

NM-PASS

New Mexico – Preparing Autism Spectrum Specialists

CFDA 84.325K Combined Priority for Personnel Preparation:

Focus Area D: Training Personnel in Minority Institutions to Service Children, Including Infants and Toddlers, with Disabilities

Part III: PROJECT NARRATIVE

The purpose of this project is to increase the number of highly qualified personnel to deliver quality services to students from culturally and linguistically diverse (CLD) backgrounds using research-based interventions for addressing the needs of students with Autism Spectrum Disorders (ASD). As such, the emphasis of this program will be on developing competencies of professionals in the areas of appropriate identification and research-based interventions. It is the goal of the project to recruit, mentor, train, and graduate 21 students with a Specialization in ASD, in addition to a Master of Arts in their major field. These students will be highly qualified to intervene with CLD students with ASD. Because participants will have a public school service obligation at the end of their training, this will assist in alleviating the severe shortages of highly qualified special educators with specialized knowledge of children with ASD.

(A)(1) Need for Project

(2)(i) Extent to which specific gaps or weaknesses in services, infrastructure, or opportunities have been identified and are addressed, including the nature and magnitude of those gaps or weaknesses

National Need: The need for special educators with preparation and expertise to teach children with Autism Spectrum Disorders (ASD) is evident in school districts across the United States. The 2008 American Association for Employment in Education (AAEE) report identified special

education as a field with considerable teacher shortage in every region in the United States. The need for special education teachers is expected to increase by 17 percent from 2008 to 2018, which is faster than the average for all occupations. Although student enrollments in general are expected to grow more slowly than in the past, continued increases in the number of special education students needing services will generate a greater need for special education teachers (U.S. Department of Labor, 2010). According to the Individuals with Disabilities Act (IDEA) Data Accountability Center, 12% of special education teachers serving children with disabilities age 3 through 5 and 11 % of special education teachers serving children with disabilities age 6 through 21 are not fully certified (IDEA Data, 2006). Boe and Cook (2006) suggest that the shortage of fully certified special education teachers will continue to grow.

The number of children with autism continues to rise and according to the Center for Disease Control (CDC) (2009) the prevalence of children with ASD is 1:110. Other estimates report that 1:91 children have been diagnosed with ASD (Kogen et al., 2009). In 2007, 39,434 children 3 through 5 years of age and 258,305 children 6 through 21 years of age were served under the “autism” classification for special education services (CDC, 2009). With the prevalence of children with ASD increasing, it is critical to have highly qualified special education professionals with additional training, knowledge, and expertise in ASD. It is especially crucial for special education teachers serving the age 3 through 5 population, where 12% of teachers are not fully certified, to have additional training and expertise in ASD. The long term benefits of early intervention for children with ASD have been well documented (National Research Council (NRC), 2001). President Barack Obama has pledged continuing support of the Combating Autism Act (2006) and has promised additional funding over the next eight years to expand support for children, families, and communities affected by ASD.

State and Local Need: The state of New Mexico reported that there are 46,384 students age 3 through 21 receiving special education services. Of these students 902 (1.94%) received special education services under the eligibility of “autism” (Easter Seals, 2009).

In New Mexico 8% of special educators serving children age 3 through 5 and 13% of special educators serving children age 6 through 21 are not fully certified to teach special education (IDEA Data, 2006). This is higher than the nationally reported statistic for special education teacher shortages. At New Mexico State University (NMSU) there are currently 85 teacher candidates in the Alternative Licensure Program. These 85 teacher candidates are currently hired by a school district in New Mexico to teach students with disabilities and are teaching with a provisional license. The increase in special education teachers who are not fully certified is due in large part to the increase in students meeting IDEA and state requirements for special education services. Relevant to this project is that fact that there are currently 24 openings (55%) for special education teachers in six school districts (Las Cruces Public Schools, Alamogordo Public Schools, Hatch Valley Public Schools, Truth or Consequences Municipal Schools, Deming Public Schools, Gadsden Independent School District), within the area that NMSU trains special education teachers, two of which are specific to autism specialists. Most districts reported educating their children with ASD in heterogeneous self contained classrooms or in inclusive programs (Cronin & Newton, in press). Because of the placement of children with ASD in a variety of educational settings within the school districts, there is a critical need for training all educators, both general education and special education, on research-based interventions for children with ASD.

In November 2008 a survey was sent to 37 school districts in southern New Mexico. The purpose of this survey was to determine approximately how many children were identified with

ASD in southern New Mexico, what services were available to families through the districts, what ability the school districts had in completing multidisciplinary evaluations for children suspected of having an ASD, and what support the university might provide to the community. Of the 37 school districts surveyed, 18 (49%) were returned. Based on the information from the surveys and the Child Count Information from the New Mexico Public Education Department (NM-PED), it is conservatively estimated that there are approximately 300 children with ASD in southern New Mexico. Survey respondents were also asked to indicate what support services NMSU could provide. All respondents requested training for school district employees (Cronin & Newton, in press).

The following statistics demonstrate the student CLD in New Mexico:

	All Students	Students with ASD
Caucasian	29.5%	54.5%
African American	2.6%	4.5%
Hispanic	55.5%	32.4%
Asian Pacific Islander	1.4%	2.2%
American Indian	11.1%	6.5%
English Language Learners	18.5%	-
Children with Disabilities	15.1%	-
Children Living in Poverty	23.8%	-
Children Eligible for Free/Reduced Lunch	63.6%	-

Table 1. Student Cultural and Linguistic Diversity in New Mexico (NM-PED, 2009a)

ASD is reported to occur in all racial, ethnic, and socioeconomic groups. Even though the demographics for children with ASD do not mirror the demographics of the state, it is imperative

to recruit personnel who are CLD to work with this population of children. There is an increased difficulty in diagnosing children with ASD who are CLD due to cultural beliefs, family values, and language barriers. According to Rodriguez (2009) CLD students with ASD have three major challenges: (1) language differences, (2) cultural differences, and (3) the disability. It is particularly difficult for CLD families to access services (Birkin, Anderson, Seymour, & Moore, 2008). Liptak (2008) reported that race, ethnicity, and socioeconomic status affect the timely diagnosis of children with ASD. Therefore, it is of the utmost importance to identify these children in need of early intervention. Having special education personnel who are knowledgeable about CLD families who are also dealing with ASD issues is of critical importance in New Mexico.

(ii) Extent to which the proposed project will prepare personnel for fields in which shortages have been demonstrated

Despite the numbers of students identified with ASD, there is no state licensure endorsement in New Mexico for teaching this population of students. Children with ASD have unique learning needs. Teachers have commented that the needs of their children vary from day to day. One day it may be to work on communication and the next day following a classroom routine is most important. There are many variables affecting children with ASD such as communication deficits, social skills impairments, and behavioral challenges. This project will provide educators with the tools they will need to effectively teach learners on the autism spectrum, considering their diverse needs, abilities, cultural experiences, and learning styles, as recommended in the Council for Exceptional Children's (CEC) Initial Practitioner and Advanced Specialist in Developmental Disabilities/Autism standards (2010), in addition to their special education teaching license.

Based on the premise that successful teaching is grounded in understanding, there is a critical need to prepare teachers with the foundational knowledge and practical skills for educating CLD learners on the autism spectrum. This can be accomplished by blending the most up-to-date theory and research with effective, meaningful, and research-based practices to ensure that every child with an ASD receives the high quality education he or she deserves, regardless of cultural or linguistic identification (NRC, 2001).

Students with ASD, especially those with co-morbid conditions, are not easy to teach, given their significant learning deficits and behavioral excesses. These students do not benefit from traditional general education instructional methods, and many special education methods may not be sufficient (NRC, 2001). These students require educators who possess the unique skills needed to provide clear and functional instruction and support in the most basic areas of learning, such as behavior, socialization, and communication. Collaboration with general education teachers and placement in inclusive settings is critical for a child with ASDs social integration. Recent research on teacher preparation for ASD (Lerman, Vorndran, Addison, & Kuhn, 2004; NRC, 2002; Scheuermann, Webber, Boutot, & Goodwin, 2003) recommends that universities consider adding specialized training within their teacher preparation programs to prepare teachers for the ASD students they will have in their care.

The NRC (2001) reported that one of the clear needs in the field of autism is to increase the number of well-prepared professionals to work with children and their families. To that end, this project will result in a Specialization in Autism Spectrum Disorders, in addition to the Master of Arts and special education teaching license, which would help prepare highly qualified personnel to work with these children and their families. The courses comprising the requirements for the Specialization in ASD are: SPED 585-Introduction to Autism; SPED 586-

Behavior and Autism; SPED 587-Social Skills and Autism; and SPED 588-Communication Skills and Autism. These courses include patterns of development in ASD, theories of underlying deficits and strengths, research-based general and specific strategies of intervention, inclusive classroom settings and collaboration with support team members, classroom-based approaches to communication, behavior, and social development, methods of evaluating effectiveness, and attention to CLD needs of families with ASD, as recommended by the NRC (2001). Participants who are CLD, as well as students with disabilities will be rigorously recruited to participate in the proposed grant.

Impact of NM-PASS on Critical Present and Projected Shortages: In response to the national and state need for highly qualified special education teachers who possess the additional knowledge and skills to work with children with ASD, the proposed project will prepare 21 educators with a graduate Specialization in ASD, in addition to the Master of Arts and special education teaching license. These educators will be familiar with theory and research concerning research-based practices for children with ASD, including methods of applied behavior analysis, naturalistic learning, incidental teaching, assistive technology, socialization, communication, inclusion, language interventions, and assessment, as well as effective ways of working with CLD families. The proposed project aims to increase the knowledge and skills of teachers by incorporating the CEC standards for developmental disabilities/autism into the course curricula. Children with ASD have diverse needs and learn best in diverse contexts; therefore, teachers need to be familiar with alternative sets of curricula and various methods for implementing them. Educators are responsible for identifying the child's needs, using appropriate curricula to address those needs, selecting appropriate methods for teaching the curricula, and ensuring engagement in the activities. In families with ASD, parent training is also a critical component, which in New

Mexico also requires the skills and knowledge to effectively work with CLD families.

Project Goals: NM-PASS will achieve the following goals to provide high quality preparation of ASD specialists with a Specialization in ASD.

Goal 1: To prepare 21 highly qualified special education professionals with interdisciplinary and collaborative knowledge and skills based on research-based practices to effectively intervene with CLD children with ASD and their families.

Objective 1.1: To implement a recruitment plan for identifying, selecting, and awarding scholarships to highly qualified candidates, with an emphasis on recruiting, admitting, retaining, and graduating high quality special education professionals with specialized knowledge of CLD children and families with ASD.

Objective 1.2: To advise/mentor candidates in developing and completing an M.A. program that includes meeting the knowledge and skills competencies for New Mexico state licensure in special education, while ensuring they are prepared to provide services to students with ASD from CLD backgrounds.

Objective 1.3: To provide coursework and research-based instruction in the areas of behavior, social skills, communication skills, and working with CLD families, as well as interdisciplinary collaboration with general education teachers and speech/language pathologists.

Objective 1.4: To provide high quality practicum experiences within the required coursework that integrates the theory and knowledge with practical application in CLD rural public school settings.

Goal 2: To manage, evaluate, and disseminate the activities and models used in NM-PASS to identify any problems and solutions and to share the results regionally and nationally to assist other programs.

Objective 2.1: To manage, administer, and implement the project, monitor the budget, and prepare reports on time and within budget.

Objective 2.2: To evaluate project activities and conduct evaluations by obtaining feedback from students, graduates, employers, faculty, and the Advisory Board to plan improvement and evaluate the project impact.

Objective 2.3: To disseminate information about the project to regional and national audiences.

(B)(1) Quality of Project Services

(2) Quality and sufficiency of strategies for ensuring equal access and treatment for eligible participants

New Mexico State University's (NMSU) policies and procedures for employment adhere to federal policies regarding the recruitment, employment, and advancement of qualified individuals with disabilities and those from underrepresented groups. NMSU does not discriminate on the basis of race, color, national origin, sex, age, disability, or sexual orientation in admission, access to, treatment, or employment in its programs and activities. NM-PASS will actively provide equal access and treatment to all persons including racial or ethnic minorities, women, and individuals with disabilities. NMSU consists of five campuses; the main campus located in Las Cruces with satellite campuses in Dona Ana, Alamogordo, Carlsbad, and Grants. NMSU is the largest Hispanic-Serving Institution in the country and attracts a large number of students who are first-generation college students. Based on fall 2009 statistics, the university has **49% minority enrollment**. The table below represents the cultural diversity of NMSU and in the Special Education/Communication Disorders (SPED/CD) department.

	NMSU	SPED/CD Department
Caucasian	51%	41%
African American	3%	Less than 1%
Hispanic	41%	39%
Asian Pacific Islander	1%	2%
American Indian	3%	4%
International Students/Did Not Disclose	-	13%
Students with Disabilities	8%	3%

Table 2. Demographic Data of NMSU and SPED/CD (2009)

Recruitment of participants will target underrepresented groups, including individuals with CLD backgrounds and persons with disabilities. Students with disabilities will be encouraged to apply and accommodations will be provided to assure they have full access to completing their program. The SPED/CD department has a strong history of recognizing individual students' needs and modifying their programs of study to accommodate students' diverse learning needs. In the past three years successful graduates of the program, who are currently employed, have included two students with significant learning disabilities, including one with dyslexia. There are currently four students in the graduate program registered with Student Accessibility Services.

A multifaceted recruitment model will be used to ensure that students from traditionally underrepresented groups and individuals with disabilities are invited to apply for the project. Recruitment will take place on the state, community, and university levels. Participants will be admitted to the program based on university and department criteria.

At the state level, the Project Director will capitalize on her participation on the State

Autism Task Force and distribute information about the specialized training in ASD available at NMSU. Information will also be distributed through a state-wide autism list-serv that reaches professionals working in the autism field, parents and families with ASD, individuals with ASD, and others with an interest in ASD.

At the community level, information and brochures about the training in ASD at NMSU will be distributed through the Alliance for the Advancement of Teaching and Learning (See Appendix A). The Alliance is comprised of school district superintendents and agencies whose mission is to collaboratively contribute to the success of all children throughout New Mexico and the educators who serve them. There are currently 33 school districts and agencies represented in the Alliance. This is an ideal method to reach current teachers that represent the CLD in New Mexico who need additional expertise in educating children with ASD. Another strategy for recruiting current special education teachers is through the Autism Support Team in our local school district. NMSU has a long standing relationship with this support team.

New Mexico has Regional Education Cooperatives (RECs) that are created to support small, rural school districts. RECs are an educational service agency committed to providing a continuum of comprehensive education-related services to children, families, schools, and communities with the purpose of supporting successful student outcomes. Because the RECs are the hub for many smaller rural school districts, they are an excellent source for recruiting current and/or prospective special education teachers.

At the university level, recruitment efforts will focus on referrals of potential participants from faculty representing various colleges and departments on campus. The project Advisory Board is an excellent source for these referrals as there is representation from the communications disorders, school psychology, and educational diagnostician programs, as well

as currently practicing professionals in the field (See Appendices B & C). The Project Director will work with the various support groups on campus (e.g., Student Accessibility Services, Student Success Center, American Indian Program, Black Programs, and Chicano Programs) to solicit referrals. Information about the project will be posted on the SPED/CD website so that prospective students have information about the project.

The diverse approaches to recruitment present a promising strategy. Because the focus of this project is to recruit, prepare, and retain highly qualified special educators with expertise in ASD, the **design includes a major effort to locate, assist, accept, and fully train participants from underrepresented groups and individuals with disabilities.**

(3)(i) Extent to which professional development to be provided reflects up to date knowledge from research and effective practice

NM-PASS is founded on research-based and best practices in the education of children with ASD. To successfully assess and educate children with ASD, participants must receive instruction integrated with opportunities for practice and feedback. For professionals to successfully educate children with ASD from CLD backgrounds, they must participate in school settings that provide opportunities for them to practice, reflect, and discuss interventions using research-based practices and practice multidisciplinary collaboration. NM-PASS meets these criteria with systematic, **individualized instruction and school-based assignments** that are aligned with the coursework. Project participants will be evaluated in coursework and school-based assignments using both formative and summative assessments and are expected to acquire and demonstrate the knowledge, beliefs, and skills that assure the families' cultural and linguistic background will be addressed.

IDEA (2004) and No Child Left Behind (NCLB) require special educators to be highly

qualified. They also require that teachers use evidence-based practices in educating children with disabilities. Over the past ten years, the research on evidence-based practices for children with ASD has substantiated several interventions as evidence-based; however, there is no single practice recommended (NRC, 2001).

Up-to date Knowledge from Research Research concerning evidence-based practices for children with ASD advocates methods of applied behavior analysis, naturalistic learning, assistive technology, socialization, communication, inclusion, adaptation of the environment, language interventions, assessment, and the effective use of data collection systems (NRC, 2001). The National Autism Center's National Standards Project (NAC-NSP) (2009) identified eleven interventions with **sufficient research to show they are effective**. These include: antecedent package, behavioral package, comprehensive behavioral treatment for young children, joint attention intervention, modeling, naturalistic teaching strategies, peer training package, pivotal response treatment, schedules, self-management, and story-based intervention package.

The National Professional Development Center on Autism Spectrum Disorders (NPDC-ASD) (2010) has translated research about evidence-based practices for students with ASD into resources for service providers. Through their research efforts, they have identified the following **evidence-based practices that improve outcomes** for students with ASD: antecedent-based interventions, computer-aided instruction, differential reinforcement, discrete trial training, extinction, functional behavior assessment, functional communication training, naturalistic intervention, parent implemented interventions, peer mediated instruction and intervention, Picture Exchange Communication System (PECS), Pivotal Response Training, prompting, reinforcement, self interruption/redirection, self management, social narratives, social skills

groups, speech generating devices/VOCA, structured work systems, task analysis, time delay, video modeling, visual supports.

Although the names of the evidence-based practices from the NPDC are slightly different from the NAC, the concepts are the same and in line with the NRC recommendations. Course content and competencies for the courses in the ASD specialization (See Appendix D) were derived from an extensive review of literature of evidence-based practices for teaching students with ASD (Campbell, Herzinger, and James, 2008; CEC, 2010; Lerman et al., 2004; Mesibov & Shea, 2010; NAC, 2009; NPDC, 2010; NRC, 2001; Odom et al., 2003; Reichow, Volkmar, & Cicchetti, 2008). The content in the courses for the Specialization in ASD also follow the NM-PED (2009b) educator guidelines.

The content of personnel preparation programs for ASD specialists reflects the diversity of approaches in the field of autism. The challenge for the program is how to provide differentiated curricula that are adapted to the social, cognitive, and communication needs of children with ASD. Specific areas that should be addressed include patterns of development, theories of underlying strengths and deficits, general and specific strategies of intervention, classroom-based approaches for communication and social development, and methods for evaluating effectiveness (NRC, 2001). Additionally, McGee and Morrier (2005) recommend the personnel preparation for ASD specialists include instruction and practice in applied behavior analysis, incidental teaching, parent and professional relationships, and instructional and assistive technological innovations, all of which are supported in the NAC (2009), NPDC (2010), and the NRC (2001) evidence-based practices for children with ASD. **Evidence-based practices should be used in concert with the professional wisdom of teachers to maximize the outcomes for children with ASD** (Cook, Tankersly, & Landrum, 2009).

Of critical importance in the training of autism specialists is the collaboration with CLD families, especially in New Mexico. IDEA recognizes the need for **parents to participate** effectively in the education and development of their children and in the quality of transitions that their children make both into and out of school. **Including families at all levels of the service delivery system** from planning and implementation to evaluation and follow-up increase the overall effectiveness of instruction and ensure that the family-centered principles are clearly reflected in the instructional partnerships (NRC, 2001). This is of critical importance when working with CLD families. The findings of Gray, Msall, and Msall (2008) further support this **family-centered approach** revealing that understanding the multiple challenges and stress faced by parents of children with ASD was a key factor in establishing the important collaborative relationship between school and home. It has been found that implementation of a **team approach that involves families in the preparation of teachers** was effective in deepening understanding, facilitating communication, and developing collaborative skills for mutual planning, implementation, and evaluation to increase positive student outcomes (Parents Reaching Out, 2009).

In CLD families, there is also the need to **include extended family members** in the evaluation and education of the child with ASD. The family, as a unit, must learn how to help their child with ASD communicate, acquire basic skills, distinguish between safety and danger, and prepare for adult life (Rodriguez, 2009). It is necessary to understand how CLD families view disability in relation to their cultural values. Rodriguez also suggests that the **family's native language plays a major role in facilitating patterns of functioning** within their communities. Patterns of acculturation can affect the family's values and interactions with the school personnel. Families new to the United States may allow educators to dictate their child's

educational programs. Educators need to be aware that **cultural integration takes place over time**. Nehring (2007) reported that families from CLD backgrounds often know very little about services that are available for their children. Additionally, CLD families frequently face discrimination in obtaining services due to the families' immigration status, language barriers, and their lack of trust of persons in authority (e.g. teachers). NM-PASS **through coursework and practical assignments** will ensure that special education teachers have the **knowledge and skills to work effectively with CLD families** who have a child with ASD as recommended by Wilder, Dyches, Obiakor, and Algozzine (2004).

Effective Practices The proposed project will support the training of highly qualified special education teachers with a specialization in ASD. The courses in the specialization have incorporated the following **research-based best practices**: integration of content courses with direct experiences; use of student-directed work based on scenarios encountered in school settings; use of teaching and learning that promote communities of learning; **use of universal design for learning and differentiated instruction**; use of school-based and other field-experience sites; use of **mentoring** and professional development models; use of **direct observation with feedback** as a means of evaluating and teaching; incorporating parents and families as support for their child with ASD (McGee & Morrier, 2005; NRC, 2001).

The unique skills in which ASD specialists must be prepared correspond closely to the extensive and unique needs of children with ASD. Because children with ASD have diverse needs and learn best in diverse contexts, most of the research-based intervention programs use many different curricula to design highly individualized programs for students (NRC, 2001). The need to address goals in behavior, socialization, and communication, in addition to any academic deficiencies, requires teachers to be familiar with alternative sets of curricula and various

methods for implementing them. These skills cannot be acquired from academic classes alone; opportunities to learn from and work with models of working classrooms and effective teachers are crucial for the preparation of ASD specialists (NRC, 2001). NM-PASS has incorporated **community-based assignments that require application of the concepts learned in the courses to be applied in the school or home setting.** This blending of the theoretical with the practical application meets the standards for best practices in training teachers.

The importance of the increasing use of inclusion as an educational strategy for children with ASD makes some form of instruction for general educators imperative. NM-PASS will help **prepare special education professionals to work collaboratively with and provide support to general education teachers and other support staff working with children with ASD.** Practical experience in self contained, inclusive, and resource settings with CLD students with ASD will provide those multidisciplinary and collaborative experiences with general educators, other special educators, and related service personnel.

In an effort to fully address the needs of CLD families, project participants will participate in the Faculty as Families project through Parents Reaching Out. In SPED 585- Introduction to ASD, students will learn firsthand about experiences, both positive and negative, that a family has had in the special education system. This program promotes family leadership skills and professional learning opportunities for future teachers that prepare them to work in partnerships with culturally and linguistically diverse families to improve services, systems and outcomes. Students will gain insight into the family dynamics by spending time with families in their home environment.

There is currently no state licensure endorsement for ASD specialists. The Specialization in ASD is approved by the Graduate School at NMSU. The teacher education programs are

accredited by the National Council for Accreditation of Teacher Education (NCATE) Initial and Advanced Teacher Preparation Levels. The specialization courses on ASD are in addition to the required classes for a special education teaching license. **The competencies for the courses align with the CEC Standards (Knowledge and Skills) for Developmental Disabilities/Autism Specialist.**

(ii) Training and professional development services to be provided are of sufficient quality, intensity, and duration

Project participants will complete a Master of Arts degree in Education/Special Education with a Specialization in ASD and a special education teaching license. Over the four years of project funding, 21 students will complete a program of study requiring 46 credit hours of preparation, which will enable them to be **considered highly qualified special education teachers**. The grant will provide **specialized knowledge in ASD** (12 credit hours). Participants will demonstrate course competencies and evaluation procedures as specified in the course syllabi (Appendix D), reflecting their participation in a state-of-the-art research-based ASD specialization preparation model. Courses will require **field-based experience** with families and schools, many of which are designated as **underperforming schools** by the state test scores and are located in **high poverty areas** which will give them the opportunity to translate research into practice. Coursework will be linked to field experiences through applied assignments working with children with ASD and their families under the **supervision of school and agency personnel in collaboration with project staff**. Participants will receive extra credit for additional field-based assignments to ensure skills competencies.

The following is the scope and sequence for completing the Master of Arts in Education, with a Specialization in ASD and special education licensure:

Year 1		
Fall	Spring	Summer
SPED 500 - Introduction to Special Education in a Diverse Society (3 cr)	SPED 585 - Introduction to Autism Spectrum Disorders (3 cr)	SPED 559 - Classroom Management for Diverse Learners (3 cr)
SPED 523 - Advanced Curriculum for Diverse Exceptional Learners (3 cr)	SPED 513 - Current Research in SPED (3 cr)	SPED 587 - Social Skills and Autism (3 cr)
SPED 504 Introduction to Assessment for Diverse Exceptional Learners (3 cr)	Approved Elective 500+ (SPED, EDUC, CEP, EMD) (3 cr)	
Year 2		
SPED 586 - Behavior and Autism (3 cr)	SPED 588 - Communication Skills and Autism (3 cr)	Approved Elective 500+ (SPED, EDUC, CEP, EMD) (3 cr)
SPED 510 Current Issues in SPED for Teaching in a Culturally Responsive Society (3 cr)	SPED 548 - Field Experience in Education, Equity, and Cultural Diversity (3 cr)	SPED 599 - Masters Degree Comprehensive Exam (NC)
SPED 570 - Life-Span Development and Transition in a Diverse Society (3 cr)	Approved Elective 500+ (SPED, EDUC, CEP, EMD) (3 cr)	

	SPED 590 - Masters	
	Degree Seminar (1 cr)	

Table 3. Scope and Sequence of Courses

Since the project is focused on preparing ASD specialists, the four classes required for the specialization will be reviewed.

SPED 585-Introduction to Autism Spectrum Disorders This course will provide an overview of autism spectrum disorders as a triad of impairments, including historical and theoretical perspectives, assessment issues, characteristics of autism, intervention programs, and CLD family issues. The student should be able to demonstrate knowledge in the following areas: explain the historical changes regarding the diagnosis and treatment of autism; identify the diagnostic characteristics of autism; infer the possible etiology of autism as suggested by recent neurobiological studies; **compare and contrast several different evidence-based behavioral and educational programs**; and describe issues related to CLD parents and siblings. In addition, to apply and relate material covered in coursework, students will participate in the Families as Faculty Program.

SPED 586-Behavior and Autism Students will gain an understanding of the behaviors of children with autism. Students will examine several evidence-based behavior management philosophies and research-based interventions and how they can be applied in the educational setting. Attention will also be given to play skills. The CLD family perspective and participation in the proactive behavior management process will be incorporated throughout the course. The student should be able to demonstrate knowledge in the following areas: identify **evidence-based interventions** for children with autism; explain the elements of **applied behavior analysis** and develop an ABA program; explain the elements of **pivotal response training**; explain the

elements of **structured teaching and visual supports**; compare and contrast interventions to improve play skills; and describe the CLD family perspective and participation in the proactive behavior management process. Field based assignments require students to develop and implement an ABA program and create visual schedules and tasks to be used in a classroom setting. These projects are reviewed in class **to maximize learning by analyzing the projects and providing suggestions to improve student achievement.**

SPED 587-Social Skills and Autism Using a blend of research-based models and evidence-based practical applications, students will gain an understanding of the social skill deficits often associated with autism spectrum disorders and explore effective social skill interventions for children functioning at a variety of levels along the autism spectrum. The student should be able to demonstrate knowledge in the following areas: explain the patterns of socialization and play in individuals with ASD; identify appropriate assessments for determining social and/or play/leisure skills; identify **evidence-based intervention strategies** for social and/or play/leisure skills; explain the differences between the different approaches for increasing socialization; and explain how CLD can impact a child with autism's socialization. Field based assignments include completing a social skills assessment and implementing evidence-based social skills interventions, based on the assessment results. These projects are reviewed in class **to maximize learning by analyzing the projects and providing suggestions to improve student achievement.**

SPED 588-Communication Skills and Autism Students will gain an overview of communication characteristics and difficulties often associated with ASD. Review of current culturally and linguistically appropriate evaluation instruments and strategies used to assess speech, language, and interaction skills will be addressed. The use of assessment results to identify needs and implement culturally and linguistically appropriate interventions will follow. A variety of **evidence-based intervention strategies** aimed at building receptive, expressive, and pragmatic

language of individuals functioning at a variety of levels along the autism spectrum will be explored. The student should be able to demonstrate knowledge in the following areas: CLD assessment instruments that are most frequently used with children and adults on the spectrum and the areas of communication evaluated by each test; identify behaviors that reflect communicative attempts and how to analyze the behaviors; evidence-based interventions used in the area of communication; basic strategies which can be utilized in motivating and acquiring new communication skills with individuals on the ASD spectrum; and **knowledge and use of assistive technology**. Field based assignments include observation of a speech/language assessment and therapy session.

(iii) Training and professional development services to be provided are likely to alleviate the personnel shortages

Over the four year period, the project will prepare **21 highly qualified special educators with specialized knowledge** of evidence-based practices for CLD learners with ASD. Recruitment efforts will focus on current and prospective special education teachers. In supporting these teachers as they develop knowledge and competencies in ASD, we will increase both their qualifications and the likelihood that they will be retained in the field, thereby alleviating the identified special education personnel shortages. The depth and breadth of their ASD knowledge will be increased by enriching effective research-based instructional and behavior management approaches with specific preparation to work with the increasing numbers of students with ASD served across the continuum of placements. Upon completion of the Specialization in ASD, the vital knowledge and expertise that these special educators will bring to the classroom and to collaborative partnerships is expected to have a major impact on the **quality of services** for students with ASD. Because CLD issues are covered in every course and

specific strategies effective for CLD children with ASD and their families are stressed through coursework and field-based assignments, these highly qualified educators will be better able to address the needs of CLD families in New Mexico.

The project is planning to ensure that quality service will continue beyond the funding period by requiring participants who receive financial assistance to subsequently provide special education services to children with disabilities for a period of two years for every year for which assistance was received. The mechanism to be employed will require participants to sign a NM-PASS Service Agreement to serve as special educators for the required term based on requirements of 34 CFR 304.30 (Appendix E). This agreement will be signed in advance and will also require the participants to agree to communicate with the project office each year to assure currency of addresses. **Participants will not be required to work as a condition for receiving the scholarship.**

(iv) Professional development to be provided involves the collaboration of appropriate partners

Collaboration activity will be an integral part of this project. The College of Education and the SPED/CD department have **numerous professional partnerships** with area schools that focus on research-based educational practices such as authentic assessment, cooperative learning, integration of technology, and inclusive learning. The SPED/CD faculty has a strong record of assistance to local public schools, providing assistance to teachers and developing collaborative relationships. It is imperative to continue the collaborative relationships with general education teachers as well, since many students with ASD are educated in the general education classroom. The faculty also has a strong history of maintaining and fostering ties with graduates of the program. In developing NM-PASS, the Project Director has communicated with the **advisory**

board and The Alliance for the Advancement of Teaching and Learning. The Project Director is also a member of the advisory board for the Alliance. These collaborative partnerships with public schools have and will continue to provide for the exchange of knowledge and for the research of effective instructional strategies. Because the project Advisory Board has representation from other disciplines (speech/language pathology, school psychology, and educational diagnostics), as well as currently practicing professionals and parents, collaborations with these departments, professionals, and families will be ongoing. The project will also incorporate the collaboration and support of **Parents Reaching Out**. Additional partnerships are maintained with the State Autism Task Force and the local school district autism support team by membership on their boards.

(C)(1) Quality of Project Personnel

Detailed information is provided in personnel curriculum vitae (Appendix C). All personnel are highly experienced and well qualified for the roles that they will fulfill in the project.

(2) Extent to which the applicant encourages applications for employment from persons who are members of groups that have been traditionally underrepresented based on race, color, national origin, gender, age, or disability

In philosophy and practice, NMSU is an equal opportunity agency, which secures employees from the most qualified candidates available, regardless of race, color, national origin, gender, age, or disability. Every effort is made to recruit employees with proven potential or abilities in the field of special education.

The SPED/CD faculty is highly qualified to make significant contributions to the components of this project. The diversity of our faculty is an especially important asset. The current faculty includes both genders with women outnumbering men 2.6 to one. Included are

three individuals with physical, learning, and other health related disabilities, an age range from twenties to sixty plus, and representatives of several ethnic, cultural, and racial groups including two African Americans, five Hispanic, and one Asian-Pacific Islander. Secretarial staff includes two Hispanic. Work study students include 3 Hispanics and 1 Native American. These numbers demonstrate an ongoing commitment to the recruitment and employment of highly qualified faculty and staff who are members of underrepresented groups.

This project is specifically designed to **promote and foster the participation, mentoring, and preparation of individuals from traditionally underrepresented groups.** Efforts will include the recruitment strategies listed in section (B)(2) on pages 9-12. All applicable laws included in Appendix F will be adhered to. The university is committed to providing equal access and to prohibit discrimination based on race, color, religion, gender, national origin, or age. It is the policy of NMSU **to provide equal opportunity for employment and advancement of all qualified individuals** to prohibit discrimination in employment or in participation in teacher preparation programs, and to promote the full realization of equal opportunity through a positive continuing program of affirmative action.

(i) Qualifications, including relevant training and experience, of key project personnel

Project Director: Kathleen A. Cronin, Ph.D. will commit .25 FTE annually to run the grant and teach courses in the summer. During the academic year, the .25 FTE will be used to buy out a course so that she may focus her attention on the grant. Dr. Cronin specializes in the area of autism spectrum disorders. She obtained her doctorate from the University of California, Riverside. Prior to earning her doctorate she earned a Master of Science in Counseling and Administration, and a Master of Arts in Education/Special Education. She holds teaching credentials for Multiple Subjects K-12, Specialist-Severely Handicapped, Resource Specialist

Certificate of Competence, School Counseling with a Behavior Intervention Case Manager supplemental authorization, and Administrative Services. She worked in the public school setting for over 25 years as a general education and special education teacher, middle and high school counselor, and site and district office administrator. In her position at the district office, she was responsible for designing, implementing, and overseeing the district's programs for children with ASD. She has presented workshops throughout southern New Mexico on the use of evidence-based practices for children with ASD.

Christine Newton, M.A., CCC-SLP will provide instructional support for the ASD courses. She is the coordinator of the SNAP program and has worked as a speech/language pathologist for 18 years in the local school district. Additionally, she is a trained music therapist. She has extensive experience assessing and working with CLD children with ASD. As part of her duties with SNAP, she supervises graduate student clinicians in the CD program who provide services to children with ASD. She has and will continue to guest lecture in the Introduction to Autism and Communication Skills and Autism courses. Her services are in-kind and not included in the budget.

Charlotte Mason, M.A., CCC-SLP will provide instructional support for the ASD courses. She is the director of clinical services for the Edgar R. Garrett Speech and Hearing Center, the clinic on the NMSU campus. She has over 20 years experience working in pediatric speech-language pathology settings with a particular focus in autism, AAC, and early language development. Ms. Mason was instrumental in securing the original funding for the SNAP program and provided clinical supervision to graduate student clinicians who traveled to Deming to provide services to children with ASD. She has been and will continue to guest lecture in the Introduction to Autism and Communication Skills and Autism courses. She is an invaluable asset to this project and her

services are in-kind and not included in the budget.

Ivelisse Torres-Fernandez, Ph.D. will provide instructional support for the ASD courses. She is an assistant professor in the Counseling/Educational Psychology department. She holds a school psychology license and is specially trained in completing CLD assessments. She is a member of the multidisciplinary ASD assessment team at NMSU and has intimate knowledge of the CLD issues families in New Mexico are facing. She supervises graduate students at their practicum sites. She has co-authored a book chapter on Multiculturalism and Diversity: Implications for the Training of School Psychologists. She has been and will continue to guest lecture in the Behavior and Autism course. Her services are in-kind and do not appear in the budget.

Advisory Board

The purpose of the Advisory Board is to advise the Project Director in planning and implementing the project, participating in the selection of student participants, and ensuring the CEC standards and recommendations for personnel preparation for specialists in ASD are maintained in the coursework. They will also support recruitment efforts to assure that students from traditionally underrepresented groups and students with disabilities apply to the project. Further, they will assist with evaluation efforts to determine how well the grant is meeting its goals and make suggestions for improvements based on the evaluations. The Advisory Board is comprised of practicing professionals in the field and parents of a child with ASD (See Appendix B).

Elizabeth Boggs is the Director of Special Education for Deming Public Schools. She has extensive training in working with children with ASD and has a unique understanding for the training, knowledge, and expertise that teachers and other support personnel need in order to meet the needs of children with ASD. Deming Public Schools are a **high poverty/high need**

district and are part of the Alliance and have served as practicum placements for the SPED/CD program.

Melinda Bennett Morgan, M.A. is a doctoral scholar in the SPED/CD department at NMSU. She holds licenses in School Psychology, Educational Diagnostics, and School Counseling. She is a practicing school psychologist and completes assessments for CLD children. Children with ASD are her focus area and she completes numerous assessments due to her expertise.

Dr. and Mrs. Bernard Pina are parents of an adolescent with ASD. Their perspective, being both parents of a child with ASD and from a CLD background, makes them ideal to support the goals and objectives of the project.

Additional Advisory Board members, including a special education teacher, general education teacher, speech/language pathologist, and behavior specialist, all of whom work with children with ASD, will be solicited from local school districts which are located in high poverty/high need areas. Many of these individuals are graduates from the SPED/CD program. A community agency providing early intervention services (Apprendamos) will also be contacted to provide their perspective on the training needs of ASD professionals. This agency is an excellent addition because they also employ graduates of the program and are in an ideal position to evaluate the program's effectiveness.

Graduate Assistant: Alice Morris-Jones, M.A. is a doctoral scholar in the SPED/CD department at NMSU. She is a licensed special education teacher who has worked in specially designed classes for children with ASD and been a private tutor for two children (now adolescents) with ASD. She has provided intensive behavior interventions based on ABA and worked on improving social skills through naturalistic teaching methods. She has assisted in preparing materials for the courses in the ASD specialization and has been a guest lecturer in

class (See Appendix B).

External Evaluator/Consultant The person for this position has not been identified. Qualified applicants will be solicited who have expertise in CLD issues and children/families with ASD. This person will assist the Project Director in identifying areas that need to be addressed and in providing solutions to problematic areas. Additionally, this person will provide professional development workshops each year in the area of CLD children with ASD for participants in the grant, as well as special education professionals in southern New Mexico.

	Project Staff	Advisory Board	Total
Caucasian	4	2	6
African American	1	0	1
Hispanic	2	3	5
Asian Pacific Islander	0	0	0
American Indian	0	0	0
Bilingual	4	4	8
Has a Disability	2	0	2
Parent of a child with a Disability	1	2	3

Table 4. Project Personnel Diversity

(D)(1) Quality of the Management Plan

(2)(i) Adequacy of the management plan to achieve objectives

The management plan serves as a blueprint for operating the project and allows the project personnel to evaluate the effectiveness of the project and actualize the project goals of

preparing highly qualified special educators with knowledge and expertise in children with ASD, particularly those that are CLD. The budget plan, timelines, and milestones for accomplishing project tasks are adequate to achieve the goals and objectives of NM-PASS (See Table 5).

(ii) Adequacy of procedures ensuring feedback and continuous improvement in the operation of the proposed project

The management plan will ensure the full participation of a multidisciplinary advisory committee and the incorporation of their advice and guidance to enhance the success of the project. Their input will be especially important in the planning and refinement of the program of study, recruitment, and evaluation. It is planned that they will meet/provide input each semester of the project through face-to-face meetings and electronic communications. Project progress information and evaluation data will be shared with members to assist them in developing recommendations and suggestions for project improvement. Minutes of the meetings and copies of electronic communication will be retained in a project file. At this time, persons agreeing to serve are: Elizabeth Boggs, Director of Special Education-Deming Public Schools; Melinda Bennett Morgan, Licensed School Psychologist; and Bernard and Loretta Pina, parents of a child with ASD. Additional Advisory Board members, including a special education teacher, general education teacher, speech/language pathologist, and behavior specialist, all of whom work with children with ASD, will be solicited from local school districts which are located in high poverty/high need areas. A community agency providing early intervention services (Apprendamos) will also be contacted to provide their perspective on the training needs of ASD professionals. This agency is an excellent addition because they also employ graduates of the program and are in an ideal position to evaluate the program's effectiveness. The composition of the Advisory Board is critical to ensure that collaboration between special education, general

education, speech/language pathologists, and other support personnel is modeled at the highest level of the grant. Letters of commitment may be found in Appendix B.

Monthly evaluation of the project activities by the Project Director will ensure that project activities are meeting the stated timelines. At the end of every semester, the Advisory Board will review and discuss the monthly reports. Table 5 will be used to evaluate the extent to which the project objectives are being met and whether progress on each objective is adequate.

In addition to the monthly review of project activities, an evaluation survey will be distributed by the Project Director to **current students** funded under the grant (See Appendix J). This survey will be used to elicit these students' perspectives on the curricula and assignments associated with the courses for the Specialization on ASD. Findings from the survey will be reviewed by the Project Director and Advisory Board and incorporated into the ongoing design and refinement of course syllabi. Surveys will also be distributed to graduates from the project (Appendix K) and their employers (Appendix I) to determine the level of preparedness for their current positions and the impact of the project on their students with ASD.

An **external evaluator/consultant** will be hired to provide an outside evaluation of the project goals, objectives, and activities to ensure that project participants are receiving the high quality research-based instruction and opportunity for practical experience that is critical for their training. Additionally, this person will provide staff development workshops each year in the area of CLD children with ASD for participants in the grant, as well as special education professionals in southern New Mexico. Recruitment efforts will focus on locating a person who has expertise in CLD issues with children and families with ASD. Experts in the field, such as Hortencia Kayser or Carol Westby, will be contacted by the Project Director for possible interest in the project.

Project Goals, Objectives, and Activities	Completion Timelines	Person Responsible	Outcomes
<p>Goal 1: To prepare 21 highly qualified special education professionals with interdisciplinary and collaborative knowledge and skills based on research-based practices to effectively intervene with CLD children with ASD and their families</p>			
<p>Objective 1.1: To implement a recruitment plan for identifying, selecting, and awarding scholarships to highly qualified candidates, with an emphasis on recruiting, admitting, retaining, and graduating high quality special education professionals with specialized knowledge of CLD children with ASD and their families</p>			
<p>Activity 1.1.1: Develop a specialization in ASD brochure for recruitment activities</p>	<p>Within 2 weeks of funding</p>	<p>PD, GA</p>	<p>Brochure</p>
<p>Activity 1.1.2: Recruit at State Autism Task Force meetings and post information on list-servs</p>	<p>Yearly</p>	<p>PD</p>	<p>Meeting minutes; list-servs disseminating information about the program</p>
<p>Activity 1.1.3: Recruit through Alliance, Autism Support Teams, and RECs</p>	<p>Yearly</p>	<p>PD</p>	<p>List of presentation dates</p>
<p>Activity 1.1.4: Recruit diverse candidates in relevant NMSU departments</p>	<p>Yearly</p>	<p>PD, Advisory Board</p>	<p>List of presentation dates</p>
<p>Activity 1.1.5: Select diverse grant participants</p>	<p>Yearly</p>	<p>PD, Advisory Board</p>	<p>List of participants selected</p>

Objective 1.2: To advise/mentor candidates in developing and completing an M.A. program that includes meeting the knowledge and skills competencies for New Mexico state licensure in special education, while ensuring they are prepared to provide services to students with ASD from CLD backgrounds			
Activity 1.2.1: Obtain signed Service Obligation form	When accepted into program	PD	Signed Service Obligation form
Activity 1.2.2: Provide educational advisement with courses leading to an M.A. degree, special education licensure, and Specialization in ASD	Each semester and as needed	SPED/CD faculty	Student Advisement form and Student Annual Review
Activity 1.2.3: Monitor student progress through program of study	Each semester	PD, SPED/CD faculty	Student Advisement form and Student Annual Review
Objective 1.3: To provide coursework and research-based instruction in the areas of behavior, social skills, communication skills, and working with CLD families, as well as interdisciplinary collaboration with general education teachers and speech/language pathologists			
Activity 1.3.1: Review and revise course content, including readings and practica, presented in all autism course syllabi to ensure that curricula	Each semester	PD, Advisory Board, GA	Modified course syllabi that reflect current, research-based best practices

represent research-based best practices			
Activity 1.3.2: Review and revise all autism course syllabi to ensure that course competencies focus on preparing teaching candidates to work effectively with students and families from CLD backgrounds	Each semester	PD, Advisory Board, GA	Modified course syllabi that reflect an emphasis on preparing participants for work with CLD populations
Activity 1.3.3: Ensure that program standards and competencies are consistent with professional standards (e.g. CEC, ASHA Guidelines)	Each semester	PD, Advisory Board, GA	Review of course syllabi to ensure that standards are being met
Objective 1.4: To provide high quality practicum experiences within the required coursework that integrates the theory and knowledge with practical application in CLD rural public school settings			
Activity 1.4.1: Review and revise all autism course syllabi to ensure that practicum experiences focus on integrating theory and knowledge	Each semester	PD, GA	Modified course syllabi that reflect an emphasis on integrating theory and knowledge

Activity 1.4.2: Review and revise all autism course syllabi to ensure that practicum experiences focus on preparing teacher candidates to work effectively with students and families from CLD backgrounds	Each semester	PD, Advisory Board, GA	Modified course syllabi that reflect an emphasis on working effectively with students and families from CLD backgrounds
Activity 1.4.3: Maintain list of school settings to ensure they serve CLD students	Each semester	PD	Matrix documenting school settings with current demographics
Goal 2: To manage, evaluate, and disseminate the activities and models used in NM-PASS to identify any problems and solutions and to share the results regionally and nationally to assist other programs			
Objective 2.1: To manage, administer, and implement the project, monitor the budget, and prepare reports on time and within budget			
Activity 2.1.1: Monitor and evaluate budget expenditures for compliance with project guidelines	Ongoing	PD	Monthly data report
Activity 2.1.2: Collect data and prepare the annual report to OSEP	Yearly	PD	Written annual report
Objective 2.2: To evaluate project activities and conduct evaluations by obtaining feedback from students, graduates, employers,			

faculty, and the Advisory Board to plan improvement and evaluate the project impact			
Activity 2.2.1: Evaluate the completion of project activities	Monthly (PD) Every semester (AB)	PD, Advisory Board	Completion of all activities listed on this table in accordance with stated completion guidelines
Activity 2.2.2: Evaluate the impact of the project by collecting outcome data from students, graduates, employers, faculty, and the Advisory Board	Yearly	PD, External Evaluator	Survey results from students, graduates, employers, faculty, and the Advisory Board
Activity 2.3.1: Present collected data and results through presentations to targeted audiences in New Mexico (e.g., State Autism Task Force, Alliance, PRO, NMSU) and national conferences	Ongoing	PD, GA	Copies of presentation materials and dates of presentations

Table 5. Project Goals, Objectives, Completion Timelines, and Outcomes for Major Activities

(iii) Extent to which time commitments of the Project Director and other key proposed project personnel are appropriate and adequate to meet the objectives of the proposed project

The time commitments of the Project Director, Advisory Board, graduate student assistant, external evaluator/consultant, and clerical support are appropriate and adequate to meet the goals and objectives of the proposed project. Table 6 presents a grid of major activities and key personnel and the proposed allocation of days per year for each. The allocation of days is based on 260 days/year.

Activity	Project Director (.25 FTE)	ASD Course Instructors	Advisory Board	External Evaluator/ Consultant	Graduate Assistant (.25 FTE)	Clerical Support (.10 FTE)	Total Days
Project Management	24						24
Recruit/Interview students	4		2		5	4	15
Report Preparation	5				6	5	16
Develop and utilize research-based curriculum to prepare 21 highly qualified special educators to serve CLD	15		4		24	5	48

students with ASD		18					
Conduct evaluation of project activities	10		3	5	15	4	37
Disseminate information on the program regionally and nationally	6				4	5	15
Manage the service obligation database	1				11	3	15
Total Professional Days	65	18	9	5	65	26	170

Table 6. Personnel Loading Chart in Days/Year

Ensuring Feedback, Continuous Improvement, and Project Evaluation The Project Director will be responsible for all grant activities, including grant management. She will continue to focus her teaching efforts on content and competencies related to children with ASD as part of her regular teaching load. The Project Director and graduate student assistant will obtain and ensure continuous feedback to evaluate and improve the project based on the evaluations as described in

the evaluation section and appendices. Courses will be evaluated each semester and the program modified as needed to meet project goals.

Students and advisors will complete the Student Advisement Form (Appendix G) and the Student Annual Review (Appendix H). The Project Director will review these evaluations to ensure adequate progress in the program. Peer and/or faculty mentoring and support services will be provided for students who may require additional assistance to complete the program.

The Advisory Board will assist with recruitment, curriculum review, and evaluation. The graduate assistant will support the project through recruitment efforts, data analysis, course materials preparation, and management of the service obligation data base. Clerical support will assist with recruitment efforts (e.g., receiving applications, scheduling interviews), report preparation, and general clerical support.

(E)(1) Adequacy of Resources

(2)(i) Adequacy of support, including facilities, equipment, supplies, and other resources from the applicant organization

New Mexico State University is classified as a Carnegie Doctoral/Research University-Extensive and is a member of the Hispanic Association of Colleges and Universities. The main campus is located in Las Cruces, which is located 40 miles north of El Paso, Texas and Juarez, Mexico. There are four satellite campuses located in Dona Ana, Alamogordo, Carlsbad, and Grants. In addition, the Las Cruces campus provides courses and academic programs via distance education technologies. Minority enrollment for NMSU is 49%.

NMSU offers 21 Doctoral programs, 3 educational doctoral programs, 51 Masters degree programs, 87 Bachelors degree programs, and 4 educational specialists throughout its 9 colleges. The College of Education houses five academic departments: (1) SPED/CD, (2) Curriculum and Instruction, (3) Counseling and Educational Psychology, (4) Educational Management and

Development, and (5) Human Performance, Dance, and Recreation. The SPED/CD department offers undergraduate, Master's and Doctoral programs in special education with specialization/concentrations in Bilingual/Multicultural Special Education, Early Childhood Special Education, Educational Diagnostics Specialization, Special Education, Special Education/Deaf-Hard of Hearing, Special Education Administration, and Special Education/Autism Spectrum Disorders. The Communications Program offers specialization in a Bilingual Program or English as a Second Language (ESL) Program. Project participants could take these courses as electives to enable them to provide support for CLD diverse children and families.

NMSU has two libraries located on its main campus and over 21 research facilities. As a research-extensive institution, NMSU is the recipient of substantial internal and external research dollars that are used to support its ability to conduct further investigations. The NMSU Library is the primary provider of print and electronic information which supports learning, teaching, research, and service at New Mexico State University. The NMSU Library acts as a partner in the education process by providing access to information through its collections, information services, facilities, and staff. In its collections there are more than 2 million items as well as interlibrary loan services that accesses world-wide collections. The library system has an extensive electronic component, including access to abstracts and full-text journals. In the fall of 2009, the SPED/CD allocation for library purchases (\$1,500) was completely allocated to resources on ASD.

NMSU is excellently equipped with state of the art "smart" classrooms. The campus maintains a campus-wide high speed digital data network available to all users. There are many computer labs located around campus. There are two computer labs in the Speech Building, where the SPED/CD department is located and at least 3 labs available for student or classroom use located in O'Donnell Hall where the College of Education is housed. These two buildings are

where the ASD specialization courses will be held.

There are several offices on campus that may be useful in supporting student needs. They are: The American Indian Program, The Black Studies Programs, Campus Tutoring Service, Chicano Programs, Sexual and Gender Diversity Resource Center, Student Accessibility Services, Student Success Centers, Veteran's Programs, The Border Health and Education Research Cluster, The Office of the Vice Provost for International and U.S. Border Programs, and the Center for Latin American Studies. There is ample support on campus to support CLD students.

The SPED/CD department will provide sufficient supplies, space, and access to technology to assist students in the successful completion of their program. This includes classroom space and access to the student computer labs located in the Speech Building and O'Donnell Hall (See Letters of Support in Appendix A). The University gave \$30,000 start-up funds in support of the ASD program to purchase curricula and testing materials for use in the ASD courses. These items have been integrated with the Southern New Mexico Autism Project (SNAP) library and materials and are available in the Speech Building for students to checkout and use in their practicum and school sites. These items include Social Skills for Elementary, Middle, and High School curricula, Social Stories books by Carol Gray, ABA for the Classroom Teachers, Ten Things Every Child with Autism Wishes You Knew by Ellen Notbohm, Communication Cards for "Wh" Questions, Emotions game, puzzles, visual timers, PECS story books, sensory stimulation materials, such as fidgets and bitty bottoms, a trampoline, etc.; all appropriate for CLD children with ASD. There are many reference books and DVDs by Temple Grandin, Michelle Garcia Winner, Tony Attwood, Gary Mesibov, Andy Bondy, and Robert and Lynn Koegel. This is in addition to the collection maintained in the NMSU library.

Personnel There are many highly qualified personnel in the SPED/CD department and in the

College of Education to support this project (See Appendix C for vitae).

Christine Newton, M.A., CCC-SLP is the coordinator of the SNAP program. She worked as a speech/language pathologist for 18 years in the local school district. Additionally, she is a trained music therapist. She has extensive experience assessing and working with CLD children with ASD. As part of her duties with SNAP, she supervises graduate student clinicians in the CD program. Because of her experience with ASD, she supervises all of the clients with ASD who receive services in the clinic. She has and will continue to guest lecture in the Introduction to Autism and Communication Skills and Autism courses. She brings a wealth of knowledge of CLD students with ASD to this project. Her services are in-kind and not included in the budget.

Charlotte Mason, M.A., CCC-SLP is the director of clinical services for the Edgar R. Garrett Speech and Hearing Center, the clinic on the NMSU campus. She has over 20 years experience working in pediatric speech-language pathology settings with a particular focus in autism, AAC, and early language development. Ms. Mason was instrumental in securing the original funding for the SNAP program and provided clinical supervision to graduate student clinicians who traveled to Deming to provide services to children with ASD. She has been and will continue to guest lecture in the Introduction to Autism and Communication Skills and Autism courses. She provides an invaluable service to this project and her services are in-kind and not included in the budget.

Ivelisse Torres-Fernandez, Ph.D. is an assistant professor in the Counseling/Educational Psychology department. She holds a school psychology license and is specially trained in completing CLD assessments. She is a member of the multidisciplinary ASD assessment team at NMSU. Her previous experience includes teaching at the University of Puerto Rico. She has intimate knowledge of the CLD issues families in New Mexico are facing. She supervises graduate students at their practicum sites. She has co-authored a book chapter on

Multiculturalism and Diversity: Implications for the Training of School Psychologists. She has been and will continue to guest lecture in the Behavior and Autism course. She brings extensive expertise in CLD issues with children with ASD. Her services are in-kind.

Aishah Ortega, Ph.D., CCC-SLP is a licensed speech/language pathologist who holds a Certificate of Clinical Competence-Speech/Language Pathology. She is currently an assistant professor in the CD program at NMSU. She teaches classes on speech disorders and general communication disorders. Because she is bilingual and comes from a CLD background, she has particular expertise in CLD issues. Her function is to assist with mentoring and representing the speech/language perspective and insuring that ASHA recommendation for collaboration are covered in the courses. Her services are in kind and do not appear in the budget.

(ii) Extent to which the budget is adequate to support the proposed project

The budget is adequate to support the proposed project and management thereof. The proposed budget supports project costs for **student support with over 77% of the funds** over the four years going to support students. Project personnel, travel, Advisory Board, and educational materials are all items that are judged to be necessary in order to complete the project successfully. **Travel is budgeted to attend the required meeting in Washington, D.C.**

(iii) Extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project

The costs are reasonable in relation to the objectives, design, and potential significance of the project. The student support request, including stipends, tuition and fees, books and materials, and student travel to conferences is over 77% of the total request. The federal request for salary and benefits accounts for about 18%, along with very modest requests for personnel travel, supplies, and project brochures preparation. Other faculty with expertise in ASD are providing their services in-kind and are not charged to the project. Because the department has a

wealth of materials, the funds to purchase additional materials are minimal. Funds for participant support are the major budget item as the major objective of the project is to prepare highly qualified special education teachers with knowledge and expertise in children with ASD. One of the project goals is to prepare participants from groups that are traditionally underrepresented and from CLD backgrounds. A major value is the positive impact of such highly qualified graduates on the profession and individuals with disabilities and their families who will receive service from the additional special educators. An additional positive impact on the objectives will be the continued expansion of the Specialization in ASD and the resulting benefits for the College of Education and the university. Because the project design requires that a careful evaluation plan be implemented, it is judged that this will assure that funds are reasonable in relation to the significance of the anticipated outcome.

(iv) Extent to which the costs are reasonable in relation to the number of persons to be served and to the anticipated results and benefits

Twenty-one participants will have successfully experienced excellent preparation for their roles as highly qualified special education teachers to serve students with ASD by the end of the grant funding. If each teacher works with 10 students (typical class size in local districts) with ASD each year, that results in 210 children receiving a high quality education from highly qualified special educators with knowledge and expertise in working with CLD students with ASD each year. Over a ten year period, that results in 2,100 children with ASD and their families being positively impacted by the education they received from the project participants. When you add in the collaboration of the grant participants with general education teachers, the effect of the training from the project is immense. Furthermore, the project students will have training in working with CLD children with ASD and will be uniquely positioned to provide services and consultation to the rapidly growing Hispanic population in New Mexico, the southwest, and the

nation. Additionally, since these students with ASD will have received research-based instruction, they will be better prepared to transition into the community at the end of their public school education. They have the ability to become independent citizens since they have received the proper instruction.

A very high value beyond the sheer numbers of persons served by the project is the major focus on the preparation of personnel from traditionally underrepresented groups, including persons with disabilities. The value of highly prepared graduates with such model attributes is difficult to ascertain; but it is estimated that they will play an immensely important role in the field. In addition to the excellent special education competencies which they will possess, they will have unique abilities to serve as role models for all persons, but especially for persons from underrepresented groups including persons with disabilities. The combination of these highly desirable attributes will place them in positions to have maximum positive impact and influence. Graduates will also provide excellent professional models for other teachers and help to bring about a more positive appreciation for the abilities of all. It is felt that the **costs of the project are indeed reasonable in relation to the numbers served as well as the great potential** for far reaching impact.

(v) Potential for continued support of the project after federal funding ends

The potential for continued support for the project after federal funding is very high. The project will enable NMSU to become known as a leader for preparing highly qualified special education teachers with specialized knowledge of CLD students with ASD. The courses for the Specialization in ASD will become infused into the traditional SPED/CD program. The materials purchased by the project will continue to be available to support students with ASD in self contained and general education classrooms in local school districts. The collaborations with school districts and community agencies will continue after the grant funding ends. The courses

in the program, the focus on evidence-based practices, the collaboration between multidisciplinary teams, school districts, community agencies, and the university are the best way to provide services for CLD children with ASD and their families and these practices will continue because it is what is best for children. The other university in the northern part of the state does not have as comprehensive and CLD focused program for preparing highly qualified ASD specialists; therefore, NMSU will gain the reputation of preparing the best with the best. All major project goals will continue after the project has ended. Course revisions will continue each semester to ensure that all course syllabi continue to reflect research-based best practices curricula. Evaluation activities proposed for this project will become institutionalized into course activities and student progress monitoring.

(F)(1) Quality of Project Evaluation

(2)(i) Extent to which the methods of evaluation are thorough, feasible, and appropriate

The evaluation methodology will provide **formative** and **summative** information regarding the outcomes of the project and information on how to modify the project when necessary. **Planning** for the management, program, student recruitment and admission, advising, evaluation of the program goals and objectives, and project impact will commence in the first year. **Input** and **process data** will be collected throughout the four years of the grant. This data includes program implementation, student outcomes, and impact, thereby providing **feedback** for the modifications of the program or project design. **Products** will include summative follow-up data on graduates' job roles, competence, students served, and project impact on the university, community, and state. The evaluation plan focuses on four major areas: student evaluation, employer evaluation, program evaluation, and project impact.

Student Evaluation Student evaluation will be based on their progress in completing the program and the competencies and skills students are to obtain during their program of study.

Each student will be evaluated annually to monitor their progress in completing the program.

The Student Annual Review Form (Appendix G) will be completed by the student and their faculty advisor to assure progress towards completing the program. Additionally, students will be evaluated several times each year to monitor progress in obtaining competencies and skills.

Performance monitoring may include direct observation, video-taped instruction, and/or a review of records. The evaluation methods are objective, produce **quantifiable data**, and are designed to provide ongoing feedback to the student. Acquisition of knowledge will be evaluated through course assignments and examinations including a comprehensive examination at the end of the program. Many of these assignments require students to apply their knowledge in practical performance based assessments (See Appendix D for course syllabi). If a student is experiencing difficulty in a course, he/she will receive **additional mentoring** and possible referral to one of the support groups on campus. This will be done in an effort to **retain and support** the student to complete the program.

Employer Evaluation At the end of each school year, surveys will be sent to all employers of project graduates (See Appendix H) while the student is under the service obligation (See Appendix E). The purpose of this evaluation is to assure that project graduates are highly qualified and have the necessary knowledge and skills to meet the needs of their CLD students with ASD. This data will also assist with determining project impact by documenting the number of children with ASD who are served by the grant.

Program Evaluation The purpose of program evaluation is to monitor quality indicators and assure that the project goals and objectives are being met. **Monthly evaluation of the project** activities by the Project Director will ensure that project activities are meeting the stated timelines as indicated in Table 5 on pages 31-35. Formal project evaluation will be conducted with input from the **Advisory Board and the external evaluator**, who will review monthly

project progress reports and program content. The external evaluator will do an on-site evaluation annually and will also do a mid-year review of documents. The evaluator will review documents from formative assessments, employer evaluation of students, interaction with teachers in cooperating schools agencies, etc. S/He will meet with key personnel and key cooperating and collaborating personnel and all students. The evaluator will meet with the Advisory Board to share the results of the evaluation with the Project Director and the Advisory Board to discuss **suggestions for changes to improve the program**. Evaluations will be based on information from several sources: data from student evaluation of courses, data on students' acquisition of knowledge, data from the Student Annual Review Form (student and Advisor), data from current students', graduate students', and employers' surveys, management plan and timeline, and external advisor and Advisory Board recommendations. After the first group of students graduate (Year 2), annual evaluations will be conducted based on input from all of the sources listed above, but with less input from the external advisor and with greater emphasis on the Advisory Board. Upon graduation, students will receive the graduates' student survey for each year that they are under the service obligation. Information from these reports will be **summarized and used to guide and direct changes**. Evaluation measures will be reviewed and revised throughout the project when necessary. The Project Director, with the help of the graduate student assistant, will collect and analyze the responses from the current students, graduate students, and employers and other data sources and share the results with the external advisor and Advisory Board. Based on this review, changes in specific courses and/or the overall project may occur. A written report will be prepared by the Project Director and the results of these evaluations will be communicated to OSEP in Annual Continuation Reports and the Final Project Report. These evaluation methods are deemed to be thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.

In addition to reviewing the management plan for evaluation of the project goals and objectives, the following criteria will also be used in determining the measure of success for the entire project:

- 1. Within a three-year period, 95% of students admitted will complete their programs of study (Related to GRPA 1, 2, 4, 5).**

Ongoing data in this area is charted by the advisor on each student after each semester on the Student Advisement Form (Appendix G). Summative data is obtained after each student completes the program. Results will be conveyed to OSDP via annual reports and final reports.

- 2. At least 85% of the graduates will secure jobs working with children and youth, the majority taking positions in schools with CLD populations (GRPA 1, 2, 4).**

Data collected from the Graduate Survey (Appendix K) during every year they are under the service obligation. Results will be conveyed to OSEP via annual reports and final report.

- 3. Employers will rate as above average the competence of at least 90% of the graduates in their employ (Related to GRPA 1, 2, 3, 4).**

Data collected from the employer survey (Appendix I) during the first year after graduation and three years after graduation will be compiled. Results will be conveyed to OSEP via annual reports and final report,

- 4. The overall and specific aspects of the ASD preparation will be rated above average by at least 90% of the trainees (Related to GRPA 1, 2, 3, 4, 5).**

Data collected from student evaluations of coursework (Appendix J) will be collected each semester. The results will be conveyed in the annual and final reports to OSEP. Upon graduation students will complete the graduate survey (Appendix K) every year they are under the service obligation (Appendix E). Results will be conveyed to OSEP via annual reports and final report.

- 5. When project students graduate, positive ratings for the program will be given by 90%**

of the students, professional partnerships, and university faculty (Related to GRP 1, 2, 3, 4, 5).

Each semester on-going data will be collected from the external evaluation, Advisory Board, internal and external faculty, as well as student evaluation of all the courses. Results will be conveyed to OSEP via annual reports and final report.

Evaluation of the Project Impact Evaluation of the project impact will be obtained from data on student acquisition of competencies, student licensure, number of graduates completing the program, employer rating of student competency, and impact graduates have on services for students with ASD (e.g., job title, number of children with ASD served, and the number and type of teachers and other school personnel for whom they have provided staff development.

(ii) Extent to which the methods of evaluation include the use of objective performance measures

Evaluation instruments for students are both **formative**, as in the feedback obtained in class, and from the assignments and tests given in the courses, and **summative** as the evaluation of each course and competency is obtained. Additionally, data used for the evaluation of the project is both formative, as in the meetings with the external evaluator, Advisory Board, faculty, the end of the semester evaluations of courses; and summative, as the results obtained from the graduate student survey and employer survey. Furthermore, **assessment information is both quantitative**, as in the statements written on all the course evaluations, the advice and recommendations from the external evaluator and the Advisory Board, and **qualitative** as in the information from the graduates on population served, from employers on competency of graduates, on data collected on number of students who successfully complete the program, and the number of students who obtain licensure and obtain positions in schools. Data will be included in the annual and final reports to OSEP.

References

- American Association for Employment in Education (2008). *Executive summary: Educator supply and demand in the United States*. Retrieved from <http://www.aaee.org/cwt/external/wcpages/resource>
- American Speech-Language-Hearing Association (2006). *Guidelines for speech-language pathologists in diagnosis, assessment, and treatment of autism spectrum disorders across the lifespan*. Retrieved from <http://www.asha.org/policy>
- Boe, E.E. & Cook, L.H. (2006). The chronic and increasing shortage of fully certified teachers in special education and general education. *Exceptional Children*, 72(4), 443-460.
- Birkin, C., Anderson, A., Seymour, F., Moore, D.W. (2008). A parent-focused early intervention program for autism: Who gets access? *Journal of Intellectual and Developmental Disability*, 32(2), 108-116.
- Campbell, J.M., Herzinger, C.V., & James, C.L. (2008). Evidence-based therapies for autistic disorder and pervasive developmental disorders. In R.G. Steele, T.D. Elkin, & M.C. Roberts (eds.), *Handbook of evidence-based therapies for children and adolescents; Bridging science and practice* (pp. 373-388). NY: Springer Science.
- Center for Disease Control. (2009). Prevalence of autism spectrum disorders---Autism and Developmental Disabilities Monitoring Network, eleven sites, United States, 2006. In: *Surveillance Summaries*, December 18, 2009 / 58(SS10). 1-20. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5810a1.htm>
- Cook, B.G., Tankersly, M., & Landrum, T.J. (2009). Determining evidence-based practices in special education. *Exceptional Children*, 75(3), 365-383.

- Council for Exceptional Children. (2010). Initial practitioner and advanced specialist knowledge and skills: Developmental disabilities/autism. Retrieved from <http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards/#HQT>
- Cronin, K.A. & Newtonson, C.M. (in press). The Southern New Mexico Autism Project (SNAP). *Border Walking Journal*.
- Wilder, L.K., Dyches, T.T., Obiakor, F.E., & Algozzine, B. Multicultural issues in autism. *Focus on Autism and Other Developmental Disabilities*, 19(2), 105-113.
- Easter Seals (2009). 2009 state autism profiles: New Mexico. Retrieved from http://www.easterseals.com/site/PageServer?pagename=ntlc8_2009_state_autism_profiles_new_mexico
- Gray, L.A., Msall, E.R., & Msall, M.A. (2008). Communication about autism: Decreasing fears and stresses through parent-professional partnerships. *Infants and Young Children*, 21(4), 256-271.
- Individuals with Disabilities Act Data (2006). Teachers employed (FTE) to provide special education and related services to children ages 3 through 5 under IDEA, Part B, by certification status and state. Retrieved from <http://www.ideadata.org/default.asp>
- Individuals with Disabilities Act Data (2006). Teachers employed (FTE) to provide special education and related services to students ages 6 through 21 under IDEA, Part B, by certification status and state. Retrieved from <http://www.ideadata.org/default.asp>
- Kogen, M.D., Blumberg, S.J., Schieve, L.A., Boyle, C.A., Perrin, J.M., Ghandou, R.M., . . . van Dyck, P.C. (2009). Prevalence of parent-reported diagnosis of autism spectrum disorder among children in the US, 2007). *Pediatrics*, 124(4), 1522-1530. doi: 10:1542/peds.209-1522

- Lerman, D.C., Vorndran, C.M., Addison, L., & Kuhn, S.C. (2004). Preparing teachers in evidenced-based practices for young children with autism. *School Psychology Review*, 33(4), 510-526.
- Liptak, G.S., Benzoni, L. B., Mruzek, D.W., Nolan, K.W., Thingvoll, M.A., Wade, C.M., & Fryer, G.E. (2008). Disparities in diagnosis and access to health services for children with autism: Data from the National Survey of Children's Health. *Journal of Developmental and Behavioral Pediatrics*, 29(3), 152-160.
- McGee, G.G. & Morrier, M.I. (2005). Preparation of autism specialists. In F.R. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders: Vol. 2. Assessment, Intervention and Policy* (3rd ed., pp.1123-1160). New York: John Wiley & Sons.
- Mesibov, G.B. & Shea, V. (2010). The TEACCH program in the era of evidence-based practice. *Journal of Autism and Developmental Disorders*, 40, 570-579.
- National Autism Center's National Standards Project. (2009). Evidence-based practice and autism in the schools. Retrieved from <http://www.nationalautismcenter.org/affiliates>
- National Professional Development Center on Autism Spectrum Disorders. (2010). Evidence-based practices. Retrieved from <http://autismpdc.fpg.unc.edu/content/briefs>
- National Research Council. (2001). *Educating children with autism* (C. Lord & J.P. McGee, Eds.). Committee on Educational Interventions for Children with Autism. Washington, DC: National Academy Press.
- Nehring, W.M. (2007). Cultural considerations for children with intellectual and developmental disabilities. *Journal of Pediatric Nursing*, 22(2), 93-102.
- New Mexico Public Education Department (2009a). 2007-2008 student demographics. Retrieved from <http://www.ped.state.nm.us>

New Mexico Public Education Department (2009b). Educator guidelines: Identifying, serving, and educating students with autism spectrum disorders. Retrieved from

<http://www.ped.state.nm.us/SEB/technical/asd.pdf>

Odom, S.L., Brown, W.H., Frey, T., Karasu, N., Smith-Canter, L.L., & Strain, P.S. (2003).

Evidence-based practices for young children with autism. *Focus on Autism and Other Developmental Disabilities*, 18(3), 166-175.

Parents Reaching Out. (2009). Families as faculty. Retrieved from

<http://www.parentsreachingout.org/resources/publications/faf/fafshb.pdf>

Reichow, B., Volkmar, F.R., & Cicchetti, D.V. (2008). Development of the evaluative method

for evaluating and determining evidence-based practices in autism. *Journal of Autism and Developmental Disorders*, 38, 1311-1319.

Rodriguez, D. (2009). Culturally and linguistically diverse students with autism. *Childhood*

Education. Retrieved from http://findarticles.com/p/articles/mi_qa3614/is_200901/ai_n32422513

Scheuermann, B., Webber, J., Boutot, E.A., & Goodwin, M. (2003). Problems with personnel

preparation in autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 18(3), 197-206.

U.S. Department of Labor (2010). Occupational Outlook Handbook, 2010-2011 Edition.

Retrieved from <http://www.bls.gov/oco/ocos070.htm>