

Speech-Language Pathologists' Preparation, Practices, and Perspectives on Serving Culturally and Linguistically Diverse Children

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Abstract

This study describes the backgrounds, diversity training, and professional perspectives reported by 154 Colorado speech-language pathologists in serving children from culturally and linguistically diverse (CLD) backgrounds. The authors compare the results of the current survey to those of a similar survey collected in 1996. Respondents reported that they were comfortable working with racially and culturally diverse students, but they felt less competence when working with linguistic minorities. They also reported using standardized English assessment less frequently with CLD students and reported using professionals for interpretation more often than family members. However, respondents also reported less confidence when using interpreters and reported that they had challenges in accessing interpreters. Challenges included a shortage of appropriate assessment tools and a lack of normative information about language development in linguistically diverse children. Based on these results the authors describe implications and future directions to continue to improve services to children from CLD backgrounds.

Keywords

cultural and linguistic diversity, English language learners, survey, service delivery, speech-language pathologists

Since 1985 the American Speech-Language-Hearing Association (ASHA) has called for professionals and practitioners to have adequate skills to serve culturally and linguistically diverse (CLD) populations. This was further clarified by ASHA's 2004 Multicultural Issues Board publication, *Knowledge and Skills Needed by Speech-Language Pathologists and Audiologists to Provide Culturally and Linguistically Appropriate Services*. This document states that

regardless of our personal culture, practice setting, or caseload demographics, we must strive for culturally and linguistically appropriate service delivery. . . . This will inform all aspects of our practice including our assessment procedures, diagnostic criteria, treatment plan, and treatment discharge decisions.

These guidelines are likely in response to the fact that only 7% of ASHA members identify as bilingual or bicultural and an estimated 95% of school speech-language pathologists (SLPs) are White (ASHA, 2008). At the same time the country is experiencing a dramatic demographic trend where 19% of individuals living in the United States are

from households where languages other than English are spoken and Hispanic children younger than 5 are the fastest growing segment of the population (U.S. Census Bureau, 2008).

With this increase in diversity in the population, and with the lack of diversity represented in the profession, the need to increase the knowledge base of in-service and pre-service SLPs is paramount. A number of national, regional, and state-level surveys of SLPs have demonstrated that a large proportion of these professionals have not received sufficient training to work with CLD populations (Caesar & Kohler, 2007; Hammer, Detwiler, Detwiler, Blood, & Qualls, 2004; Kohnert, Kennedy, Glaze, Kan, & Carney, 2003; Roseberry-McKibbin, Brice, & O'Hanlon, 2005). The clinical assessment of children from CLD backgrounds

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in particular is an area where SLPs lack confidence or clinical strategies (Caesar & Kohler, 2007; Hammer et al., 2004; Kohnert et al., 2003; Kritikos, 2003). Another interesting finding is that simply being bilingual does not necessarily mean that an SLP is competent or skilled at working with linguistically diverse populations; however, specific training and diverse cultural life experiences do seem to result in more confidence and competence in serving these populations (Caesar & Kohler, 2007; Kritikos, 2003; Roseberry-McKibbin et al., 2005).

Colorado Demographics

Dramatic demographic changes are occurring in Colorado in both the racial composition and the linguistic background of children enrolled in public schools. Of students enrolled in Colorado public schools, 28% are Hispanic; this is nearly a 10% increase from 1997 (Colorado Department of Education, 2009). Although Hispanics represent the fastest growing segment of the student body in Colorado, other groups are also increasing at a remarkable rate, including Asians and American Indians. The linguistic backgrounds of students in Colorado are also changing. Over the past 10 years, Colorado has experienced a greater than 200% growth of English language learners (ELLs), which makes it a *destination state* for immigrant populations (Campbell, 1996; Colorado Department of Education, 2008). Destination states are areas of the country where the ELL population has doubled over the past decade; these states generally have a need for immigrant labor because of the types of regional industry. These areas are thought to be the immigrants' planned destination because of the prospect of employment. There are 11 identified states meeting this criterion, including Colorado, Nevada, Nebraska, Arkansas, Indiana, Kentucky, Tennessee, Alabama, Georgia, South Carolina, and North Carolina. Virtually all Colorado districts reported having ELL students enrolled, with several districts reporting up to 35% of student body enrolled in ELL services. More than 85% of the state's ELLs are Hispanic and more than 77% are eligible for free or reduced lunch at school, with the fastest growing age group of ELLs in Colorado being preschool to third graders (Colorado Department of Education, 2008). Regrettably, the graduation rate for ELLs in Colorado in 2006 was only 65%.

Colorado SLP Practices With CLD Students

In 1996, 83 Colorado SLPs working in public schools completed a survey on backgrounds, training, and practices involved in assessing and serving CLD populations (Guiberson, Miron, & Brickl, 1998). Of the SLPs who responded, 13% indicated that they were bilingual. Among the responses

received, the average percentage of CLD students on caseloads was 9.8%. Given this information, it was assumed that interpreter usage would be frequent; however, 58% of SLPs reported that they did not have access to an interpreter when assessing or serving CLD students. Of the respondents who did use an interpreter, 40% reported that they used a family member for translation when assessing or serving children from CLD backgrounds. Of the respondents, 66% indicated that they had specialized training in serving linguistically diverse students; yet 60% of the respondents reported that they used standardized English language assessments when assessing linguistically diverse children. Not surprisingly, 42% indicated that they were uncomfortable with the reliability of their evaluations of linguistically diverse students. Of respondents, 76% reported that they believed linguistically diverse students were disproportionately identified as having speech-language or learning disabilities.

At the time of the 1996 survey there were fewer ELLs in Colorado schools; still, this population was beginning to appear on SLP caseloads. Although 66% of respondents indicated they had received training in assessing or serving children from diverse backgrounds, 34% had not received any diversity training. In addition, more than half of the respondents used standardized English language assessments in their assessments of ELLs. When assessing ELLs, most of the SLPs questioned either the reliability of their assessment or the accurateness of the determination of disability and qualification for special education services.

The survey described above was completed more than 10 years ago. There certainly have been substantial changes in the demographic makeup of students in U.S. schools during this time. There also have been significant changes in the special education referral and assessment process with the implementation of the response to intervention (RTI) model that was mandated with the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) in 2004. Based on the RTI model, when there are concerns about a child's development, general educators and special education providers collaborate in developing and providing an intensive targeted intervention that redefines a child's general education instruction and targets specific areas of need. RTI includes a focus on implementing scientifically based instruction, high fidelity of intervention, and documenting child responsiveness and progress. In the state of Colorado, the Department of Education has recommended that professionals with knowledge about linguistic diversity be included on RTI teams so that variables associated with second language development are considered and effective ELL teaching strategies are implemented (Colorado Department of Education, 2008).

It is not known how the dramatic increases in diverse student enrollment and RTI-mandated practices have affected SLPs' practices with CLD students.

The current study was designed to describe SLPs' practices in an area of the country that has experienced substantial growth in CLD populations. To this end, a survey was developed (a) to gain a better understanding of the characteristics, backgrounds, and caseloads of SLPs working in Colorado; (b) to determine the amount and type of diversity training SLPs have received; and (c) to describe SLPs' professional perspectives on serving CLD populations, including confidence, practices, and challenges reported. In addition, comparisons are made between a 1996 survey of Colorado SLPs and the current survey to determine if there have been notable changes in the past decade. And finally, comparisons are made and implications described for other areas of the country that have high enrollment of CLD students.

Method

Participants

Participants were recruited through the Colorado Department of Education SLP email list. This email list primarily included SLPs serving children in Colorado schools; however, it also included some members from universities, from early intervention teams, and in private practice. To address this issue, the letter of invitation provided to prospective participants specified that the survey was intended for SLPs practicing in public schools in Colorado. An estimated 500 Colorado SLPs were emailed the letter of invitation and the link to the electronic survey.

Survey

In developing the survey, the researchers reviewed and selected numerous surveys that other researchers had used nationally or in other areas of the country. The 52-question survey included 46 questions from Kohnert et al.'s (2003) survey, 4 questions from Kritikos's (2003) survey, and 2 questions on code switching that the second author included as part of a thesis study. The researchers organized the survey into three sections: background information, diversity training, and professional perspectives. Survey questions included yes-no, multiple-choice, and Likert-type scale responses and some open-ended questions. The survey used in the current study is presented in the appendix.

Procedures

An invitation to participate in the study was emailed to Colorado SLPs through a Colorado Department of Education SLP email list. The letter of invitation included a brief description of the study, indicated that participation in the study was voluntary and anonymous, and included the contact information for the first author. If prospective

participants consented, they were instructed to click on an electronic link to a SurveyMonkey website where the survey was accessed by invitation only. Prospective participants had access to the electronic survey for approximately 1 month. Each question was presented individually, except in the cases where questions required multiple responses. Participants could skip any of the survey questions or parts of questions. To progress to the next question participants clicked an arrow at the bottom of the screen. The survey took an estimated 5 to 10 minutes to complete. After 1 month the researchers deactivated the survey link.

Scoring and Data Analysis

After the survey was deactivated, results were downloaded into an SPSS file for analysis. The downloaded file included each participant's coded responses for each of the Likert-type or multiple-choice questions and descriptive responses to open-ended questions. Descriptive statistics (percentages, means, standard deviations, and distributions) were calculated separately for each of the survey questions based on the total number of respondents for each survey item. Like Kohnert and colleagues (2003), the researchers used repeated items and parallel items as an index of interrater reliability. They found no significant differences on the two sets of questions used for interrater reliability. Based on these results, the survey appeared to have good reliability.

Results

A total of 154 Colorado SLPs completed the survey anonymously, resulting in an estimated 30% response rate. Since participants were allowed to skip answering questions or parts of questions, the number of responses varied by questions from 154 to 112.

Background Information

Characteristics of respondents. Table 1 presents information on respondents' characteristics. Of the respondents, 97% were White. The age of the participants varied; 50- to 59-year-old respondents were the largest group (representing 35% of respondents). A majority (43.5%) of the survey participants had been practicing as SLPs for more than 15 years, and 20% had been practicing 6 years or less. The majority of the SLPs (88.2%) were members of ASHA. Of the respondents, 11% could speak a language other than English fluently; however, only 6% reported that they were proficient in writing in a second language. Of the 18 respondents who were bilingual, 15 reported that they spoke Spanish; other languages included French, Czech, German, Hebrew, and American Sign Language.

Table 1. Participant Characteristics

Characteristic	<i>n</i>	%
Age (years)		
20–29	19	12.3
30–39	41	26.6
40–49	34	22.1
50–59	54	35.1
> 59	6	3.9
Years employed as an SLP/SL specialist		
1–3	14	9.1
4–6	17	11.0
7–10	25	16.2
11–15	31	20.1
> 15	67	43.0
Racial/ethnic background		
White	147	97.4
Asian	1	0.7
African American	0	0
Native American	0	0
Hispanic	4	2.6
Other	1	0.7
Skipped question	3	1.9
Bilingual status		
Bilingual	18	11.7
Not bilingual	136	88.3

SLP = speech-language pathologist.

Caseload diversity. Caseload diversity was considered among two dimensions: race and linguistic diversity. Only 17% of the respondents indicated that their caseloads were primarily White (75% or more). This means that the majority (83%) of the respondents reported working with a substantial number of racially diverse children and families. Nearly 75% of the respondents indicated that they had a sizable number of Hispanics on their caseload, with one third of respondents indicating that up to a quarter of their caseload were children from Hispanic backgrounds. African Americans were the next largest racial group on caseloads, with 12% of respondents indicating that they had caseloads that included African Americans. Asians, Black Africans, and Native Americans were also represented on caseloads, but at much smaller percentages.

Caseloads also varied in terms of linguistic diversity. Roughly half the respondents had caseloads that included 75% or more English-speaking children. At the same time half of the respondents indicated that they had a sizable number of Spanish-speaking children on their caseloads (10% to 75% or more of caseloads). Other linguistic groups (including African American English, Russian, Hmong, Somali, and Vietnamese speakers) were also represented on caseloads, each representing less than 10% of caseloads. Altogether, respondents indicated that 21 additional languages were represented on their caseloads.

Diversity Training

Of the respondents, 72% indicated that they had specialized training in providing services to individuals with diverse cultural or linguistic backgrounds. This training was provided through professional workshops, school districts, and graduate school.

Speech-language pathology coursework. In terms of specific diversity coursework in speech-language pathology, approximately 40% of the respondents indicated that they completed coursework that included the topics of second language acquisition or communication patterns in cultures where languages other than English are spoken. Of the respondents, 67% indicated that they completed coursework that included the topic of language disorder versus difference; however, only a quarter of the respondents indicated that they completed coursework that included information on assessing children from linguistically diverse backgrounds. Even a smaller percentage (21%) received coursework that included information on how to utilize an interpreter.

Continuing education received. Participants indicated that they received training on a variety of topics through continuing education, in-service trainings, and workshops. Nearly 70% of the respondents indicated that they received training on second language acquisition or language disorder versus language difference. Half of the respondents indicated that they received training on considerations for differential assessment of monolingual versus bilingual children, and 38% received training that included information on how to utilize an interpreter.

Professional Perspectives

Confidence. More than 70% of the respondents reported that they were comfortable assessing and treating individuals from a cultural or racial background different from their own. Yet only 51% reported that they were competent in assessing or treating bilingual or multilingual clients. There seems to be a mismatch between SLPs feeling comfortable with assessing cultural and racial minorities and their sense of competence in assessing and treating bilingual or multilingual clients. This mismatch may reflect that SLPs are becoming more knowledgeable and comfortable with cultural aspects of their caseloads, but they may not feel competent making clinical decisions with linguistically diverse populations. Given this pattern, it is not surprising that 85% of respondents reported that they prefer to work with specialists in bilingualism when working with individuals from linguistically diverse backgrounds.

Practices. Of the respondents, 60% indicated that they used the services of an interpreter for assessment or treatment of children from CLD backgrounds, with the majority of respondents using a professional interpreter or other

Table 2. Most Frequently Reported Challenges in Serving Children From Culturally and Linguistically Diverse Backgrounds

Challenge	% of respondents
Do not speak the child's language	81
Lack of knowledge of developmental norms in the child's language	75
Lack of appropriate assessment/screening instruments	74
Lack of relevant research	72
Lack of other professionals who speak child's language	72
Lack of treatment materials in other languages	70
Lack of methods to separate a language difference from a language disorder	63
Lack of interpreters and translators	55

school personnel. Only 14% reported using a family member or friend of the client, this is a notable difference from the results of the 1996 survey, where 40% of respondents reported using family members for interpretation. Still, only 25% of respondents reported that they felt competent in assessing a child's language development with the help of an interpreter. This lack of confidence and the fact that roughly two thirds of respondents have not received training on how to effectively utilize an interpreter reflect that SLPs may need more training to learn strategies on how to effectively utilize an interpreter.

In terms of practices in assessment, the vast majority of SLPs reported using standardized assessments for native English speakers, whereas only 24% used standardized assessment (in English or in the student's first language) with CLD students. This seems appropriate given that a very small percentage of respondents reported that they were bilingual and thus would not be qualified to administer standardized testing in the child's first language, and the use of standard scores from a tool normed on an English-speaking children would not be appropriate for use with CLD student. This also reflects a change in practice from the time of the 1996 survey, when 60% of respondents used standardized English language assessment tools with CLD students. This change in practice is likely reflective of national and statewide educational efforts that have addressed the risk of *false positives* when inappropriately using standardized assessment measures with CLD populations. Still, nearly 75% of respondents reported that the lack of appropriate assessment and screening tools was a challenging aspect of assessing CLD students.

Challenges. A number of other aspects of working with CLD populations were also challenging for the respondents. Table 2 presents the eight most frequent challenges reported. Approximately 81% of the respondents reported

that not speaking the client's language was challenging and that the lack of other bilingual professionals (including psychologists and special education teachers) was also challenging. More than half of the respondents reported that the lack of access to interpreters could also be challenging in appropriately meeting the needs of children from CLD backgrounds. And finally, the lack of appropriate assessment tools and the lack of knowledge of developmental norms in linguistic minorities were areas of challenge for approximately 75% of the respondents.

Discussion

The purpose of this study was to describe the backgrounds, diversity training, and professional perspectives of SLPs working in Colorado; to compare the results from the 1996 and 2009 surveys; and to describe implications for practitioners in Colorado and similarly diversely populated states.

Background

Of respondents, 97% were White and 11% reported that they were bilingual. Based on these results, it seems that the racial composition of SLPs in Colorado mirrors the national composition. Over the past decade there has been substantial growth in the number of linguistically students represented on SLPs' caseloads; essentially all districts in Colorado now report having ELLs enrolled. Caseload data from the current survey parallel statewide trends, with the largest segment of minority and ELL students on SLP caseloads being of Hispanic backgrounds. Similar trends are observed in neighboring states in the Southwest.

Diversity Training

Of respondents, 72% indicated that they had received specialized training in how to provide services to CLD populations. This likely is the result of efforts by the state Department of Education and ASHA to provide continuing education opportunities for in-service SLPs. Multiple respondents indicated that they had participated in an ongoing Colorado Department of Education training workshop titled English Language Learners with Exceptional Needs. This four-part module training provides in-depth information on language and culture, assessing and monitoring progress, effective instructional practices, and meaningful involvement of parents and families. Conversely, it appears that strategies for utilizing interpreters is an area in which relatively few SLPs in this study indicated receiving training in their graduate coursework or continuing education workshops.

Professional Perspective

Respondents from the current survey reported that they were comfortable working with *racially* and *culturally diverse* students but that they had less competence with *linguistically* diverse populations. Although most of the respondents indicated that they received training in stages of second language development and differentiating language difference from language disability, they also reported that the lack of information on clients' first language and bilingual development is challenging. This difficulty in assessing linguistically diverse children may reflect the complexity that is involved in understanding variables related to bilingual language development, such as shifts in language proficiency over time, language loss, language fossilization, cross-linguistic influences on language development, and other variables that have an impact on bilingual and ELL language development.

Another interesting professional perspective was concerning assessment practices. Since the 1996 survey was administered there was a decrease in the use of standardized assessment in English with CLD children. This change certainly will result in improved assessment and decrease the likelihood of false positives and the inappropriate placement of CLD students into special education programs. At the same time, respondents from this survey and others have identified that there is a continued need for more assessment and screening tools to use with children from CLD backgrounds.

In 1996, respondents indicated that the lack of interpreters was an issue; this may have driven the use of family members as interpreters, which is less than ideal (Perez-Mendez & Moore, 2005). Based on the results from the current survey, there still is a reported shortage of interpreters; yet SLPs also reported that they were able to access a variety of other school staff to assist with interpretation. Although respondents from the current survey reported increased usage of interpreters, they also reported that they felt less competent when using an interpreter. This clearly points to the need to provide specialized training in how to utilize interpreters effectively.

Comparison of the 1996 Survey and the Current Survey

Table 3 presents results obtained on select question from the 1996 survey and results for those same items on the 2009 survey. Although it is unclear if the same participants responded to both surveys, the goal of making these comparisons is to gain a broad sense of how the practices and beliefs of school-based SLPs as a group has changed over the past 13 years. The percentages of respondents who reported that they were bilingual were comparable in 1996 and 2009. A slight increase was observed in the percentage

of SLPs reporting that they had received training in assessing and serving students from CLD backgrounds. Conversely, a rather large increase was observed in respondents' confidence in assessing and treating bilingual or multilingual clients (with 11% reporting confidence in 1996 and 51% reporting confidence in 2009). A major decrease was observed in the percentage of SLPs who reported using standardized English assessments with CLD students. And finally, in 2009 a higher percentage of respondents reported using interpreters, but fewer respondents reported that they used family members or family friends for interpretation.

Implications for States With Increasing or High ELL Enrollment

The current study provides implications not only for practitioners in Colorado but also for practitioners from states with similar population trends. Specifically, the results from the current study are relevant to other destination states that have recently experienced a large growth in ELLs. The destination states include states in the South (Arkansas, Tennessee, Alabama, Georgia, South Carolina, and North Carolina), Midwest (Indiana and Nebraska), and Southwest (Colorado and Nevada). According to national data, personnel in some of these states, especially those in the Midwest and South, may not have had prior experiences serving ELL students or training in diversity. A survey completed by Roseberry-McKibbin et al. (2005) of more than 1,400 school-based SLPs across the United States revealed that nearly half of the SLPs from the South and Midwest reported that they had no coursework in service delivery to CLD populations. Respondents in these regions also reported more frequent problems in adequately serving ELL populations. Results from the current study indicate that continued diversity training does result in changes in practice.

The results from the current survey are also relevant to neighboring states in the Southwest and West. In all of the Southwest and many of the states in the West, ELLs represent more than 10% of students enrolled in public schools (U.S. Department of Education, 2006). Roseberry-McKibbin et al.'s survey (2005) also revealed that SLPs from the Southwest and West had significantly more ELLs on their caseloads and had significantly more diversity training than SLPs from other areas of the country. However, results from the current study suggest that even those SLPs who have received diversity training need additional specialized training to refine their practice with CLD students. This idea is consistent with the notion that cultural intelligence is an ongoing process that continues throughout one's lifetime (Cheng, 2007; Robertson, 2007). A concerns-based adoption model (Hall & Hord, 2005) may help better understand how knowledge and practices evolve over time before consistent implementation. According to this model, when practitioners are exposed to innovative strategies to address

Table 3. Comparison of Percentage of Respondents by Five Survey Items

Survey item	% of respondents	
	1996	2009
Reported as fluent bilingual	13	11
Received training in assessing/serving students from CLD backgrounds	66	72
Reported competence in assessing/treating bilingual or multilingual clients	11	51
Reported using standardized English assessment on students from CLD backgrounds	60	24
Reported use of interpreter	42	60
Utilized family member or family friend to interpret	40	24

CLD = culturally and linguistically diverse. Items from 1991 and 2009 surveys of Colorado speech-language pathologists.

areas of concern, they progress through predictable stages. Initially the new knowledge is not adopted or used. Next, a general level of awareness of the new knowledge is developed. Eventually, the knowledge is mastered and consistently applied, until finally the knowledge is adopted, refined, and shared with others (Hall & Hord, 2005; Moore, Perez-Mendez, & Guiberson, 2006). Based on this model, multiple doses of training to support SLPs in their practices with CLD populations are needed for changes in practice to be mastered and refined.

Limitations

This study included respondents from the state of Colorado only; however, results from this study seem to parallel results from other regional and national surveys. Furthermore, one of the goals of this study was to compare the current practices of SLPs to those from the 1996 survey of Colorado SLPs; unfortunately, it is not clear how many of the respondents in the current survey also participated in the 1996 survey. Information about the university programs that respondents graduated from would have also been interesting information to gather. Despite these shortcomings, this study did provide useful information about SLPs' backgrounds, diversity training, and professional perspectives.

Conclusions

One of the goals of this study was to determine how far SLPs have progressed over the past decade in improving services to CLD children in Colorado. Table 3 presents some of the changes this study uncovered between 1996 and 2009. Changes included an increase in competence in assessing and treating bilingual or multilingual clients, a decrease in using standardized English assessment on

students from CLD backgrounds, and a decrease in utilizing family members or friends as interpreters. These results seem to reflect the fact that over the decade many SLPs practicing in Colorado have developed what some have called cultural intelligence, or CQ (Cheng, 2007). At the same time, nearly half of the respondents indicated that they were not competent in assessing CLD students. This indicates that a continued effort in developing CQ and specific strategies in assessing CLD students is needed. Indeed, developing CQ is a lifetime journey, so continued training opportunities and experiences are still needed for practitioners to master, adopt, and refine practices.

It is also important to consider the changes in practice that have occurred since the 1996 survey as a result of the implementation of the RTI model that was mandated with the reauthorization of IDEA in 2004. It is likely that SLPs have modified their assessment and intervention approaches as they collaborate with ELL teachers and other general educators. However, the survey did not include specific questions about collaboration with ELL teachers or influences of RTI on practices with CLD students. Nonetheless, for RTI teams to be successful with CLD students, they need to include professionals who are knowledgeable about linguistic diversity, they need to provide tailored and intensive instruction for children who are ELLs, and families need to be included in the RTI process so that they can participate in these important conversations (for a review, see Guiberson, 2009).

With the progress the current study describes, the question now becomes, what are the next steps for SLPs in refining practices to improve the quality of services to CLD children? Results from the current survey suggest that SLPs in Colorado need more training in effectively utilizing interpreters. Perez-Mendez and Moore (2005) provide specific strategies that professionals can use when accessing the services of an interpreter. These include developing a team approach with the interpreter, accessing well-trained and biliterate interpreters, planning before sessions and debriefing afterward, and identifying the specific type of interpretation that will be utilized (e.g., simultaneous translation, summarizing translation, consecutive translation, or sight translation). Perez-Mendez and Moore further recommend that practitioners collaborate with cultural mediators, who are not only interpreters but also cultural brokers who assist professionals in establishing trusting relationships with families. This model allows the cultural mediator to collect and share important information while enlisting the parent's help in the child's assessment and educational planning. A common thread that seemed to resurface in effectively utilizing interpreters is that effective interpretation or cultural mediation requires specialized training (of staff and interpreters) and extra time. By adequately dedicating resources and time to implement these strategies, practitioners will likely gain an improved sense of

confidence in working with children and families from diverse backgrounds.

A second step that SLPs can take to improve their services to CLD students is to hire bilingual SLPs as district wide consultants. An overwhelming majority of respondents from the current survey indicated that SLPs preferred working with professionals who are specialists in bilingualism. The practice of hiring bilingual SLP specialists would not be implemented to relieve other SLPs of their responsibilities but rather to *coach* these SLPs through assessment and educational planning. Coaching is strengths based, which allows professionals to reach their individualized teaching goals and supports the larger goals of adequately serving children and families (Drake, 2003). The strategy of coaching has been effective with ELL teachers and special education teachers (Guiberson, 2009). Teachers who attend professional development workshops on linguistically diverse learners have reported that workshops that include *hands-on* practice with a coach or mentor in their classrooms are most helpful (August & Siegel, 2006). A bilingual SLP specialist would ideally provide coaching for all aspects of professional services provided to children,

including screening and assessments, planning and implementing services for children, monitoring child progress, and modifying intervention approaches.

Finally, there clearly is a need for relevant clinical research that will provide clinicians with evidence-based practices that can be implemented in the field. This research should include continued descriptions of developmental norms in CLD populations, evidence-based screening and assessment procedures, and research-based intervention methods and approaches. The shortage of appropriate screening and assessment tools in particular seems to be an area that can be addressed by developing assessment tools and documenting their diagnostic accuracy with linguistically diverse populations.

In summary, results from this study indicate progress has been made in serving children from CLD backgrounds. Demographic trends point toward a consistently increasing diverse caseload in public schools not only in Colorado but also across the nation. In the next 10 years SLPs should expand their knowledge base on CLD populations, continue to receive training or coaching in serving CLD populations, and continue to refine their everyday practices with this population.

Appendix (continued)

Survey Employed for the Study

BACKGROUND INFORMATION

My racial/ethnic background is:

- | | |
|--|---|
| <input type="checkbox"/> White | <input type="checkbox"/> African American/Black |
| <input type="checkbox"/> Hispanic | <input type="checkbox"/> Asian |
| <input type="checkbox"/> American Indian/Native American | <input type="checkbox"/> Other |

My age is:

- | | | |
|--------------------------------|--------------------------------|--------------------------------|
| <input type="checkbox"/> 20–29 | <input type="checkbox"/> 30–39 | <input type="checkbox"/> 40–49 |
| <input type="checkbox"/> 50–59 | <input type="checkbox"/> > 59 | |

I have been employed as an SLP/SL specialist for

- | | | |
|--------------------------------------|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> 1–3 years | <input type="checkbox"/> 4–6 years | <input type="checkbox"/> 7–10 years |
| <input type="checkbox"/> 11–15 years | <input type="checkbox"/> > 15 years | |

I am a member of ASHA

- Yes No

I speak a language other than English fluently.

- Yes No

If yes, which language(s) do you speak? _____

(continued)

Appendix (continued)

Rate your proficiency in the language other than English for the following domains:

Listening

not proficient somewhat proficient proficient very proficient

Speaking

not proficient somewhat proficient proficient very proficient

Reading

not proficient somewhat proficient proficient very proficient

Writing

not proficient somewhat proficient proficient very proficient

Please indicate the percentage of individuals on your caseload who are:

	< 10%	10–25%	26–50%	51–75%	> 75%
White					
Hispanic					
African American					
Black/African (e.g., Somali)					
Asian					
Native American					
Other					

Please indicate the percentage of individuals on your caseload who speak the following languages as their first language:

	< 10%	10–25%	26–50%	51–75%	> 75%
English					
African American English					
Russian					
Hmong					
Somali					
Spanish					
Vietnamese					
Others					

Specify other languages represented on your caseload _____.

DIVERSITY TRAINING

I have had specialized training in providing services to individuals from diverse cultural or linguistic backgrounds.

Yes No

If yes, the specialized training was provided by (Check all that apply) :

graduate program mentorship from other SLP professional workshop
 employer (e.g., school district) other

Have you had any speech language pathology coursework that addressed the following issues? (Check all that apply)

Second language acquisition
 Communication patterns in cultures where a language other than English is spoken

(continued)

Appendix (continued)

- Considerations for differential assessment of monolingual versus bilingual children
- Assessment tools for bilingual individuals
- Differentiating language disorder from language difference
- Laws/guidelines involved in the assessment and treatment of bilingual clients
- How to utilize an interpreter

Have you attended any in-services or professional workshops that addressed the following issues? (Check all that apply)

- Second language acquisition
- Communication patterns in cultures where a language other than English is spoken
- Considerations for differential assessment of monolingual versus bilingual children
- Assessment tools for bilingual individuals
- Differentiating language disorder from language difference
- Laws/guidelines involved in the assessment and treatment of bilingual clients
- How to utilize an interpreter

PROFESSIONAL PERSPECTIVE

In the past two years I have used the services of an interpreter for assessment and/or treatment.

- Yes No

If yes, the number of times I have used an interpreter in the past two years is

- 1–5 times 6–10 times >10 times

These interpreters were most often: (check all that apply)

- Family members/Friends of Clients Professional interpreters
 Community member Other school personnel Paraprofessional

With the help of an interpreter, how competent do you feel in assessing an individual’s language development in a language that you do not understand or speak?

- Not competent Somewhat competent Competent Very competent

Please use the scale below to react to Statements a–r:

1 = strongly disagree 2 = disagree 3 = no opinion 4 = agree 5 = strongly disagree

	1	2	3	4	5
I am competent assessing and treating bilingual/multilingual clients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compared to other speech-language specialists, I am very skilled in clinical interactions with culturally and linguistically diverse clients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am comfortable assessing and treating an individual from a cultural or racial background other than my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special knowledge and training is needed in order to provide services to foreign-born clients who want to improve their English skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communication skills may vary across cultures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A course in cultural and linguistic diversity should be required for graduate students in speech-language pathology programs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I could benefit from post-graduate training in cultural/linguistic diversity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special knowledge and skills are needed to diagnose or treat individuals from non-mainstream backgrounds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(continued)

Appendix (continued)

Clinical Competence is related to cross-cultural knowledge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have sufficient training to be able to adequately serve the clients on my caseload.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In assessment with mainstream, English speaking populations, I rely on the results of standardized assessments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In assessments with culturally and linguistically diverse children, I rely on the results of standardized assessments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Code switching is a normal behavior for a bilingual child to exhibit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bilingual and multicultural issues should be considered specialty areas of clinical practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bilingual and multicultural issues should be an integrated part of graduate programs in speech-language pathology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bilingual and multicultural issues should be taught as a special course in graduate programs in speech-language pathology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When serving culturally and linguistically diverse clients, I prefer to collaborate with another professional with specialty in ELL or bilingualism.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Code switching is indicative of language deficiency or language confusion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you provide clinical services to individuals who are from culturally and/or linguistically diverse backgrounds, please indicate the frequency with which you encounter the challenges indicated in Items a–r:

1 = rarely 2 = sometimes 3 = often 4 = usually 5 = almost always

	1	2	3	4	5
a.) Lack of appropriate assessment instruments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.) Lack of information available to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.) Lack of appropriate assessment/screening instruments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.) Lack of treatment materials in other languages.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.) Don't speak the language(s) of the client.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.) Lack of knowledge of individual's cultural characteristics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.) Lack of knowledge of the nature of second language acquisition in children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h.) Lack of general knowledge of bilingualism.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.) Lack of other professionals who speak individual's languages (e.g., special education teachers, psychologists).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j.) Lack of other professionals who are knowledgeable in working with individuals from culturally diverse backgrounds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k.) Lack of methods to separate a language difference from a language disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l.) Lack of interpreters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m.) Lack of knowledge of the developmental norms in the child's first language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n.) Lack of relevant research.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o.) Limited family resources (e.g., transportation, insurance).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p.) Lack of knowledge regarding appropriate procedures for treating individuals from non-mainstream cultural groups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q.) Lack of knowledge regarding low family/client literacy (in any language).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r.) Language knowledge of the developmental norms in the individual's first language.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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