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# APPLICATION FOR GRANTS UNDER THE

**NATIONAL PROFESSIONAL DEVELOPMENT PROGRAM**
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Closing Date: MAY 09, 2011

**University of Illinois at Chicago**

**Project Math and Science Teachers of English Learners (MASTEL)**

**Consortia Partners:** LEA: Office of Language and Cultural Education, Chicago Public Schools and, SEA: English Language Learner Division, Illinois State Board of Education

**Project Description:** Project MASTEL will address the Illinois teacher shortage for bilingual science and math educators by providing University of Illinois at Chicago (UIC) preservice and Chicago Public Schools (CPS) inservice math and science endorsed teachers and teacher candidates with five courses leading to state of Illinois endorsements/approvals to teach English Learners (ELs).

In the 2010-11 academic year, over 63,000 ELs were enrolled in 382 bilingual/ESL programs in the Chicago Public Schools (CPS, 2011). Spanish is the native language of 86% of these students, followed by Polish, Arabic, Cantonese, and Urdu.

Results from the *2009 National Assessment of Educational Progress* (USDE, 2009) reveal that CPS 8th graders scored 27 points lower than their peers in other large urban districts in their understanding of several core science areas: physical, life, earth, and space. They tested particularly low on analyzing scientific concepts and critical thinking skills. Part of the problem may lie in the fact that many elementary and middle school science teachers are not endorsed to teach science. CPS fourth grade science scores were also among the lowest on the NAEP assessments in comparison to 17 large urban districts. For CPS ELs, the 2009 NAEP data reveal that, at both the 4th and the 8th grades, students performed below the average of other urban districts.

The *2008 Educator Supply & Demand in Illinois* (ISBE, 2008) report revealed that positions of greatest under-production, through 2012, include bilingual teachers, and that the majority of unfilled positions (43%) in 2008 occurred in the Chicago District 299 (CPS). Although in 2008 the number of newly certified math teachers had doubled since 2002, and the number of newly certified science teachers had increased by 16% a year, both subjects appear on the list of the largest number of teachers needed through 2012.

UIC preservice teacher candidates who are pursuing Illinois certification programs to become math and science teachers, and CPS math and science practicing inservice teachers, will take a five-course sequence of foundations and methods courses that lead to state of Illinois approval/endorsement for teaching ELs in Bilingual/ESL programs. Coursework will cover language proficiency assessment, learning standards for ELs, WIDA (World-class Instructional Design and Assessment) standards, linguistics for teachers, methods of teaching ELs, second language acquisition theory, bilingualism and literacy, foundations of bilingual education, and cross-cultural issues in teaching culturally diverse ELs. Each of the courses includes a 30-hour field experience requirement of working with ELs in schools. Project participants will have the option of taking a sixth course: *Integrating Math, Science and ESL,* which leads to an additional

state secondary endorsement in English as a New Language. Selected CPS teachers who complete the five courses will be provided an option of taking four additional courses to obtain a Master's degree.

Assessments of preservice teacher candidates' strengths and weaknesses in meeting the Illinois Professional Teaching Standards will be summarized for each UIC math and science certification program and the aggregate data will be used to improve the programs. Particular focus will be on state teaching standards that cover teaching culturally and linguistically different students.

CPS bilingual coaches, trained in using the SIOP, will assist Project MASTEL staff in collecting pre-program and post-program data on CPS science and math teachers who take the Bilingual/ESL Approval courses. The purpose of collecting these data is to enable the teachers make instructional decisions on a day-to-day basis and incorporate strategies that have been shown to be effective in improving learning outcomes for ELs.

**Project MASTEL has seven project objectives:**

**Project Objective 1:** By the end of Year 5, at least 10 undergraduate students will graduate from UIC with a 1) a Bachelors' degree in education, 2) secondary or elementary Illinois certification, 3) state endorsement in Science or Math, and 4) state Approval (endorsement) to teach English learners in Bilingual and/or ESL classrooms.

**Project Objective 2:** By the end of Year 5, at least 15 new teacher education students will graduate from UIC with 1) a Master's degree in education, 2) secondary or elementary Illinois certification, 3) state endorsement in Science or Math, and 4) Approval (endorsement) to teach English learners in Bilingual and/or ESL classrooms.

**Project Objective 3:** By the end of Year 5, at least 30 practicing secondary or elementary science or math-endorsed teachers in the Chicago Public Schools will have obtained an additional ESL/Bilingual Approval/endorsement through UIC.

**Project Objective 4:** By the end of Year 5, at least 10 elementary or secondary science or math teachers from Objective 3 will obtain a Master's degree in Educational Studies.

**Project Objective 5:** By the end of year 5, at least 25 math and science teacher candidates will generate certification assessment data, which is collected, analyzed and used to improve UIC's certification programs.

**Project Objective 6:** By the end of year 5, at least 20 CPS math and science teachers from Objective 3 will measure changes and improvements in their instructional practices for ELs, using the SIOP protocol to collect pre-program and post-program data.

**Project Objective 7:** By the end of Year 5, UIC, in conjunction with CPS, will have produced at least two workshops per year, providing inservice training which targets research-based science and math instruction for English learners.

**Priorities:** Project MASTEL is designed to meet the following two priorities: Competitive Preference Priority 2--Enabling More Data-Based Decision-Making. Competitive Preference Priority 3--Promoting Science, Technology, Engineering, and Mathematics (STEM) Education.

| GPRA Measure Targets | Yr. 1 | Yr. 2 | Yr. 3 | Yr. 4 | Yr. 5 |
|---|---|---|---|---|---|
| The number of pre-service teachers expected to be served (duplicated counts) | 6 | 11 | 18 | 15 | 8 |
| The number of pre-service teachers expected to complete the program of study (unduplicated) | | 4 | 6 | 7 | 8 |
| The number of pre-service teacher completers expected to be placed in instructional settings serving ELs (Year 2 and beyond) (unduplicated) | | 4 | 6 | 7 | 8 |
| The number of pre-service teachers expected to complete the program of study and be certified in EL instruction (unduplicated count) | | 4 | 6 | 7 | 8 |
| The number of in-service teachers expected to be served (duplicated counts) | 10 | 15 | 15 | 15 | 10 |
| The number of in-service teachers expected to complete the program of study (unduplicated) | | 7 | 7 | 8 | 8 |
| The number of in-service teachers expected to complete the program of study and be certified in EL instruction (unduplicated counts) | | 7 | 7 | 8 | 8 |
| The number of in-service teacher completers who are expected to serve EL students (undupl.) | | 7 | 7 | 8 | 8 |

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## References

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Illinois State Board of Education (2008). *Educator supply and demand in Illinois: 2008 Annual report*. Data Analysis and Progress Reporting Division. Springfield, IL.

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## Part III: Narrative

The partnership between the University of Illinois at Chicago (UIC) and the Chicago Public Schools (CPS) is exceptionally strong, with a number of program commitments already established between the two institutions. The Dean of the College of Education (COE) has been very active in forging this long-term partnership, beginning with communication with the CPS Central Office administration and extending to UIC partnership projects with targeted high-need schools in Chicago. These established partnerships exist across several educational projects and programs, including mathematics, science, reading, and professional development programs.

The Bilingual/ESL Program at UIC has a long tradition of consulting with and supporting the work of the Office of Language and Cultural Education and other units at CPS. Our faculty conduct in-services for K-12 teachers at CPS schools, teach courses for CPS teachers, and work with individual schools in comprehensive school change projects. Also, the COE places student teachers and requires all elementary certification students' fieldwork to take place exclusively in the Chicago Public Schools.

At a meeting at CPS on March 14, 2011, Karen Sakash, proposed Project Director, consulted and coordinated efforts regarding this proposal, with Griselda Flores, CPS Area 1 Bilingual Instructional Coach, Bilingual Professional Development Unit, Office of Language and Cultural Education, and Maria Pagan Goutos, School Management Specialist, CPS Office of P-12 Management. They have agreed to be primary contacts in working in consortia with UIC on Project Math and Science Teachers of English Learners (MASTEL). CPS personnel will collaborate with their support and assistance in: 1) receiving UIC students for early field experiences and student teaching in CPS classrooms,

2) helping place UIC students in teaching positions, 3) keeping UIC abreast of CPS needs and initiatives, 4) helping us collect data on teacher practices for the purpose of improving instruction to English Learners (ELs), and 5) helping us plan and deliver quality professional development that provides Continuing Professional Development Units (CPDUs) for CPS teachers. We have also consulted with Ms. Robin Lisboa, Division Director, English Language Learning Division, Illinois State Board of Education (ISBE). We will work together with the SEA and its offices and divisions, to stay informed of changes in policies regarding certification/endorsement programs, such as the implementation of new professional teaching standards and new assessment policies for teachers and programs, and the SEA will help direct eligible participants to our teacher education programs.

**Criterion (a): Quality of the project design**

The primary goal of Project MASTEL is to produce a pool of highly trained and qualified math and science-endorsed secondary and elementary teachers who work with, or are planning to work with, ELs in the Chicago Public Schools. We will also provide professional development, available to all UIC students and faculty and CPS teachers and administrators, on research-based math and science instruction for ELs. Two of our objectives focus on data-based decision-making to improve instructional practice in CPS, and to improve UIC certification programs in helping its students achieve state standards.

Project MASTEL is aligned with the following competitive priorities:

In accord with competitive preference priority 3--Promoting Science, Technology, Engineering, and Mathematics (STEM) Education--through this grant we will: "increase the opportunities for high-quality preparation of, or professional development for,

teachers or other educators of STEM subjects."

In accord with competitive preference priority 2--Enabling More Data-Based Decision-Making—the project will: "collect (or obtain), analyze, and use high-quality and timely data, including data on program participant outcomes, in accordance with privacy requirements, in the following priority area: Improving instructional practices, policies, and student outcomes in elementary or secondary schools."

**Objectives of Project MASTEL**

**Project Objective 1:** By the end of Year 5, at least 10 undergraduate students will graduate from UIC with a 1) a Bachelors' degree in education, 2) secondary or elementary Illinois certification, 3) state endorsement in Science or Math, and 4) state Approval (endorsement) to teach English learners in Bilingual and/or ESL classrooms.

**Project Objective 2:** By the end of Year 5, at least 15 new teacher education students will graduate from UIC with 1) a Master's degree in education, 2) secondary or elementary Illinois certification, 3) state endorsement in Science or Math, and 4) state Approval (endorsement) to teach English learners in Bilingual and/or ESL classrooms.

**Project Objective 3:** By the end of Year 5, at least 30 practicing secondary or elementary science or math-endorsed teachers in the Chicago Public Schools will have obtained an additional ESL/Bilingual Approval/endorsement through UIC.

**Project Objective 4:** By the end of Year 5, at least 10 elementary or secondary science or math teachers from Objective 3 will obtain a Master's degree in Educational Studies.

**Project Objective 5:** By the end of year 5, at least 25 math and science teacher candidates will generate certification assessment data, which is collected, analyzed and used to improve UIC's certification programs.

**Project Objective 6:** By the end of year 5, at least 20 CPS math and science teachers from Objective 3 will measure changes and improvements in their instructional practices for ELs, using the SIOP (Sheltered Instruction Observation Protocol) to collect pre-program and post-program data.

**Project Objective 7:** By the end of Year 5, UIC, in conjunction with CPS, will have produced at least two workshops per year, providing inservice training which targets research-based science and math instruction for English learners.

These workshops will be provided to CPS administrators, elementary and secondary educators, preservice teachers, and UIC teacher education faculty. Workshop providers will include nationally known researchers, local CPS teacher-researchers, as well as UIC researchers who work on projects such as *Teaching Teachers to Use Technology – What Works and Why?* a project of the Learning Sciences Research Institute in the UIC College of Liberal Arts and Sciences (LAS).

To these **Project Objectives** we add these **GPRA Performance Measures:**

**GPRA Performance Measure 1.1:** The percentage of pre-service program completers who are State and/or locally certified, licensed, or endorsed in EL instruction. (Project Objectives 1, 2, and 5 are directly related to this measure.)

**GPRA Performance 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.

**GRPA Performance Measure 1.3:** The percentage of pre-service teacher completers who are providing instructional services to EL students 3 years after program completion.

**GPRA Performance Measure 1.5:** The percentage of in-service teacher completers who complete State and/or local certification, licensure, or endorsement requirements in EL instruction as a result of the program. (Project Objectives 3 and 4 are directly related to this measure.)

**Target Participants**

The students whose education will be funded under this program will be recruited from two major groups: preservice UIC teacher candidates and inservice CPS teachers.

The first group is traditional undergraduate and graduate preservice math and science education students who will add an ESL/Bilingual State Approval (endorsement) to their subject matter area training. The COE and the College of Liberal Arts and Sciences (LAS) work together to offer certification programs that produce math and science teachers. At the graduate level we have state-approved secondary certification programs for teaching biology, earth science, and environmental science. At both the graduate and undergraduate level our standards-based secondary programs are state-approved for teaching math, chemistry, and physics. The state offers a middle school endorsement in biology, physical science, math, general science and technology for certified teachers at the elementary and secondary level who complete18 hours in the content area for the endorsement and take two middle school courses which COE offers.

**Graduate Preservice Participants**

The COE offers one-year and two-year program options for secondary science certification and a master's degree in five science concentrations: biology, chemistry, earth science, environmental science, and physics. Those interested in teaching ELs will pursue the required five courses for Bilingual/ESL Approval within the two-year option. The

program is aimed at college graduates with undergraduate degrees in science-related fields, who are interested in urban education and teaching secondary science in CPS. UIC seniors in their final spring semester may begin program coursework that may be transferred into this graduate program.

The Department of Mathematics, Statistics, and Computer Science (MSCS) in LAS offers a Master of Science in the Teaching (MST) of Mathematics. For more than 20 years the MST program has served both certified teachers and career-changers. The career changers complete a rigorous program. For the MST they must earn 32 semester hours of adviser-approved graduate credit in mathematics; for certification they must earn 19 additional hours in the COE.

The COE MEd in Instructional Leadership – Elementary is a 35-credit program, plus 12 hours of student teaching, which leads to elementary certification with an option of obtaining an endorsement in science or math instruction at the middle school level and/or a Bilingual/ESL Approval. The program places all of its student teachers in CPS and, in the science methods course, each teacher candidate is observed teaching science and is provided feedback by the COE clinical science assistant professor.

**Undergraduate Preservice Participants**

At UIC all undergraduate students seeking secondary science or math certification obtain an LAS major in their subject area, such as Mathematics, Biology, Earth Sciences, Chemistry, Physics, or Environmental Sciences. Thus, knowledge of subject matter is insured for science undergrads by the rigorous coursework required by their department majors. All programs are aligned with and accredited by their professional organizations, such as Chemistry's program, which has been aligned for certification by the American

Chemical Society. Undergraduate science majors have an option of graduating with a Teaching of Mathematics, Chemistry or Physics degree. To insure that candidates have appropriate pedagogical content knowledge, they take a content-methods course, which, along with the student teaching seminar course, are usually taught by the STEM department. Twenty hours of observation in subject-matter classrooms is one component of the methods course. Students have the opportunity to observe effective mathematics/ science teachers in a variety of CPS environments.

All candidates in each of these programs take at least five core courses in education that focus on human development, philosophical ideals and policies in education, dealing with diverse student populations, teaching literacy within the subject matter, and pedagogical knowledge and practice. This coursework insures that candidates have knowledge of the students they teach, the environments that are conducive to teaching, issues and concerns about teaching and learning, and the practices that will make their teaching effective.

COE houses the BA in Urban Education program which leads to elementary certification. All students take three general education science and two math courses in addition to their math, science, and technology methods courses. Students are required to take 15-19 hours in a subject matter concentration and thus have the option of obtaining middle school math, science, or ESL/Bilingual endorsements. Participants in Project MASTEL will be recruited from those seeking a science or math concentration and they will add the required Bilingual/ESL Approval courses before they graduate.

COE and LAS certification programs all have a strong emphasis on a) constructivist learning and conceptual change teaching (Darling-Hammond & Bransford, 2005), within

the context of the disciplines; b) a focus on teaching in an urban environment; and, c) the use of ongoing assessment as integral to instructional design.

All Illinois educators are assessed in three distinct areas of professional knowledge. The Basic Skills test assesses reading comprehension, language arts (grammar and writing), and mathematical skills. No UIC student is admitted to any of its teacher certification programs unless they have passed the state Basic Skills test. Content-area tests are substantial examinations of subject-matter knowledge at a level of understanding required of educators. They entail the use of conceptual knowledge and thought, not the mere memorization and recounting of facts. No student is allowed to student teach until they have passed the state Content Test in their subject area. The knowledge of pedagogical and teaching foundations evaluated by the Assessment of Professional Teaching (APT) tests is substantive, and the test items are demanding, thought provoking, and reflective of educational practice. No student is certified to teach until they pass the state Assessment of Professional Teaching in the grade range of their certificate. The cut-off scores for passing the Basic Skills Test were raised in 2010, making pass rates more difficult, and insuring an academically strong teaching force for Illinois.

Teacher candidates in the aforementioned UIC certification programs will provide a pool from which to recruit and offer the five-course sequence leading to a Bilingual/ ESL State Approval to teach ELs. We will focus our recruitment efforts on teachers and prospective teachers who grew up in Chicago, and who have close cultural and social ties to the community. There is a large body of research indicating that urban students achieve the best academic results when working with teachers who are familiar with their linguistic and cultural backgrounds, and of whom, at least a representative number are from the same

ethnic, linguistic, and cultural backgrounds as the students. (Grant and Secada, 1990; Futrell, 1999; Ladson Billings, 1999) The Chicago area has a wealth of culturally and linguistically diverse students of university age, mostly Latino(a). Many are deterred from entering the teaching profession due to financial constraints. We intend to address this issue with Project MASTEL.

When students are first admitted to the degree/certification programs at UIC, they often do not know that they have an option of obtaining a state Approval in ESL/Bilingual Education. This is true even among bilingual teacher candidates. Proactive and accurate advising is extremely important as a recruitment strategy.

We will also build on our close partnership with CPS to provide teacher education students with extensive field experiences in the urban school setting, and support existing CPS induction programs for newly placed UIC-trained teachers. There is strong evidence that teachers are most likely to choose to teach in urban areas when they were born in close geographical proximity to the school recruiting them, and when they have graduated from a teacher education program that is located in the urban area in question, and that is working in partnership with the local school district. (Boyd, Lankford, Loeb and Wycoff, 2003).

**Graduate Inservice Participants**

The second group to be recruited for Project MASTEL is comprised of already certified CPS secondary and elementary science or math-endorsed teachers who work in schools with EL populations. Serving over 63,000 ELs, there are 382 Bilingual and ESL programs in 261 elementary schools and 41 high schools in Chicago. Science and math teachers will be recruited from CPS schools with Bilingual/ESL programs to take the five-course sequence leading to Bilingual/ESL Approval. Preference will be given to bilingual

teachers and to those who actually teach ELs. This will be determined by self-reports in their applications. Our CPS partner, with help from the eight Area Bilingual Instructional Coaches, will help us identify practicing science and math teachers of ELs.

**The Bilingual/ESL Approval Courses**

To obtain Bilingual or ESL Approval, Illinois requires 18 hours of coursework that cover specific disciplinary areas. For ESL Approval: Linguistics, Theoretical Foundations of Teaching ESL, Assessment of the Bilingual Student, Methods and Materials for Teaching ESL, and Cross-cultural Studies for Teaching Limited-English Proficient Students. For Bilingual Approval the topics are similar, but not identical: Foundations of Bilingual Education, Assessment of the Bilingual Student, Methods and Materials for Teaching Limited-English-Proficient Students in Bilingual Programs, Cross-cultural Studies for Teaching Limited-English-Proficient Students, and Methods and Materials for Teaching ESL.

The Bilingual/ESL program, an integral part of the COE, has been offering bilingual and ESL courses since1976. In the mid-1980s Illinois mandated that teachers take courses in specific bilingual/ESL topics in order to be qualified to teach in bilingual/ESL classrooms. In the early 1990s the Bilingual/ESL Program at UIC combined the state-required bilingual/ESL topics into 5 courses that the state approved for our students to take and concurrently obtain both the ESL and the Bilingual Approval. For Bilingual Approval, teachers must pass a state-administered Target Language Proficiency test offered in fifteen languages. (Malayalam was the most recent addition in February 2011). A decade later (2003) English as a New Language (ENL) content area standards for preparing bilingual and ESL teachers were developed [ISBE: 23 Illinois Administrative

Code, CH. I, S. 27.400, Subtitle A, Subchapter b, Subpart C, Section 27.420 English as a New Language (ENL)], and incorporated into our existing courses.

All participants in Project MASTEL under Objectives 1, 2, and 3 will take UIC's ESL/Bilingual Education Approval courses consisting of 20 semester hours. These include five core courses in foundations and methods for ELs, comprised of CI 481-- *Foundations and Current Issues in Educating English Language Learners* (4 credit hours); CI 482—*Assessment and Instruction: A Multilingual, Multicultural Perspective* (4 credit hours); CI 472—*Language Proficiency Assessment and ESL Instruction* (4 credit hours); CI 464—*Bilingualism and Literacy in a Second Language* (4 credit hours); and, CI 540—*Linguistics for Teachers* (4 credit hours). Each of the Bilingual /ESL courses requires 30 hours of clinical experience in classrooms with ELs.

Secondary teachers and teacher candidates have the option of taking an additional 4 hour elective, which would bring the total number of Bilingual/ESL credits to 24. They may then take a content area test in English as a New Language and receive an additional content area endorsement. An ideal course to add to Project MASTEL participants' program is CI 571--*Integrating Mathematics, Science, and ESL* (4 credit hours). This course is not offered on a regular basis because it is not required for any specific program. It used to be taught as a math methods option when large numbers of emergency-certified bilingual teachers were enrolled in a COE program leading to full certification (Project 29). We propose to offer this course once a year for the duration of the grant because it matches the needs and goals of this project. Like all of our Bilingual/ESL courses, it will be open to all interested students.

The Bilingual/ESL program at UIC is sustainable, moreover, it built its capacity as

an institutionalized program many years ago. It continues to stay current amid the changing landscape of research and policies regarding the teaching of ELs. Because our mission at UIC is so intertwined with serving our surrounding neighborhoods, we have already prepared countless educators and administrators to serve EL populations. Once the targeted participants for this grant are trained and obtain Bilingual/ESL State Approval, CPS will have increased its capacity to meet the needs of ELs, in the areas of bilingual math and science, where there are shortages.

The bilingual program faculty collaborates to continually revise its course content to incorporate the most up-to-date knowledge from research and effective practice. For example, courses include research from the Center for Research on Education, Diversity & Excellence (CREDE). *Standards for Effective Pedagogy and Learning* articulate both philosophical and pragmatic guidelines for effective education and were established through CREDE research, and through an extensive analysis of the research and development literature in education and diversity. These *Standards* establish principles for best teaching practices, which are included in our courses. Center for Research on the Educational Achievement and Teaching of English Language Learners (CREATE) issues research briefs that help inform our instruction. For example, Project QuEST (Quality English and Science Teaching) investigated an intervention model to concurrently develop science content and language and literacy skills in middle school ELs.

**Learning Standards**

Research has shown that there is a strong link between teacher qualifications and student success at meeting state and national educational standards (Renaissance, 1993; Ferguson and Ladd, 1996; Sanders, Saxton, and Horn, 1997; Futrell, 1999; Hanushak, Kain

and Rivkin, 1998). The proposed project will help increase PK-12 student learning by incorporating the WIDA standards into its bilingual/ESL coursework. WIDA (World-class Instructional Design and Assessment) is a consortium of states dedicated to the design and implementation of high standards and equitable educational opportunities for ELs. To this end, the WIDA Consortium (Illinois is a member) has developed English language proficiency standards anchored in academic content standards and an English language proficiency test aligned with those standards (ACCESS for ELLs®), which has been adopted by ISBE to assess its ELs.

**Teaching Standards**

In 2010 the state revised its Professional Teaching Standards. All state-approved programs have until July 1, 2013 to redesign their fundamental education courses and submit detailed plans for incorporating all of the new standards, including courses that will house each knowledge and performance indicator under each standard, as well as key assessments, clinical experiences, and revised syllabi for each course. (Indicators are elaborated from these standards but not listed here.) The new standards are as follows:

***Standard 1 - Teaching Diverse Students*** – The competent teacher understands the diverse characteristics and abilities of each student and how individuals develop and learn within the context of their social, economic, cultural, linguistic, and academic experiences. The teacher uses these experiences to create instructional opportunities that maximize student learning.

***Standard 2 - Content Area and Pedagogical Knowledge*** – The competent teacher has in-depth understanding of content area knowledge that includes central concepts, methods of inquiry, structures of the disciplines, and content area literacy. The teacher creates

meaningful learning experiences for each student based upon interactions among content area and pedagogical knowledge, and evidence-based practice.

***Standard 3 - Planning for Differentiated Instruction*** – The competent teacher plans and designs instruction based on content area knowledge, diverse student characteristics, student performance data, curriculum goals, and the community context. The teacher plans for ongoing student growth and achievement.

***Standard 4 - Learning Environment*** – The competent teacher structures a safe and healthy learning environment that facilitates cultural and linguistic responsiveness, emotional well-being, self-efficacy, positive social interaction, mutual respect, active engagement, academic risk-taking, self-motivation, and personal goal-setting.

***Standard 5 - Instructional Delivery*** – The competent teacher differentiates instruction by using a variety of strategies that support critical and creative thinking, problem-solving, and continuous growth and learning. This teacher understands that the classroom is a dynamic environment requiring ongoing modification of instruction to enhance learning for each student.

***Standard 6 - Reading, Writing, and Oral Communication*** – The competent teacher has foundational knowledge of reading, writing, and oral communication within the content area and recognizes and addresses student reading, writing, and oral communication needs to facilitate the acquisition of content knowledge.

***Standard 7 - Assessment*** – The competent teacher understands and uses appropriate formative and summative assessments for determining student needs, monitoring student progress, measuring student growth, and evaluating student outcomes. The teacher makes decisions driven by data about curricular and instructional effectiveness and adjusts

practices to meet the needs of each student.

***Standard 8 - Collaborative Relationships*** – The competent teacher builds and maintains collaborative relationships to foster cognitive, linguistic, physical, and social and emotional development. This teacher works as a team member with professional colleagues, students, parents or guardians, and community members.

***Standard 9 - Professionalism, Leadership, and Advocacy*** – The competent teacher is an ethical and reflective practitioner who exhibits professionalism; provides leadership in the learning community; and advocates for students, parents or guardians, and the profession.

**Assessment of Teachers and Teacher Candidates: Objectives # 5 and # 6**

Objective # 5 concerns the assessment of preservice teacher candidates. Each certification program at UIC is outcome-based and designed to determine whether its teacher candidates have met the Illinois Professional Teaching Standards.

The Council on Teacher Education (CTE) is the unit that oversees all certification programs and monitors their participation in the state program approval process. Every teacher candidate, in all programs, uses Taskstream, an online data collection and management system, to upload required UIC certification assessments. Program coordinators or their designees use standardized rubrics to score these assessments. These uploaded assessments include a Philosophy of Teaching and Learning Essay and a comprehensive standards-based Teaching and Assessment Event. Teacher_candidates plan and implement a lesson or unit using an elaborated lesson plan format. They design and administer assessments that provide information on how well PK-12 students meet the lesson goals and master learning standards, and they summarize the student assessment data. After lesson implementation, they write reflections on both the assessment data and

their own teaching. Candidates upload student work samples as evidence of student learning and they also upload photos, video, documents, connect with websites, etc.

A student teaching observation protocol, that mirrors the Illinois Professional Teaching Standards (IPTS), with performance indicators, is used by each field instructor to guide teacher candidates' development; and, it is used to provide a summative evaluation of the candidates' growth on each of the current 11 IPTS standards.

Data from all of these assessments are summarized for each certification program and analyzed by program coordinators to identify areas of program improvement. Additionally, Illinois is a member of the Teacher Performance Assessment Consortium (TPAC), a 21 state initiative to design new strategies for evaluating teacher competence and effectiveness, and UIC is piloting the Teacher Performance Assessment.

Objective # 6 involves collecting data on teacher practices. Math and science teachers have an important role in "sheltering instruction" to make their lessons comprehensible for ELs. (Echevarria, Short, & Powers, 2003; Goldenberg, 2008). When direct achievement evidence is difficult to link to teachers, as is often the case with ELs, collecting evidence on specific teacher practices that are known to improve outcomes among ELs may be essential. (Holdheide, Goe, Croft, & Reschly, 2010). The Sheltered Instruction Observation Protocol (SIOP) is a research-based observation instrument that has been shown to be a valid and reliable measure of sheltered instruction (Guarino, Echevarria, Short, Schick, Forbes, & Rueda, 2001). The SIOP model makes clear and explicit a large number of instructional modifications and has integrated them into a system of planning, delivery, and assessment (Echevarria, Vogt, & Short, 2008). All features of the SIOP model are aligned with current research on instruction for ELs. In a CREATE

study examining the effects of the SIOP Model on student achievement, students whose teachers implemented the SIOP model to a high degree in middle school science classes outperformed those students in sheltered classes whose teachers were unfamiliar with the model. This and other large scale research studies of the SIOP model are currently in progress by the CREATE Center and the Center for Applied Linguistics, such as the study on the impact of the SIOP Model on elementary school math. We will follow the findings of these studies and integrate them into our teacher preparation. CPS bilingual coaches, trained in using the SIOP, will assist Project MASTEL staff in collecting pre-program and post-program data on CPS science and math teachers who take the Bilingual/ESL Approval courses and complete the endorsement/approval program.

**Criterion (b): Quality of project personnel**

The University of Illinois at Chicago (UIC) strives for a diverse community reflective of our urban environment. Diversity is evident in our student body and extends to our faculty and all levels of administration and staff. Regardless of how the ranking is scored or which parts of our community are counted, UIC is among the top five most diverse U.S. campuses. UIC adheres to the principles of equal employment opportunity and nondiscrimination in all aspects of employment, including recruitment, hiring, promotion and development of our employees. Our hiring and employment policies are devised to promote this commitment. Our campus-wide Underrepresented Faculty Mentoring Program, created to encourage minority faculty retention, is directed by a COE faculty member. Since 1989 UIC has doubled the number of African American, Latino and Native American tenured and tenure-track faculty. UIC has a higher percentage of tenured/tenure-track faculty of color (10.5%), --Black faculty (4.7%) and Hispanic faculty

(5.8%) than all 11 Illinois research universities. All faculty search committees work with an Equal Opportunity Officer who furnishes the committee with a compliance employment packet of materials, which includes "Higher Education Guidelines."

**Proposed Project Director**

Dr. Karen Sakash, Clinical Professor Emerita and member of the Bilingual Education faculty, is proposed as the Project Director. She earned a PhD from UIC in 1990 in Public Policy Analysis – Education; and formerly taught *CI 472: Language Proficiency Assessment and Instruction of English Language Learners* as well as other ESL/Bilingual Approval courses. Currently she is mentoring the Coordinator of the Graduate Elementary Education Program, a former position she held in the college, which houses Project 29, a former Title VII grant, which is now an institutionalized program option for provisionally certified bilingual teachers. Although retired, she has an office in the College of Education and is .5 FTE Project Director of Project STELL (Secondary Teachers of English Language Learners), a Title III NPD grant awarded in 2007. She has extensive experience (over 30 years) with federal grants, both as an administrator and an evaluator of Title II, Title VII and Title III grants for Illinois IHEs. She understands the work of LEAs, SEAs and IHEs. She was a bilingual and ESL classroom teacher for eight years at both the elementary and secondary level and has in-depth knowledge of the multiple COE state certification/ approval programs that the students will pursue. Having taught in the UIC bilingual program for many years, she is knowledgeable about language acquisition and issues related to the education of English Learners. She is very familiar with federal, state and local policies for educating English Learners and stays current in this changing landscape.

**Key Personnel**

The co-principal investigator is Zitlali Morales, a tenure-track ESL/Bilingual Education assistant professor hired in 2010, who teaches *CI 482: Assessment & Instruction: Multilingual/Multicultural Perspective*, one of the Bilingual/ESL Approval courses. She earned her PhD in Urban Schooling from UCLA, working under Kris D. Gutierrez for her dissertation. She graduated in 1998 with an undergraduate degree in Cultural Anthropology from Stanford. Among her research interests are academic identity, bilingual education, achievement of English language learners (ELLs), and educational experiences of immigrant students.

Dr. Ranfen Li is proposed as the external Project Evaluator. She was the Director of Research at Malcolm X Community College - Chicago, for eight years before accepting a position at UIC in administration. Dr. Li is currently Director of Assessment, Office of Programs and Academic Assessment. For over 25 years she has served as external Project Evaluator for multiple Title III and Title VII grants for the Bilingual Program at UIC, and has established working relationships with the bilingual faculty. Currently she is Project Evaluator for three NPD grants and she helped OELA pilot the current format for collecting GPRA data. She has always approached evaluation from a formative standpoint, providing evaluative feedback to the project directors for the purpose of improving the programs. She's very accessible and timely in her work with project directors.

Four bilingual/ESL program faculty members have retired since 2009 resulting in four emerita faculty who share office space and stay involved in the Department of Curriculum and Instruction, administering grants, mentoring PhD candidates, mentoring program coordinators and adjuncts, and publishing in the field. The collective wisdom of

this strong faculty group is available to the two, more recently hired tenure-track Bilingual faculty. The current UIC bilingual program personnel include one tenured retired professor emerita, two tenured retired associate professors emerita, two tenure-track assistant professors, one clinical professor emerita, and several bilingual teaching adjuncts. The bilingual/ESL faculty intentionally organize their course loads so that they teach in the mainstream program, in addition to their course responsibilities in the Bilingual/ESL program. Over the years a steady stream of federal and foundation grants has led to our reputation as the leading institution in the Chicagoland area for preparing teachers to serve in ESL and Bilingual classrooms.

The teaching staff of the Bilingual/ESL Program is typically selected from the pool of current doctoral students in one of the COE programs, or they have graduated with a Master's degree or PhD from UIC. We have a very strong Math Education PhD program from which we have tapped doctoral students to teach math and bilingual courses for our certification programs. Additionally, Lena Licon Khisty, Associate Professor Emerita, specializes in Bilingual Education and Math Education. All of the teaching adjuncts we utilize are bilingual, have taken the Bilingual/ESL coursework at UIC, and/or have attained the state Approval for teaching ELs. The adjuncts are familiar with national, state and local standards for English as a New Language and most have experience teaching in CPS.

## Criterion (c): Quality of the Management Plan

### Management of Certification Programs at UIC

In order to understand the management and administrative structure of Project MASTEL, it is important to first understand the broader governance structure of teacher certification programs within UIC. The Deans of the College of Education (MEd. and BA

programs) and Liberal Arts and Sciences (BS, MST programs) monitor the quality and administration of his or her respective programs. Each program director supervises the progam activities and coordinates faculty and partner relationships. UIC and CPS collaborate on the recruitment, placement and retention of candidates. The UIC Council on Teacher Education (CTE) oversees all ISBE certification programs offered at UIC and ensures that they incorporate the Illinois Professional Teaching Standards. The Council consists of deans from the six colleges that sponsor professional education programs. The Council also serves as a liaison between the University of Illinois at Chicago and ISBE.

**Financial Management**

Financial management of all grants and contracts at the University of Illinois at Chicago is accomplished in the Office of the Vice Chancellor for Research (OVCR) in accordance with the State of Illinois statutes governing the University of Illinois. Within OVCR, The Office of Research Services (ORS) handles all pre-award and non-financial post-award activities. Pre-award activities include activities from the pre-proposal stage to the receipt and processing of the award, up to the point of account set up. A separate account is established for each grant or contract awarded; all expenditures incurred are charged to that account. ORS is responsible for the administration and reporting of grants and contracts funds, for reviewing all requisitions and expenditures to determine that they are made in accordance with the terms of the award, and for ensuring compliance with both agency and University policies. ORS also develops and communicates institution-wide policies specific to sponsored programs. Within the COE, an accounting office maintains records of expenditures and provides fiscal management support and assistance in grant-

related activities. Additionally, the COE provides office space, administrative services, and equipment necessary for the personnel assigned to the bilingual teacher training program.

**Table 1: Activities, Responsibilities and Timelines by Objective: Years 1-5**

**Project Objective # 1: Undergraduate students obtain certification/endorsements**

| | Specific Activities | Person(s) Responsible | Timelines |
|---|---|---|---|
| 1.1 | Create and distribute recruitment flyers to targeted participants in the COE and LAS. | Project MASTEL Director in collaboration with COE Director of Recruitment and Retention | Summer 2011 before Year 1, Fall Year 1 and on going Years 2-5 |
| 1.2 | Host recruitment meetings through LARES (Latin American Recruitment and Educational Services*) and local High Schools. | Project MASTEL Director in collaboration with COE Director of Recruitment and Retention, LARES Personnel, and Council on Teacher Education | Summer 2011 before Year 1, Fall Year 1 and on going Years 2-5 until recruitment targets are met |
| 1.3 | Encourage and advise eligible undergraduates to apply to program. Answer emails and meet with students to explain the additional courses. | Project MASTEL Director in collaboration with COE Director of Recruitment and Retention, and COE & LAS math and science education advisors | Summer 2011, before Fall, Year 1 and on-going Years 2-5 each semester as needed to meet recruitment targets |
| 1.4 | Candidates are reviewed for admission, and admitted for | Admissions Office UIC, COE & LAS math and | Summer-Fall 2011-Spring 2012 and |

| | | | |
|---|---|---|---|
| | initial program advising in either LAS or COE. | science education advisors, Project MASTEL Director | ongoing as needed to meet targets |
| 1.5 | Undergraduates are assisted in applying for Federal/State Aid. | Office of Student Financial Aid, COE, & LARES Financial Aid Advisors | Year 1: Fall 2011 & Spring 2012<br>Years 2-5: on-going |
| 1.6 | Develop individual course & academic plans (tutoring if needed). | Project MASTEL Director, COE & LAS Academic Advisors | Year 1: Fall 2011 & Spring 2012<br>Years 2-5: ongoing |

*The efforts of the Latin American Recruitment and Educational Services and other groups serving Latino/a students have helped UIC graduate more Latino/a math majors than all of the other Chicago-area colleges and universities combined.

**Project Objectives # 2, 3, 4: Graduate students obtain certification/endorsements**

| | **Specific Activities** | **Person(s) Responsible** | **Timelines** |
|---|---|---|---|
| 2.1<br>3.1<br>4.1 | Set up meetings to inform, recruit, & encourage eligible and interested teachers and teacher candidates. Make applications available. | CPS & SEA Personnel, Project MASTEL Director, COE Director of Recruitment and Retention, LAS math and science advisors | Year 1: Summer/ Fall 2011,<br>Years 2-5: on-going until targets are met for each objective |
| 2.2<br>3.2<br>4.2 | Applications submitted and reviewed. Participants selected. Students enrolled. | MASTEL Project Director, COE Bilingual Faculty, Math & Science Prog. Coordinators | Year 1: Summer/ Fall 2011, Year 1. Years 2-5: ongoing |
| 2.3<br>3.3 | Advise participants for program planning to meet | Project MASTEL Director, COE Bilingual Faculty, Math | Year 1: Fall 2011<br>Years 2-5 ongoing as |

| | | | |
|---|---|---|---|
| 4.3 | certification/degree goals. | & Science Program Advisors | needed. |
| 2.4<br>3.4<br>4.4 | Participants begin course work and progress through programs. | Selected participants for Project MASTEL, supported by COE & LAS faculty | Year 1: Spring, 2012<br>Years 2-5: ongoing |
| 2.5<br>3.5<br>4.5 | Coordinate program support, clinical experiences, state certification/Approval process. | Project MASTEL Director, Chicago Public Schools personnel, Council on Teacher Education personnel | Years 1-5: ongoing until participants are certified and/or endorsed/degreed |

**Project Objective 5: certification assessment data to improve certification programs.**

| | **Specific Activities** | **Person Responsible** | **Timelines** |
|---|---|---|---|
| 5.1 | Certification candidates enroll in Taskstream. | LAS & COE program coordinators with CTE help | Beginning Fall 2011, ongoing. |
| 5.2 | Certification candidates fulfill assessment tasks. | Certification candidates with CTE and Coordinator help | Beginning Fall 2011, ongoing. |
| 5.3 | Program Coordinators analyze assessment data and make program changes. | Certification program coordinators in LAS & COE with CTE input | Annually each spring |

**Project Objective 6: CPS teachers measure improvements using the SIOP protocol**

| | **Specific Activities** | **Person Responsible** | **Timelines** |
|---|---|---|---|
| 6.1 | SIOP data collector hired | SIOP Data Collector, | Year 1: Fall 2011 |

| | | | |
|---|---|---|---|
| | and trained. | CPS bilingual coaches | |
| 6.2 | CPS teachers observed with SIOP before program. | SIOP Data Collector, CPS bilingual coaches | Beginning Year 1 and ongoing |
| 6.3 | CPS teachers observed with SIOP after program. | SIOP Data Collector, CPS bilingual coaches | Years 2– 5, as teachers finish |
| 6.4 | SIOP data analyzed and reported to stakeholders. | Project MASTEL Director, Project MASTEL Evaluator | Years 4 & 5 as teachers finish |

**Project Objective 7: <u>Research-based science and math professional development</u>**

| | **Specific Activities** | **Person Responsible** | **Timelines** |
|---|---|---|---|
| 7.1 | Collaborate with CPS to plan workshops. | Project MASTEL Director, CPS personnel | Each spring Years 1-5 |
| 7.2 | Identify presenters and secure services. | Project MASTEL Director, CPS personnel | Each spring, Years 1-5 |
| 7.3 | Conduct and evaluate workshops. | Identified speakers, Project MASTEL Director | Each spring, Years 1-5 |
| 7.4 | Award CPDUs to CPS teachers for attendance. | CPS personnel, SEA personnel | Each year via paperwork |

The Project Director will be responsible for all aspects of program development and administration; such as recruitment and retention of program students, developing program applications, selecting participants, collaboration with CPS at the schools and district level, collection of data for the Project Evaluator, communication with other COE, LAS and UIC

administrative offices, submission of reports, and day-to-day project and budget management. The Project Director will devote .5 FTE to the project. Part of this time will be targeted for mentoring Dr. Zitlali Morales, co-principal investigator of the grant, so that she can learn grantsmanship responsibilites and be skilled to continue the longstanding tradition of providing tuition and fee support to UIC students and Chicago Public School teachers for the purpose of promoting improved instruction for ELs in the PK-12 setting.

**Criterion (d) Quality of the project evaluation**

Data for the yearly evaluation (Annual Performance Reports) will be compiled and summarized by the Project Evaluator and submitted to the Project Director to provide information about the functioning and effectiveness of the program, and to provide on-going information to improve the project. Specific activities and evaluation methods for each objective or cluster of objectives, as detailed in the Management Plan, follow.

**Table 2: Evaluation Activities and Measures for Project Objectives 1-7**

**Project Objective # 1: Undergraduate students obtain certification/endorsements**

| | **Specific Activities for Objective # 1** | **Evaluation Methods/Data** |
|---|---|---|
| 1.1 | Create and distribute recruitment flyers to targeted participants in the COE and LAS. | Documents created and disseminated |
| 1.2 | Host recruitment meetings through LARES (Latin American Recruitment and Educational Services) and local High Schools. | Documents of meetings, Attendance lists |
| 1.3 | Encourage and advise eligible undergraduates to apply to program. Answer emails and meet with students to explain the additional courses. | Documented number of applicants interviewed and meetings /emails |

| | | |
|---|---|---|
| 1.4 | Candidates are reviewed for admission, and admitted for initial program advising in either LAS or COE. | Documented # of students admitted and advised |
| 1.5 | Undergraduates are assisted in applying for Federal/State Aid. | Number of successful applicants for State Aid. |
| 1.6 | Develop individual course & academic plans (tutoring if needed). | Individual advising documents |

**Project Objectives # 2, 3, 4: Graduate students obtain certification/endorsements**

| | **Specific Activities for Objectives 2, 3, & 4** | **Evaluation Methods and Data Sources** |
|---|---|---|
| 2.1<br>3.1<br>4.1 | Set up meetings to inform, recruit, & encourage eligible and interested teachers and teacher candidates. Make applications available. | Records and attendance sheets of meetings. Documentation of the number of applicants received in each category ( preservice graduate and inservice, experienced teachers) as well as descriptive analyses of their teaching experience, demographic information, and academic qualifications for admission (test pass rates, GPA, etc.). |
| 2.2<br>3.2<br>4.2 | Applications submitted and reviewed. Participants selected. Students enrolled. | |
| 2.3<br>3.3<br>4.3 | Advise participants for program planning to meet certification/degree goals. | Survey of participants on effectiveness of advising. |
| 2.4<br>3.4 | Participants begin course work and progress through programs. | GPAs reviewed and monitored; Records of courses taken; Survey of participants on |

| | | |
|---|---|---|
| 4.4 | | program effectiveness; Sample student products and reflections analyzed; Course and instructor evaluations as required by LAS/COE. |
| 2.5<br>3.5<br>4.5 | Coordinate program support, clinical experiences, state certification/Approval process. | Surveys and interviews of participants on effectiveness of placements; Exit surveys on satisfaction with program supports. |

**Project Objective 5: certification assessment data to improve certification programs.**

| | **Specific Activities** | **Evaluation Methods and Data Sources** |
|---|---|---|
| 5.1 | Certification candidates enroll in Taskstream. | Project MASTEL Director will gain access to and monitor student enrollment data in Taskstream. |
| 5.2 | Certification candidates fulfill assessment tasks. | Taskstream database will be analyzed for student fulfillment of assessment tasks. |
| 5.3 | Program Coordinators analyze assessment data and make program changes. | Communications between Project MASTEL Director and Program Coordinators will focus on program assessment data and program changes. |

**Project Objective 6: CPS teachers measure improvements using the SIOP protocol**

| | **Specific Activities** | **Evaluation Methods and Data Sources** |
|---|---|---|
| 6.1 | SIOP data collector hired and trained. | Applicant files, interview records, SIOP training agenda. SIOP training materials purchased. |
| 6.2 | CPS teachers observed with | Records of observation dates for each teacher, |

| | | |
|---|---|---|
| | SIOP before program. | SIOP observation protocol data collected. |
| 6.3 | CPS teachers observed with SIOP after program. | Records of observation dates for each teacher, SIOP observation protocol data collected. |
| 6.4 | SIOP data analyzed and reported to stakeholders. | Summary document of pre and post program data differences, report to stakeholders. |

**Project Objective 7: <u>Research-based science and math professional development</u>**

| | **Specific Activities** | **Evaluation Methods and Data Sources** |
|---|---|---|
| 7.1 | Collaborate with CPS to plan workshops. | Needs assessment data collected. Topics analyzed for frequency of response. Records of planning. |
| 7.2 | Identify presenters and secure services. | Project documents including presenter communications and work contracts. |
| 7.3 | Conduct and evaluate workshops. | Attendance records; Completed workshop evaluation forms on effectiveness of each workshop |
| 7.4 | Award CPDUs to CPS teachers for attendance. | Number of forms filled out by attendees seeking CPDUs. |

**Table 3: Benchmarks for Meeting Certification/Endorsement/Degree Goals**

| Objective 1: **10 preservice undergraduates** for degree and endorsement in 5 years | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Total** |
|---|---|---|---|---|---|---|
| # New to the program (unduplicated count) | 2 | 2 | 3 | 3 | 0 | 10 |
| # Enrolled in the program (duplicated count) | 2 | 4 | 7 | 8 | 5 | |
| # Completed (unduplicated count---estimated) | 0 | 0 | 2 | 3 | 5 | 10 |

| Objective 2: **15 preservice graduate students** for degree and endorsement in 5 years | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
|---|---|---|---|---|---|---|
| # New to the program (unduplicated count) | 4 | 4 | 4 | 3 | 0 | 15 |
| # Enrolled in the program (duplicated count) | 4 | 8 | 8 | 7 | 3 | |
| # Completed (unduplicated count---estimated) | 0 | 4 | 4 | 4 | 3 | 15 |

| Objective 3: **30 inservice teachers** for endorsement in 5 years | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
|---|---|---|---|---|---|---|
| # New to the program (unduplicated count) | 10 | 5 | 7 | 8 | 0 | 30 |
| # Enrolled in the program (duplicated count) | 10 | 15 | 15 | 16 | 8 | |
| # Completed (unduplicated count---estimated) | 0 | 7 | 7 | 8 | 8 | 30 |

| Objective 4: **10 inservice teachers** out of 30 practicing teachers for MEd in 5 years | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
|---|---|---|---|---|---|---|
| # New to the program (unduplicated count) | 2 | 2 | 2 | 2 | 2 | 10 |
| # Enrolled in the program (duplicated count) | 2 | 4 | 6 | 6 | 4 | |
| # Completed (unduplicated count---estimated) | 0 | 0 | 2 | 4 | 4 | 10 |

The objectives are clearly quantifiable. The benchmark tables above provide estimates of the number of teachers and teacher candidates recruited, enrolled, and completed for each year, for those objectives related to counting degrees, certificates, and approvals/endorsements. Actual data will be collected twice yearly by the Project Evaluator, once in March for the Annual Performance Report (APR) and once in September for the Complete Data Report (CDR), or as otherwise specified by the grant instructions. The CDR report will contain actual numbers of students meeting GPRA measures, which are similar to, but not identical with the project objectives.

Project implementation strategies and effectiveness will be measured in several ways, including the use of participant surveys, which will provide qualitative data.

Per Objective # 5, for preservice participants, additional quantitative measures will include aggregate scores from teacher candidates' "Teaching and Assessment Event," a required UIC certification assessment that provides evidence of having met the Illinois Professional Teaching Standards, and aggregate scores on the Student Teaching Evaluation form completed by the students' UIC field instructors and by their CPS cooperating teacher.

Per objective # 6, for inservice teachers, results of the pre and post SIOP data will help measure changes in teaching practice as a result of taking the Bilingual/ESL Approval courses. Each teacher will meet with the SIOP observer, after post data-collection, to review the data and discuss the sheltered instruction practices that were and were not observed, helping to inform the teachers' classroom instructional decisions as they occur during typical daily lessons. One of the main purposes of any assessment is to inform decisions (Stiggins, 2008). Objectives # 5 and # 6 are intended to enable data-based decision-making at the program level by program coordinators, and at the classroom level by math and science teachers. Both strategies have the ultimate purpose of improving student outcomes in elementary and secondary classrooms.

A formative evaluation plan, intended to provide continuous performance feedback towards achieving the project's intended benchmarks and outcomes will occur in Years 1-4. The purpose will be to ascertain the effectiveness of the procedures or strategies used for recruitment, retention and training of participants in the program. Participant enrollment in the Bilingual/ESL courses, program progress data, including grades attained

for each participant and state tests passed, will be collected by the Project Director and given to the Project Evaluator. The information will be used to continuously modify or strengthen advising procedures and program strategies. Performance measures such as academic characteristics of project participants, and number of credits gained per semester by students will be determined. The Project Director will work closely with the LAS and COE certification Program Coordinators to help analyze program data, with particular attention to ascertaining the attainment of Illinois state standards regarding teaching ELs.

The summative evaluation will be conducted by carefully documenting the outcomes of each objective, including the GPRA Measures, along the length of the funding cycle. Careful documentation of the participants' upward movement (progress) on the certification/degree/endorsement/approval programs will clearly indicate if the outcome objectives have been realized. The summative evaluation will include analyses of baseline data regarding students (ethnic background, GPA, scholarship or stipend data, etc.), analysis of pre-and post-program knowledge and attitudes towards teaching ELs, analysis of pre-and post SIOP data, program changes as a result of analyses of teacher candidates' attainment of the Illinois Professional Teaching Standards, Bilingual/ESL program evaluation data collected from an exit survey, graduation rates and post graduation job placement information for preservice participants---one year out and three years out. Data on placement of program graduates and first year retention data is available in a CTE database, which is reported to the State of Illinois.

The Project Evaluator has developed several surveys for collecting qualitative and quantitative evaluation data from program participants for previous NPD and other grants. Similar surveys will be used for Project MASTEL.

Participants will complete a pre and post survey of their knowledge and attitudes towards teaching ELs. After program completion, they will be surveyed about the dates that certificates, endorsements, or approvals were issued by the state. Data will be collected on which schools, which positions, what subjects, what grade levels, and what type of programs (mainstream, Bilingual, ESL, etc.) participants teach in. Participants will estimate the number of ELs they teach. If participants respond that they are not teaching they will be asked about tutoring positions, substitute teaching, teaching abroad and, if they are not teaching, they will be asked to provide reasons. New teachers will be asked to describe and evaluate mentoring opportunities or other professional development support in the schools, and what additional training they have received to serve ELs.

Surveys will help evaluate the UIC learning experiences by having participants rate the bilingual/ESL courses, the clinical experiences, and the "regular" degree program courses, and comment on why they rated the courses as such. Participants will be asked about mentoring, how the program has made them more effective in teaching ELs, the strongest and weakest aspects of the program, and suggestions for improvement.

Analyses of these data will be used to provide formative feedback and summative reports for the APRs and Final Report. The evaluation results will be shared with our partners, CPS, the SEA, and results will be made available to the community at large.

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