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APPLICATION FOR GRANTS UNDER THE

NATIONAL PROFESSIONAL DEVELOPMENT PROGRAM
CFDA # 84.365Z
PR/Award # T365Z110167
Grants.gov Tracking#: GRANT10865353

Closing Date: MAY 09, 2011

ABSTRACT

Preparing Rural Inclusive Multicultural Exceptional-educators (PRIME)
Bachelors Degree in Elementary Education, Special Education/CLDE, and ESL

Name of IHE: Northern Arizona University

Title of the Program: OELA- National Professional Development Program CFDA 84.365Z

Number and Type Participants Projected To Be Served. Over 5 years, it is projected that 48 Preservice Bachelors of Science (BS) Degree in Education undergraduate students who are all employed as Paraprofessionals in Special Education will be served. These Career Ladder paraprofessionals will develop the competencies to become fully certified Highly Qualified Teachers with a focus on improving instruction for English Learners (ELs) and ELs with disabilities in Elementary Education/Special Education (k-12 Cross Categorical Disabilities) and earn the Arizona Endorsement in English as a Second Language (ESL). These 48 students will be divided into 3 cohorts of 16 students in each cohort. Each cohort will take classes for approximately 20 months. By the end of the five year grant, it is projected that 48 pre-service teachers will have received training in ESL, Special Education (SpEd), Culturally Linguistically Diverse Exceptional (CLDE) Education, STEM subjects of Science, Math, and Technology, Elementary Education (ElemEd), and Middle School Education.

Yr 1- Fall 2011-**Cohort 1**: 16 ElemEd/SpEd/ESL Undergraduate Career Ladder Preservice students Begin the 24 courses in the PRIME grant program for 5 semesters of coursework. Cohort 1 coursework Completed in Yr 2 Spring 2013.

Yr 2- Summer 2013–**Cohort 2**: 16 ElemEd/SpEd/ESL Undergraduate Career Ladder Preservice students Begin the 24 courses in the PRIME grant program for 5 semesters of coursework. Cohort 2 coursework Completed in Yr 4 Fall 2014.

Yr 4 -Spring 2015–**Cohort 3**: 16 ElemEd/SpEd/ESL Undergraduate Career Ladder Preservice students Begin the 24 courses in the PRIME grant program for 5 semesters of coursework. Coursework Completed in Yr 5 Summer 2016.

Yr 1 to 5- **Higher Education Faculty**-6 each year.

STUDENTS PROJECTED TO BE SERVED BY END OF PROJECT–**Preservice Total=48**

Higher Education Faculty = Total of 30 Faculty in five years

Consortia LEA Partners: Yuma Union High School District; Yuma Elementary 1, Somerton; Gadsden; Crane; Wellton; Parker; Hyder; Antelope Valley, and La Paz County Schools.

Project Description: Northern Arizona University College of Education and Yuma Branch Campus will prepare general education and special education undergraduate teacher education students employed as paraprofessionals in rural school districts in La Paz county and the Yuma area on the border of Mexico to improve instruction for English Learners (ELs) and English Learners with disabilities. NAU will work in consortium with Yuma LEA partners to prepare Highly Qualified teachers who are well prepared to serve EL students and EL students with disabilities through delivery of a pre-service teacher preparation program leading to Arizona

Endorsement in ESL and Arizona certification in Elementary Education and Special Education. The curriculum will emphasize STEM content education which will be infused into ESL and Special Education courses as well as ESL being infused into Science, Math, and Technology courses. PRIME graduates will be Highly Qualified teachers who have expertise in using ESL strategies and effective assessment procedures, methods and materials for CLDE students.

LEA Superintendents are members of the PRIME Advisory Committee and lend their unique perspectives to the PRIME program about best practices in preparing teachers to educate EL students. Partner districts will provide Mentor Teachers and appropriate classroom assignments for pre-service teachers. LEA partners will also provide feedback on pre-service teacher performance and allow program participants to take part in professional development activities. In addition, LEA partners will allow PRIME staff and faculty to observe program participants in their classrooms teaching EL students.

Competitive Preference Priority 2: Enabling More Data Based Decision Making. Multiple measures on progress of participants will be taken during the course of instruction. SIOP data collection instruments will be used to track implementation of EL and CLDE strategies during practicum and student teaching. Cohort will be measured against non-grant participants in the same degree program to determine 1) Retention of PRIME students 2) Bachelors degree completion rate. 3) GPA 4) School employment serving EL students. In addition, course redesign guided by nationally recognized experts in EL and STEM education will commence in year 1. Cohort 1 will pilot at least two redesigned courses. Data collected from cohort 1 will be presented to university faculty. Further course adaptations and adoptions will be considered. Overall data will be collected in Year 4 and analyzed in Year 5. These findings will have implications for changes in the courses in the university's teacher education program.

Competitive Preference Priority 3: Promoting Science, Technology, Engineering, and Mathematics (STEM) Education. 1)The degree offered is a dual major in Elementary Education/Special Education Cross Categorical, therefore, graduates will be teaching STEM subjects of Science, Technology and Mathematics either as an elementary education teacher or in their role as a special education teacher. 2)Using courses redesigned to include teaching CLDE students, faculty will prepare the PRIME graduates to engage students of all abilities in active learning. 3)Program participants will be offered the option of specializing in middle school Math or Science to become Highly Qualified in Math or Science. This would result in some of the graduates becoming STEM teachers at the Middle School level. 4) Course redesign to infuse Math, Science, and Technology guided by nationally recognized experts in EL and STEM education will commence in year 1. Appropriate Special Education and ESL classes will be enhanced to include proven strategies for effective instruction of Math, Science, and Technology for all students, as well as increasing parental involvement and awareness of STEM education.

Invitational priority: Improving preparation of all teachers to better serve English Learners. Through this grant, the NAU teacher education curriculum and courses will be improved significantly to include more instruction related to best practices and research with EL students and CLDE students especially in STEM content area, ESL, and SpEd courses. Course redesign guided by nationally recognized experts in EL and STEM education will commence in year 1. Cohort 1 will pilot at least two redesigned courses. Data collected from cohort 1 will be presented to university faculty. Further course adaptations and adoptions will be proposed to the education faculty related to the specific subject areas.

Project Activities by Year and Cohort number (C-1, C-2, C-3)

Year 1 8/1/11-7/31/12	Year 2 8/1/12-7/31/13	Year 3 8/1/13-7/31/14	Year 4 8/1/14-7/31/15	Year 5 8/1/15-7/31/16
TOT student presentations on STEM/ ESL/CLDE topics 1national 1 in-service presentation 100 teachers attend. 80%use 3 strategies	TOT student presentations on STEM/ ESL/CLDE topics 1national 1 in-service presentation 100 teachers attend. 80%use 3 strategies	TOT student presentations on STEM/ ESL/CLDE topics 1national 1 in-service presentation 100 teachers attend. 80%use 3 strategies	TOT student presentations on STEM/ ESL/CLDE topics 1national 1 in-service presentation 100 teachers attend. 80%use 3 strategies	TOT student presentations on STEM/ ESL/CLDE topics 1national 1 in-service presentation 100 teachers attend. 80%use 3 strategies
Cohort 1 (C1)- 12 courses	(C1) 12 courses (C2) 3 courses	(C2) 15 courses	(C2) 6 courses (C3) 9 courses	(C3) 15 Courses
Infuse ESL into ECI 306 Elem. Science methods course	Infuse ESL into ECI 300 Elem. Math methods course	Infuse CLDE & Technology teaching strategies into Math /Science methods courses	Collect data on effectiveness of revised syllabi	Analyze data from syllabi review and from focus groups
Infuse Science into 2 ESL and 2 sp. Ed courses	Infuse Math into 2 ESL and 2 sp. Ed courses	Infuse CLDE & Tech into 1 ESL course	Collect data on effectiveness of revised syllabi	Analyze data from syllabi review and from focus groups

GPRA Targets:
Measure 1.1: The percentage of pre-service program completers who are State and/or locally certified, licensed, or endorsed in EL instruction.
Year 1-N/A. Year 2 100% Year 3- N/A Year 4 – 100% Year 5- N/A
Measure 1.2: The percentage of pre-service program completers who are placed in instructional settings serving EL students within one year of program completion. Year 1- N/A Year 2- 100% Year 3-N/A Year 4 100% Year 5 N/A
Measure 1.3: The percentage of pre-service program completers who are providing instructional services to EL students 3 years after program completion. Year 1- N/A Year 2 – N/A; Year 3-N/A; Year 4-N/A; Year 5 100%

Project Director Contact:
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Competitive Preference Priority 2: Enabling More Data Based Decision Making Multiple measures on progress of participants and completion of project objectives will be taken during the program of instruction. Each cohort will be measured against non-grant participants in the same degree program to determine: 1) Retention of grant program students, 2) Degree completion rate, 3) GPA, and 4) Employment in classrooms serving EL students. A statistical comparison of these data from Grant Program students and Non Program students will be performed using appropriate statistical analysis tests. Also, using a SIOP type assessment instrument and the Yuma County Teaching for Success (T4S) observation instrument, classroom data will be collected on PRIME students' implementation of ESL/CLDE/STEM instructional strategies to improve instruction of EL students. Observation data will be analyzed with the StatPac program to provide formative evaluation information to guide us in changes which may be needed throughout the program. Students are also required to maintain reaction journals and make at least three entries per week in them. Students are encouraged to make entries pertaining to attitudes and dispositions about serving EL students and EL students with disabilities and their families. Students submit journal entries by e-mail to Onsite Coordinator. Entries are analyzed for emergent themes using Hyperqual or a similar software package. Interviews and focus groups of students and stakeholders will be conducted to provide ongoing data on effectiveness of program and potential changes that need to be made. We will look for Content Themes within the data using NVivo. Qualitative and quantitative data collected from program participants will be analyzed with StatPac data manager statistical software using appropriate statistical analysis tests. In addition, course redesign guided by nationally recognized experts in ESL/STEM/CLDE education begins in Year 1. Cohort 1 pilots three redesigned courses. We will use StatPac to design surveys and conduct interviews with students and faculty to determine effectiveness of

redesigned courses in improving instruction of EL/ CLDE students. Qualitative and quantitative data will be analyzed with StatPac and NVivo. Cohort 1 data will be presented to university faculty so further course adaptations and adoptions are considered. More complete details about data based decision making are found in Evaluation Section of proposal.

PRIME is also interested in documenting how teachers' conceptualizations of academic language were implemented in their science and math instruction and to what effect. A STEM/EL professional development program should specifically target the enhancement of teachers' knowledge and skills in integrating language and literacy goals into math and science instruction. Concurrent research within such a program should document the challenges that exist in changing teacher concepts, beliefs, and methods and putting these into practice (Hart & Lee, 2003; Lee, 2004; Lee, Hart, Cuevas, & Enders, 2004; Stoddart et al., 2002). PRIME will document teachers' concepts, beliefs, and methods of **integrating language instruction with math and science instruction**, before and after completing the PRIME program, and utilize those data to improve instructional methods and EL student success in secondary and elementary schools. **(This also relates to STEM Competitive Preference Priority 3 below.)**

Competitive Preference Priority 3: Promoting Science, Technology, Engineering, and Mathematics (STEM) Education. 1) All students in PRIME will become teachers of STEM subjects who will receive high quality preparation in STEM/ESL/CLDE teaching strategies. In their roles as multiple subjects Elementary or Special Education teachers, they will teach Math, Science, and Technology to students who are EL and CLDE (EL students with disabilities). In ETC 447 Technology in the Classroom, ECI 300 Teaching Elementary Math and ECI 306 Teaching Elementary Science, PRIME candidates will be prepared to design effective lessons for EL/CLDE students in these subjects. 2) In addition, a priority in this grant will be to recruit and

provide competitive preference in selection for grant participation to candidates who will pursue Middle School Math or Science certification. All PRIME students will take ECI 323 Middle School Curriculum to prepare them for potential middle school instruction. 3) When PRIME graduates become elementary or special education teachers as well as those who become middle school subject specific teachers, in essence they will all be STEM teachers who are well trained in ESL and CLDE strategies. They will all be better able to provide instruction to meet the needs of EL students and EL students with disabilities in STEM subjects. 4) Undergraduate Special Education and ESL courses will be revised to include proven strategies for effective instruction of Math, Science, and Technology. Additionally, Math, Science, and Technology methods courses will be revised to include ESL and CLDE instructional strategies. 5) Nationally recognized experts in ESL, CLDE, and STEM subjects provide workshops for NAU faculty and collaborate on revision of ESL courses to include STEM and CLDE content. These experts also collaborate with NAU faculty on the revision of STEM methods courses to include ESL/CLDE content, 6) Students develop and present **Trainer of Trainers (TOT)** professional development on STEM/ESL/CLDE instructional strategies at National Conferences and local education workshops. **STEM/ESL/CLDE Strategies Consultants/Trainers.** Nationally recognized consultants (**Lily Wong Fillmore in ESL Instruction, Gerry Madrazo in Science/ESL, Nora Ramirez in Math/ESL, and Patricia Medeiros Landurand in CLDE)** will deliver training to NAU faculty to enhance their skills in teaching future teachers how to improve instruction of EL and CLDE students in the areas of science, math, technology, and CLDE. Consultants will plan workshop, provide materials, travel to Yuma, and deliver training to faculty. Workshops will be open to all NAU Education faculty and PRIME faculty. Thus, many more College of Education faculty will receive training to improve their courses with principles and strategies related to

Science, Math, Technology and ELs/CLDE students. This will lead to overall improvement of the NAU Teacher Education Program related to instruction to enhance the educational outcomes of EL students and EL (CLDE) students with disabilities. **TARGET** –ESL/CLDE/Tech infused into 1 Science and 1 Math Methods course; 2 ESL/2 Sp Ed syllabi enhanced with Science/ESL and Math/ESL content, and 1 ESL syllabus enhanced with CLDE and Technology content. **Invitational Priority – Improving preparation of all teachers to better serve English Learners.** Via PRIME, NAU Undergraduate Education curriculum and courses will be improved significantly to include more instruction related to best practices and research with EL and CLDE students especially in STEM methods courses, ESL, and SpEd courses. Undergraduate courses will be infused with STEM, ESL, CLDE strategies to enhance the NAU BS.Ed program.

A. PROJECT DESIGN

1. Goals, Objectives, Outcomes. Preparing Rural Inclusive Multicultural Exceptional-educators (PRIME) is a rural field-based program located in Yuma, AZ, 325 miles from the main campus of NAU in Flagstaff. Northern Arizona University College of Education and Yuma Branch Campus will prepare general education and special education undergraduate teacher education students employed as paraprofessionals in rural school districts in La Paz county and the Yuma area on the border of Mexico to improve instruction for English Learners (ELs) and English Learners with disabilities (Culturally Linguistically Diverse Exceptional – CLDE). NAU will work in consortium with Yuma LEA partners to prepare Highly Qualified teachers who are well prepared to serve EL students and EL students with disabilities through delivery of a pre-service teacher preparation program leading to Arizona Endorsement in ESL and Arizona certification in Elementary Education, Middle School Education, and Special Education. The curriculum emphasizes STEM content education which will be infused into ESL and Special

Education courses as well as ESL being infused into Science, Math, and Technology courses. graduates will be Highly Qualified teachers who have expertise in ESL strategies, assessment procedures, methods and materials for EL and CLDE students. NAU will work in consortium with several rural Yuma area Local Education Agencies (LEAs) which enroll high numbers of English Learners (ELs) with the 4 largest districts having 63%, 51%, 23% and 22% ELs. It is critical for these districts to "grow their own" elementary, middle, and special education certified teachers, especially with ESL endorsements, by preparing paraprofessionals who work in their districts with EL students to become certified teachers. PRIME has developed a series of learning opportunities in which the values of language and culture are reinforced. PRIME students will participate in a field-based program where courses are directly linked to classroom experiences students are involved in through daily paraprofessional roles. Faculty assign "real world" activities for PRIME students, because these paraprofessionals and future teachers put into immediate practice in their own classrooms each day what they learn in PRIME. This creates a "seamless curriculum" where knowledge and skills learned in one course are applied in the next course as well as in the practicum classroom where the PRIME student works each day.

Over 5 years, it is projected that 48 Pre-service Bachelors of Science (BS) Degree in Education undergraduate students who are all employed as Paraprofessionals in Special Education will be served. These Career Ladder paraprofessionals will develop the competencies to become fully certified Highly Qualified Teachers with a focus on improving instruction for English Learners (ELs) and ELs with disabilities in Elementary Education/Special Education (k-12 Cross Categorical Disabilities), earn the Arizona Endorsement in English as a Second Language (ESL), and if they possess a content emphasis in Math or Science, they could also earn Middle School certification. These 48 students will be divided into 3 cohorts of 16 students in

each cohort. Each cohort will take classes for 20 months. By the end of the five year grant, it is projected that 48 pre-service teachers will have received training in ESL, Special Education (SpEd), Culturally Linguistically Diverse Exceptional (CLDE) Education, STEM subjects of Science, Math, and Technology, Elementary Education (ElemEd), and Middle School Education.

Yr 1- Fall 2011-Cohort 1: 16 ElemEd/SpEd/ESL Undergraduate Career Ladder Pre-service students Begin the 24 courses in the PRIME grant program for 5 semesters of coursework. Cohort 1 coursework Completed in Yr 2 Spring 2013. **Yr 2- Summer 2013–Cohort 2**: 16 ElemEd/SpEd/ESL Undergraduate Career Ladder Pre-service students Begin the 24 courses in the PRIME grant program for 5 semesters of coursework. Cohort 2 coursework Completed in Yr 4 Fall 2014. **Yr 4 -Spring 2015–Cohort 3**: 16 ElemEd/SpEd/ESL Undergraduate Career Ladder Pre-service students Begin the 24 courses in the PRIME grant program for 5 semesters of coursework. Coursework Completed in Yr 5 Summer 2016.
Yr 1 to 5- **Higher Education Faculty Revising courses with STEM/ESL/CLDE**-6 each year.
STUDENTS PROJECTED TO BE SERVED BY END OF PROJECT–**Pre-service Total=48**
Higher Education Faculty = Total of 30 Faculty in five years

Consortia Partners along with NAU are the following School Districts: Yuma Union High School District, Yuma Elementary 1, Somerton; Gadsden, Crane, Wellton, Parker, Hyder; Antelope Valley, and La Paz County Schools. Letters of commitment and collaboration are in Other Narrative Forms in this proposal. PRIME goals and objectives lead to increased capacity of the consortium districts to provide a quality education to EL students and to provide continual support to new teachers of EL/CLDE students. The capacity of NAU to provide teacher education programs to improve instruction for EL students will be strengthened during the five years of the project. The PRIME project also serves as a model of long-term collaboration

between the university and public schools to serve EL students and EL students with disabilities in rural settings. **The LEA partners will contribute** in many ways to the PRIME project. 1) All of the districts were contacted and asked for their input and feedback in planning the proposal. They shared their ideas with us about the needs in their districts, and this helped to shape the specific focus areas of STEM content instruction and CLDE strategies that were included in PRIME along with ESL courses. 2) LEA Superintendents are members of the PRIME Advisory Committee and lend their unique perspectives to the PRIME program about best practices in preparing teachers to educate EL students. They meet twice a year to reflect on the progress of the program, students, and provide feedback on changes or improvements that the program could make. 3) Partner districts provide practicum settings in the form of the classrooms PRIME students work in as paraprofessionals to implement new methods and materials with EL students Practicum activities provide high quality time/guidance/experience with EL/CLDE students. PRIME students will work in classrooms for a minimum of seven hours per day, five days per week, for 30 weeks which equals 1190 contact hours. The school districts in Yuma will provide a wide variety of practicum settings for PRIME Students. Because the target area schools are composed of 65-100% Hispanic and/or Native American students, PRIME students will be placed in a special education classroom or general education inclusion classroom with Hispanic and/or Native American exceptional children. Course content will be directly integrated into the practicum experience. For example, in Classroom Management (ESE425) students learn about behavior management plans and transfer this knowledge to the design and implementation of an actual management plan in their practicum classroom. NAU bilingual/ESL special education faculty as well as directors of special education and mentor teachers (Special Education and ESL) in the local districts will provide supervision and continual feedback during the practicum

experience each semester. Districts provide opportunities for PRIME students to work in inclusion classrooms with assistive technology, up-to-date computer technology, and software. 4) LEAs will provide Sixteen Mentor Teachers, one for each PRIME student, who will support, coach, and provide daily on-the-job training for PRIME students who are also paraprofessionals in their classrooms. PRIME design and coursework represent a conceptual framework of partnership and collaboration in rural schools with Mentor Teachers and University Faculty. These experienced teachers will mentor and support the PRIME students (paraprofessionals) throughout their program. Each Mentor Teacher will mentor and work closely with PRIME students on a)achievement of the required PRIME competencies and course activities through modeling of expert lessons, conducting co-teaching lessons, and providing feedback on students' lessons; b) providing feedback and coaching on PRIME students' professional development and their understanding of the culture of schools; and c) collaborative development of PRIME students and mentor teachers in professional development activities, i.e. learning seminars led by invited speakers and PRIME students presentations at selected conferences. 5) LEA partners will allow PRIME staff and faculty to observe program participants in their classrooms teaching EL students. 6) Principals in the district schools will be involved in the recruitment process of each cohort of PRIME students. 7) Superintendents, principals, and teachers will meet yearly with the External Evaluator to provide data, insights, and feedback on the results of the PRIME project.

NAU will contribute through the collaboration with the local schools and the resources that the PRIME program will bring to the community, school districts, teachers, and ultimately EL students. NAU has sufficient resources to deliver a high quality program with the previously detailed activities and the unique characteristics of STEM and CLDE curriculum that have been described in this section. In addition, library holdings, technology, technology support, facilities,

and faculty are all significant contributions that NAU brings as a partner. NAU College of Education programs are accredited by NCATE and North Central Association. The AZ SEA reviewed NAU's teacher education programs and certified that all preservice programs align fully with AZ K-12 State Standards and assessments including English language proficiency standards, content standards, and special education standards. PRIME curricula meet all state standards for educational personnel preparing to serve EL students and EL students with disabilities. NAU Elem Ed/Special Ed. Bachelor degree, and ESL endorsement have AZ SEA Institutional Recommendation which signifies that NAU grants state Certification directly to graduates. Through the rigorous application process for 2009 NCATE accreditation, all NAU courses including PRIME courses have added Signature Assignments of high quality assessment of student outcomes. NAU Teacher Education Students including PRIME students will post Signature Assignments on Taskstream Electronic Portfolio system for assessment and feedback.

Advisory Committee. Culturally/ linguistically diverse individuals are Advisory Committee members as well as parents from the community. The Advisory Committee is composed of:1) superintendents of Consortium LEAs, 2) parents of EL students and students with disabilities, 3) individuals with disabilities, 4) Arizona Dept of Ed Parent Information Network Specialist, 5) an LEA Migrant Ed Coordinator, and 6) NAU faculty member/parent of child with a disability.

Recruitment. To ensure an adequate pool of applicants from underrepresented populations, including students with disabilities, PRIME will be widely advertised to students with disabilities, Native American, Mexican American, and other culturally diverse students at NAU-Yuma, the Yuma area school districts, neighborhood community centers and parent support groups. Flyers will be distributed in both English and Spanish explaining the PRIME program and inviting students to informational meetings. We will specifically target schools with high

populations of EL students and paraprofessionals. Another strategy to recruit students with disabilities will be to provide flyers and application forms using Assistive Technology means (TDD/TDY's) to the NAU and Arizona Western Community College (AWC) Disability Support Services, the Parent Information Network for Students with Disabilities, American Diabetes Association, ARC, and Independence Plus. It is anticipated this project will train role models who can help their communities by working effectively with EL/CLDE students. In this regard, another recruitment strategy is the involvement of the PRIME Advisory Committee (AC)

Selection Criteria. 1. Academic achievement and completion of prerequisite coursework demonstrated by 2.5 GPA in all required Liberal Studies courses; Admission to NAU Teacher Education Program, 2.Consortium LEA paraprofessional employment working with EL children, 3.Spanish Proficiency demonstrated by exam or 2 semesters college-level Spanish. 4. English Proficiency demonstrated by language arts exam, 5. Excellence in classroom performance based on mentor teacher and principal recommendation.

Retention. Individual assistance will be provided to students in academic areas. Workshops will be conducted on time/stress management, computer technology, grammar/writing/oral expression, and research methods. When a student demonstrates academic difficulties in coursework, prescriptive tutoring sessions will be provided via community volunteers and PRIME staff. Monitoring and documentation will be conducted with the student until the student has demonstrated mastery in the area of concern. PRIME students will have opportunities to share and discuss successes and challenges, in an on-line chat-room. Students will have opportunities to receive day-to-day feedback from peers, mentors, NAU faculty, and PRIME staff. These retention strategies have been employed in other NAU rural diverse programs with great success. Intensive ESL writing workshops and course study guides will be developed to

facilitate student success. This structured support system will enable students to overcome the barriers rural students often face in accessing higher education. Rural students, particularly underrepresented groups, often have difficulties juggling jobs, families, classes, etc. PRIME addresses these difficulties by changing the nature of the classroom. Students will take courses in a cohort group, one class at a time for 3-4 weeks each, and learning will build from each course.

GOAL I – Improve instruction for EL students/EL students with disabilities by preparing 48 rural paraprofessionals (3 cohorts of 16) to become Highly Qualified teachers via coursework for B.S. degree in Elementary (K-8) and Special Education (K-12), ESL endorsement (K-12), with a focus on STEM and CLDE strategies.

Objective 1-Recruit paraprofessionals from the Yuma area using PRIME Consortium contacts.

Objective 2 -Preference to candidates who pursue Middle School Math or Science certification.

Objective 3-Implement PRIME undergraduate program.

Objective 4 Identify future PRIME candidates in local High Schools and community colleges.

GOAL II - Improve NAU Teacher Education to better prepare all teachers to provide effective instruction for EL/CLDE students via faculty training and redesign of STEM/ESL/SpEd. syllabi.

Objective 1 NAU faculty training on STEM/ESL/CLDE strategies for EL/CLDE students.

Objective 2 Faculty redesign syllabi with new strategies for ELs in STEM/ESL/CLDE Content.

Objective 3 Pilot new redesigned syllabi with STEM/ESL/CLDE content in PRIME program.

Objective 4 Implement redesigned syllabi with STEM/ESL/CLDE Content with Non PRIME grant program NAU teacher education students.

GOAL III – Collect pre/post data on effectiveness of PRIME students teachers to implement instructional practices that promote achievement of EL students and EL students with disabilities, disseminate information and data from the program.

Objective 1 - PRIME student teachers display knowledge and use of strategies that support the academic needs of EL learners in academic settings measured pre/post using the Sheltered Instruction Observation Protocol (SIOP) Self-Assessment instrument.

Objective 2 -PRIME student teachers will demonstrate their ability to produce lessons that improve instruction for EL students and will be observed and evaluated during fieldwork experiences using SIOP instruments and Teaching for Success (T4S) Evaluation Instrument.

Objective 3 –PRIME students will develop and present TOT professional development on STEM/ ESL/CLDE instructional strategies at National Conferences and to local educators.

Objective 4 –Collect and analyze data, make program revisions as needed. Disseminate findings and data to allow for replication of positive program outcomes. **See Mgmt Plan for activities**

Project Activities by Year and Cohort number (C-1, C-2, C-3)

Year 1 8/1/11-7/31/12	Year 2 8/1/12-7/31/13	Year 3 8/1/13-7/31/14	Year 4 8/1/14-7/31/15	Year 5 8/1/15-7/31/16
TOT student presentations on STEM/ ESL/CLDE at 1national conference & 1 local workshop	TOT student presentations on STEM/ ESL/CLDE at 1national conference & 1 local workshop	TOT student presentations on STEM/ ESL/CLDE at 1national conference & 1 local workshop	TOT student presentations on STEM/ ESL/CLDE at 1national conference & 1 local workshop	TOT student presentations on STEM/ ESL/CLDE at 1national conference & 1 local workshop
Cohort 1 (C1)- 12 courses	(C1) 12 courses (C2) 3 courses	(C2) 15 courses	(C2) 6 courses (C3) 9 courses	(C3) 15 Courses

Infuse ESL into Elem. Science methods course	Infuse ESL into Elem. Math methods course	CLDE & Tech into Math/Sci courses	Collect data on effectiveness of revised syllabi	Analyze data from syllabi review and from focus groups
Infuse Science into 2 ESL and 2 SpEd courses	Infuse Math into 2 ESL and 2 SpEd courses	Infuse CLDE & Tech into 1 ESL course	Collect data on effectiveness of revised syllabi	Analyze data from syllabi review and from focus groups

PRIME sequence of El.Ed, Sp.Ed and Bilingual/Multicultural ESL courses each semester.

CYCLE I (3 Cr. per course) Fall 2011 ESE 380 Intro Exceptional Ed., BME 480 Parent Involvement, ESE 424 Sp Ed High Incidence Fnd, ESE 434 Sp Ed Low Incidence Fnd, ETC 447 Technology in Classroom, EPS 324 Ed Psych, ESE 308(1Cr) Sp Ed Practicum, Spring 2012 ECI 309 Literacy I, BME 481 Assmt. EL Students, ECI 307 Social Studies in Elem School, ESE 425 Classroom Mgmt, BME 408 ESL/BME Practicum, ESE 308(1Cr) SpEd Practicum, Summer 2012 ESE 423 Sp Ed Assmt, ECI 321 El Ed Curriculum, BME 420 Literacy/Biliteracy, ECI 310(5Cr) Literacy II, Fall 2012 BME 538 Linguistics Ed Context, BME 430 Structured English Immersion (SEI) Methods, EDF 301 School/Society, ESE 471 Non-Biased Assmt CLDE Students, ECI 323 Middle School Curriculum, ECI 308(1Cr) El Ed Practicum, Spring 2013 ECI 300 Math Elem School, ECI 306 Science, ESE 450 Sp Ed Methods, ESE 426 Secondary Sp Ed Methods, ESE 472 CLDE Methods, ESE 308 SpEd Practicum **(Cycle II,III similar sequence)**

Culturally/Linguistically Diverse Exceptional (CLDE) /EL Students with Disabilities

COURSES - ESE 471 - Non-biased Assessment for CLDE Students. Pre-referral procedures, assessment techniques and instruments, educational diagnosis, and placement procedures for CLDE students, emphasizing Native American and Hispanic populations. **ESE 472 - Methods**

and Materials for CLDE Students. Modify/develop methods/curriculum materials related to academic interventions classroom mgmt. strategies for Hispanic & Native American students.

Competencies and Standards. Competencies related to teaching EL students and EL students with disabilities are based on current research and AZ Standards. Evaluation of Competencies. Program graduates will demonstrate attainment of the competencies addressed in program via written/oral exams and teaching performance. Teaching sessions will be evaluated onsite by Onsite Coordinator, CoDirector, and mentor teachers. Activities ensuring achievement of competencies range from trainee's observation of instructional methods to delivering instruction in classroom and self-evaluating a lesson. Onsite Coordinator (OC) supervises practicum experiences and utilizes mentor teachers designated by the school district as providing model programs to EL and CLDE students. Practicum assignments relate directly to content of PRIME courses. For weaknesses in skills, students will receive assistance and remediation until the competency is mastered. Skills will be assessed via competency evaluation forms providing opportunities for documentation of strengths, needs and prescriptive intervention plans.

Competencies linked to PRIME courses are:

Language and Linguistics(ECI 309, 310, EPS 324, EDF 301, ESE 471, BME 538, BME 481)
Sociocultural Foundations(EDF301 ,ESE472, ECI307, EPS324, BME480, BME430)
Curriculum/Instructional Strategies (ESE426, ESE450, ESE434, ECI300, ECI306, ECI 307, ECI 321,ECI 323, ECI 309, ECI 310, BME 408, BME 430, BME 420, ESE 308,ECI 308)
Testing and Evaluation: Non Biased Assessment (ESE 423, ESE 471, BME 481)
Classroom Management (ESE425, ESE472, BME 430, BME 408, ESE 308, ECI 308)
Inclusion/Collaboration/Parent Involvement (ESE426, 450, 472, BME 481 BME408)

2.Design Reflects Knowledge from Research and Effective Practice. The **PRIME** design is based on the following tenets from current research (Baca & Cervantes, 2004; Chamot & O'Malley, 1994; Echevarria & Graves, 1998; Freeman & Freeman, 2000; Gallegos & McCarty, 2003; Gollnick & Chinn, 2009; Gordon, 2007; Salend, 2011; Vogt & Echevarria, 2006; Wong Fillmore, 2005): (1) instructional programming is effective only to the degree that general and special education teachers are knowledgeable about cultural and linguistic variables and extent to which these variables contribute to psychological development, social behaviors, and academic accomplishments of EL students and CLDE students with disabilities; (2) educational issues for EL rural students are not reflected to a high degree in current teacher training programs and K-12 curriculum materials. PRIME is designed on current practices in research and pedagogy. Findings from the literature, have been incorporated into PRIME.

Cultural Responsiveness/CLDE. A key factor determining the degree to which the needs of CLDE children are met is the preparation or lack of preparation of teachers to be responsive to the needs of these students and to be more sensitive to their cultural heritage (Baca & Cervantes, 2004; Doran, 2011). Besides student learning, the area of curriculum and instruction materials is directly affected by culture (Barker & Grassi, 2011). Contents of instructional materials as well as the instructional strategies must be presented in culturally appropriate ways (Bruns & Fowler, 2004; Patterson, 2002). In the past, instructional materials have not drawn from the cultural and linguistic experiences relevant to multicultural exceptional children (Gollnick & Chinn, 2009).

Instructional Practice. According to Romo (2006) successful strategies for teaching EL and CLDE students stress collaborative learning and development of higher-level cognitive skills as opposed to factual or rote memory. Based on the research (Baca & Cervantes, 2004; Gallegos & McCarty, 2000; Gollnick & Chinn, 2009; Salend, 2011), PRIME will incorporate the most

effective instructional practices for students from diverse backgrounds including: Building strong connections to background knowledge; building on existing competence or "funds of knowledge, and providing activities perceived as meaningful and authentic by the students. Teachers must require active rather than passive participation and value and incorporate the language of the students in high-level academic activity. Teachers must permit "nonstandard" interactional patterns where appropriate to support learning. Strategies and effective practices in ESL development and achievement for EL students integrated into PRIME coursework are:: A) "The Literacy Club" Freeman, D.E., & Freeman, Y.S. (2000), *Teaching reading in multicultural classrooms. B)*"Anticipation/Reaction Guide" Vogt, M & Echevarria, J. (2006). *Teaching ideas for implementing SIOP.* C) "Discourse of Sheltered Instruction" Echevarria, J. & Graves, A. (1998*). Sheltered content instruction: Teaching English language learners with diverse abilities.* D) "Comparison Chart" Chamot, A.. & O'Malley, J. (1994). *The CALLA handbook: Implementing cognitive, academic language learning approach.* E) "All Around the School Writing." Gordon, T. (2007). *Teaching young children a second language.*

SIOP—Sheltered Instruction Observation Protocol--(Echevarria, Vogt & Short , 2008) offers teachers a jump-start for such instruction. SIOP is a research-based model, which began as a tool for evaluation and assessment, but evolved through a period of sustained effort into a full scale instructional model with its own suggested lesson-plans, strategies, and evaluation procedures. The basic philosophy of SIOP allows teachers to work within a critical community in which students support one another's learning, and growth, and development processes.SIOP offers strategies for direct instruction, student involvement, and vocabulary extension, as well as a philosophy for creating safe environments conducive to learning. The scaffolding methodology builds on comprehension including a move from detail to deep understanding in the speaking and

listening skills. SIOP includes reading and writing based on phonetic and alphabetical principles through decoding towards comprehension and into critical and interpretive understanding. In our evolving digital universe, literacy skills are obviously crucial and in need of constant evaluation.

To be effective, teachers in today's classroom must also be aware of the complex contribution to language learning provided by the cultural components. Much research has been done in the field of cultural and linguistic interplay. Brown and Eisterhold (2004) in *Topics in language and culture for teachers* explain how the notions of "Competence" versus "Performance" complicate and are highly dependent on cultural knowledge and sensitivity.

STEM. As the student population in US schools becomes increasingly culturally and linguistically diverse, the body of knowledge and skills required to be an effective teacher is changing. The growing presence of limited English proficient (also referred to as English Learner [EL]) youth in US schools means that more teachers of core academic subjects, like science, are confronted with instructional issues related to second language acquisition. As a result, teachers need to create classroom environments that promote EL students' development of general and content-specific academic language (Wong-Fillmore & Snow, 2002).

EL students learn the language more effectively when English instruction is combined with content knowledge than when they are in language-only classes (Chamot and O'Malley 1994; Echevarria et al. 2004), because content-area classrooms present the English language in a more meaningful and authentic context (Chamot & O'Malley,1994; Gibbons 2002). PRIME will offer teachers professional development curriculum design, implementation and student assessment methods. PRIME will design workshops that provide teachers with multiple methods of speaking and articulating STEM content such via drawings, models, charts, and graphs that facilitate EL students' acquisition of English language skills and academic knowledge.

B.QUALITY OF KEY PERSONNEL

Employment of Persons from Underrep. Groups and Individuals with Disabilities. NAU has successfully recruited persons from traditionally underrepresented populations. Among PRIME Director, Key Personnel, faculty/staff there are several persons from Mexican American background and 2 individuals with a disability. For Program Support Coordinator, recruitment with involvement of Advisory Committee will target culturally diverse persons, individuals with disabilities and underrepresented persons to develop a diverse pool of qualified applicants.

1.Project Director Qualifications. Dr. Patricia Peterson (.25FTE; .33 Summer), Professor of Special Education with CLDE focus will oversee PRIME project; supervise all student activities, personnel and budget activities; develop CLDE training; coordinate with STEM/CLDE/TECH consultants on faculty training and course revisions; and complete OELA reports. Her Ph.D. is in Special Education with a minor in Bilingual Education . Dr. Peterson is bilingual in Spanish and English, taught bilingual education and bilingual special education at K-12, has taught at NAU for 20 years, directed 10 federal BS, M.Ed., and Doctoral grants in bilingual/ESL/multicultural special education teacher preparation. She has published many articles in CLDE field and is the author of an upcoming book on "CLDE Teaching Methods". **2. Key Personnel.Qualification. Co-Director (.05 FTE)**. Dr. Russell Prust will coordinate PRIME Evaluation activities and coordinate activities with Advisory Committee and LEA Consortium District schools meeting monthly with the superintendents of Yuma County School Districts to gather feedback on specific training needs in the area. He is Education Coordinator at NAU Yuma, holds a Ph.D. in Educational Psychology, is fluent in English, Portuguese, and Spanish; taught ESL in Brazil for 5 years; was External Evaluator for Title VII/ III programs for 12 years; and Director of Grants at Milwaukee Area Tech College for 17 years. **Onsite Coordinator (.35 FTE) Maureen Hengl,**

M.Ed.in Elem Ed, will coordinate all recruitment, retention (writing/math tutoring, AEPA test prep, stress/time mgmt, and job search/interviewing skills), and Practicum Supervision. She taught in elementary inclusion classrooms for 25 years. As a Master Teacher, she mentored 20 first year teachers. **Project Manager (.20 FTE) Jody Attaway,** M.Ed. in School Psychology and certification in Special Education, will devote .20 FTE to local PRIME program management duties, coordinate onsite instruction and curricula, supervise daily progress of PRIME students, be involved in planning courses, tracking students, networking with LEAs, assisting prospective students in securing Paraprofessional Employment, assisting graduates in obtaining employment as teachers, matching students with mentors, and meeting with mentors and administrators. She is SpEd Director for Somerton District, NAU Yuma faculty, and bilingual in Spanish and English. **Advisor (.10FTE), Nancy Blitz,** M.Ed.in Bilingual/ESL Education, will advise students regarding Liberal Studies requirements including Arizona General Education Curriculum (AGEC) program completion, and PRIME prerequisites. She is trilingual in Spanish, German and English and teaches Bilingual/ESL Ed courses at NAU. **Elem Ed/Technology Coordinator (.15 FTE) Dr. Gae Johnson,** Elem Ed Professor with Ph.D. in Curriculum & Instruction, coordinates Elem Ed faculty, assists them in adding continuous EL strategies and CLDE methods to Elem. Ed. courses, provides Technology Training in Summer for PRIME students/ faculty, and has published widely as a leader in Math Ed. **Staff: Part-time Temp Support**, Elizabeth Padilla Ketterer, bilingual in Spanish/English, will mange travel documents, assist with conference logistics, and carry out clerical duties. **Program Support Coordinator position is To Be Hired .50 position** involves clerical duties, course registration for students, accounts payable, budget upkeep, coordinate faculty workshops, conferences, and travel. Requirements are: 2 yrs experience working with Federal Grant programs, 2 yrs working

with CLD students, 2 yrs , strong budget management skills, strong interpersonal communication skills, proficiency with NAU Advantage 3 Budget system and Peoplesoft registration/accounts payable system, and excellent written and oral expression skills. **Project Faculty**. In addition to Dr. Peterson, PRIME courses will be taught on rotating basis by BME, Sp Ed/Elem.Ed Faculty with experience and Doctorates or M.Ed: Dr. Natalie Hess, Dr. Pam Powell, Dr. Gae Johnson, Dr. Gaetano Senese, Randy Martin, Jody Attaway, Maria Porches Nixen, Nancy Blitz, Alma Sandigo, Elisa Soto, April Brady, Todd Pinnt. and Jim Manley (2000 AZ Teacher of the Year). **External Evaluator, Dr. Tim Hart,** Director of ESL for Wake County Schools, NC from 1980-2010, holds Ed.D. in Curriculum and Instruction (Second Language/Teacher Education) will lead the project evaluation activities. He will conduct onsite evaluation visits in Yuma, develop evaluation instruments, collect data, facilitate focus groups, and provide written feedback, reports, and recommendations to Director, Co-Director, Key Personnel, LEAs/Adv Committee on project progress and outcomes. **STEM/ESL/CLDE Consultants. Dr. Lily Wong Fillmore,** internationally known researcher on second language instruction, works with faculty/ students in Year 1 on effective practices in ESL STEM methods. **Dr. Gerry Madrazo** whose research and publications are in the area of Science instruction and ESL works with faculty and students on course redesign on infusion of ESL/CLDE into Science and Science content and strategies into ESL and SpEd courses in Year 1. **Dr. Nora Ramirez,** Professor of ESL/Math instruction, will work with faculty and students on course redesign on infusion of of ESL/CLDE into Math and Math content and strategies into ESL and Sp Ed courses in Year 2. **Dr. Patricia Medeiros Landurand,** nationally known in instructional strategies for CLDE students/parent involvement, works with faculty and students on course redesign infusing CLDE/Tech strategies into ESL, Science, and Math methods courses in Year 3. Consultants TBD Yr 4,5 pending Yr 1,2,3, data.

C. QUALITY OF MANAGEMENT PLAN

1. Objectives, Responsibilities, Timelines, & Milestones. PRIME will increase the number of highly qualified special education/elementary education teachers with ESL Endorsement successfully delivering education services to rural EL students and EL students with disabilities. PRIME graduates will learn best practices for STEM content strategies, especially with EL and CLDE children, particularly Native American and Mexican American students, and skills to increase parent involvement and collaboration among general and special education teachers, ESL specialists, administrators, related service personnel and parents. PRIME will also enrich existing IHE curricula to include strategies for teachers of EL and CLDE students in general education classroom. Collection and analysis of data will be ongoing throughout the grant so that process improvements can be implemented immediately.

PRIME leadership personnel and staff will continually monitor progress of participants, including students and faculty, to ensure key program objectives will be met. Staff, including Program Support Coordinator (to be hired) and Part Time Temporary Support Staff E. Padilla Ketterer, will report monthly to Director or Co-Director to provide updates on expenditures. Using the NAU GPS system, staff and faculty will track grades of participants to ensure that students who may need intervention/assistance are offered help at the earliest sign of difficulty. Onsite coordinator will observe students to evaluate use of STEM and CLDE strategies in the classroom setting. Co-Director, Onsite Coordinator and staff will collect data. Co-director and evaluator will analyze data. Director, Co-director, Elementary Education/Technology Coord. will disseminate information on the grant to other professionals via conference presentations.

TABLE 2 –GOALS, OBJECTIVES, PERSONNEL, MILESTONES, TIMELINE CHART

Director(D), CoDirector(CD), Proj Mgr (PM), Onsite/Practicum Coordinator (OC), Staff(S)

Mentors(M),El Ed/Tech Coord(EE), Advisor (A) Faculty(F), Students (St), Evaluator (E) Advisory Committee(AC), ESL/CLDE/STEM Consultants (C)

Activities/Benchmarks		**Staff**	**Criteria/Milestones**	**Timeline**
GOAL I Improve instruction for EL/CLDE students by preparing HQ Teachers *Objective1 recruit consortium paraprofessionals* ***(activities repeated prior to ea. cohort)***				
1a	Contact target school districts, provide PRIME information	D, CD,S,OC	School Dist Response applicant response	4/11
1b	Distribute info packets	D,CD, OC	LEA response	4/11-5/11
1c	Hold recruitment meetings	D/CD/PM	High attendance	4/11-8/11
1d	Secure list of students.	D/S/PM	List of eligible students	4/11-8/11
1e	Contact interested students	D,S,PM,A	Student Reply	5/11-8/11
1f	Review applications	D,S,A,OC	Completed applications	6/11-8/11
1g	Select program participants	D/CD/AC	Qualified applicants	8/1/11
Objective 2: Competitive preference to applicants for Middle school math/science (repeated for each cohort)				
2a	Targeted communication to Math/Science programs	D/CD/	60% respondents pursuing Math/Science	4/11-6/11
2b	Additional points on interview rubric for Math/Science high GPA-pursue Math/Science	D/CD/F/PM,EE	50% selected applicants pursuing Middle School math or science cert.	4/11-6/11
Objective 3: Implement PRIME Program (repeat for each cohort)				
3a	Begin PRIME Courses	D, F,OC,S	Students enrolled	8/11

3b	Oversee PRIME Courses	D/CD/PM	Stu master cmpetncies	8/11-7/16
3c	Evaluate each course at end of instruction (approx monthly)	D,CD,PM OC,	High Quality evaluation	ongoing
3d	Analyze course evaluations	D/CD/PM	Positive remarks	9/11-8/16
3e	Stu use CLDE/STEM meth/mat in practicum	St., OC, F	Obs. Tools confirm use of EL/CLDE strategies	3 obs. Per semester
3f	External Evaluator site visit	E, D,S, St M,F,CD	Positive evaluation, suggest modifications	Annually
3g	Implement suggested changes	D,CD, F,S OC, AC	Confirm modifications implemented	Annually
Objective 4 – Identify future PRIME candidates in local High Schools and colleges				
4a	Contact H.S. and college admin/future teacher orgs	D, OC, S A	50+ responses, build contact list	1/12-8/15 (quarterly)
4b	Advise and communicate with potential candidates	A,S, Stu	Candidates prepared for COE admit/PRIME app	2/12-8/15 ongoing
	GOAL II, Improve NAU Teacher Ed. to prepare educators of EL/CLDE students			
Objective 1- Faculty training on strategies for teaching EL/CLDE students				
1a	Faculty EL/CLDE and STEM Training	C,F,D	Positive evaluations from consultants	3/12-3/14
Objective 2-redesign syllabi with EL/CLDE and STEM strategies				
2a	Faculty redesign syllabi	F	Syllabi completed	Post train.
Objective 3-Pilot and assess new syllabi in PRIME cohort classes				

3a	Pilot Syllabi in PRIME classes	F	Syllabi Implemented	5/12-8/14
3b	Analyze data syllabi outcomes	D, E	Positive outcomes	8-13/7-14
Objective 4-implement redesigned syllabi in college-wide courses				
4a	Use Syllabi in Teacher Ed classes	F	Approved for use in Teacher Prep. progrm	8/15
	GOAL III,Collect pre/post data on use of EL/CLDE instructional practices ***Disseminate program information***			
Objective 1-graduates display knowledge and use of strategies for EL/CLDE students				
1a	Collect pre training data	D,OC,S	Baseline established	Cohort
1b	Collect Post Training Data	D, E	EL/CLDE competent	8-13/5-16
Objective 2 students produce lesson plans to improve instruction for EL/CLDE students				
2 a	T4S and observations	OC, St., F	All prod. good lessons	1/12-6/16
Objective 3-Students participate in conferences, create TOT presentation for Yuma area				
3a	Stu. Part. in national conf.	D,OC,St	Present activity at conf.	Annually/
3b	St. Part. STEM conference	St,OC, EE	Reflections/TOT prep	Annually
3c	Students create TOT STEM/CLDE workshop for Yuma area teachers	D,EE,CD, St.OC, E	80% participants note 3 EL/CLDE strategies they will use in classrm.	Annually, late spring
Objective 4- Collect/analyze data, revisions as needed. Disseminate findings				
4.a	Collect program data	E, D,AC	Accurate data collected	Annually
4b	Analyze Post Training Data	E	Write Eval Report	6/13-8/16

2. Time Commitments. Dr. Peterson, **Director**, oversees all administrative and fiscal aspects of project, develops/revises CLDE courses, supervises staff, and monitors student progress. Director devotes .25 FTE and approximately .33 Summer to project. She heads a Project Management Team consisting of herself, Co-Director Prust, Project Manager Jody Attaway, Elem. Ed. Coordinator Dr. Gae Johnson, Onsite coordinator Maureen Hengl, Advisor Nancy Blitz, Part time temporary support Elizabeth Padilla Ketterer and Program Support Coordinator (to be hired). **Co-Director** Dr. Russell Prust devotes .05 FTE to PRIME, coordinates evaluation activities, leads activities with LEAs and advisory committee. **Project Manager** Jody Attaway will devote .20 FTE to local PRIME program coordination. Project Manager oversees onsite instruction and curricula, supervises the daily progress of PRIME students, is involved in planning courses, tracking students, networking with LEAs, assisting prospective students in securing Paraprofessional Employment, assisting graduates in obtaining employment as teachers, matching students with mentors, and meeting with mentors and administrators. **Onsite Coordinator** Maureen Hengl will devote .35 FTE Organizes Informational Meetings, sends flyers to schools, facilitates practicum assignments among several mentors, organizes and supervises practica, meets with mentor teachers, prepares students for practicum assignments, conducts 3 onsite observations and evaluations each semester for each PRIME student, and provides writing workshops and tutoring to students. **Elementary Education/Technology Coordinator** Dr. Gae Johnson devotes .15 FTE to PRIME. She coordinates the Elem. Education faculty, assists them in adding continuous ELL strategies and CLDE methods to Elem. Ed. courses. She provides Technology Training in summer for PRIME students and faculty. **Advisor** Nancy Blitz devotes .10 FTE, advises students regarding Liberal Studies requirements including Arizona General Education Curriculum (AGEC) program

completion, and PRIME prerequisites. **Program Coordinator** (.50 FTE FY) carries out office coordination, clerical duties, registration, TOT conference organization, workshop coordination, accounts payable, and budget upkeep duties for the project. **Part-time Temp Support** Elizabeth Padilla Ketterer (.25 FTE) manages travel documents, travel itineraries, conference coordination, and clerical duties. **The team** conferences weekly via conference call to review project progress, accomplishments, make program modifications based on ongoing evaluation data, set deadlines, and plan future activities. Adv Com(AC) is involved in planning, implementing and evaluating PRIME. AC, Director/Key Personnel meet regularly to review progress and make necessary modifications to program. Utilizing CIPP Model (Context, Input, Process, Product), evaluation is clearly aligned with objectives providing structure for continuous feedback and program revision. EVALUATION section describes in more detail how CIPP model will produce project feedback/continuous improvement.

D. PROJECT EVALUATION

1) Methods Appropriate to Goals and Objectives, and Outcomes

PRIME will be evaluated utilizing CIPP Model (Context, Input, Process, Product) developed by Stufflebeam. This model has been widely implemented in evaluation of federally funded education projects (Madaus, Scriven, & Stufflebeam, 1983; Stufflebeam, 2001). CIPP approach is based on premise that the most important purpose of evaluation is not to ***prove*** but to ***improve***. "The use of the CIPP model is intended to promote growth and to help responsible leadership and staff of an institution systematically to obtain and use feedback so as to excel in meeting important needs…." (p. 118. Madaus, Scriven, & Stufflebeam, 1983). Utilizing the CIPP model, evaluation will be clearly aligned with project objectives. This model provides a structure for continuous feedback and program revision and is outlined below.

C = Context: Evaluation planning decisions - What should we do?

I = Input: Evaluation structuring decisions – How should we do it?

P = Process: Evaluations implementing decisions – Are we doing it as planned?

P = Product: Evaluation recycling decisions – Did it work?

The PRIME project will be evaluated in order to: 1) initiate, assess, and modify project activities related to the program objectives and improve the project (Context, Input, Process); 2) provide stakeholders with information allowing them to determine the efficacy of the training approach we utilized (Product), and 3) communicate with other professionals currently engaged in or considering similar work (Product). The External Evaluator and Co-Director will be responsible for overseeing the evaluation activities.

The following areas will be evaluated: 1) Efficacy of program implementation 2) Improvement of teacher preparation to include STEM/ESL/Special Ed. strategies 3) Assessment and Evaluation activities, 4) Information Dissemination activities. The Program Management Chart, Table 2 in Management Plan section, lists individuals responsible for the Context (What should we do?) and Input (How should we do it?). The Program Evaluation Chart in the Evaluation section, Table 3, lists the individuals initially responsible for collecting the evaluation data. Multiple measures will be used in the ongoing evaluation of the program. A statistical comparison of success measures (GPA, graduation rate, etc) comparing PRIME students to non-PRIME students in the same degree program will be performed using appropriate statistical analysis tests. Journal entries and surveys from program participants who are piloting revised syllabi will be evaluated using HYPERQUAL and StatPac to determine the effectiveness of the revisions. Director, Onsite coordinator and available faculty and staff will meet weekly to monitor progress on objectives. Staff and faculty will provide updates on student progress. The

Director, Co-Director and Onsite Coordinator will meet quarterly to assess progress on objectives. The Director, Co-Director will: 1) review the data collected, evaluations, and surveys, 2) monitor all criteria for success, and 3) propose any revisions or modifications if necessary. Finally, the LEA partners and the Advisory Committee meet bi-annually and review all program information and also make suggestions on revisions/modifications if necessary. These evaluations will be used to provide annual reports which will provide OELA with information regarding progress toward goals and the efficacy of the training approach we utilized (Product) and may be used for program presentations, findings, and publications (Product). Documentation of student progress will be on-going (e.g., grades, students progress, attainment of competencies in practicum). Since multiple methods and multiple evaluations will be used, credibility of the evaluation findings is increased.

2) Objective Performance Measures Which Provide Quantitative and Qualitative Data

PRIME Goals and Targets-(how do we measure our success/progress) **GOAL I-Prepare 48 paraprofessionals to become Highly Qualified Teachers for EL/CLDE students.**

Objective 1-Recruit consortium paraprofessionals for PRIME cohorts. **Target-**48 students, 3 cohorts of 16 students each. Measured by number of candidates accepted into the program. If number applicants is low (less than 40), re-evaluate recruitment methods, increase contacts with college and high school students to encourage application for the next cohort.

Objective 2-Preferenc to candidates who pursue middle school math or science certification

Target-8 students per cohort (24 total) pursue middle school math or science certification. Measured by number of candidates accepted into the program. If number applicants is low (less than 20), re-evaluate recruitment methods, increase contacts with college/high school students to encourage application for the next cohort.

*Objective 3-Implement PRIME undergraduate program-***Target-**Participants show strength in key areas (GPA, retention, degree completion rate and teaching to EL students) compared to non-grant students in same degree program. Measured at midpoint and end of each cohort using PASW. NAU GPS system and instructor feedback checked throughout the semester to track student success. If student shows a deficiency, academic help is offered to improve success.

Objective 4-Identify future PRIME candidates in local high schools and community colleges. **Target-**Create and maintain a list of 50 or more potential candidates prior to each cohort. Promote PRIME grant at the school and district level to ensure interest in the grant and advisement on grant prerequisites.

GOAL II- Improve NAU teacher education to prepare all teachers to provide effective instruction for EL/CLDE students.

Objective 1 –NAU faculty trained on STEM/CLDE/ESL Strategies- **Target** at least six faculty participate in training each year (years 1-5) with STEM/ESL consultants.

Objective 2 –Faculty redesign syllabi with new strategies for ELs **-Target-**ESL/CLDE/Tech. infused into 1 Science and 1 Math Methods course **Target** –2ESL/2 Sp. Ed. syllabi enhanced with Science/ESL and Math/ESL content. **Target** – 1 ESL syllabus enhanced with CLDE and Technology content. Measured after faculty workshop and redesign by consultant.

***Objective** 3 Pilot redesigned syllabi with PRIME students/**Objective 4** implement redesigned syllabi with non-grant NAU teacher education students* **Target-**Five syllabi accepted for implementation. Prior to implementation, feedback from students, focus groups, advisory council and consultants will be evaluated using HYPERQUAL to ensure content themes are addressed.

Goal III-Collect pre/post data on effectiveness of student teachers to implement instructional practices that promote achievement of EL/CLDE students; Disseminate program information.

Objective 1-PRIME students display knowledge and use of effective strategies which support needs of ELs in academic settings **Target-**90% students show growth in ESL knowledge. Determined by pre/post interviews, SIOPs protocols and observations.

Objective 2-PRIME Students demonstrate ability to produce lessons that improve instruction for ELs. **Target-**90% students show competency. Measured using T4S, SIOPs or other observational methods during fieldwork experiences. Students not meeting competencies will be tutored.

Objective 3-Students develop and present TOT activity on ESL/STEM/CLDE instructional strategies at national conferences and workshop for local educators. **Target-**80% of participants (audience) identified an ESL/CLDE/STEM strategy they would use in their classrooms. Measured by post conference surveys; possible follow up surveys.

Objective 4-Collect and analyze data, make program revisions as needed; disseminate findings- **Target-** meet bi-annually to review progress. For student progress –monthly monitoring to ensure successful completion of courses; program revision if needed. **Target-**Present findings at two national conferences annually.

GPRA targets – To be reported to OELA annually

Measure 1.1: The percentage of pre-service program completers who are State and/or locally certified, licensed, or endorsed in EL instruction. Year 1-N/A. Year 2 100% Year 3- N/A Year 4 – 100% Year 5- N/A

Measure 1.2: The percentage of pre-service program completers who are placed in instructional settings serving EL students within one year of program completion. Year 1- N/A Year 2- 100% Year 3-N/A Year 4 100% Year 5 N/A

Measure 1.3: The percentage of pre-service program completers who are providing instructional services to EL students 3 years after program completion. Year 1- N/A Year 2 – N/A; Year 3-N/A; Year 4-N/A; Year 5 100%

Questions for annual external evaluation –*These questions are designed to evaluate the program, activities and outcomes as a whole, not to separately evaluate activities.*

1) What knowledge, skills, and dispositions are participants gaining in the project, as evidenced from various sources to include Field-Practice Assessment?

2) What suggestions for improving the project come from participants and other stakeholders that can be used to modify the program related to recruitment, retention, and support services?

3) How many Program Completers; what is completers' graduation rate;

4) Effectiveness in preparing teachers for post-program employment/employment rate?

5) Do Revised Syllabi & Faculty EL/CLDE Training improve strategies for EL/CLDE students?

3) Performance Feedback for Assessment of Progress Toward Achieving Outcomes

Question # 1 – Knowledge, Skills, and Disposition gained from program.

Activity 1 – A test evaluating knowledge of ESL(CALLA, SIOP, etc), STEM, and CLDE strategies for improving instruction of EL will be identified. PRIME students will be administered this test in a pre/post format. Based on demographics, a control group of Elementary/Special Education Dual major program students will be administered the test at the end of their program of study. These scores will be compared to post-test scores of the PRIME participants. **Program Modification** – Mean scores will be compared between the pre and post-

tests and the post-tests of the control group. These data will be used to determine if additional information regarding ESL, STEM, and CLDE instructional methods needs to be infused into the curriculum of the program.

Activity 2, Course Assessment - Student Evaluation forms will be developed by the AD/Evaluator to determine effectiveness of Course Revisions developed by STEM/ESL and CLDE specialists. Faculty evaluations will also be done when instructors teach the revised courses which include STEM/ESL/CLDE. **Program Modification-** For any weaknesses or difficulties noted on the evaluations, technical assistance will be provided by PRIME staff to remedy problem areas, and modifications will be made in the training and materials provided to the Faculty.

Activity 3, Field Practice Assessment -Each participant must teach lessons to CLD exceptional students. A local expert panel (teachers and university personnel with expertise in the area) review the lessons. Each student meets with members of panel to receive professional growth.

Activity 4, Portfolios - Students are required to develop a portfolio that will be maintained throughout the five semesters. Portfolio type of performance-based product responds to a standard called for in *A Nation Prepared* and *What Matters* Most*: Teaching for America's future*. According to the literature (e.g., Bullock and Hawk, 2001), portfolios, (1) enable teachers to demonstrate they meet a set of standards, (2) communicate their effectiveness and competency, and (3) take charge of their own assessment. Portfolios document evidence of teaching, content understanding, and recorded reflections supporting contents of portfolio. Students demonstrate how they have met state standards in Elem/Sp Ed/ ESL.

Activity 5, Problem Solving – Students participate in problem-based case studies. Problem-based learning helps students use their analytic and critical thinking skills, knowledge of

educational theory and research, knowledge of instruction and strategies, and knowledge of sociopolitical/cultural realities for ELL. Case study analysis asks students to go beyond the obvious and to practice thinking like a teacher, problem solving within the cultural, community, and school realities (Silverman, Welty, & Lyon, 1996).

Activity 6, Reaction Journals - Finally, students are required to maintain reaction journals and make at least three entries per week in them. Students may make any type of entry, but are encouraged to make entries pertaining to attitudes and dispositions about serving children with special needs and their families. Students submit journal entries by e-mail to Director and Co-Director. Entries are analyzed for emergent themes using Hyperqual or a similar software package. **Program Modification.** The Director and Onsite coordinator review practicum observation from each class, and analyzes the entries from participant journals. Data will be used to determine whether additional direct instruction and practicum assignments are necessary to achieve the competencies of the program.

Question 2. Suggestions for Improvement from Stakeholders, participants

Activity 1, Surveys of Participants, Completers, Instructors, Mentor Teachers and School Administrators - To obtain stakeholders' suggestions for program improvement, two activities will be completed. Each stakeholder group (i.e., participants, completers, instructors, mentor teachers, and administrators) will complete a questionnaire devised by Director and reviewed by evaluator and experts in field. Questionnaire will contain numerous items which tap constructs such as "how could the delivery of this program be improved?" and "what content/knowledge should be added to the program?" etc. Focus group interviews will be conducted at end of each year. Focus group purpose is to get at complex underlying notions in a setting where sharing of experiences can help guide other participants to greater awareness, understanding, and

participation (Shank, 2002). **Program Modification**. Director reviews questionnaires from all stakeholders and uses the suggestions for improvement and focus group interviews to modify pertinent areas within curriculum, activities, program procedures.

Question 3. Students Completing Program and Receiving BS in El.Ed/SpEd/ESL

Activity, Graduation Rates - These data will be collected at the end of Cycles 1, 2, 3. Additional data on B.S. Degrees awarded are obtained each semester from registrar's office. **Program Modification**. These data will be used to determine if changes need to be made in retention activities.

Question 4. Number of PRIME Completers Employed and Types of Positions

Activity, Placement Rates-Director maintains names/addresses of project participants and determines types positions attained post-graduation. Data collected on participants, % instructing EL students, quality feedback from employers. **Program Modifications:** Data to determine if more placement efforts needed; program needs improvements; if all teachers serve EL students.

Question 5: Do revised syllabi improve Teaching Strategies for EL/CLDE Students?

Activity 1 – Faculty evaluate effectiveness of EL/CLDE training in revising syllabi with EL Modules. **Program Modification** –Data used to determine if further reading/resources needed.

Activity 2 – Survey PRIME and teacher education students on changes they will make in teaching EL and CLDE students in content subjects as result of Revised Syllabi/Faculty ELL/CLDE strategies. Data will be analyzed using Hyperqual to determine how revised syllabi and faculty strategies improved depth and breadth of teacher Students skills/strategies teaching EL students. **Program Modification**–If no improvement in student methods, faculty will review courses and suggest interventions if required.

Table 3 - Evaluation Activities

Director(D), CoDirector(CD), Proj Mgr (PM), Onsite Coord. (OC), Staff(S) Mentors(M),El Ed/Tech Coord(EE), Faculty(F), Students (St), Evaluator (E) Adv.Com (AC), Consultant (C)

Evaluation Activity	**Staff**	**Criteria/Milestones**	**DATES**
Test evaluating ESL knowldg. Admin. to PRIME/non PRIME	E/S/F/OC/ OC,St.	St. post response shows imprv. Vs. control grp	8/11-7/16
Course assessment	F,St.PM	Student/Peer response	8/11-7/16
Field practice assessment	OC,F,St.	Pos. resp. from panel	4/12-5/16
Portfolio	E/F/St/OC	High ranking eval.	8/11-7/16
Problem solving /case study	E/F/OC/St	Complete analysis	4/12-5/15
Reaction Journals	D/CD/St	Student pos. disposition to EL/CLDE students	8/11-7/16
Survey of Stakeholders	E/F/AC	A/C feedback updated, eval/change if needed	8/12-7/16
Data on grads employed vs. non-PRIME graduates	S/D/E	All graduates employed	8/13-7/16
Placement with EL students	E/St. OC	All graduates serving EL/CLDE students	8/13-7/16
Faculty eval. revisions	E/F/OC	Students using methods	11/12-6/16
Survey graduates and mentors re: changes to their EL/CLDE instruction	E/F/St/M	Students and mentors using methods, growth in depth of skills	12/13-7/16