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Exploring Language Services Provided to Culturally and Linguistically Diverse Students
with Autism Spectrum Disorders in the State of Utah

Jeannie Irene Zwahlen

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Science

Tina T. Dyches, Chair
Martin Fujiki
Blake Hansen
Stefinee Pinnegar

Department of Counseling Psychology and Special Education
Brigham Young University

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ABSTRACT

Exploring Language Services Provided to Culturally and Linguistically Diverse Students with Autism Spectrum Disorders in the State of Utah

Jeannie Irene Zwahlen
Department of Counseling Psychology and Special Education, BYU
Master of Science

Because several challenges exist when providing English as a Second Language (ESL) services to culturally and linguistically diverse (CLD) students with autism spectrum disorder (ASD), such services may be overlooked in deference to other educational needs. Therefore, this study used a survey to obtain information from 121 special education teachers in the state of Utah to explore the types of ESL services offered to CLD students with ASD.

Results indicated that only 30% of the special educators participating in the study provide second language services in their classrooms. Results also show that language services provided by speech language pathologists are typically provided in English only and do not address second language needs.

Almost 80% of participants agree that it is important to provide ESL/Bilingual services to CLD students with ASD. Lack of training, lack of use of second-language materials and difficulty ensuring appropriate placement are cited as challenges faced by participants when working with CLD students with ASD.

This study suggests that CLD students with ASD in Utah are not receiving appropriate language services. Results show the need for improvement in teacher training and provision of second language materials and resources for special education teachers.

Keywords: English language learners; culturally and linguistically diverse students; bilingual students; autism spectrum disorder

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DESCRIPTION OF THESIS STRUCTURE

This thesis, *Exploring Language Services Provided to Culturally and Linguistically Diverse Students with Autism Spectrum Disorder in the State of Utah* is written in a format that reflects both the university requirements for a master's thesis and the format of a journal-ready article.

This thesis begins with a journal-ready article that is prepared with content and standards required for a peer-reviewed journal related to students with autism spectrum disorder and cultural/linguistic diversity. The extended literature review is included in Appendix A. A copy of the consent to participate in the study is included in Appendix B. A copy of the survey instrument used in this study is included in Appendix C.

Introduction

Students with Autism Spectrum Disorders (ASD) who are also culturally and linguistically diverse (CLD) have the right under the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 to a free and appropriate public education. For CLD students with ASD, this includes second-language instruction. However, because students with ASD require specialized instruction and often qualify for special education based on their disability, other aspects of their identity such as race or cultural background may be overlooked.

Several challenges exist when providing services to CLD students with ASD. Educators are faced with the challenge of assessing students and determining educational placement. Language plays a large part in this process. If students have a primary language other than English, IDEA requires that educators consider this language during the determination of eligibility and as they develop the Individualized Education Program (IEP). According to a report submitted to the U.S. Office of Education (Zehler, Fleischman, Hopstock, Pendzick, & Stephenson, 2003), special education providers typically take responsibility for development of the IEP with little input from the English as a Second Language/Bilingual service providers.

The choice of language used to teach CLD students with ASD becomes even more important because they are likely to learn at an uneven or much slower pace than other students with ASD, and possibly will not produce any meaningful spoken language. Due to deficits in both expressive and receptive language, CLD students with ASD do not or have difficulty acquiring language through typical social and linguistic interactions (Mueller, Singer, & Carranza, 2006). This makes it even more important to assist them in learning to communicate effectively in relevant environments. Receiving instruction in their native language may assist them in functioning within their families and communities (Crockett, 2006).

Harry (2002) points out that professionals must consider the family culture as they collaborate with parents as part of the IEP process. Parents of CLD students often demonstrate their involvement in their child's education differently than parents in the mainstream culture (Arias & Morillo-Campbell, 2008). Educators must consider how each family's culture and experience with education affects their approach to their students' schooling and seek input on what services parents feel are important for their student. In these interactions, it is critical that information and resources are provided in the native language of the parents (Panferov, 2010) and that parents are given access to the educational system in which their child participates.

Extensive research has been conducted to develop evidence-based practices for teaching CLD students, such as high expectations, positive relationships with families and communities, and cultural sensitivity (Schmidt & Ma, 2006). Other practices may include using active teaching methods (involving students in a variety of learning opportunities that use all types of learning), having the teacher act as facilitator (presenting information and allowing students to work in small groups to create better understanding), having students control portions of the lesson, and providing instruction in pairs and groups.

These practices have also been effective in assisting CLD students who have learning disabilities as they develop both their primary language and English as a second language (Utley, Obiakor & Bakken, 2011). Providing a culturally responsive environment allows students to bridge their prior language and current knowledge to build new understanding. However, little research exists regarding services for CLD students with ASD.

Language development is an important factor in the education of CLD students with disabilities such as autism spectrum disorder. This study will explore the current services being provided to CLD students with ASD in the state of Utah. It will investigate what services are

being provided to CLD students with ASD and how those services are being delivered in special education programs in Utah schools. The research will explore what training and support is provided to educators working with this population of students, if educators indicate that training is sufficient, and what type of professional development and support they believe would help them more effectively serve the CLD students with ASD in their classes. This study will offer a brief overview of current practices and services provided to this population and what deficits might exist.

Statement of the Problem

Research shows that CLD students benefit from services providing second-language support and instruction. CLD students with ASD have more specific learning needs than typically developing students. As of 2013, reports show that 10% of the special education population in Utah is CLD students. Because research is limited in this area, there are not sufficient data to show what types of services are being provided for this population. A previous related study conducted by Crockett in 2006 surveyed both educators and SLPs. This survey is outdated and does not give data regarding specific classroom practices for students with ASD who are also CLD students. Developing communication skills can greatly impact this population's ability to function in the world. More research in this area will assist professionals in becoming more aware of what services are currently being offered in the classroom and where improvements can be made. This may help professionals who work with CLD students with ASD better understand how to meet both the learning and the language needs of this population.

Research is needed to understand what types of services are being offered, how services are provided, and what training and materials are available to professionals serving students in this area. Results from this study may help professionals understand what services are currently

provided and in what ways these services need improvement to better meet the needs of CLD students with ASD.

Statement of Purpose

This study investigated the provision of ESL/Bilingual services to CLD students with ASD, with three primary purposes. First, the purpose of this research was to examine the types of language services that are being provided to culturally and linguistically diverse students with autism spectrum disorders in the state of Utah, and the professionals who are providing these services. Second, information was gathered to indicate the type of qualifications and training that teachers have in providing these services. Finally, the research sought information regarding teachers' attitudes towards the importance of second language instruction with this population of students.

Research Questions

This study addressed the following research questions:

1. How many and what percentage of CLD students with ASD in Utah have ESL/Bilingual services on their IEPs?
2. If ESL/Bilingual services are listed on the IEPs of CLD students with ASD, who provides these services?
3. What types of ESL/Bilingual services are provided to CLD students with ASD?
4. What ESL/Bilingual materials and strategies are being used for CLD students with ASD in the classroom? With what frequency are they used?
5. What frequency and percentage of participants have received training in order to provide ESL/Bilingual services?

6. What are the relationships between participant demographic data with the provision of ESL/Bilingual services?
7. What type of training do participants find helpful in teaching CLD students with ASD?
8. What are participants' perceptions of ESL/Bilingual services for CLD students with ASD?

Method

This section describes the participants and procedures used to gather information regarding teachers of CLD students with ASD. It outlines how participants were selected and how responses were gathered and reported. The survey instrument used to gather information and data analysis procedures are also described.

Participants

Participants in this study were drawn from the population of 1896 special education teachers in the state of Utah who work specifically with students who have ASD ages 5-22. The recruitment letter specifically sought teachers of CLD students with ASD. This includes special educators working with students with ASD in various educational settings. Contact information for these participants was obtained from the school websites of each public school, including charter schools, in Utah. Emails were sent to all special educators. Participants were sent the link to the survey on Qualtrics and then given two follow-up emails to encourage participation in the study. Only two of the 1896 emails sent were returned as inaccurate email addresses.

Three hundred and ninety-seven (20.9%) of the 1896 surveys sent to special educators in Utah were completed. If participants' responses showed that they did not currently work with

students with ASD, they were not included in the study. Of the 397 surveys, only 121 teachers met the requirement of having students on their current caseload who are classified as both ASD and CLD. In order to be included in the study, the teacher had to have students who met both of these criteria.

Measures

The *Survey for Special Educators Working with CLD students with ASD in Utah* was designed specifically for special educators licensed and currently practicing in the state of Utah. This survey was modified from a previous survey conducted in 2006 as a dissertation study at the University of Utah (Crockett, 2006) focused on services for students with severe disabilities with the classifications of intellectual disability, multiple disabilities and autism. The original study surveyed both teachers and speech language pathologists (SLP). Modifications were made to survey only special educators and explore services specifically provided to CLD students with ASD and not other disability classifications. In addition, teacher perceptions of the need for CLD services and professional development are explored beyond the information provided in the Crockett study.

Because this study did not include SLPs, additional questions were added asking teachers to report on services provided by SLPs. More current Census race/ethnicity designations and questions about current classroom practices are also used in the current study. These modifications were necessary in order to gain information specific to this research study and to allow data to reflect more current Census designations and current classroom practices.

The survey instrument consisting of three sections was used to collect data pertinent to this study regarding teacher demographic data, CLD student data, and classroom information. The first section of the instrument consists of 15 questions and asked respondents to report on

their qualifications, their current classroom setting, and if they spoke any language other than English. Questions also explored the type of training teachers receive in order to work with CLD students and what types of professional development they believed would enhance their ability to provide services to their CLD students with ASD. Some of the questions in this section included: “What is the highest educational degree you have received?,” “Do you teach in a Title I school?,” and “What type of training would you find beneficial in working with CLD students with ASD?”

In the student information section of the survey, 12 questions were used to gather student data including student demographics, and primary and secondary language of students. Questions were asked to determine if CLD services are present on the student’s IEP, and what type of CLD services are listed on the IEP. Data were collected to determine if students are receiving the CLD services described on their IEP, frequency of services provided and who is providing students with these services. It also included questions regarding the qualifications and provision of services by the SLP with whom the teachers are currently working and addresses communication with parents of CLD students. Some examples of questions in this section include: “As a teacher, do you provide English as a Second Language or Bilingual instruction to your students?,” “Do any of your CLD students with ASD receive speech/language services from a certified speech language pathologist?,” “What strategies do you use to communicate with parents of CLD students with ASD?”

The final section of the survey gathered information regarding classroom practices and teacher perceptions. It asked respondents to describe materials in their classrooms, languages used for instruction, and strategies they use to address CLD students’ language needs. One of the questions asked teachers to rate their beliefs regarding the importance of language instruction

for CLD students with ASD. Data were collected using a Likert scale. It was analyzed to determine trends in participant perceptions. Descriptive data and percentages were used to help describe the trends and perceptions of participants. Other questions in this section include: “How much of the school day is a language other than English used in your classroom for instruction?” and “What are some of the challenges you face when providing services to CLD students with ASD?”

Procedure(s)

After receiving Institutional Review Board approval, the survey was administered using an online survey program, Qualtrics. An email describing this study and requesting participation was sent to the licensed special educators in the state of Utah (see Appendix B). Two weeks after the survey was sent, a follow-up email was sent thanking those who responded and encouraging those who had not responded to do so. One week after the follow-up email, another email was sent to those who had not yet completed the survey.

Research Design and Data Analysis

This study uses a simple correlational design to study relationships between variables, specifically teacher demographic variables and services provided to their CLD students with ASD. Descriptive data from 121 survey responses were used to answer the first five research questions. Correlational data were used to answer the final three research questions.

The following research questions were analyzed using frequency and percentage data. First, how many and what percentage of CLD students with ASD in Utah have ESL services on their IEPs. Then, if ESL services are listed on the IEPs of CLD students with ASD, who provides this service? Data were examined to determine the frequency and percentage of

specific types of ESL services provided to CLD students with ASD. Frequency data were also used to determine with what frequency specific ESL materials and strategies are being used within the classroom.

The variables of teacher training, ESL certification, teacher fluency in other languages and school demographic data are categorical data. A chi-square analysis was used to demonstrate if significant relationships exist between these variables and the provision of ESL services to CLD students with ASD. This analysis was used to determine if there is a significant relationship between ESL services that are provided to CLD students with ASD and teacher training or ESL certification. A chi-square analysis was also used to demonstrate if there is a significant relationship between provision of ESL services and teacher fluency in another language. This analysis compared demographic data to show if demographics of the school (e.g., Title I) are related to the provision of ESL services to CLD students with ASD. While analyzing the data, a p level at $<.05$ was considered a significant relationship.

Results

Participants' Demographic Information

Participants were asked, but not required, to provide basic demographic information. Therefore, not all 121 participants answered all of the demographic questions. For example, only 119 (98.3%) of participants indicated their gender, and only 40 (33%) indicated their ethnicity. One hundred and seven (89.9%) of participants were female. Only 4 (10%) of the participants described themselves as Hispanic or Latino. Of the 113 participants who reported their race as not Hispanic or Latino, 108 (94.7%) indicated they were White.

Twenty-six respondents (23%) reported that they spoke a language other than English. Respondents were able to list more than one language that they speak other than English. The

three most prevalent languages spoken by respondents were 15 participants who speak Spanish, 9 who use American Sign Language, and 7 who speak French. Three participants speak Italian, three speak Portuguese, and other languages were reported once (i.e., Bosnian, German, Hebrew, Korean, Navajo, and Russian). Twenty-nine percent reported linguistic proficiency as basic skills (0-40 words), 37.5% reported intermediate fluency (limited conversation), and 33.3% reported that they are fluent in a language other than English.

According to reports from the 121 participants, 221 of their students receive language services from an SLP, and another 87 receive services from a paraeducator under the direction of the SLP. Among those providing speech/language services, there are eight SLPs who speak another language fluently, four who speak at an intermediate level and two who have basic skills in another language. Languages spoken include 10 who speak Spanish, 1 who speaks Portuguese and 1 who communicates using American Sign Language.

Student and classroom setting demographics were also reported. Fifty-two (50%) of the participants in this study work with elementary students K-6. Fifty-six (49%) participants teach within a self-contained classroom and fifty-three (46%) work in a resource classroom. Participant demographic information is reported in greater detail in Table 1.

Table 1

Participant Demographics Reported as Frequency and Percentage Data

Demographic Information	n	%
Gender (n = 119)		
Male	12	10.1
Female	107	89.9
Ethnicity (n = 40)		
Hispanic or Latino	4	10
Not Hispanic or Latino	36	90
Race (n = 113)		
Black or African American	1	.8
White	108	94.7
Asian	2	1.7
American Indian/Alaska Native	0	0
Native Hawaiian/Other Pacific Islander	2	1.7
Age ranges of participants (n = 116)		
20-30 years old	23	19.8
30-49 years old	56	48.3
50 years and up	37	31.9
Age range of students on caseload (n = 103)		
Birth to 2	0	0
Preschool	0	0
Elementary (K-6)	52	50
Middle School/Junior High	30	29
High School	24	20
Post High School	2	2
Classroom setting (n = 115)		
Institution	0	0
Home	0	0
Self-contained school	4	3
Self-contained class	56	49
Resource class	53	46
General education class	2	2

Note. Two participants chose not to report any of their demographic information.

Students' Demographic Information

One hundred twenty-one participants indicated that they serve CLD students with ASD. A total of 207 CLD students with ASD were reported. Participants were asked to list the students' home language and number of students who speak each language. One participant reported Polynesian as a home language, which is not an official language but a general geographic area. This was included in the table. One participant reported "many" students with the home language of Spanish, but did not provide an actual number. Because it was not specific, these data were not included in the total number of students. An overwhelming majority of students, 171 (82.2%) described in this study speak Spanish, but there are 18 home languages used among this group of students (See Table 2).

Table 2

Home Language of CLD Students with ASD

Language	N	%
Arabic	3	1.5
ASL	2	1.0
Chinese	5	2.4
Ethiopian	1	0.4
Hmong	3	1.5
Japanese	1	0.4
Korean	4	1.9
Marshallese	1	0.4
Mie Mie	1	0.4
Polynesian	1	0.4
Russian	1	0.4
Samoan	1	0.4
Spanish	171	82.6
Swahili	1	0.4
Tagalog	1	0.4
Tongan	3	1.5
Urdu	1	0.4
Vietnamese	6	2.9
Total	207	100

Communication and language proficiencies and deficits of CLD students with ASD were an important factor in this study. Each participant was asked to rate the proficiency level for expressive and receptive communication skills of their students in both the student's home language and in English. Participants reported how many CLD students with ASD on their caseload had skills in each area. Participants included students in more than one area of proficiency, which accounts for the higher number of students reported. Table 3 uses frequency data to show a comparison of receptive and expressive language skills in English and in the native language of the CLD students with ASD. In the area of receptive language, participants reported that a higher number of students have basic or fluent skills in English than the number of students with basic or fluent skills in their native language. The same pattern was reported for expressive language, with more students having basic or fluent skills in English than the number of students with basic or fluent skills in their native language. The majority of students fall in the low range of receptive and expressive communication in their native language (See Table 3).

Table 3

Number of CLD Students with ASD in Each Skill Level for Receptive and Expressive Language

	Receptive Language Skills				Expressive Language Skills			
	English		Native Language		English		Native Language	
	N	%	N	%	n	%	n	%
Non-verbal	30	6.8	19	4.3	60	9.1	19	4.7
Low	95	21.6	210	47.9	196	30.0	177	44.0
Basic	157	35.8	138	31.5	172	26.3	131	32.6
Fluent	156	35.6	72	16.4	225	34.5	75	18.7
Total	438	100	439	100	653	100	402	100

Services Provided to CLD Students with ASD

This section answers research question 1, “How many and what percentage of CLD students with ASD in Utah have ESL services on their IEPs?,” and research question 2, “If ESL services are listed on the IEPs of CLD students with ASD, who provides this service?” In this analysis, n = number of participants who responded in each area and is defined for each specific service provider. Participants were allowed to mark all that applied.

Thirty (30%) special education teachers reported that within the classroom, they provide English as a Second Language or Bilingual instruction to their CLD students with ASD. Thirty-four (35%) have students who receive additional English language instruction from an ESL certified instructor, and 11 (11%) have students who receive instruction from an ESL paraeducator under the supervision of the ESL certified instructor. Only five (5%) of teachers

have students with services provided by Bilingual certified instructors, with six (6%) who report that students receive instruction from a Bilingual paraeducator under the supervision of the certified instructor. Eighty-two (85%) participants reported that the SLP provides language services for CLD students with ASD on their caseload, and 20 (21%) reported language services provided by a paraeducator working under the supervision of the Speech Language/Pathologist.

Frequency data show the number of students receiving services from each type of service provider. Participants were asked to report how many students on their caseload receive direct services from each type of provider. Classroom teachers were only asked if they provided this service, a number of students receiving services in the classroom was not reported. This information is indicated in Figure 1.

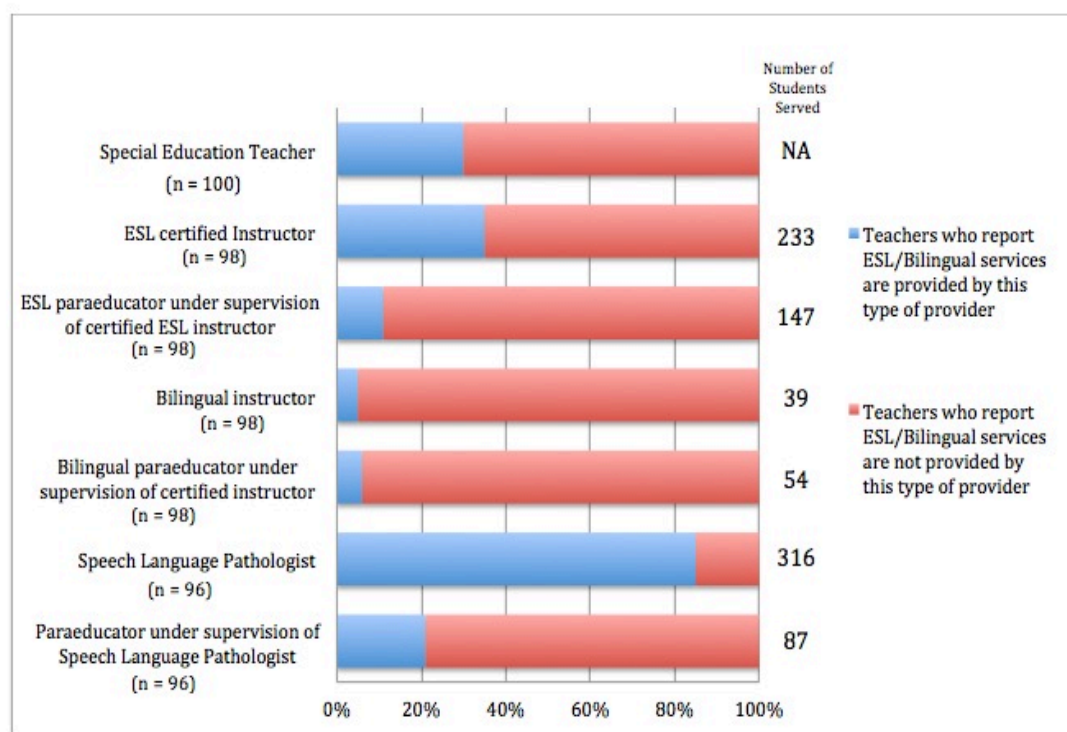


Figure 1. Who provides language services for CLD students with ASD.

To answer research question 3, “What types of ESL services are provided to CLD students with ASD?” 119 participants indicated how each service provider participates in the student’s educational program. The involvement of these individuals was analyzed using frequency and percentage data for six categories: assessing educational needs, participating in developing the IEP, designing the lesson plan or instructional program, providing instruction, training classroom staff to provide services, and consulting with the classroom teacher. An option of “Other” was provided. Only one participant chose to add information and that participant stated that due to their own ESL endorsement, all services were provided in the classroom. Only 26 respondents reported the ability to speak a language other than English. Only nine of those who speak another language speak that language fluently. If the first language of the student is not spoken fluently by the educator, bilingual services cannot be provided in the classroom. Percentages were based on the number of teachers who reported that they had students receiving this service and not on the number of students served by these providers. In this analysis, n = number of service providers working with CLD students with ASD and is defined for each specific service provider. Participants were able to mark all that applied.

The information in Table 4 shows that the ESL and Bilingual certified instructors are frequently involved in many areas of the student’s educational program. Paraeducators are most commonly reported as providing instruction (ESL 45.5%; Bilingual 50%) or consulting with the classroom teacher (ESL 45.5%; Bilingual 50%). The area least often addressed by service providers is training for classroom staff to provide services with only 23.5% of ESL certified instructors providing training and 20% of bilingual certified instructors providing training to classroom staff.

Language services provided by SLPs reported in Figure 1 do not specify whether those services are provided in the native language of the student or in English; therefore, it is not clear whether the SLPs were providing language intervention in English, language intervention in the students' native language, or ESL/Bilingual services. Further information gathered showed that 80 out of 81 students receive speech/language services from the SLP only in English. The one student out of 81 is reported to receive equal parts English and native language services. Of the 20 students receiving services from a paraeducator under the direction of the SLP, all 20 are provided services in English only.

Table 4

How Service Providers Participate in the Educational Programs of CLD Students with ASD

	ESL certified instructor (n = 34)		ESL paraeducator under supervision of certified ESL instructor (n = 11)		Bilingual instructor (n = 5)		Bilingual paraeducator under supervision of certified instructor (n = 6)	
	N	%	n	%	n	%	n	%
Assess educational needs	23	67.6	3	27.3	3	60	0	0
Participate in developing the IEP	25	73.5	1	9.1	2	40	0	0
Design lesson plans or instructional program	15	44.1	1	9.1	1	20	0	0
Provide instruction	21	61.7	5	45.5	3	60	3	50
Train classroom staff to provide services	8	23.5	1	9.1	1	20	0	0
Consult with classroom teacher	23	67.6	5	45.5	4	80	3	50

ESL/Bilingual Materials and Strategies

Ninety-four participants responded when asked how much time teachers, students, and staff use another language in their classroom each day. Seventy-six (81%) participants report that they spend 0 hours a day using another language in their classroom. Nine (10%) participants use up to 30 minutes, six (6%) use up to one hour and only three (2%) participants use more than 4 hours of their day in a language other than English.

To answer research question 4, “What ESL materials and strategies are being used for CLD students with ASD in the classroom? With what frequency are they used?,” participants listed the materials and strategies used with CLD students with ASD and these data were reported as frequency counts and percentage data.

Frequency data were used to show what materials are used in the classroom. Table 5 shows the types of material, the language of the material and how many participants use that material. The most prevalent materials used are books, while games were reported as never being used in a language other than English. Of the 18 home languages reported for CLD students with ASD, materials were only reported in three languages. The majority of materials reported were in Spanish, with materials in American Sign Language and Vietnamese each appearing only once. Participants did not report giving students access to materials in the other languages spoken by their students. In Table 5, n = number of participants using the materials and the percentage is given for materials in each language.

Table 5

Materials Used in Languages Other than English

	Books		Communication Devices		Pictures		Games		Computer software		Applications for tablets		Audio materials		Video materials	
	n	%	N	%	n	%	n	%	n	%	n	%	n	%	n	%
Spanish	8	100	2	66	2	100	0	0	1	100	3	100	0	0	2	100
Vietnamese	0	0	1	33	0	0	0	0	0	0	0	0	0	0	0	0
American Sign Language	0	0	0	0	0	0	0	0	0	0	0	0	1	100	0	0

Strategies used to communicate with parents of CLD students with ASD were also examined. Frequency and percentage data were used to determine how often teachers communicate with parents and how that communication takes place. Each participant was asked to report if they use each strategy never, daily, weekly, monthly, semi-annually or annually. Table 7 shows percentage data for each category of communication. Information in this area is based on data taken from the 93 participants who completed this portion of the survey.

The results show that verbally communicating with parents in their native language is the least common strategy used, with 72 (78.2%) participants reporting that they never use this strategy. The majority of participants reported sending correspondence to parents in English daily (21, 22.5%) and monthly communication (30, 32.2%). For information on all areas of communication strategies see Table 6.

Table 6

Strategies Used to Communicate with Parents

	Send correspondence (e.g., emails, newsletters, letter, progress notes) home in English		Send correspondence (e.g., emails, newsletters, letter, progress notes) home in students' native language		Communicate through a professional interpreter		Communicate through an informal interpreter (e.g., colleague, community member)		Communicate through the student's sibling who speaks the language of the parents		Verbally communicate with the parents in their native language	
	n	%	n	%	N	%	n	%	n	%	n	%
Daily	21	22.5	6	6.3	2	2.2	2	2.2	2	2.2	3	3.2
Weekly	22	23.6	10	10.6	4	4.3	10	10.9	5	5.4	8	8.6
Monthly	30	32.2	22	23.4	10	10.7	21	23	12	13.1	5	5.4
Semi-annually	15	16.1	19	20.2	18	19.5	13	14.1	14	15.3	1	1
Annually	2	2.2	6	6.3	15	16.3	7	7.6	3	3.2	3	3.2
Never	3	3.2	31	32.9	43	46.7	39	42.3	55	60.4	72	78.2
Total N	93	100	94	100	92	100	92	100	91	100	92	100

Participants' Training and Qualifications

To answer research question 5, "What frequency and percentage of participants have received training in order to provide ESL services?," frequency data and percentages were used to determine the type and amount of training provided. Only 41 (36%) teachers reported receiving pre-service training and only 47 (41%) received in-service training through their school or district. Table 7 uses frequency data to illustrate the amount of training reportedly received by these educators. Data are reported as number of participants who participated in training within each given range of hours.

Table 7

Hours of ESL or Bilingual Education Training Received by Participants

	Pre-service training (credit hours) n = 41		In-service training (hours per year) n = 47	
	n	%	n	%
1-5 hours	22	53.6	31	65.9
6-10 hours	3	7.3	7	14.8
11-20 hours	13	32.5	6	12.8
20 or more hours	3	7.3	3	6.4

Of the teachers who participated in pre-service training, 34.3% provide ESL/Bilingual instruction to their students. Approximately 66% percent of teachers who participated in pre-service training do not provide ESL/Bilingual services to their students. A Chi-square test of independence was conducted to determine if a relationship exists between pre-service training and provision of ESL/Bilingual services. No significant interaction was found ($p = .493$, $p > .05$) between pre-service training and provision of ESL/Bilingual services.

Data collected related to in-service training was also analyzed to determine the percentage of teachers who received in-service training who also provided ESL/Bilingual services to students. Of the 30% of teachers who provided ESL services, 60% received in-service training, and 40% did not receive in-service training. Seventy percent of teachers in this study do not provide ESL services. Within this 70% of educators, only 20% have received in-service training for providing such services. A Chi-square test of independence was conducted to determine if a relationship exists between in-service training and provision of ESL/Bilingual services. A significant interaction was found ($p = .008$, $p > .05$) between in-service training and provision of ESL/Bilingual services.

To answer research question 6, “What are the relationships between participant demographic data with the provision of ESL services?” frequency data, percentages and Chi square analyses were figured. Thirty-seven percent of participants teach in a Title I school. The majority of respondents (64%) teach in a suburban district, followed by 25% in an urban district and only 10% teach in a rural school district. In order to determine if the type of school or type of district is related to the ESL/Bilingual services provided to CLD students with ASD, a Chi-square analysis was conducted for each area. Each area was evaluated using percentage data and the results of a Chi-square test of independence.

A significant relationship was found between the type of school and teachers who provide ESL/Bilingual services with a value of $p = .000$. Teachers working in Title I schools report that 51.4% provide ESL/Bilingual services, while only 17.5% not working in Title I schools provide these services. A significant relationship was not found between the type of school and ESL/Bilingual services provided by the other service providers. See Table 8 for more detailed information.

No significant interaction was found between the type of school district and the provision of ESL/Bilingual services for CLD students with ASD. Percentage data displayed in Table 9 shows that in every type of district there are a higher percentage of teachers who do not provide ESL/Bilingual services than of those who do provide these services. Urban districts have the highest number at 44% of teachers providing ESL/Bilingual services, with 25% in suburban districts and 27.3% in rural districts. Refer to Table 9 for more information.

Table 8

Type of School and Provision of ESL/Bilingual Services

Do you teach in a Title I school?	Teacher provides ESL/Bilingual services %		ESL certified instructor provides services %		ESL paraeducator provides services %		Bilingual certified instructor provides services %		Bilingual paraeducator provides services %	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Yes	51.4	48.6	38.9	61.1	16.7	83.3	5.6	94.4	8.3	91.7
No	17.5	82.5	32.3	67.7	8.1	91.9	4.8	95.2	4.8	95.2
Value of p	.000		.506		.193		.876		.487	

Table 9

Type of School District and Provision of ESL/Bilingual Services

	Teacher provides ESL/Bilingual services %		ESL certified instructor provides services %		ESL paraeducator provides services %		Bilingual certified instructor provides services %		Bilingual paraeducator provides services %	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Urban	44	56	41.7	58.3	8.3	91.7	12.5	87.5	4.2	95.8
Suburban	25	75	33.3	66.7	9.5	90.5	3.2	96.8	6.3	93.7
Rural	27.3	72.7	27.3	72.7	27.3	72.7	0	100	9.1	90.9
Value of p	.209		.659		.199		.150		.846	

Data were collected on participants' level of education. A Chi-square analysis was used to determine if a relationship was present between level of education and provision of ESL/Bilingual services. A significant relationship was shown ($p = .000$) for participants who have earned their ESL/Bilingual license or endorsements. Fifty-two percent of teachers who

have their ESL/Bilingual license or endorsement reported that they provide ESL/Bilingual services to their students. Eighty-five percent of teachers who have not earned this license or endorsement do not provide ESL/Bilingual services to CLD students with ASD. No other area of education showed a significant relationship with provision of ESL/Bilingual services (See Table 10).

Table 10

Participants' Level of Education and Services Provided from Participants at Each Level

	Number of participants with this educational degree	Teacher provides ESL/Bilingual instruction		Value of p
		Yes %	No %	
Bachelor's degree	46	28.2	71.7	.449
Master's degree	40	27.5	72.5	.449
Education Specialist degree	7	28.5	71.4	.449
Other	7	57.1	42.8	.449
ESL license or endorsement	40	52.5	47.5	.000

Note. In the category of Other, respondents listed Intern, National Board Certified, Juris Doctorate and Enrolled in graduate programs.

Percentage data were also used to show how many teachers in each area of licensure provide ESL/Bilingual services to their CLD students with ASD. Participants were able to report more than one licensure. Only 30.9% of teachers with a Severe Disabilities license and 30.8% of teachers with Mild/Moderate Disabilities license provide ESL/Bilingual services (See Table 11).

Table 11

Participants' Area of Licensure and Services Provided from Participants in Each Area

	Number of participants in this area of licensure	Teacher provides ESL/Bilingual instruction			
		Yes		No	
		n	%	n	%
Severe disabilities	51	16	30.9	35	69
Mild/moderate disabilities	76	24	30.8	52	69
Early childhood education	0	0	0	0	0
Hearing impaired	1	0	0	1	100
Visually impaired	1	0	0	1	100
Other	6	3	50	3	50
Total N	135	43		92	

Note. In the category of Other, respondents listed Speech, School Psychology, Behavior Disorder, Elementary Education and Diverse Learners. Participants could list more than one license.

Although 42.3% of teachers who speak a language other than English provide ESL/Bilingual services to CLD students with ASD in their classes, no significant relationship was found between teacher fluency in another language and provision of ESL services. A Chi-square test of independence was performed to determine if teacher fluency in another language influences the amount of ESL/Bilingual services provided to CLD students with ASD. The results of this analysis were $p = .111$, which does not indicate a significant relationship between these two variables.

Perceptions of ESL/Bilingual Services for CLD Students with ASD

To answer research question 7, “What type of training do participants find helpful in teaching CLD students with ASD?”, respondents were asked to rank professional development from a list including: current ASD practices, current CLD practices, integrated practices for CLD and ASD, in-class implementation and support of CLD practices, in-class implementation and

support of ASD practices, in-class implementation and support of integrated practices for CLD and ASD, and an option to write in other training that professionals may find more beneficial.

Professional development based on integrated practices for CLD and ASD was ranked most important by 38 (36.8%) participants. In-class implementation and support of integrated practices for CLD and ASD was the next highest ranking, with professional development based on current ASD practices being ranked the third most important. Professional development based on current CLD practices was ranked least important by 28 (27.1%) participants, and in-class implementation and support of CLD practices was ranked least important by 21 (20.3%) participants. Participants were allowed to write in other types of training that they would consider beneficial. Table 12 lists training in order of importance according to responses gathered by participants.

Table 12

Type of Training Participants Find Helpful

Type of Training	Participants who consider this type of training most important (N = 103)	
	n	%
Professional development based on integrated practices for CLD and ASD	38	36.9
In-class implementation and support of integrated practices for CLD and ASD	21	20.3
Professional development based on current ASD practices	21	20.3
In-class implementation and support of ASD practices	13	12.6
Professional development based on current CLD practices	6	5.8
Other: Mental illness as it relates to ASD, observations of schools implementing successful programs	3	2.9
In-class implementation and support of CLD practices	1	0.9

To answer research question 8, “What are participants’ perceptions of ESL/Bilingual services for CLD students with ASD?”, participants’ indicated their level of agreement with four

statements about providing instruction for CLD students with ASD. These data are reported as percentages and were analyzed to examine teachers' perceptions of ESL/Bilingual services for CLD students with ASD. Figures 2-5 illustrate participant responses for each question and in each level of the scale. Only 103 participants chose to complete this portion of the survey; percentages are based on those 103 responses.

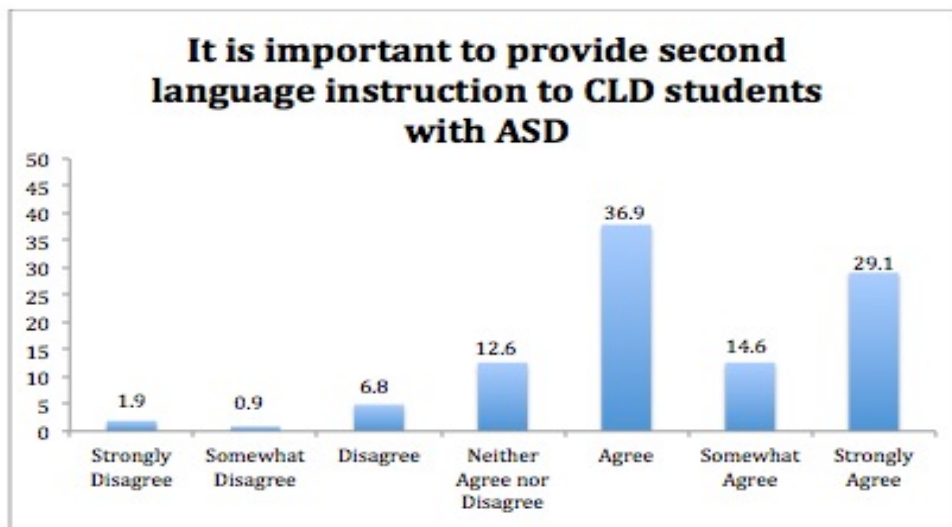


Figure 2. Participant rankings for level of agreement with the statement: It is important to provide second language instructions to CLD students with ASD. These rankings are reported as percentages.

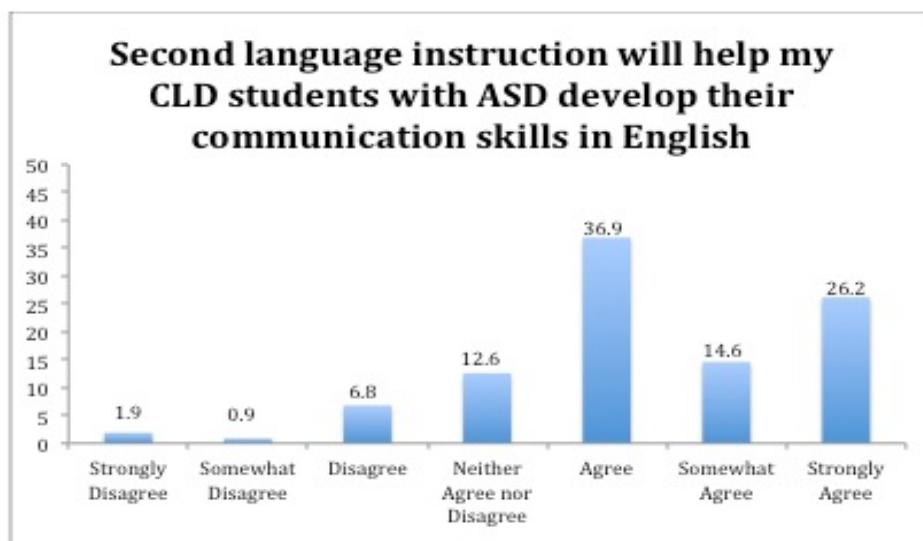


Figure 3. Participant rankings for level of agreement with the statement: Second language instruction will help my CLD students with ASD develop their communication skills in English. These rankings are reported as percentages.

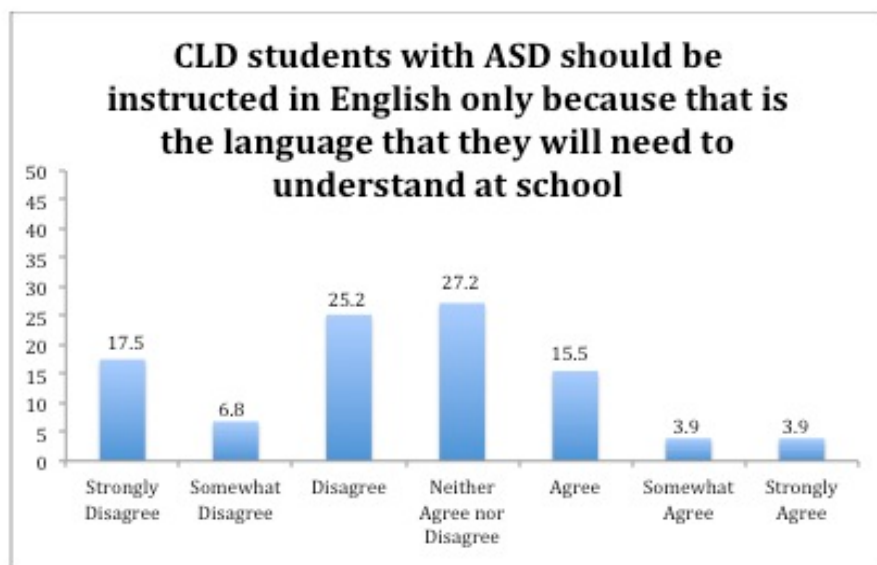


Figure 4. Participant rankings for level of agreement with the statement: Second language instruction will help my CLD students with ASD develop their communication skills in their native language. These rankings are reported as percentages.

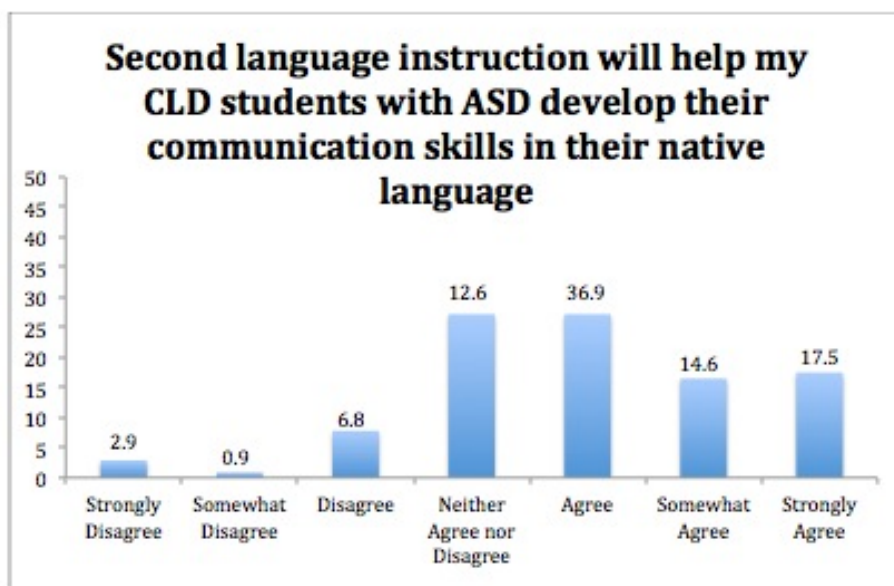


Figure 5. Participant rankings for level of agreement with the statement: CLD students with ASD should be instructed in English only because that is the language they will need to understand at school. These rankings are reported as percentages.

Almost 80% of participants agree to some degree that it is important to provide second language instruction to CLD students with ASD. Twenty-nine percent strongly agree that it is important to provide second language instruction to CLD students with ASD. Seventy-seven percent of participants agree to some degree that second language instruction will help CLD students with ASD develop their communication skills in English. Sixty-one percent agree that second language instruction will help CLD students with ASD develop their communication skills in their native language. Only 23% of participants agree to some degree that CLD students with ASD should be instructed in English only, and 17.5% strongly disagree with this statement.

Challenges Faced by Teachers with CLD Students with ASD

Sixty-eight participants chose to answer the open-ended question, “What are some of the challenges you face when providing services to English language learners with ASD?” These responses were categorized and then percentages were recorded for each category. Determining how to best meet student needs is the challenge most reported by participants. Twenty-four (35%) participants listed this challenge due to difficulty understanding if challenges are due to second-language learning or if they are disability related. Ensuring correct placement, balancing language instruction between both languages, and overcoming the language barrier were also described as areas of concern.

Communicating with parents who do not speak English was the next most common issue reported by participants. Twenty-two (33%) reported this concern and indicated that the biggest challenge is the inability to communicate important legal information and helping parents to be aware of resources available to them. Other challenges reported were lack of materials in native language of students, students’ understanding cultural norms and verbal instructions, training in ESL instruction, and scheduling translators when they are needed. Participants’ answers may

reflect more than one area of concern. See Table 13 for information on percentage of responses by category, and in order of prevalence.

Table 13

Challenges Faced by Teachers with CLD Students with ASD

Challenge	Participants who reported concerns in this area (n = 68)	
	n	%
Meeting student needs	24	35.2
Balancing instruction in two languages	3	3.9
Determining correct placement	3	3.9
Communicating with parents	23	33.3
Training in ESL	8	11.7
Lack of materials	7	9.8
Students understanding of cultural norms and ability to follow verbal instructions	7	9.8
Scheduling translators when needed	1	2

Discussion

This study examined second-language services provided to culturally-linguistically diverse students with autism spectrum disorder in the state of Utah. It gives an overview of types of services, service providers, qualifications of service providers and educator perceptions of language services for a sample of these students. The following section discusses the findings from the study, presents study limitations and what results might mean for future research and practice in this area.

Respondent Demographics

This study surveyed special education teachers in the state of Utah who have CLD students with ASD on their caseload. Of the teachers participating in this study, 28 (23%)

reported the ability to speak a language other than English. Within this group, the most common language was Spanish (57.6%), American Sign Language (34.6%) and French (27%). Ten of the languages spoken by students were not represented at all. Of the 26 participants who speak another language, 16 (33%) reported fluency in a language other than English and only 10 (20.8%) reported fluency in Spanish.

Language Skills and Proficiency Levels of Students and Teachers

Respondents reported 19 different home languages spoken by CLD students with ASD in Utah. The three most prevalent home languages of students reported in this study are Spanish (171, 82.2%), Vietnamese (6, 2.8%) and Chinese (5, 2.4%). Each of the other reported languages represent approximately 2% of the population of CLD students with ASD. In May 2014, the Utah State Office of Education reported demographics for students with Autism being served in the state of Utah. Students with ASD were reported as primarily White (3895, 84.7%), followed by Hispanic (443, 9.6%), Asian (55, 1.2%), Black or African American (53, 1.1%) American Indian (33, 0.7%) and Pacific Islander (30, 0.6%). These demographics align with the home languages reported by participants in this study.

The results indicate that there is a large disparity between the language spoken by teachers and the native language of their students. This increases the concern that CLD students with ASD will be classified inappropriately. As Harry (2002) points out, cultural barriers increase the risk that students' disability will become their defining factor while race and culture are pushed aside. Brown (2004) discusses the issues that arise when language differences create cultural barriers between teachers and students. When the background knowledge and language of students and teachers differ, it can affect how classroom teachers interpret learning and behaviors of CLD students.

Under IDEA, the IEP team must consider the language needs of the child as those needs relate to the child's IEP. However, the U.S. Department of Education report to Congress on the implementation of the Individuals with Disabilities Act in 2014 still reports a disproportionate representation of CLD students in special education. Indicating that ensuring that language appropriate assessments are used and appropriate placement of CLD students are not uncommon concerns. Four percent of participants in this study found the challenge of interpreting test results and ensuring appropriate placement the most difficult challenges in working with CLD students with ASD.

Meeting both the language and developmental needs of students was also described as a major challenge by more than 35% of the teachers who participated in this study. Mueller and colleagues (2006) point out that teachers rely heavily on curricular materials to assist in teaching the primary language of the student. Yet, as the data in this study reflect, materials in the native language of CLD students are rarely used, making meeting the language needs of CLD students more difficult.

Teacher Qualifications and Training

The results of the survey indicate that 40 (33%) participants have earned their ESL license or endorsement. Data from this study indicate that teachers who have their ESL license or endorsement are more likely to provide ESL/Bilingual services (52.5%). Participants' level of education did not make a significant impact on the provision of ESL/Bilingual services. Area of special education licensure was not a significant factor, with participants licensed in Severe and Mild/Moderate Disabilities both reporting only 30% who provide ESL/Bilingual services.

Less than half of participants reported receiving pre-service training (36%) and in-service training (41%) to provide ESL services. Of those who received such training, the majority of

educators received only 1-5 pre-service semester credit hours, and 1-5 in-service training hours per year. While pre-service training did not affect provision of ESL services, 60% of participants who provide ESL/Bilingual services have received in-service training. In-service training was shown to be a statistically significant factor in the provision of ESL/Bilingual services. Lack of ESL/Bilingual training was reported by almost 12% of participants as a challenge that they face when working with CLD students with ASD. Few studies exist to describe what types of training is provided to professionals working with CLD students with disabilities. Obiakor, Utley, Smith and Harris-Obiakor (2002) recommend that teachers be included in planning professional development and have a voice in determining what type of support is needed as they implement new practices in their classroom.

This survey examined what types of training participants would find helpful. The three most desired training areas include: integrated practices for CLD and ASD, in-class implementation and support of integrated practices for CLD and ASD, and current ASD practices.

School Demographics and Provision of ESL/Bilingual Services

This study found a significant relationship between the amounts of ESL/Bilingual services provided to CLD students with ASD and the type of school they attend. In every service area, students attending Title I schools receive more ESL services. This is an encouraging finding, since the U.S. Department of Education lists providing services to limited English children, and children with disabilities as one of the main purposes of Title I programs within the schools.

Urban districts report the highest percentage (44%) of teachers who provide ESL/Bilingual services. However, survey results indicate that in every type of district there are a

higher percentage of teachers who do not provide ESL/Bilingual services to CLD students with ASD, than of teachers who do provide these services.

ESL/Bilingual Services and Service Providers

This study explored the type of ESL/Bilingual services being provided to students with ASD who are also CLD and who provides these services. Results show that only 30% of classroom teachers provide ESL/Bilingual services. Data indicates that 35% of participants have students receiving instruction from ESL certified instructors, 11% from an ESL paraeducator, 5% from a bilingual certified instructor and 6% from a bilingual paraeducator.

Along with instruction provided by teachers, this survey explored the types of services provided to CLD students with ASD. ESL and bilingual certified instructors play a large part in the educational program of these students. The types of services provided by ESL and bilingual certified instructors include: assess, participate in developing the IEP, provide instruction, and consult with the classroom teacher. A large percentage of ESL/Bilingual certified instructors and paraeducators consult with the classroom teacher on how to provide ESL/Bilingual services.

Results of this study indicate that only 23.5% of certified ESL instructors and 20% of bilingual certified instructors provide training to classroom staff. ESL and Bilingual paraeducators work under the supervision of a certified instructor and while 50% of their time is spent providing instruction, the other 50% of their time is spent consulting with the teacher. Since paraeducators are considered by many as important in the delivery of special education and related services, ESL/Bilingual paraeducators can provide a cultural and linguistic context for students and may have valuable insights into planning and implementing ESL/Bilingual strategies. Training both teachers and paraeducators on how to collaborate effectively with one

another and allowing paraeducators to be included in planning might increase the effectiveness of the services provided to CLD students with disabilities (Ashbaker & Morgan, 2012).

This study highlights the type of language services provided by SLPs. Respondents report that 82.2% of their students receive services from a SLP, or paraeducator under direction of the SLP. When these language services are explored in-depth, it becomes apparent that within this study, 99% of these CLD students with ASD receive language services from SLPs in English only.

These results are similar to a study submitted to the U.S. Office of Education (Zehler, et. al., 2003), reporting that special education teachers typically take primary responsibility for development of the IEP and implementation of services. There is not a formal policy for coordination of services among service providers. While consultation reportedly occurs among providers, this study agrees that there is little likelihood that special education teachers and other service providers are implementing consistent service plans across settings and service providers.

ESL/Bilingual Materials and Strategies

The majority of participants (81%) reported that within their classroom, there is no time spent using another language. Seventy-four percent also report that no materials in another language than English are used within their classroom. When ESL materials are used within the classroom they are mainly used in Spanish, while other language materials are rare or non-existent.

Panferov (2010) points out that parents are a critical part of the IEP team and it is imperative that information be provided in their native language to ensure understanding. However, the majority of participants correspond with parents in English only. In this sample of teachers, daily (22.7%) and monthly (32.2%) communication is done through written

correspondence (e.g., emails, letters, newsletters, progress notes) in English only.

Communicating with parents was recognized as an area of concern by 33% of participants.

Providing correspondence in the native language, finding interpreters that speak the language and helping parents understand the special education and ESL services available were all highlighted as major concerns for professionals working with CLD students with ASD in Utah.

Participant Perceptions of ESL/Bilingual Services for CLD Students with ASD

Although only 30% of teachers provide CLD services to students with ASD, participants still ranked these services as important to assist in improving students' language skills.

Participants agree that ESL services will help enhance students' language skills in both English and in their native language. Only 23% of teachers agree to some degree that CLD students with ASD should be instructed in English only.

It is possible that the lack of CLD/Bilingual services is due to lack of materials or lack of training. Mueller and associates (2006) point out that if teachers do not have access to curriculum in the primary language of the student, they are more likely to teach in English only. This study shows provision of in-service training as a significant factor in increasing the provision of ESL/Bilingual services. While teachers recognize the importance of these services, more support in implementing these practices may be needed.

Challenges for Teachers of CLD Students with ASD

The survey results indicate that the challenges faced by Utah educators with CLD students with ASD focus mainly on ensuring that appropriate services are provided. CLD students with ASD are frequently misdiagnosed and placed in inappropriate learning environments (Utley, et al., 2011). Results of this survey demonstrate similar concerns by teachers in Utah. Teachers (35.2%) reported concerns with meeting students' needs in both

languages and ensuring appropriate placement. Determining if the students' learning challenges are due to disability or language difficulties is difficult and teachers felt that standardized testing did not assist in making these decisions. This also makes it difficult for teachers to determine if behaviors are due to disability, second language acquisition, or differing cultural norms and expectations. Teachers reported that training in both ESL and ASD are areas in which they would appreciate more support.

Limitations

This sample is limited due to the fact that participation was voluntary. The demographics, classroom setting and qualifications of other teachers with CLD students with ASD in Utah may differ in these areas.

A second limitation to this study is the type of data collected. This survey has not been tested for validity nor reliability. It relied solely on self-reporting by participants. These data reflect teacher perceptions which may have some error due to lack of teacher fluency in native language of student or lack of materials and assessments in the native language of the students. In addition, respondents were not forced to answer every question, which left some questions with a smaller response pool. It only collected data that they chose to share and it does not provide information from educators who chose not to participate.

Other limitations are that the study does not address the level of severity of the disability of the students with ASD, or the amount of time that each educator provides services to students with ASD. The survey was only sent to public school teachers within the state of Utah and does not take into account the services being provided by private or charter schools. All of the information gathered in this survey was self-reported by teachers, without a way to verify that the information is an accurate reflection of their practice. Due to these factors, the information

provided by this survey may not be an entirely accurate view of what is happening in Utah schools.

Implications for Further Research and Practice

Results of this study highlight some questions that should be addressed in the future. First, if more in-service training is provided to both teachers and SLPs, would it increase the amount of ESL services provided throughout the school day? Teachers recognize the lack of training in this area. More research should focus on appropriate and effective training to assist teachers in providing effective ESL instruction to CLD students with ASD. Because language development differs for both CLD students and students with ASD, finding more effective ways to address both of these needs could assist teachers and enrich the linguistic and culturally responsive services provided. Training teachers on how to implement these practices and balance both needs of students in the classroom may assist educators to better meet the needs of the CLD students with ASD with whom they work.

Second, if more materials were available and used in the native language of students, would teachers enhance language instruction in the classroom? Teachers pointed out a significant lack of use of materials in languages other than English and Spanish. If more materials were used with this population, it may increase the teachers' ability to provide these services and student motivation. More research to determine which materials are most beneficial to this population is also warranted. The majority of materials reported are books, but research to determine which materials most engage and assist the CLD student with ASD would be beneficial.

In this study, teachers report an alarmingly low rate of communication with parents in their native language. More research on how effective parent communication and participation in

the IEP process effects this population of students is warranted. This study reports that the majority of daily and weekly communication is sent only in English, with 78.2% of participants never having communicated verbally with CLD parents in their native language. Further training of teachers in how to use available resources to communicate more effectively with parents is greatly needed.

This survey examined many areas of ESL/Bilingual services for CLD students with ASD in Utah. There are many areas in which these services could improve. According to the Utah State Office of Education, the number of CLD students with ASD being served in special education in the state of Utah has steadily increased from 2008-2014. In 2008 among the 2740 students with ASD in Utah, there were 153 (5.5%) Hispanic, 46 (1.7%) Asian/Pacific Islander, and 22 (0.1%) American Indian or Alaska Native. In 2014, there were 4597 students with ASD being served in special education in Utah, consisting of 443 (9.6%) Hispanic, 55 (1.2%) Asian, 30 (0.1%) Pacific Islander, and 33 (0.1%) American Indian or Alaska Native. The number of CLD students with ASD is increasing quickly and warrants future research in how to most effectively provide teacher training and resources to encourage these services.

Summary

The purpose of this study was to explore what types of ESL/Bilingual services are being offered to CLD students with ASD in the state of Utah. The study focused on three main areas: (a) the types of language services offered to CLD students with ASD and who is providing those services, and the types of materials used in provision of services (b) the qualifications of educators providing these services, and (c) teacher perceptions of second-language instruction for this population.

Results suggest that there is a critical need for improvement in ESL services being offered to CLD students with ASD in Utah. The majority of the students' time is spent with the classroom teacher, but only 30% of the teachers who participated in this study report that they are providing these services. Fewer than half of the participants have students receiving services from ESL/Bilingual certified instructors. While a large portion of students are receiving speech/language services, those services are provided in English only and do not address second-language needs. Lack of materials was a factor in the provision of services. Educators who use materials in another language reported materials primarily in Spanish, and teachers pointed out lack of materials in other languages as a specific issue when providing ESL services in the classroom.

Professional training in second-language instruction is limited. There are few who received pre-service training, and in-service training in this area is reported as minimal. Participants recognized the need for more training in these areas and listed lack of training as a challenge that they face when working with this population of students.

Teachers' attitudes toward language instruction for CLD students with ASD are encouraging. The majority of teachers agree that it is important for CLD students with ASD to receive language services in both English and their native language. They agree that this language instruction will improve their communication skills in both languages and is an important factor in educating CLD students with ASD. And yet, these services are still not being provided on a daily or even monthly basis within the classrooms.

This study suggests that CLD students with ASD are not receiving appropriate language services. It highlights the large number of students whose communication needs may not be met within the Utah schools. This research shows a great need for professionals to improve teacher

training and materials provided to teachers so that they can begin to meet the language needs of this population of students.

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APPENDIX A: Review of Literature

In the United States, the fastest growing population of students is those who are culturally and linguistically diverse (CLD). In 2009, the U.S. Department of Education, National Center for Education Statistics reported that the number of students who speak a language other than English in the home is 11,204, representing 21% of the population of students attending schools in the United States. In 2006, the state of Utah reports 52,342 students who are learning English as a second-language. This represents 10.24% of the population of students in the state (Crockett, 2006).

CLD students have the right to an appropriate education; the challenge for educators is finding the most appropriate way to provide this education. Research explains the challenges when working with CLD students; however, little research exists to assist educators who work with CLD students with moderate to severe disabilities.

Challenges in Teaching Culturally and Linguistically Diverse Students

Linguistic barriers. Language of CLD students cannot be evaluated separately from their culture. The students' background knowledge and how language is used may differ from the teacher that is assessing or providing classroom instruction. Such differences can impact the students' ability to understand directions, new learning and it can affect how children respond to teachers in general. Because interpretation of language affects behaviors, it can be difficult for classroom teachers to interpret behaviors of CLD students (Brown, 2004).

Cultural barriers. One of the barriers in recognizing the cultural diversity of persons with disabilities is the disability movement itself creates a new minority, that of persons with disabilities. To focus on other minority factors of this group would take away from the minority status that the movement tries to create. Thus, the disability becomes the defining factor and

other aspects of identity such as racial or cultural factors are pushed aside (Harry, 2002). The reauthorization of IDEA in 1997 shifts some focus back to race/ethnicity. States are now required to report race/ethnicity and take precautions not to disproportionately classify students based on cultural and linguistic diversity.

Rights of Culturally and Linguistically Diverse Students

Teachers of CLD students must understand that language proficiency refers to listening, speaking, reading and writing, and that students vary in the rate at which they develop these skills (Williams, 2001). In order to identify CLD students at school, the United States has outlined a procedure for educators to follow. First, they are identified through a parent survey, which discloses the language spoken in the home. Then, a language proficiency exam is administered and other factors such as academic achievement, standardized test scores, and teacher reports are considered. At this point, the type of instruction necessary can be determined (Benavides, Midobuche, & Kostina-Ritchey, 2012).

There are various types of settings within the school in which students who are culturally and linguistically diverse can be placed. Some of these programs have more advantages than others.

Bilingual programs. Bilingual education is instruction in two languages. This instruction must provide both content and delivery in both languages. English as a Second Language (ESL) is not considered a bilingual program, because it primarily focuses on learning English and does not focus on instruction in the primary language of the student. In 2010, the Pacific Policy Research Center outlines the three main models to be considered when developing a bilingual teaching program: transitional bilingual, maintenance bilingual, and enrichment bilingual education.

Transitional bilingual education is designed to develop only the second language and uses the primary language as a media of instruction for 1-2 years until the student is proficient in the second language. The goal of this program is not bilingualism and is used to instruct students in learning the dominant language. Maintenance bilingual education is designed to only maintain and not develop the first language of the student. It is designed to form a solid base on which to build the second-language acquisition. Maintenance bilingual education serves to validate the student's primary language and culture, but focuses on learning in the second-language. Enrichment bilingual education focuses on bilingualism by focusing on academic instruction in the second language but enhanced use of the primary language in the community. All bilingual programs have mixed results based on individual student and community needs.

Immersion programs. Three basic types of immersion programs exist. The first is total immersion. In a total immersion program, the students spend almost 100% of the day in a setting, which uses the second-language that the student is learning. Partial immersion programs spend approximately half of the class time using the second language. Two-way immersion programs combine learners of English who share the same primary first language with native English speakers. The goal of this program is to allow both sets of students to become fully proficient in both languages. The three characteristics of this type of program include: instruction in two languages, one language used at a time, and peer-facilitated language sharing (Pacific Policy Center, 2010). There has not been significant research published in this area to show if this type of program is more successful than other approaches. A study conducted in 2007 shows that preschoolers enrolled in this type of program made more progress in both languages compared to students who were enrolled in English immersion programs (Barnett, Yarosz, Thomas, Jung, & Blanco, 2007).

Pull-out programs. The pullout model is the most common way to serve CLD students in the United States. In this model, students are pulled out of from the mainstream class for 30-45 minutes per day. This design is used to promote literacy and fluency in the second language. Children of many ages are served at the same time and they often miss important content instruction in their mainstream classes. Students also have less primary language support; pull-out programs are, therefore, the least effective model (Benavides, et al., 2012).

Mainstream programs. Teachers who are ESL certified are often hired to teach in a mainstream classroom. These classrooms typically have a few CLD learners mixed in with students who are native speakers. The effectiveness of this type of a program depends largely upon the preparation of the teacher and the teacher's ability to modify instruction according to student needs (Benavides, et al., 2012).

Challenges in Serving CLD Students with Disabilities

Eligibility assessment and diagnostic classification. General and special educators must take into account cultural factors as they refer students for eligibility consideration for special education. CLD students with learning disabilities often have different behavioral patterns than their CLD peers who do not have learning disabilities. CLD students with learning disabilities are frequently misdiagnosed and placed in learning environments that are inappropriate for their needs (Utley, Obiakor, & Bakken, 2010). Under the most recent reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA, 2004), it is required that assessments be "provided and administered in the language and form most likely to yield accurate information on what the child knows and can do academically, developmentally and functionally" (p. 23). As educators assess students, they must consider the primary language of the child. Salend and Salinas (2003) recommend educators consider using response to

intervention methods when assessing CLD students which might include: compare student performance in both native and secondary languages, consider the factors associated with second language acquisition, use alternatives to traditional standardized testing, and identify diverse life experiences that may affect learning. Using these suggestions while assessing CLD students would give educators a more accurate view of students' abilities.

Determination of appropriate educational services. Educators are faced with the challenge of making certain that CLD students with disabilities are not disproportionately represented in special education programs, misidentified using biased assessment tools or evaluated using ineffective instructional strategies. Despite federal legislation and the reauthorization of IDEA, data continues to show a disproportionate representation of CLD students in special education (Utley, 2011).

Appropriate linguistic services. Children with moderate to severe disabilities typically have both receptive and expressive language deficits, which often affect their social skills development. These deficits affect their ability to process and learn information through typical social and linguistic interactions. Their linguistic acquisition develops in smaller increments over a longer span of time. For typically developing CLD students, the choice of what language is used in the classroom will impact the rate at which they learn both English and their primary language. The choice of language used with CLD students with moderate to severe disabilities becomes even more important because they will learn at a much slower pace and there is the possibility that they will not produce any spoken language at all. Teachers rely heavily on curricular materials. If they do not have access to materials in the primary language of the student, they are more likely to teach the communication skills only in English (Mueller, Singer, & Carranza, 2006).

Since CLD students with severe disabilities may have limited ability to communicate with family members in their native language, communication services in their native language might help them function more effectively in their communities (Crockett, 2006). However, according to a statewide survey conducted in 2006, CLD students with severe disabilities are not receiving language instruction in their primary language either in the classroom or from their SLPs (Crockett, 2006).

If assessment in the native language of the student yields the most accurate results, instructional goals should be developed to appropriately address learning needs in both the primary language and English. In 2007, a survey was conducted in North Carolina, with 141 administrators, teachers and parents of preschool English Language Learners. Participants were asked various questions regarding the assessment and placement of such students as well as how the students' IEPs reflected their language and cultural needs. Forty percent of the teachers reported that they did not know how IEPs reflected these areas. Nearly a quarter of the administrators and 18 percent of teachers said that no effort was made to reflect cultural and linguistic difference (Hardin, Roach, Reisner-Feinberg, 2007). Few studies explore how teachers and other professionals are considering language and cultural needs as they develop IEPs for CLD students with disabilities, even though language and cultural needs should be a major factor as instructional goals are developed.

The same North Carolina study shows that 30 percent of administrators and 20 percent of teachers report that parent participation helps ensure that culture and language are considered during the development of the IEP goals (Hardin, et al., 2007).

Parental involvement. Harry (2002) states that professionals must consider the family culture as they collaborate with parents during the IEP process. Various social groups often

perceive disabilities differently, and culture has a profound effect on parental coping styles. Culture and socioeconomic status often affect parents' perceptions of their role and their ability to participate in the development of the IEP.

One of the earliest studies on parent participation in the IEP process was conducted by Marion in 1979. This study illustrates the disadvantage that poor and minority parents face as they attempt to take part in their child's educational planning. Marion demonstrates that these parents often face a stigma attached to their culture, ethnicity or social status and they were often treated carelessly. This creates a great barrier in regards to communication between professionals and parents. Limited schooling can be a source of embarrassment to parents; language barriers may also contribute to parents feeling a level of intimidation by school staff (Arias & Morillo-Campbell, 2008).

Arias and Morillo-Campbell (2008) address the fact that parents of CLD students often demonstrate their involvement in their child's education differently than the mainstream culture. Although parents of CLD students may communicate less with school professionals, this is not an indicator that they are less involved in their child's education. Research shows that parents of CLD students may compensate for their difficulty in communicating with their child's teacher by spending more time helping their student with educational activities at home (Harper & Pelletier, 2010).

Every effort should be made to include parents through oral and written communications. Often school professionals provide interpreters for the IEP meetings. However, the majority of interpreters are not specifically trained in the terminology that is specific to special education. Although translation is provided, parents still do not receive the precise information that is

needed (Hardin, et al., 2007). This lack of information limits their access to the educational system in which their students are educated.

Conducting personal interviews with parents about what type of communication they prefer is recommended as an ideal way to increase parent communication and participation. Panferov (2010) explains that schools which offer two-way communication and guidance for effecting positive home support are most likely to have parents of CLD students who are able to navigate the school system successfully. Parents are an important part of the IEP process and it is critical that information and resources be provided in their native language (Panferov, 2010).

Multi-disciplinary team involvement. In order to accurately consider the language and cultural needs of students with disabilities, ESL specialists and SLPs should be included in the development of IEPs. In a study conducted in 2004, teachers reports they would be open to discussion of these factors with the IEP team, but typically there is not allotted time during the meeting in which to discuss the primary language of the child. Some of the teachers feel this was discussed informally, but that explicit discussion of these needs did not occur (Mueller, Singer, & Grace, 2004)

In 2003, a study was submitted to the U.S. Office of Education that reflects how CLD students with special needs are receiving services. Two-thirds of districts report special education program staff took primary responsibility for the IEP development. Formal policies for coordination between special education and ESL services were not in place. This means that while both programs are aware of each other, there is not a formal communication system to relay what is being done with students in each program. There is little likelihood that special education and ESL programs are providing consistent service plans (Zehler, Fleischman, Hopstock, Pendzick, & Stephenson, 2003).

Evidence-Based Practices for CLD Students with Disabilities

Many CLD students do not receive appropriate instruction because their teachers do not understand the difference between their language development and the development of their non-ELL peers (Zehler, et al., 2003). In order to enhance instruction for CLD students, teachers should attempt to connect learning to both students' environments and learning abilities. Using materials and language that appropriately represent diversity and that are free from bias can be important components in achieving an appropriate learning environment (Garcia & Tyler, 2010).

Explicit language instruction is the most agreed upon method for working with CLD students with learning disabilities. When ELL students are at risk, using explicit instruction and appropriately scaffolding development of skills is essential, no matter what skill is being taught. (Rivera, Moughamian, Lesaux, & Francis, 2009). Working with CLD students with special needs requires even more explicit instruction in both the students' primary language and in English.

According to Utley, Obiakor, and Bakken (2011), culturally responsive teaching for CLD students with learning disabilities should make academic achievement and learning rigorous, exciting, challenging and equitable with high standards. Such teaching should also promote cultural competence, allowing students to engage in the learning process across different cultural and linguistic groups. A culturally responsive framework should not replace academic data, or effective and evidence based teaching practices.

Evidence-Based Practices for CLD Students with Learning Disabilities

Schmidt and Ma (2006) describe seven essential elements in creating a learning environment appropriate for CLD students with learning disabilities. These seven elements include: High expectations, positive relationships with families and communities, cultural

sensitivity, active teaching methods (involving students in a variety of learning opportunities that use all types of learning), teacher as facilitator (presenting information and allowing students to work in small groups to create better understanding), student control of portions of the lesson, and instruction around pairs and groups. These seven characteristics of a classroom will help the CLD student with a learning disability find success not only in closing the cultural gap but also providing the scaffolding to help them learn the curriculum presented.

Williams (2001) explains that structuring activities to be context rich as well as relating English language to students' native language can be highly useful as students learn a second language. Speaking clearly and providing sufficient wait time also allows students to process information and construct a clear response.

Little research describes how to create a behavior management program that prevents behavior problems across all cultures. Educators must strive to create an environment incorporating the values of all cultures. Proactive and culturally responsive behavior management is necessary in these situations. Positive Behavior Support (PBS) systems across tiers are one way to achieve such an outcome (Utley, et al., 2011). PBS systems also create a caring environment based on positive behaviors; these systems are less punitive and often create a more comfortable environment for students from varying cultures.

Teachers must identify instructional barriers that CLD students with learning disabilities may be facing. Then, teachers can appropriately scaffold learning. Evaluating barriers may include reflecting on appropriateness of assessments and instructional strategies which may impede learning. Teachers should then select adaptations most beneficial to learners. Adaptations might include reducing information the student must process or providing more opportunities for the student to gain the information required (e.g., small group work, peer-

assistance, study guides). Coordinating instruction across teachers and environments is another beneficial method to assist CLD students with learning disabilities to gain access to the general education curriculum (Garcia & Tyler, 2010). Special educators must be aware of how culture affects their students in the classroom from learning styles to behaviors. Understanding cultural factors and gathering anecdotal information from parents of CLD students can be extremely beneficial in determining and providing appropriate services (Utley, et al., 2011).

Evidence-Based Practices for Students with Autism Spectrum Disorders

A small study of 14 English-Chinese bilingual students with ASD and 14 English monolingual children with ASD study conducted by Petersen, Marinova-Todd, and Miranda (2012) showed that students with ASD did not suffer adverse affects from bilingualism. The study shows no differences in students' lexical skills across the two languages. Although they may learn differently, CLD students with ASD learn language at the same pace as their monolingual peers with ASD.

Six interventions for teaching students with Autism Spectrum Disorders (ASD) are outlined by the Committee on Educational Interventions for Children with Autism (2001). These interventions include teaching children functional communication, social skills, play, academic and cognitive skills and decreasing challenging behaviors. Using these strategies showed positive effects for 94% of participants across age, diagnosis and curricular area (Machalicek, O'Reilly, Beretvas, Sigafos, Lancioni, Sorrels & Rispoli, 2008). In 2001, the National Research Council also showed that generalization and maintenance of skills are important areas to consider when working with students with ASD. The ASD population has difficulty transferring skills across settings and maintaining skills over time. Sufficient research does not exist across race or

socioeconomic participants, to determine if CLD students with ASD require other interventions to effectively learn skills in these areas (Machalicek, et al., 2008).

Professional Development for Working with CLD Students with Disabilities

Eighty percent of special education teachers serve students with two or more primary disabilities, and 32 percent teach students with four or more different primary disabilities. On average, almost one-fourth of special education students are from a cultural or linguistic group different from the teacher, and seven percent are English Language Learners. Special education teachers serve students who are highly diverse and challenging (Office of Special Education Programs, 2002).

Although explicit instruction is recommended for CLD students with learning disabilities, special educators and other professionals who work with these students receive very little training to assist them in developing these practices. In the national report given to the U.S. Department of Education in 2003, 60.5 percent of teachers whose primary responsibility is special education report that within five years of teaching they have received a median of three hours of training related to working with limited English proficient students. They report that they have received 40 hours of inservice related to special education and the number of hours training them to work with ELL students with disabilities is zero (Zehler, et al., 2003). Limited research exists to show that educators are specifically trained to work with CLD students with special needs.

Professional development programs in multicultural education is necessary and research suggests that professional development should be collaborative, developed based on teacher and administrator input, use quantitative and qualitative measures and lead to change in classroom and school practices. Current studies recommend that teachers be included in planning

professional development which will target skills that they may be lacking and provide support as they implement new information and practices in their classrooms (Obiakor, Utley, Smith, & Harris-Obiakor, 2002).

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APPENDIX B: Consent Form

**Exploring Language Services Provided to Culturally and Linguistically Diverse students
with Autism Spectrum Disorder in the State of Utah
Research Study**

Purpose: This study is being conducted by Jeannie Zwahlen, a Special Education graduate student at Brigham Young University. The purpose of this study is to explore English as a Second Language (ESL) or Bilingual services provided to Culturally and Linguistically Diverse (CLD) students with Autism Spectrum Disorders (ASD) in the state of Utah. You are invited to participate in this study because you are a Special Education teacher in the state of Utah.

Procedures: Your contact information was obtained through the Utah State Office of Education. Special educators working with students ages 5-22 in the state of Utah will be asked to participate in this study. If you choose to participate, you will be asked to complete an online survey regarding ESL/Bilingual services provided to the students in your class and your training and perception of ESL/Bilingual services. The survey contains 38 questions and should take approximately 20 minutes of your time.

Risks: Participation in this study should not pose any risks to you personally.

Benefits: Participation in this study may not benefit you personally. However, we hope to gain more insight into what services are being provided and what areas need improvement in providing ESL services to Utah students with ASD.

Voluntary Participation and Withdrawal: Participation in this study is voluntary. If you decide to be in the study and change your mind, you may skip questions or stop participating at any time.

Confidentiality: Your name and other information will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally.

The research data will be kept in a password-protected computer. After 3 years, the data will be securely deleted from the computer.

Questions: If you have question about the study, please contact Jeannie Zwahlen at 435-650-4748 or jeanniez@provo.edu or my advisor, Tina Dyches at tina_dyches@byu.edu. If you have questions about your rights as a participant, please contact the IRB Administrator, Brigham Young University, A-285 ASB Campus Drive; Provo, UT 84602; 801-422-1461; irb@byu.edu.

Consent: If you consent to participate in this study, please click on the survey link provided below.

Recruitment Email

Dear Special Educator,

Research indicates that culturally and linguistically diverse (CLD) students benefit from services providing second-language support and instruction. CLD students with Autism Spectrum Disorders (ASD) have more specific learning needs than typically developing CLD students. More research is needed to assist professionals who work with CLD students with ASD to understand how to meet both the learning and the language needs of this population.

This research study is being conducted to understand what types of services are being offered, how services are provided, and what training and materials are being given to professionals who work with this population of students in the state of Utah. As a special educator, your input regarding this topic is invaluable. You can provide your feedback by completing a brief online survey, which should take approximately 20 minutes.

There are minimal risks associated with participation in this study. If you choose to participate, your name will be entered into a drawing for a \$50 gift card.

If you agree to assist us with this research, please click on the link below. This will take you to the consent form and the online questionnaire.

If you have questions about this research, you may contact Tina Dyches at (801) 422-5045 or the BYU Institutional Review Board Administrator at (801) 422-1461.

Thank you for considering this request.

Sincerely,

Jeannie Zwahlen
Special Education Graduate Student

Tina Dyches, Ed.D.
Professor, Department of Counseling Psychology and Special Education

APPENDIX C: Instruments

Survey for Special Educators Working with CLD students with ASD in Utah

Eligibility Question : Do you have students on your caseload with Autism Spectrum Disorder who have a home language other than English? Yes/No

Part 1: Professional Information

1. What is your current age?
2. What is your gender?
 - a. Male
 - b. Female
3. What is your ethnicity and race?
 - a. Hispanic or Latino
 - b. NOT Hispanic or Latino
 - i. American Indian or Alaska Native
 - ii. Asian
 - iii. Black or African American
 - iv. Native Hawaiian or Other Pacific Islander
 - v. White
 - vi. Other (Please specify)
4. Do you speak any languages other than English?
 - a. Yes
 - b. No
 - i. If yes, please indicate each language and your level of proficiency for each language.

Language	Basic (0-40 words)	Intermediate (Limited conversation)	Fluent

5. What is the highest educational degree you have received?
 - a. Bachelor's degree
 - b. Master's degree
 - c. Education Specialist degree
 - d. Doctoral degree
 - e. Other (please specify) _____

6. In what area(s) did you receive your special education licensure? Please check all that apply.
- Severe disabilities
 - Mild/moderate disabilities
 - Early childhood special education
 - Hearing Impaired
 - Visually Impaired
 - Other (list): _____
7. Do you hold licensure or an endorsement in English as a Second Language or Bilingual Education? (Please check all that apply)
- English as a Second Language
 - Bilingual Education
 - Not applicable
8. Do you hold any additional licensures, endorsements, licenses? Yes/No
Please specify.
(e.g., Early Childhood Education, Elementary 1-8 , Reading Level 1, Mathematics Level 2?)
9. How many years have you been teaching in special education? ____ years.
10. Do you teach in a Title I school?
- Yes
 - No
11. In what type of district do you teach?
- Urban (a central city of a metropolitan area)
 - Suburban (a community located less than 25 miles from an urban center)
 - Rural (a community located 25 miles or more from an urban center)
12. In what type of setting do you teach?
- Institution
 - Home
 - Self-contained School
 - General School
 - General education class
 - Resource class
 - Self-contained class
13. Have you received in-service training in English as a Second Language or Bilingual Education through your school or district?
- Yes
 - No
 - If yes, on average how many hours per year? _____

14. Have you received pre-service training in English as a Second Language or Bilingual Education through your university or licensure program?
 - a. Yes
 - b. No
 - c. If yes, on average how many semester credits? _____
15. Rank the type of training you would find most beneficial in working with CLD students with ASD (1 representing the most important and 6 representing the least important).
 - a. Professional development based on current ASD practices
 - b. Professional development based on current CLD practices
 - c. Professional development based on integrated practices for CLD and ASD
 - d. In-class implementation and support of CLD practices
 - e. In-class implementation and support of ASD practices
 - f. In-class implementation and support of integrated practices for CLD and ASD
 - g. Other. (Please specify).

Please answer the following questions using the scale of 1 to 7 with 7 being strongly agree and 1 being strongly disagree:

	Strongly Disagree	Somewhat Agree	Disagree	Neither Agree or Disagree	Agree	Somewhat Agree	Strongly Agree
It is important to provide second language instruction to CLD students with ASD.	1	2	3	4	5	6	7
Second language instruction will help my CLD students with ASD develop their communication skills in English.	1	2	3	4	5	6	7
Second language instruction will help my CLD students with ASD develop their communication skills in their native language.	1	2	3	4	5	6	7
CLD students with ASD should be instructed in English only because that is the language that they will need to understand at school.	1	2	3	4	5	6	7

Part II: Student Services

1. How many students are on your caseload?
2. What is the teacher/paraeducator ratio to student?
3. Please list the home languages spoken other than English for each student with ASD on your caseload. If more than one student speaks the same home language, please indicate how many students speak that language.
 - i. (e.g., Spanish - 2, Navajo – 1)
4. What is the age range of the students currently on your caseload? (Please check all that apply)
 - a. Birth to 2 (Early Intervention)
 - b. Preschool
 - c. Elementary (K-6)
 - d. Middle School or Junior High School
 - e. High School
 - f. Post High School

5. List how many of your students have receptive and expressive language skills in the following categories.

		Non-verbal	Low	Basic	Fluent
English	Expressive				
	Receptive				
Native Language	Expressive				
	Receptive				

6. As a teacher, do you provide English as a Second Language or Bilingual instruction to your students with ASD?
 - a. Yes
 - b. No

7. Do any of your CLD students with ASD receive English language instruction from

	Yes	No	How many students receive instruction from this individual?
ESL certified instructor			
Bilingual certified instructor			
ESL Para-educator (Under supervision of certified ESL instructor)			
Bilingual Para-educator (Under supervision of certified ESL instructor)			

8. If you have CLD students with ASD receiving services from any of the above individuals, how do these individuals participate in the student's educational program? (Please check all that apply)

	ESL certified instructor	ESL paraeducator	Bilingual certified instructor	Bilingual paraeducator
Assess educational needs				
Participate in developing the IEP				
Design lesson plans or instructional program				
Provide instruction				
Train classroom staff to provide services				
Consult with classroom teacher				
Other (Please Specify)				

9. Do any of your CLD students with ASD receive speech/language services from

	Yes (How many?)	No	Language (English, Native Language, Equal amounts of English and Native Language)
Speech/Language Pathologist			
Paraprofessional under supervision of Speech/Language Pathologist			

With what frequency do you use these strategies to communicate with parents of CLD students with ASD?

	Never	Daily	Weekly	Monthly	Semi-annually	Annually
Send correspondence (e.g., emails, newsletters, letters, progress notes) home in English						
Send correspondence (e.g., emails, newsletters, letters, progress notes) home in the student's native language						
Communicate through a professional interpreter/translator						
Communicate through an informal interpreter (e.g., colleague, community member)						
Communicate through the student's sibling who speaks the language of the parents						
Verbally communicate with the parents in their native language						
Other (Please specify)						

Part III: Classroom Information

1. How much of the school day is a language other than English used in your classroom for instruction?
 - a. 0 hours
 - b. Up to 30 minutes
 - c. Up to 1 hour
 - d. Up to 2 hours
 - e. 2-4 hours
 - f. More than 4 hours

2. How often do you, your staff or your students use materials in your classroom that are in students' home languages (other than English):
 - a. Never
 - b. Daily
 - c. Weekly
 - d. Monthly
 - e. Annually

If yes, please specify the type of materials and the language of the materials:

Material	Language(s) (Spanish, Navajo, Vietnamese, Other (Please specify))
Books	
Communication Devices (e.g., PECS books, communication boards, speech generating devices)	
Pictures	
Games	
Computer software	
Applications for tablets (e.g., iPad, Kindle)	
Audio materials	
Video materials	
Other (please specify)	

Do any of the other staff or volunteers in the classroom speak a language other than English?

- f. Yes
- g. No

If yes, please indicate the languages spoken, level of proficiency for each language and the individual's role in the classroom (e.g. paraprofessional, volunteer)

Role in the classroom	Language	Basic (0-40 words)	Intermediate (Limited conversation)	Fluent

3. Does your current speech language pathologist speak a language other than English?

- a. Yes
- b. No

If yes, please indicate the languages spoken, level of proficiency for each language that they speak.

Language	Basic (0-40 words)	Intermediate (Limited conversation)	Fluent

4. What are some of the challenges you face when providing services to English language learners with ASD?

5. Please include any other comments.