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Redefining the Landscape of Educational Interpreting: A National Study

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ABSTRACT

This national study was conducted to examine the level of progress that educational sign language interpretation has made towards professionalization as a field, particularly since the establishment of the National Association of Interpreters in Education (NAIE) in 2016 and the subsequent release of their Standards and Professional Guidelines in 2019. Following a long history of literature indicating drastic disparities in educational interpreters' credentials, qualifications, expectations, and working conditions, this mixed-method study partially replicated Johnson and colleagues' (2018) national study with an added exploration of newly acknowledged domains. Data from 591 educational interpreters were analyzed using descriptive and content analyses, triangulated through multiple choice, open-ended, and document review responses. Although progress has been made in several domains, much work remains to be addressed.

INTRODUCTION

A sudden and drastic need for sign language interpreters in educational settings occurred without much guidance when Public Law 94-142 (U.S. Department of Education, 1975) mandated that Deaf and hard of hearing (DHH) students have access to public schools (Stewart & Kluwin, 1996). When the Individuals with Disabilities Education Act (IDEA) was reauthorized in 2004, educational interpreters were specifically designated as Related Service Providers (RSPs), further expanding their professional participation as formal members of Individualized Education Program (IEP) teams. However, two decades later, standardization regarding their professional expectations, qualifications, and credentials has yet to occur, and they remain the only legally-designated RSPs who are not systematically required to demonstrate skills and competencies through a standardized degree, training, and/or certification program (NAIE, 2023a). As the proportion of DHH students who attend public schools continues to increase (Digest of Education Statistics, 2022), professionalizing the specialized field of educational interpreting remains essential.

In addition to the foundational requirement of sign language interpreting skills, a multitude of considerations must be addressed when interpreting for DHH children and youth (Guynes et al., 2020; NAIE, 2019; Patrie & Taylor, 2008; Registry of Interpreters for the Deaf, 2010). Educational

interpreters must be knowledgeable about child and language development as well as each student's developmental needs, educational goals, and the fluid utilization of differing communication modalities (NAIE, 2019; Registry of Interpreters for the Deaf, 2010; Schick, 2007). Essentially, educational interpreters must possess a specialized skill set that allows additional educational considerations to consistently influence the provision of their interpreting services (Patrie & Taylor, 2008). They must balance a myriad of potentially appropriate roles and responsibilities that can vary greatly depending on the specific needs of the student, school, and situation at any given time (Guynes et al., 2020). Despite these wide-reaching educational responsibilities, many individuals fulfilling educational interpreting positions have not possessed an adequate level of education, training, credentials, professional knowledge and/or interpreting skills (Cates, 2021; Hale, 2012; Johnson et al., 2018; Schick, 2008). It is critical to emphasize, however, that such concerns regarding the quality of educational interpreting services are cyclic, as inadequate compensation and workplace provisions, along with poor employment conditions, have inhibited the ability to attract and retain qualified educational professionals. As such, the current study aimed to investigate the characteristics of educational interpreters as well as their working environments.

DEMOGRAPHICS

Literature has consistently indicated that the overwhelming majority of educational interpreters in the United States are hearing, White females, which is problematic for ensuring that the diverse population of DHH students have access to linguistic and cultural models who align with them demographically (Gallaudet Research Institute, 2011; Johnson et al., 2018; Schafer & Cokely, 2016; Smietanski, 2016).

DEGREE ATTAINMENT AND PRESERVICE EDUCATION

Legal requirements established at the federal level mandate that all RSPs be *qualified* to provide their specified educational service. However, no federal guidance has been made available regarding specific credentials for educational interpreters. Thus, in most cases, individual states and even school districts have the liberty to determine which, if any, qualifications are actually required to fulfill their educational interpreting positions (Johnson et al., 2018; NAIE, 2023b). This is particularly problematic given that the majority of hiring administration and supervisors are unknowledgeable regarding American Sign Language, d/Deaf education, and the intricacies of educational interpreting (Jones, 2004; Weirick, 2021).

Standardized requirements for preservice education are foundational to ensuring an appropriate baseline of professional capability within any field, which is distinctly expected of all other RSPs, such as audiologists, speech-language pathologists, and occupational therapists. In 2012, the Registry of Interpreters for the Deaf (RID) established the requirement of a bachelor's degree to obtain any of their national interpreting certifications, including, at that time, the Ed:K-12 certification specific to educational interpreting. However, because that educational-specific certification is no longer being offered, there is currently little-to-no oversight, incentive, nor standardized requirements for degree attainment by educational interpreters.

As the need for more preservice education specific to educational interpreting continues to be acknowledged (Hutter, 2020; Seipke-Dame, 2023; Witter-Merithew & Nicodemus, 2012), the Professional Guidelines for Interpreting in Educational Settings (henceforth, "Professional

Guidelines," NAIE, 2019) call for not only the attainment of a bachelor's degree in sign language interpreting but also the completion of coursework and experiential learning specific to educational settings. However, this expectation is in stark contrast to what is actually being required to enter the field. For example, in nine states, a General Education Development (G.E.D.) test is currently specified as the minimum requirement to be hired as an educational interpreter (Johnson et al., 2018), which, notably, is even less than the two years of college education systematically required for all paraprofessional educators in the United States (U.S. Department of Education, 2004).

In Hale's (2012) study, only about half of the educational interpreters had any college degree. While Johnson and colleagues' (2018) study indicated an increase to 78% of participants having a degree, with more degree attainment by younger and newer interpreters, most of those were associate degrees, which is not enough to acquire the specialized training required for entry-level competency in educational interpreting (Hutter, 2020). Furthermore, less than half of the participants with degrees had completed any coursework related to educational interpreting, and despite an established emphasis on the importance of a K-12 internship for educational interpreter training (Marchut, Musyoka, & Clark, 2019), most participants did not have that experience. Those opportunities appear to be intermittently available at best, with the scarcity of specialized academic programs being a primary contributor (Hutter, 2020; Marchut, Musyoka, & Clark, 2019; Patrie & Taylor, 2008; Registry of Interpreters for the Deaf, 2009).

CREDENTIALS

Herein, we refer to *credential* as any formal method of demonstrating knowledge and/or skill sets, such as certifications, licenses, examinations that result in a score, and screening assessments that offer a right-to-work in a specific location or setting. The Professional Guidelines (NAIE, 2019) have defined minimum entry-level credentials for educational interpreters to include a score of 4.0 on the Educational Interpreter Performance Assessment (EIPA) and passing of the associated Written Test (EIPA-WT). Such determinations were established based on research indicating that those scores are associated with the ability to provide *basic* accessibility to the classroom environment *much of the time* (Cates & Delkamiller, 2021; Johnson et al., 2018).

Previously, a national-level certification for educational interpreting (Ed:K-12) was offered by the Registry of Interpreters for the Deaf (RID) for individuals who had achieved an EIPA score of at least 4.0, completed a bachelor's degree in any field, and maintained active membership in the organization with continuing education requirements. However, in January of 2016, that certification was placed in moratorium by RID, and in 2023, it was announced that they will not reinstate the Ed:K-12 certification (Registry of Interpreters for the Deaf, 2023). While RID continues to recognize current Ed:K-12 holders who keep up with continuing education requirements as nationally certified for educational settings, there is currently no option available to earn that initial certification, nor any other national certification in educational interpreting (NAIE, 2023a).

An EIPA score of 3.5 was previously established as the baseline expectation of minimum competency for educational interpreting, not because it was appropriate for ensuring accessibility for DHH students, but because it was thought to be feasibly attainable by the workforce at that time (Johnson et al., 2018). According to the EIPA Assessment Rating System Descriptions website (Schick, n.d. as cited in Johnson et al., 2018), a score in the 3.0-3.9 range is considered *intermediate*, and while individuals with such scores may have a considerable repertoire of basic

ASL signs, they cannot be expected to know the signs for more complex, technical, and academic concepts. Their slower rate of processing and pacing is likely to interrupt the flow of interpretation, and their ASL grammatical skills are typically even more inadequate than their sign production. While they may be able to represent a rudimentary context of the classroom environment, the clarity and accessibility of more complex information will be unreliable. Consistent supervision and frequent assistance are needed, especially in the areas of ASL comprehension and ASL-to-English interpretation.

Meanwhile, scores in the 4.0-4.9 range are *advanced intermediate*, indicating a broader vocabulary base and more consistent use of accurate ASL grammar. An individual scoring at this level can be expected to represent the original message more consistently and provide accessibility to *much* of the classroom content. An EIPA score of 4.0 is indicative of *minimum entry-level competency*. However, it is notable that breakdowns in interpretations which result in periods of inaccessibility should still be expected, particularly for complex topics or when rapid processing is required. Of 217 participants in Hutter's (2020) study, just over a quarter had achieved that minimum score of 4.0 on the EIPA, while Johnson and colleagues (2018) reported that only 23% of 8,680 interpreters had achieved it, and Cates (2021) indicated that only 6% of 1,211 test-takers had achieved it.

Optimally, however, an EIPA score of 5.0 is indicative of providing accessibility to *the majority* of educational content and appears to have only been achieved by less than 1% of educational interpreters (Cates, 2021; Hutter, 2020). Given the recognized phenomenon of sign language interpreters utilizing educational settings as a starting point to their careers, it is likely that many of the test takers in those studies, who have demonstrated advanced interpreting skills through such a high score, are no longer working in educational settings.

While there has recently been an increase in EIPA score expectations to be hired as an educational interpreter, with 42 states establishing some kind of minimum requirement, only fourteen states are currently requiring the nationally recommended minimum EIPA score of 4.0 (NAIE, 2023b). Furthermore, because there is no systematic oversight at the state or national levels, it is likely that the established requirements of some of those states are not being consistently enforced (Johnson et al., 2018). It is also important to emphasize that although EIPA performance scores are often given the most attention, they reflect just one slice of the recommended credentials that are prescribed by the Professional Guidelines (NAIE, 2019). An EIPA score does not address degree attainment, preservice training, demonstration of content knowledge through the EIPA Written Test, professional experience, nor continuing education.

WORKPLACE CONDITIONS AND PROVISIONS

Professional educators, such as classroom teachers and RSPs, can typically expect a certain baseline of workplace provisions, including an adult-sized desk, personal workspace, the physical equipment needed to address the goals of their students, and time for preparation during the school day. However, many educational interpreters have expressed concerns about not being provided with the tangible materials they need to provide appropriate services, such as ergonomically appropriate seating, dedicated working space, and access to curricular materials. In fact, increasing attention has been given to the pain and discomfort that educational interpreters often experience, potentially because of their working environments (DeCaro et al., 1992; Pollard et al., 2021; Powell, 2013; Camacho et al., 2018). Likewise, many educational interpreters are not provided with compensated time to review materials and prepare for interpretation, as they are often

expected to remain with the assigned student(s) for the entire duration of the school day (Storey & Jamieson, 2004).

JOB TITLES

A clear and fair hiring process provides specific details about a professional position and allows candidates to demonstrate relevant qualifications for the needs of the position. However, many educational interpreters have been hired without such vetting, nor the opportunity to receive clear details about the position to which they apply. Research has indicated that appropriate job titles are more often associated with appropriate duties and employment provisions, yet a wide variety of titles have been utilized for positions that include the provision of educational interpreting services (Hale, 2012; Storey & Jamieson, 2004). Such variability has been problematic towards standardizing expectations, designing accountability systems, and overseeing educational interpreters at state and national levels. This also makes it difficult to ascertain how many individuals are providing educational interpreting services across the United States (Johnson et al., 2018). As such, the Professional Guidelines (NAIE, 2019) call for the distinct title of "educational interpreter" to be consistently utilized for any position that provides interpreting services in PK-12 educational settings.

The complex decision-making processes that educational interpreters frequently face, often with little available guidance, have been widely acknowledged as a professional challenge (Antia & Kreimeyer, 2001; Smith, 2010). Under federal law in educational settings (IDEA, 2004), educational interpreters' roles and responsibilities can vary greatly depending on the individualized needs of the students, school, and specific situation (Guynes et al., 2020). Without adequate guidance and support, educational interpreters are often left to make their own best guesses when determining how to optimize student support while establishing and maintaining appropriate professional boundaries (Wolbers et al., 2012). As such, it is essential to utilize an appropriately developed and clearly articulated job description for the purposes of recruitment and hiring, as well as to use as reference throughout the duration of the position (NAIE, 2019).

COMPENSATION AND EMPLOYEE BENEFITS

Within any profession, a particular range of salaries can be expected and appropriate, as influenced by the resources of the hiring entity, geographical setting, and qualifications of the employee. However, there has been a longstanding and substantial disparity in compensation between sign language interpreters in community settings and those in educational settings (Bowen-Bailey, 1996; Marchut, Musyoka, & Clark, 2019). Furthermore, there has been a dramatic range of salaries amongst educational interpreters, with little predictable correspondence to qualifications, which continues to present a barrier to the recruitment of more qualified educational interpreters (Hale, 2012; Johnson et al., 2018).

SUPERVISION, EVALUATION, AND PROFESSIONAL SUPPORT

Having a qualified supervisor who can appropriately evaluate and provide guidance, particularly for entry-level educational interpreters, is essential. However, very few educational interpreters have been supervised by individuals knowledgeable regarding the intricacies of educational interpreting, and most supervisors of educational interpreters are not even knowledgeable regarding ASL (Jones, 2004; Weirick, 2021). The use of a professionally qualified lead interpreter

is one such solution, but rarely implemented in educational settings (Johnson et al., 2018). Relatedly, the importance of native and DHH signers as cultural, role, and language models for young DHH children has long been acknowledged, and their utilization has been encouraged in positions such as teachers of the Deaf and classroom assistants (Shantie & Hoffmeister, 2000). Increased attention has recently been given to the importance of qualified Deaf interpreters in community settings for adults, particularly when working with individuals who have linguistic, social, educational, physical, mental health, and/or cognitive considerations (Adams et al., 2014; Bentley-Sassaman & Dawson, 2012; Gebruers & Haesenne, 2021; Mathers, 2009; Rogers, 2016). Given that these characteristics are also exhibited by many DHH children and youth, further investigation is needed regarding the potential utilization of Deaf interpreters in educational settings, as no guidance could be located during the onset of this study.

PROFESSIONAL PROVISIONS

Preparation is a crucial responsibility of any professional position for which compensated time should be allotted. Despite being shown to improve the accuracy of signed interpretations (Nelson, 2016), many educational interpreters have reported that they do not have access to the materials needed to prepare for lessons, nor the space and time to do so (Storey & Jamieson, 2004). Educational interpreters especially require such designated preparation time, as they cannot be expected to possess an academic expertise across the range of grade levels, subject areas, and specializations for which they may provide services. Educational interpreters regularly encounter specialized English terms in the classroom for which they do not already know the established, evolved, or best ASL sign choice. Furthermore, to ensure the accurate and appropriate facilitation of socialization amongst peers, educational interpreters are expected to learn the vocabulary vernacular of the student population with whom they interact, both in English and ASL. As such, it is necessary to have access to such terminology and preparation time to complete additional research of vocabulary signs (Storey & Jamieson, 2004). Recognizing that it is not possible to interpret 100% of the educational environment 100% of the time (Wolbers et al., 2012; Langer & Krume, 2023), they must understand the specific goals of each lesson so that they can appropriately prioritize and emphasize the information presented during their message delivery (Schick, 2007).

METHODS

DESIGN AND PROCEDURES

The overarching purpose of this study was to explore the current landscape of educational sign language interpreting as a profession in the United States and, as such, wide recruitment of potential participants was a foundational cornerstone. The mixed-method survey instrument, hosted in Survey Monkey, solicited multiple-choice and open-ended responses, along with the collection of formal job descriptions. The survey was initially drafted as a partial replication of Johnson and colleagues' (2018) survey questions and was further developed with input from stakeholders associated with the National Association of Interpreters in Education, including a pilot study with seven board members. Based on that feedback, with an emphasis on logistics and formatting, revisions were completed prior to finalization for dissemination. The finalized survey consisted of two preliminary questions to determine eligibility, 72 multiple choice questions, 14 open-ended questions, and 18 questions that were both multiple-choice and open-ended, primarily by offering participants the opportunity to provide additional information. Each question was

optional. The survey was made available online from October to December of 2021 and the research questions addressed in this study were as follows:

RESEARCH QUESTIONS

- 1. What level of qualifications and credentials do educational interpreters currently possess and what do employers expect of them?
- 2. What are the working conditions and workplace provisions of educational interpreters?
- 3. Has the field of educational interpreting made progress towards professionalization?

RECRUITMENT

The National Association of Interpreters in Education (NAIE) served as a sponsor to this research endeavor through the provision of compensation for participation and assisting in nationwide recruitment efforts. Recruitment material was provided to NAIE members via email, and on associated social networks, which included both members and non-members. Materials were also shared with other relevant organizations such as the Registry of Interpreters for the Deaf (RID), Training and Assessment Systems for K-12 Educational Interpreters (TASK12), the Conference of Interpreter Trainers (CIT), and through the research team's affiliated institutions. In an effort to recruit more widely, recipients of the invitation and those who participated were asked to share the research information with any other individuals who might be eligible to participate. Accounting for participants whose responses were completely invalidated (presumably inauthentic automatic submissions), and those who did not continue past the eligibility questions, a click-to-completion rate of 78.17% was achieved.

PARTICIPANTS

Participants in this nationwide study included individuals who had provided sign language interpreting services in PK-12 educational settings as any component of their employment within the two years prior. The decision was made not to limit participants based on actual job title due to the history of variability in educational interpreter job titles. Likewise, individuals in other professional positions, such as teachers of DHH students, were encouraged to participate if they provided educational interpreting services within their positions. Participants were well spread out across the four major regions of the United States, with 13.8% being from the Northeast, 29.5% from the Midwest, 28.3% from the South, and 24.1% from the West, while 36.6% were from urban areas, 43.8% from suburban areas, and 19.7% from rural areas, and from all states except for Rhode Island.

DATA COLLECTION AND ANALYSIS

A total of 756 responses were received, but an immediate review of the data indicated some duplicate and unauthentic, seemingly automated responses, as evidenced by multiple, identical responses submitted within seconds of each other. A preliminary analysis was completed to sift through and remove the responses deemed to be inauthentic, conflicting, or inconsistent throughout the survey. 47 responses were removed because they failed this data validation process, and 118 responses were removed because no questions were answered beyond the initial screening questions. Therefore, quantitative statistical analyses were based on a maximum of 591 validated responses, but because each question was optional, the meaningful response rate is reported per

question. Similarly, some responses to open-ended questions were deemed irrelevant to the question being asked and were removed from summative reporting. Results are presented to the nearest tenth of a percentage, which could cause some results to total slightly over 100% due to rounding. 147 participants provided their formal job description for review, which were used to help triangulate data from survey responses.

Quantitative data was analyzed using summary and descriptive statistics, while qualitative data was analyzed utilizing directed and, in some cases, summative content analysis (Hsieh & Shannon, 2005; Kondracki et al., 2002; Krippendorff, 2013). Each set of qualitative data was holistically reviewed and initially coded within a predetermined set of categories, while responses that did not distinctly fall into those established categories were initially coded as "other" and later categorized into new themes that emerged (Hsieh & Shannon, 2005). Each set of qualitative data was reviewed thoroughly by at least two members of the research team and reclassified several times until no new categories emerged, reaching saturation for each question. Data was triangulated using responses from multiple choice questions, open-ended questions, and document reviews from participants who provided their formal job descriptions.

RESULTS

DEMOGRAPHICS

584 participants provided information regarding their demographics and identities. 90.7% of participants identified as female, 6.9% as male, and 2.4% as other. 89.0% of participants identified as White, 4.8% as Hispanic, 4.5% as Black, 2.7% as Native American, 2.1% as Asian, .2% as Pacific Islander, and 6.6% as other. 87.8% of participants identified as hearing, 4.8% as Deaf or hard of hearing, and 7.4% as hearing family members of DHH individuals including parents, children, spouses, and siblings.

587 participants indicated how long they have been interpreting in educational settings. 19.9% had been interpreting for 4 years or less, 19.1% for 5 to 9 years, 17.9% for 10 to 14 years, 14.7% for 15 to 19 years, and 28.5% for 20 years or more. Most participants (80.9%) have been interpreting in schools for the same range of years they have been interpreting at all, indicating that they have spent the majority of their careers in an educational setting.

Table 1. Participants' Gender Identities, Respondents n=584

Female	Male	Other
90.7%	6.9%	2.4%

Table 2. Participants' Ethnic Identities*, Respondents n=584

White	Hispanic	Black	Native American	Asian	Pacific Islander	Other
89.0%	4.8%	4.5%	2.7%	2.1%	.2%	6.6%

^{*}Participants could select more than one response.

Table 3. Participants' Hearing Statuses, Respondents n=584

Hearing	Deaf or Hard of Hearing (DHH)	Hearing w/ DHH Family Member
87.8%	4.8%	7.4%

DEGREE ATTAINMENT AND PRESERVICE EDUCATION

550 participants answered questions about their preservice education. Regarding degrees completed (in any field, not necessarily interpreting), an associate degree was the highest degree completed by 28.7% of participants, while 48.2% completed a bachelor's degree, 14.7% completed a graduate degree, and 8.4% did not report having a degree at all. More specific to interpreter training (but not necessarily degree completion), 40% completed some type of interpreter training at the associate level, 28.2% at the bachelor level, 11.3% at the certificate level, and 3.0% at the graduate level, with 17.6% having no interpreter training at all. Of 147 formal job descriptions, 32.7% required an associate degree, 8.8% required a bachelor's degree, and 29.3% required a high school diploma or equivalent, while 29.3% did not indicate the requirement of a degree or diploma at all. Of 553 respondents, 69.1% had completed some kind of practicum, internship, or fieldwork in educational interpreting as part of their training.

Table 4. Participants' Preservice Education & Requirements, Respondents n=550; Job Descriptions n=147

Education Level	Interpreter Training	Degree Completion	Job Requirements
	11 20/		
Certificate	11.2%		
Associate's	40%	28.7%	32.7%
Bachelor's	28.2%	48.2%	8.8%
Dachelol 5	20.270	70.270	0.070
Graduate	3.0%	14.7%	0%
None	17.6%	8.4%	28.7%*

^{*29.3%} of job descriptions required a high school diploma or equivalent, which participants were not asked to report.

CREDENTIALS

587 participants answered at least some questions about their credentials. 40.4% of those have passed the EIPA Written Test and 78.4% have *attempted* the Educational Interpreter Performance Assessment. Only 31.5% of participants reported having achieved at least a 4.0 on the EIPA, with an additional 33.7% having achieved a 3.5-3.9. 479 participants answered the question of whether they have a state credential, with 64.7% of participants holding a right-to-work credential in at least one state. A review of the 147 formal job descriptions provided revealed that only 19% of jobs listed an EIPA score of at least 4.0 as a minimum requirement. However, only 60 participants total, 10.2% of those who provided information about their credentials, have achieved minimum entry-level qualifications as established by the NAIE that include a bachelor's degree (in any field), passing of the EIPA Written Test, and a score of 4.0 or higher on the EIPA performance assessment.

Table 5. Participants' Credentials, Respondents n=587, *479

Passed EIPA-WT	Attempted EIPA	Achieved 3.5-3.9	Achieved 4.0+	*State Credential
40.4%	78.4%	33.7%	31.7%	64.7%

^{*}Fewer participants answered the question regarding a state credential, which is likely due to many states not requiring or offering a state-specific credential.

Approximately 150 participants provided additional information about their credentials in the form of an open-ended response. Of those, the most common response that participants shared was that they were actively working towards some kind of degree or credential. However, another notably common response was the sharing of personal and professional reasons why participants had not pursued or achieved specific credentials. Backlogs and waitlists for testing, often attributed to the pandemic, were commonly indicated, while some further explained how credentialing requirements had changed during these long waits. Some participants openly shared about how their efforts to achieve certain credentials had been unsuccessful. Lastly, another prominent theme was rationalization as to why some participants had not pursued credentials, such as inability to dedicate the time or financial resources to doing so, and commonly, a belief that credentials were not necessary due to the knowledge and skills they have acquired through experience.

WORKPLACE CONDITIONS AND PROVISIONS

JOB TITLES

390 participants provided their formal job title. Of those, nearly half (47.7%) had a single job title which appropriately indicated that they were interpreting in an educational environment, such as *Educational Interpreter*, *Educational Sign Language Interpreter*, *Educational Interpreter for the Deaf*, and *K-12 Educational Interpreter*. One participant reported that they were an *Educational Interpreter Intern*. The second most reported job description (27.4%) was that of an (American) Sign Language Interpreter without indicating the educational environment. *Sign Language Interpreter* was the most reported title in that category, but some job titles included additional indicators such as *certified*, *professional*, or *substitute*. 8.2% reported a job title that indicated interpreting for Deaf and hard of hearing individuals, such as *Interpreter for the Deaf and hard of*

hearing, DHH Interpreter, and Deaf Interpreter. 8.2% indicated that they held a job title related to interpreting, but it did not indicate the educational setting, sign language, or DHH population, such as Interpreter, Outreach Interpreter, and Staff Interpreter. 2.8% indicated that they had an assistant-related job title that did not indicate interpreting responsibilities at all, such as Paraprofessional, Hearing Impaired Assistant, and Teacher's Aid. 5.6% reported a dual job title that included interpreting and at least one other distinct position. Seven of those dual positions reported that they were working as an interpreter and tutor, five as an interpreter and translator or captionist, four as an interpreter and assistant, three as an interpreter and language specialist, two as an interpreter and teacher, and one as an interpreter and social worker. Analysis of formal job descriptions revealed similar results, with 47.8% utilizing a single title related to educational interpreting, 23.9% indicating an (American) Sign Language Interpreter title, 10.6% indicating interpreting for Deaf and hard of hearing individuals, 8.8% utilizing an interpreter-related title without indication of the environment, sign language, or DHH population, and 8.8% were dual titles. None of the submitted job descriptions indicated an assistant-only position.

Table 6. Participants' Job Title Categories, Respondents n=390; Job Descriptions n=147

Title Category	Participant Responses	Job Descriptions
Educational Interpreter	47.7%	47.8%
Sign Language Interpreter	27.4%	23.9%
DHH Interpreter	8.2%	10.6%
Interpreter	8.2%	8.8%
Assistant	2.8%	0%
Dual Title	5.6%	8.8%

COMPENSATION AND EMPLOYEE BENEFITS

Of 451 participants, 62% reported being considered hourly employees with a compensation range of \$10 to \$60+ hourly, a median rate of \$30-\$34/hour, and a mode of \$25-\$29/hour. Meanwhile, 38% reported being salaried with a salary range from under \$19,000 to over \$80,000 annually, a median of \$40,000 - \$44,999 and a mode of \$35,000 - \$39,999. A review of 147 job descriptions revealed similar, but more condensed ranges of \$21.65-\$55.00 hourly and \$32,597-\$57,000 annually.

Table 7. Participants' Compensation Rates, Respondents $n=451$; Job Descriptions $n=143$	}
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Compensation Classification	Percentage	Rate	Median	Mode	Job Descriptions
Hourly	62%	\$10-\$60	\$30-\$34	\$25-\$29	\$21.65-\$55.00
Yearly	38%	<\$19,000 - >\$80,000	\$40,000 - \$44,999	\$35,000 - \$39,999	\$32,597 - \$57,000

Over half (57.4%) of the 437 participants who responded to questions about their contracts reported that they are for 9 or 10 months with 180-190 working days, which aligned with analysis of the formal job descriptions. Of 335 respondents, 47.8% reported that they had the opportunity to earn overtime pay in their educational interpreting positions, and 73% reported working at least one additional job to supplement their compensation, whether it be regularly, occasionally, or during school breaks. Most participants indicated that they receive employee benefits of some kind. The majority receive medical (87.3%), dental (85.6%), and vision (81.1%) insurance, a retirement plan (80%, with 59.4% receiving employer contributions), sick leave (84%), paid holidays (60.8%) and personal time off (74.1%). 17% of respondents indicated that they receive other benefits as well such as access to a flexible health savings account, life insurance, and reimbursement for professional fees.

139 participants took the opportunity to provide additional information about their compensation. Overwhelmingly, the primary theme was that of dissatisfaction and concern, with many participants sharing that it was difficult to make ends meet, often having to rely on supplementary employment, and that compensation was not commensurate with qualifications. For example, one participant stated, "The senior interpreters make the same amount of money as a new hire. We do not have a pay scale or anything that helps retain educational interpreters. There is no difference in pay scale for different credentials." Meanwhile, the few distinctly positive comments that were shared were primarily associated with results of successful advocacy initiatives combating such concerns, such as through union support.

SUPERVISION, EVALUATION, AND PROFESSIONAL SUPPORT

438 participants provided information about how they are supervised. 44.4% of participants reported that their supervisors are fluent in the sign language utilized by the student. However, only 26% are supervised by someone who is an interpreter while 74% are not. 17.5% are supervised by a principal or assistant principal, 13.4% by a teacher of Deaf and hard of hearing students, 12.9% by a lead interpreter, 5.9% by an interpreting agency owner, 3.1% by a special education teacher, 2.1% by a speech language pathologist, 1.4% by a classroom teacher, and 44.5% by someone else.

Table 8. Participants' Supervisors, Respondents n=438

(Assistant) Principal	of DHH	Lead Sign Language Interpreter	Interpreting Agency Owner	Education	Speech- Language Pathologist		Someone Else
17.5%	13.4%	12.9%	5.9%	3.1%	2.1%	1.4%	44.5%

73.5% of participants reported being evaluated at some point, but only 57.4% are evaluated at least annually, and while 95% are evaluated on their professional skills, only 46.4% are evaluated on their interpreting skills. 40% are observed by their supervisor while providing interpreting services, but only 27.5% of those receive feedback based on those observations.

Table 9. Frequency and Type of Evaluation, Respondents n=437; 317

Receives	At Least	Professional	Interpreting	Interpreting	Receives
Evaluation	Annually	Skills	Skills	Observations	Feedback
73.5%	13.4%	95%	46.4%	40%	27.5%

111 participants provided additional information regarding how they are supervised. By far, the most prominent themes were related to their supervisors' lack of knowledge regarding most aspects of DHH education, including educational interpreting, as well as a distinct desire for more consistent and meaningful evaluations. It appears that most educational interpreters are evaluated solely on skills other than interpreting, while some are not evaluated at all. Still, quite a few reported being evaluated based on how their interpreting appears to the supervisor even though they do not actually know sign language. One participant summarized the situation by explaining, "evaluations are based solely on whether or not the student seems to pay attention to the interpretation, and the rapport I seem to have with them" while another stated that, "our boss evaluates us without even knowing if we're just flopping our hands ... or actually interpreting content being delivered in the classroom." Yet another said that the supervisor "comes to see us once a year and watches for 15 minutes to see if people look like they understand" and finally, one shared that, "My evaluations were honestly a joke. I was given good ratings, but no one had any idea what I was doing."

Participants shared mixed feelings regarding being evaluated by teachers of DHH students, with some stating they should be less involved and others emphasizing that they should have more involvement. Some participants stated that their official supervisors, who were typically not well-versed regarding DHH education, were actively involving DHH teachers and other interpreters, and/or utilizing outside testing, such as EIPA scores, in their final evaluative report, which was generally appreciated. Several participants indicated that they were evaluated using a generic tool, unrelated to educational interpreting, that was also utilized for support staff, educational assistants, classroom teachers, speech language pathologists, and/or therapists. One participant explained that

she took it upon herself to provide the teacher of DHH students with an evaluative rubric specific to educational interpreting, so that she could receive more meaningful feedback.

PROFESSIONAL PROVISIONS

431 participants provided information about their workplace. 46.8% indicated that they have dedicated office space, 44.5% have compensated preparatory time, and 58.5% receive some kind of support for pursuing professional development in the form of compensation, financial support, allotted time, and/or resources. Of 364 respondents, only 6.6% regularly receive a break for interpreting up to 20 minutes, which is the general recommendation, while 60.7% regularly receive a break for interpreting up to 60 minutes, and 45.9% of participants regularly interpret for 60 minutes or more without a break.

Table 10. Workplace Provisions and Designated Breaks, Respondents n=431; 364

Dedicated Office Space	Compensated Preparation Time	Professional Development Support	Break for 20 Minutes		No Break for 60+ Minutes
73.5%	13.4%	95%	6.6%	60.7%	45.9%

Of 431 respondents, 87.6% have other interpreters in the district and 66.2% have other interpreters at their specific worksite, while 41.1% have access to other interpreters for teaming purposes, and 39.7% indicated that the educational interpreters are the only sign language models for DHH students in their schools. Of all the participants in the study, 24 (4.1%) indicated that they were working as Deaf interpreters or language facilitators themselves, while 127 (22% of the hearing participants) indicated that they had the opportunity to work with Deaf interpreters in their educational setting. Both Deaf and hearing interpreters indicated that delayed ASL acquisition and signing skills were the primary reasons for the involvement of the Deaf interpreter. Additional situations for which Deaf interpreters were utilized included psychological exams, special presentations, language differences in the home, mental health concerns, and to provide professional development support for the hearing interpreter.

Even though only 106 hearing respondents (18.7%) answered "yes" to the question that asked if they had ever formally requested to work with a Deaf interpreter or language facilitator, openended responses from 185 participants indicated that many more of them had been involved in such a request at some level. Most often, requests for the support of Deaf individuals were made directly to administration or the entire IEP team. Overwhelmingly, participants indicated that the school districts' responses to their requests were negative, with budgetary concerns being one of the most frequent justifications for denial. In many cases, participants felt that their requests to collaborate with Deaf professionals were not only poorly received, but also met with retaliation, with one participant sharing that she was told her position was no longer needed, and one participant being told that her "job was simply to interpret; nothing else."

Only 39 participants indicated positive responses from the district as far as agreeing to their requests to work with Deaf professionals. However, of those, several participants indicated that

the requests ultimately went unfilled due to the inability to secure qualified Deaf interpreters, reiterating the perceived shortage in the field. One participant stated that the statewide licensing process to become an interpreter presented barriers to Deaf individuals. Of the participants whose requests for Deaf interpreters were not approved or implemented, 30 indicated that a compromising option was offered instead, with the most frequent being the utilization of a Deaf individual in a language model/facilitator capacity instead of a certified Deaf interpreter. In many cases, these individuals were already on staff serving as assistants, paraprofessionals, and teachers of DHH students. A few participants shared that the district agreed to hire a Deaf facilitator on a contract basis for specific situations only, such as psychological evaluation, language sampling, and for a legal situation. Some schools reached out to DHH-specific organizations for support, and a few changed the placement of the student.

Table 11. Professional Collaboration Opportunities, Respondents n=431

Other Interpreters in District	Other Interpreters at Worksite		Other Language Models Available for Students	Access to Deaf Interpreters
87.6%	66.2%	41.1%	60.3%	22%

PROFESSIONALIZATION OF THE FIELD

Of 589 respondents, 61.5% of participants were members of the National Association of Interpreters in education, while 38.5% were not. However, 81.2% of participants were familiar with the NAIE Professional Guidelines (2019), and of those, 90.2% found them helpful. Three hundred eighty-eight participants provided additional responses regarding how they utilized the NAIE Professional Guidelines, with the overwhelming majority indicating that they had been professionally advantageous. Over 90% of the open-ended responses indicated that the primary use of the Guidelines was to inform their own practice and/or inform others about their practice. Specifically, administration, students, teachers, colleagues, community interpreters, mentees, interns, and families were indicated as stakeholders who could benefit from the Professional Guidelines to better understand the appropriate roles, responsibilities, and expectations of educational interpreters. Several of those responses more specifically indicated the use of the Guidelines as a tool for advocacy initiatives at school, district, state, and national levels, with an emphasis on the Guidelines' much-needed specific applicability to educational settings. Only 26 of the participants who were aware of the Guidelines (6.7%) indicated that they had not yet read them or had any opportunity to put them into practice.

DISCUSSION

CHARACTERISTICS OF EDUCATIONAL INTERPRETERS

Results of this study align with previous research that the field of educational interpreting is largely dominated by hearing, white, females. Although there has been a slight increase in representation by other ethnicities, drastic improvements must be made to ensure that the diverse population of DHH students have access to educational interpreters with whom they can culturally relate. The field of educational interpreting must include itself in national efforts to improve diversity, equity,

and inclusion. Furthermore, additional effort must be dedicated to establishing a crucial space for Deaf Interpreters in educational settings. Deaf interpreters are necessary to provide support for hearing interpreters in more traditional educational interpreting roles, as well as through the distinct provision of language facilitation services for the large population of DHH students who are language delayed because of language deprivation. Results of this study indicate the highest known involvement of Deaf Interpreters in educational settings reported to date. It is also promising that many school districts worked with the educational team to implement a compromising option, including changing the placement of the child, when a Deaf interpreter was not available.

Most participants in this study have spent the majority of their interpreting careers in educational settings, regardless of how long that has been. However, because this study required participants to have interpreted in educational settings during the previous two years, it does not yield information regarding those who began in educational settings and transitioned to community settings after building their skills, which is common in the field of interpreting. Given that a prominent theme shared by participants was rationalization as to why they are not actively pursuing interpreting credentials, it is very likely that many individuals who are unable or unwilling to improve their qualifications remain in educational settings, where obtaining a credential is often not required nor enforced.

It is very promising that over 90% of the participants in this study had obtained a degree, with 63% having a bachelor's degree or higher. Although these results indicate a substantial increase since Johnson and colleagues' (2018) study, we must reiterate the same limitation that they emphasized, that those working as interpreters without degrees and credentials are less likely to be connected to the field and participate in these types of research opportunities. Considering that some states do not require any degree for educational interpreting positions, and that many districts assign interpreting tasks under alternative job titles, it is likely that the actual rate of degree attainment by those interpreting in educational settings is still much lower. Additionally, while it was anticipated that newer and younger interpreters would be more likely to have a degree, as was shown in Johnson and colleagues (2018) study, the correlation in this study was very low and not significant, indicating that young individuals are still regularly entering the field of educational interpreting without any degree. It is also encouraging that most participants in this study have had some type of interpreter-specific education or training, through the completion of a practicum, internship, and/or fieldwork specific to educational settings. While these results clearly indicate improvement in preservice preparation, it is important to note that the specific content and expectations of those experiences are unknown and continue to require attention in the field. Overarchingly however, with just 10% of participants in this study having satisfied the minimum entry-level expectations as set forth by the Professional Guidelines (NAIE, 2019), the qualifications of currently working educational interpreters remain a serious concern.

HIRING PRACTICES

Results of this study indicate drastic improvements in the job titling of educational interpreters, with over 97% of participants being distinctly hired as interpreters, and nearly half possessing a job title that specifically designates the educational setting. Although this study indicates that there are still a significant number of interpreters working without educationally specific job titles, very few participants held positions labeled as assistants or other distinctly inappropriate titles. Of the

twenty-two reported dual titles, half were likely to be considered appropriate, such as interpreter/tutor, interpreter/translator, and interpreter/captionist. However, additional information regarding employees' credentials and context would be required to determine the appropriateness of the other reported dual titles that included language specialist, teacher, and social worker.

COMPENSATION AND EMPLOYEE BENEFITS

Appropriate compensation has long been a concern in the field of educational interpreting, and results of this study show only a slight upward shift in overall compensation. The proportion of interpreters who were paid hourly vs. salaried was nearly identical in Johnson and colleagues' study, while the lowest hourly rate only increased from \$8/hour to \$10/hour in the past decade. Likewise, for salaried employees, the most reported rates only increased from \$30,000-\$34,999 to \$35,000-\$39,999 and while about half were earning less than \$35,000 in the 2018 study, about half were earning less than \$45,000 in this study. However, despite hourly or salaried designation, most participants in this study indicated having access to many benefits from their employer, which had been previously unexplored. Although less than half of participants reported the opportunity to earn overtime pay, many participants clarified in the open-ended responses that they did have opportunities to interpret outside of the school day for their regular hourly rate (not an overtime rate), another designated rate, or for compensation time. Further investigation is needed to determine if school districts are willingly complying with the IDEA (2004) requirement to provide educational interpreting services for extracurricular educational opportunities.

WORKPLACE CONDITIONS AND PROVISIONS

Results from this study indicate some improvement in workplace provisions, with approximately half of participants receiving dedicated office space, compensated preparatory time, regular breaks during interpreting, and support for professional development. A much larger percentage of interpreters in this study than previous studies had access to interpreter colleagues and Deaf professionals for teaming and support. With over 60% of respondents indicating that DHH students have access to other sign language models (besides themselves as interpreters), an increased awareness regarding the necessity of including DHH team members is also apparent. However, considering how many participants shared negative experiences or outcomes regarding their requests to collaborate with Deaf interpreters, it is critical that these efforts receive increased attention and that a line of research is initiated to develop evidence-based practices for the evolving use of Deaf educational interpreters.

SUPERVISION, EVALUATION, AND TRAINING

Although nearly half of participants in this study were being supervised by someone who is fluent in some type of sign language, which is a significant increase since previous studies (Jones, 2004; Weirick, 2021), only about a quarter of participants were directly supervised another interpreter, which is critical for understanding the intricacies of the position and ability to provide ongoing professional guidance (Weirick, 2021). Furthermore, it is unknown if most supervisors of participants in this study, who were not interpreters themselves, such as teachers of DHH students, had previous experience as educational interpreters and/or training in supervision. Although this study indicates a significant increase in the number of educational interpreters who are at least partially being evaluated and supervised by someone who knows sign language, the majority of

participants are not being regularly evaluated with an appropriate provision of feedback on their interpreting work. Much additional information is needed regarding the types of qualifications that supervisors of educational interpreters possess, as well as how educational interpreters and their administration can be better supported towards an appropriate supervision and accountability system. It is necessary to emphasize the cyclic relationship between professional qualifications, or lack thereof, and the type of oversight needed. The current workforce clearly requires more specialized, consistent, stringent, and direct oversight than is currently being provided. However, a more qualified workforce could require less direct supervision and more intermittent support, parallel to professional educators and other qualified RSPs. Once more, further investigation is much needed.

PROFESSIONALIZATION OF THE FIELD

Perhaps most remarkably, the results of this study indicate dramatic progress towards professionalization of the field through the establishment and implementation of the Professional Guidelines for Interpreting in Educational Settings (NAIE, 2019). Although just over half of the participants in this study were members of the NAIE, the majority were aware of the NAIE's Guidelines, and found them professionally advantageous. Given that educational professionals' stakeholder feedback is one of the first steps towards establishment of evidence-based practices (Bretschneider et al., 2017), these results establish the critical layer of foundational support for utilizing the Professional Guidelines in educational settings.

CONCLUSION

LIMITATIONS AND CONSIDERATIONS

Although this study provided valuable insight regarding shifts that have occurred over the past decade, the sample size of 591 validated responses is much lower than the 1,615 validated responses in Johnson and colleagues' (2018) study and in comparison to how many individuals are likely providing educational interpreting services today. Additionally, an inherent limitation of all self-reported survey responses is the inability to fully verify information provided, with the potential of survey fatigue affecting the depth of responses received. Likewise, the asynchronous nature of the study prevented the opportunity to obtain and provide clarification for participants. The long history of confusion and ambiguity in the field of educational interpreting was further evidenced in this study through some participants' inaccurate and inconsistent responses to questions. For example, participants would often select "other" as an option, but type in a response that was in fact available as a multiple-choice answer choice, sometimes being listed under a wellknown acronym instead of fully spelled out. As a distinct example, one participant responded to the question regarding what type of state credential they hold as follows, "I have no idea what most of these are" (referring to the list of multiple-choice options). Furthermore, many participants who indicated that their hearing status was hearing, later answered that they were a "Deaf Interpreter" or "Deaf Language Facilitator," likely misunderstanding the intent of those questions or the specialized positions being indicated. While the original pilot study was conducted with NAIE Board Members, individuals perceived as experts in educational interpreting, it appears that many educational interpreter participants did not have knowledge of terminology within the field, further emphasizing concerns that many educational interpreters are lacking training and professional knowledge.

DISCUSSION AND IMPLICATIONS FOR FUTURE RESEARCH

Overarchingly, results from this nationwide study point to meaningful progress in the field of educational interpreting over the past decade, as evidenced by increases in educational interpreters' degree and credential attainment, completion of preservice education, and attempts toward improved EIPA scores. Likewise, many states have increased their expectations for qualifications of educational interpreter candidates. Almost 75% of interpreters in this study were being evaluated, and more than ever are being supervised by someone who is at least proficient in some type of sign language. Workplace provisions in the form of appropriate job titles, access to other hearing and Deaf interpreters, tangible materials, employee benefits, and professional support appear to be on the rise. Most notably, there is widespread awareness and professional utilization of the Professional Guidelines for Interpreting in Educational Settings (NAIE, 2019).

While these results are highly encouraging, there is still much work to be done, as the improvements have certainly not yet become standardized expectations. Despite the upward trajectory of professional expectations by many different stakeholders, compensation for educational interpreters has hardly increased, and an overwhelming majority of the workforce is still largely unsatisfied with their working conditions. Likewise, the workforce still predominantly consists of underqualified, white, female, hearing individuals, who are supervised by someone with even less knowledge about their professional positions than they possess themselves.

As professionals and other stakeholders in this field, which has clearly shown the potential to evolve, we simply cannot continue to provide the same inadequate level of services and expect better results, as research continues to demonstrate dismal academic, linguistic, and social outcomes for many DHH students (Cawthon et al., 2023; Mood et al., 2020; Trezek & Mayer, 2019; Williams et al., 2023). Likewise, even if a comparatively small number of states or school districts are refusing to enforce minimum entry-level standards, we cannot consider the field as having successfully professionalized. Each individual DHH child is equally entitled to the full range of educational services, including a qualified educational interpreter, as a fully participatory member of the IEP team, who can competently advocate for their educational needs, and with confidence that their professional position is protected when they do so.

Urgently, the next step for the field is standardized enforcement of minimum entry-level qualifications that include a bachelor's degree with preparation specific to educational interpreting, passing of the EIPA Written Test, and achievement of at least a 4.0 on the EIPA performance assessment (NAIE, 2019). Essentially, this could be implemented through the establishment of a standardized certification system administered by a professional organization specific to educational interpreting, similar to the Certificate of Clinical Competence issued by the American Speech-Language Hearing Association for Speech Language Pathologists, which widely is accepted as the minimum credential across the United States (ASHA, n.d.-a). Although the significant amount of time it will take to implement such a call to action must be acknowledged, in the meantime, it is critical that states with established minimum-level expectations immediately cease their various pathways to circumvention, which are currently perpetuating widespread inaccessibility for DHH students.

Instead, a certification-governing organization can determine which, if any, provisional circumstances may be appropriate to acknowledge, and can ensure that a reasonable timeline for satisfaction exists, with oversight at a national level, aligning with the NAIE's recent *Case for*

National Certification: Sign Language Interpreters Working in K-12 Education (2023). While it is ideal for an educational interpreter to achieve the required score in the same educational setting and modality in which they provide services (e.g. EIPA high school, ASL), that may not be feasible to consistently enforce until a more qualified and plentiful workforce can be attracted, through the improvement of expectations, compensation, and workplace provisions.

Likewise, although a bachelor's degree specializing in educational interpreting is recommended by the NAIE and is certainly ideal, it simply may not be feasible at this time due to the extremely limited number of specialized educational programs available. In absence of the creation of additional bachelor level programs, specialized coursework should be created, and/or what already exists should be curated, and made available to supplement more generalized bachelor's programs in interpreting. Such modules could be standardized with required assessments to demonstrate knowledge specific to educational interpreting. The standardized requirement of a compensated, post-graduate internship experience, similar to the yearlong Clinical Fellowship required of aspiring speech-language pathologists (ASHA, n.d.-b), should also be considered.

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