability to use a wide range of vocabulary, accurate use of fingerspelling and numbers.
- Overall abilities: Ability to represent a sense of the entire message, use appropriate discourse structures, and represent who is speaking.

As recently as 2004, only thirteen states required interpreters working in public schools to achieve at least a 3.5 on a 5-point Likert scale in order to meet minimum qualification standards. A score of 3.5 is characterized as a "coherent" interpretation. According to the test developers, an individual scoring a 3.5 would have "frequent errors in grammar, vocabulary, and rhythm and prosody, which could lead to misunderstandings, lack of knowledge, and misinformation in the student's education" (Schick *et al.*, 1999: 148). Schick further cautions that interpreters who "produce a message that is missing parts of the original message are not typically making principled omissions. That is, many interpreters are not making decisions that will preserve the most important information for the lesson. In addition, information is not just missing; it is also distorted, confused, and sometimes just wrong" (2004: 82). In contrast, an individual scoring a 5 "demonstrates broad and fluent use of vocabulary, with a broad range of strategies for communicating new words and concepts. Sign production errors are minimal and never interfere with comprehension. An individual at this level is capable of clearly and accurately conveying the majority of interactions within the classroom." In addition, interpreters who score a 5 have demonstrated mastery of complex grammatical constructions and can communicate all details of a signed message.

In spite of the concerns of many interpreter educators and the test developers that a score of 3.5 is too low, several states have determined that a 3.5 or less is sufficient to meet employment qualification standards for interpreters in primary and secondary schools (known as K-12 in the U.S.). Much of the reluctance to set the bar higher has to do with recognition of the fact that the nation's educational interpreting workforce has been, by and large, under-qualified.

In fact, one study showed that the interpreting skills of more than half of 59 employed educational interpreters working in public schools in Colorado were actually below 3.5 on the 5.0 EIPA scale, even though a 3.5 EIPA score was the state's minimum entry level standard (Schick *et al.*, 1999). In another study of 63 interpreters working in K-12 schools in two rural states, Yarger (2001) found that the 43 interpreters assessed using the EIPA achieved a mean score of 2.6. Only ten of the interpreters had completed interpreter training programs and only five of those had had any coursework related to education. Clearly, such unqualified and under-qualified interpreters would not be able to interpret accurately enough for students who depend on interpreters to access social and academic discourse to succeed in educational environments.

Fortunately, more states are defining and raising qualification standards. In 2012, a national project funded by the U.S. Department of Education's Office of Special Education Programs (OSEP) reported that four states required K-12 interpreters to achieve at least a 3.0 on the EIPA, thirteen states a 3.5 (with one more state giving its workforce until January 2014 to achieve this level), and ten states a 4.0 or above (Johnson *et al.,* 2012). Some states, like Texas, require candidates to pass a rigorous state test unless they hold national certification.

There is still a long way to go, but in the past decade, there has been tremendous progress in implementing minimum standards of qualification for signed-language interpreters. To date, however, there are no such standards for spoken language interpreters in education.

Specialization: Skills and training

Chapter 25 discusses many available options for interpreter training, but there are few opportunities to specialize as an interpreter in educational contexts. In fact, a web search reveals only one or two university programs for spoken language and a handful for signed-language interpreting focused on working in educational settings. Other colleges may offer a course or dedicate some class time to preparing students for work in educational contexts, but there is no identifiable curriculum designed to teach this particular specialization. Complicating matters further, not all educators in interpreting programs have backgrounds in educational interpreting themselves (see Chapter 25 for discussion of the training of trainers), so they may not be able to address the critical information about the teaching and learning contexts that the educational interpreters need to know to ensure school success for students who are dual language learners.

Understanding dual language learners and primary language experiences

It has been estimated that 75% of Deaf and hard of hearing students depend upon signed-language interpreters to access social and academic discourse in schools (Marschark, *et al.,* 2005). In order to more adequately prepare interpreters to work effectively in educational settings, it is important to recognize the complexity of the task. Not only do interpreters need to master two working languages and language style variations as well as the complex processes of interpreting, they also need knowledge about the goals of educational settings and how to promote teaching and learning in general. Moreover, they need to understand how these principles apply to dual language learners with unique learning needs.

It is necessary to highlight some of the similarities and differences between the language experiences of Deaf and hard of hearing students in comparison with other dual language learners, such as those who immigrate from other countries with their families. While most children are exposed to the language of the parents from the moment they are born (if not earlier), most Deaf and hard of hearing children have hearing parents (Mitchell and Karchmer, 2004). The vast majority of these parents do not know a signed language and therefore are not able to serve as fluent language models for their children during critical years for language acquisition (Marschark *et al*., 2002). For these reasons, it is crucial for interpreters working with very young Deaf and hard of hearing children to be extremely proficient in their working languages and to model both social and academic language in a way that is accessible to these children. Moreover, interpreters working with children who are language delayed must understand language acquisition and be able to make decisions which will promote language as well as cognitive, social and emotional development.

In contrast, hearing children have the obvious advantage of constant and consistent exposure to at least one spoken language. (This advantage is also provided in homes where both parents are already fluent in a signed language, such as in homes with two Deaf parents who sign or in the rare case in which two hearing parents sign fluently.) However, many children of immigrants, especially refugees, have undergone traumatic experiences and physical or socio-educational deprivations that may have impeded their learning. Even after settling in a host country, they may not necessarily be exposed to the rich language environments of children who reside in more stable households. Proficient language models that are equipped to address the unique needs of these dual language learners are essential for promoting the success of these students in academic and highly interactive school contexts. Because interpreters are often the most proficient language models with whom these children consistently interact in school settings, the most highly qualified interpreters should be recruited to work with language-deprived or -delayed students.

Multiple functions of discourse in schools

Significant research has been conducted on the patterns of discourse used in academic settings. Much of this research has been informed by socio-linguistic theories that illuminate the social construction of language and power. Other research has emphasized the multiple functions of discourse in schools and has brought to light the fact that students whose discourse styles and funds of knowledge are aligned with those of the schools are better equipped to succeed than students whose discourse styles differ.

The ways in which children learn to access information at home and the values of discourse styles in the home environment have a significant impact on their school experiences. Students whose home talk corresponds highly with school talk will have an easier transition into the learning environment of schools. In order to be academically successful, students have to know not only the meaning of words, but accepted forms and patterns of dialogue in school contexts, and discourse cues that dictate when it is appropriate to speak up and participate or when to remain quiet (Cazden, 1988; Heath, 1983; Mehan, 1979). Interpreters working in these environments must understand, recognize, and be able to clearly convey these discourse patterns in their interpretations.

Deaf and hard of hearing students and inclusion (or the illusion of inclusion)

Citing the social nature of learning (Vygotsky, 1978), some researchers call into question the extent to which an interpreted education promotes the cognitive, linguistic, or social development of Deaf and hard of hearing students (Hyde and Power, 2004; Ramsey, 1997, 2004; Schick, 2004; Winston, 2004). Because many Deaf and hard of hearing students are raised in non-signing families, they often have limited access to funds of knowledge from their homes and communities and are not as likely to have the cultural and linguistic capital that leads to school success. Furthermore, little is known about how academic and discourse norms must be adjusted to include a third party who mediates communication, especially when the third party interpreter is not a native user of the language used to access discourse, in this case American Sign Language or other form of sign language.

Schools are highly social environments in which students create communities of learners that become a resource for continued learning. Schick (2004: 83) explains, “Access is not just about what the teacher says … A child who can access conversations with peers only by using an interpreter may have reduced opportunities to engage in authentic, rich discussions and debate with peers. These kinds of experiences are essential for cognitive development for any child or youth.” In addition, since language is the channel for socio-emotional growth, cognitive and academic development, and the transmission of culture, it is important to look at how interpreters impact learning opportunities.

Of primary concern to researchers who have observed interpreters in academic settings is the degree to which Deaf and hard of hearing students can participate in interactions and question-asking in a predominantly hearing classroom (La Bue, 1998; Ramsey, 1997; Russell and Winston, 2012). The La Bue study of Deaf and hard of hearing students who are mainstreamed in public school classrooms is the most in-depth description of an interpreter-mediated education in secondary educational environments to date. This study is an illuminates some the challenges faced by students who rely on interpreters in educational contexts. The findings provide a thorough evidential basis to support Ramsey's (1997) observation that Deaf children using interpreters are often left out of classroom interactions, and that discourse strategies used by instructors may not be conveyed. Some of the significant implications of La Bue's study are that Deaf students, and all students who access school discourse using unqualified interpreters or those who are not making principled decisions that "preserve the most important information for the lesson" (Schick, 2004), are often left to re-interpret the content of a message – placing a much higher cognitive load on these students than their peers – and that they may be relegated to bystander status rather than being afforded equal opportunities for interacting with their teachers and peers in an academic environment.

As with any practice profession such as medicine, law, education, or mental health, "careful consideration and judgment regarding situational and human interaction factors are central to doing effective work" (Dean and Pollard, 2005: 259). Dean and Pollard (2006) suggest that an ethical response must first consider the context of the situation in which the interpreted interaction takes place and decisions must be made that are in service of and aligned with the goals of the setting. They explain that an essential first step when discussing ethical practice is to understand the intricacies of the situation that calls for response within the context of the interpreted interaction. It is only then that interpreters can make appropriate and ethical decisions regarding practice.

Roles and responsibilities of educational interpreters

The role of educational interpreter is not always clearly defined (Kurz and Langer, 2004; Langer, 2004; Hayes, 1992; Hurwitz, 1995; Taylor and Elliott, 1994; Yarger, 2001; Zawolkow and DeFiore, 1986). Educational interpreters are often faced with additional obligations besides interpreting (Smith, 2013). Jones (2004) suggests that K-12 interpreters need qualifications beyond merely the linguistic task of interpreting. He explains that three additional roles educational interpreters typically fulfill on a daily basis include tutoring, consulting, and serving as an aide in the classroom, which he points out "all school personnel are expected to do" (*ibid.*: 122). He states that confusion may result from overlapping or apparently conflicting roles.

Research has also indicated that interpreters are responsible for clarifying teachers' instructions, facilitating interaction between peers, tutoring, and keeping administrators and other members of the educational team informed about student progress (Antia and Kreimeyer, 2001). Some interpreters report providing consultation by asking permission in advance to interrupt a teacher's lecture to request rephrasing in different words so that the concept can be more clearly conveyed to the students (Mertens, 1990).

Other conflicts and contradictions in expectations are evidenced in the literature about interpreters in K-12 settings. Role confusion is a particular source of frustration for many interpreters in educational settings, especially when the range of roles conflicts with the interpreter's primary obligation of interpreting or preparing to interpret (Hayes, 1992; Metzger and Fleetwood, 2004). Kurz and Langer (2004) report one high school student's description of how his interpreters provided extensive tutoring help during elementary school, gradually withdrawing support as he progressed through middle school and higher grades. He said, "In high school, they only help you if you really need it. I am now working on asking my teachers more than my interpreters if I have questions. I need to learn to rely on the teachers more in college, so this is good practice" (*ibid.*: 17). Older students in the same study " … wanted their interpreters to draw the line at interpreting" (*ibid.*: 18).

Some of the students in the Kurz and Langer study reported seemingly contradictory opinions and beliefs about what educational interpreters should do. For example, some students expressed a desire not to be singled out, but others said that interpreters should advocate for students when they are not able to advocate for themselves. Some students wanted space, but lamented the fact that interpreters were not always there when they wanted to interact in social situations, or available to interpret informal conversations before and after class (*ibid.*: 20). Some researchers call into question the effect that the presence of a third party adult such as an interpreter will inevitably have on peer interactions between deaf and hearing students (Schick 2004).

Mertens (1990) found that the concerns about appropriate roles reported by Deaf adolescents resulted in feelings of dissatisfaction regarding their interpreters. Specifically, "the interpreters were helping discipline the students and providing clarifying comments when they felt the students did not understand" (*ibid.*: 51). Some students wanted interpreters to interpret everything and to allow them to make their own decisions, including whether to interrupt the teacher to clarify or get more information, and whether or not to pay attention. Interpreters, in contrast, felt that it was appropriate to tell the students to pay attention. The reality may be that if some interpreters over-step appropriate bounds when disciplining students, negative feelings between the students and their interpreters could be detrimental to the relationship needed to effectively participate in an interpreter-mediated education. On the other hand, doing and saying nothing when students (hearing or Deaf) are behaving inappropriately, threateningly, or unsafely is likely to be just as harmful. Other students do not want interpreters to help the Deaf students because hearing students do not get extra help (Kurz and Langer, 2004). Yet tutoring is reported as being a primary role of many K-12 interpreters. Jones (2004: 122) posits that in some cases, "tutoring may be more appropriate than interpreting for some students."

Accessibility of an interpreted education

Research on what interpreters do in the classroom is scarce, resulting in an incomplete understanding of how to prepare educational interpreters to effectively meet the needs of Deaf and hard of hearing students in academic contexts. Winston (1994, 2004) analyzed several classroom interactions and identified situational educational contexts that would likely pose challenges for interpreters of signed-languages. She identified several realities that she hypothesized would make it difficult for Deaf and hard of hearing students who rely on interpreters to access all instruction and classroom communication necessary to truly experience full inclusion.

Winston posited that the time delay inherent to interpretation would significantly reduce the ability of those dependent upon the interpretation to interact fully, as would the phenomenon of overlapping dialogue, and the presence of multiple sources of visual input. Interpreters cannot interpret effectively into a target language until they have analyzed an incoming message, or source message, for its meaning. Research has shown that the number of errors in an interpretation increased as the amount of lag time decreased (Cokely, 1986). One result of this necessary delay in order to render an accurate interpretation is that there are issues of timing when it comes to interpreting between spoken and signed modalities.

These timing delays are perhaps most salient in a classroom context, which emphasize question and answer formats for demonstrating learning and the development of self-esteem. For example, if a teacher wants to ask students to respond to a question, by the time the interpreter has a chance to process the question for meaning and begin to sign the question, the students who can hear and understand the teacher directly have already called out responses. The teacher may even begin writing the answer on the board or providing a visual cue indicating the answer such as nodding her head to signify the correct response. The time delay interpreters need to process the incoming message could very well cause students who need to wait for an interpretation before they can answer to come to the unfortunate conclusion that there is no point in trying to answer a question, because by the time they can answer, the class has already moved on. This cycle is likely to result in feelings of frustration and to negatively affect students' view of themselves as academically successful students.

Student strategies for dealing with this delay are likely to vary. While some choose to distance themselves from classroom discourse and restrict themselves to the practice of lurking rather than actively participating in interactions as full members of the classroom community of learners, others may develop their own coping strategies. La Bue (1998) reported that when a ninth grade Deaf student was asked what he did if he had a question or did not understand the teacher's point, he replied that he might ask the teacher or the interpreter, but if he perceived that it wasn't the right time, he would make a note to himself and ask later. Asked to clarify what he meant by the "right time," he explained, "when the teacher stops talking or things in the class become more settled, for instance, when the students are working … or focused on something else. I wait until the teacher isn't busy. But if the teacher is busy, then I'll ask the interpreter" (*ibid.*: 112).

Several features of the above response are cause for alarm. Coupled with the fact that the researcher reported that the two Deaf youths using the interpreter never participated in large group discussions while data was being collected, this student's remarks reflect his belief that being left out of class discussions is just a natural part of life. To think of an educational experience where a child or young adult feels that it is acceptable not to be included along with the rest of the students in what is supposedly a model of inclusion is intolerable. His strategy of writing himself a note not only demotes his standing to second-class, it places an additional cognitive demand and burden of responsibility on him that is not required of his peers, who can freely ask the teacher for clarification or elaboration when the guidance is relevant – without fear that the question will appear out of place or after the fact.

Contributing to the difficulty of this Deaf student's need to jot down a note while the class is having a discussion is the fact that he must take his eyes off of the interpreter and miss part of the discussion. At the very least, he must divide his attention to compose a written note in English, perform the physical act of writing, and continue watching the interpreter while processing for meaning. Furthermore, if the interpretation itself was less than adequate, he must re-interpret the message he received as well. This type of cognitive multi-tasking would be challenging for even the most capable of adults. Indeed, graduates who are Deaf report that frustrations about timing have led them to talk to teachers after class rather than attempt to participate during class and that they participate "less frequently in mainstream classes" because of "concerns about clear communication, and self-consciousness," especially because of the time delay associated with processing time. Students also reported that since it was difficult for the interpreter to keep up, often the hearing students were able to answer before the Deaf students were presented with the interpreted question (Kurz and Langer, 2004: 19).

In-the-field research on the moment-to-moment decisions of educational interpreters

Until very recently, only a few researchers have gone into the field to describe what actually happens in interpreter-mediated interactions. Although survey research provides significant insight, it is limited to a finite set of responses. Rarely have practitioners been given an extended opportunity to elaborate on their perspectives on practice. Research specific to interpreting clearly demonstrates that skills beyond that of merely interpreting between two languages are required, but the field has made little progress in defining clearly what educational interpreters should be able to do and what sets of circumstances they are likely to encounter.

In one richly descriptive study, Smith (2013) videotaped and interviewed three interpreters working in fifth and sixth grade classrooms at three school sites to explore what interpreters do in the course of their work, and to illuminate the factors they consider when making moment-to-moment decisions.

Findings revealed five primary categories of what educational interpreters do during the course of their daily work. They are:

- Assess and respond to a constellation of contextual, situational, and human factors.
- Interpret and/or transliterate.
- Seek, obtain and capitalize on available resources.
- Interact with others.
- Perform aide duties and other tasks. Be useful or helpful as needed.

Although these broad strokes descriptions of what interpreters do may appear to be superficial and obvious, the true story is exceptionally complex. Through analyses of interview and video data, the fact that interpreters' decisions and resulting actions are greatly influenced by unique constellations of multiple factors becomes exceedingly clear. Moreover, what interpreters do at any moment is significantly informed by their ongoing assessments of a myriad of factors. This study describes in detail how the work of educational interpreters is further complicated as they strive to optimize visual access, to facilitate the learning of language and content, and to cultivate opportunities for participation. Findings reveal that even highly qualified interpreters working in public schools are not always certain about how to achieve these critical goals (Smith, 2013).

Data indicate that even the most qualified interpreters may not be adequately prepared to swiftly and effectively meet the essential needs of Deaf and hard of hearing students in educational settings. Context-based research regarding authentic interpreter-mediated interactions in a variety of settings is a promising area of discovery. If the skills and knowledge needed for interpreters to work effectively can be identified along with the presumptions and beliefs underlying more and less effective decisions, the data can then inform curriculum development. Furthermore, it is possible that awareness of the skills and knowledge needed for interpreters to do their jobs effectively in educational settings could extend to teaching- and learning-based interactions in other contexts.

Summary and conclusions: Implications for future research

Taylor (2005) suggests that when hiring educational interpreters, administrators should assess an interpreter's "skills, expertise, knowledge of the subject matter, and ability to suit the needs of the situation and the individual child. Interpreters must be competent to provide interpretation for the specific teachers and students for whom they are being hired" (*ibid.*: 179). Competency, however, as discussed above, depends on numerous factors, including the ability of the interpreter to adjust the interpretation according to the context, teaching and learning goals, and needs of the participants.

Since Deaf and hard of hearing students may not have had exposure to the same linguistic and cultural capital and funds of knowledge as their hearing classmates, Schick (2004) proposes that "appropriate scaffolding and guided participation for a hearing child at any point in development may not scaffold the deaf or hard of hearing child's learning. The deaf or hard of hearing child may need interaction and teaching that is more fine-tuned to his or her level of skills and understanding" (*ibid.*: 81). She suggests that training interpreters to become a working part of the educational team might be more reasonable than the "model of interpreting that was developed by interpreters who work in the adult community where the gold standard is to represent everything the teacher and classmates say" (*ibid.*: 81). Rather than basing decisions on the chronological age or academic grade level, each student's language, cognitive, social and emotional readiness must be considered.

Scholars in the field of interpreter education have not reached consensus about the role of educational interpreters in consideration of the learning, language, and social-emotional needs of deaf and hard of hearing children in mainstream educational environments. Because of the impact that interpreters likely have on students' language and school experiences, there is a pressing need for research on the work of educational interpreters, particularly in primary school settings or in all instances in which Deaf and hard of hearing students or immigrant students may not yet have developed a solid language foundation in any language.

Recent descriptive research provides insights and information about the challenges currently faced by interpreters in educational settings. There is a compelling need for further context-specific research in actual interpreter-mediated interactions and extensive collaborative efforts to determine how to better prepare interpreters to work effectively within complex educational contexts.

Further reading

Chafin Seal, B. (2004). *Best Practices in Educational Interpreting*, Second Edition. Seal provides representative cases to illustrate issues and strategies pertaining to interpreting in primary through higher education settings.

Marschark, M. and Hauser, P. C. (2012). *How Deaf Children Learn: What Parents and Teachers Need to Know*, First Edition. Marschark and Hauser highlight research-based strategies to promote learning in ways that best support the language development, social skills, and academic success of Deaf youth.

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