

Urban Education Excellence: STEM Teaching Residency with Dual Licensure in Special Education

Needs Assessment

The Indiana University School of Education at Indiana University-Purdue University Indianapolis (IUPUI) and its LEA Partner, Indianapolis Public Schools (IPS), propose this Teacher Quality Partnership Grant entitled, *Urban Education Excellence: STEM Teaching Residency with Dual Licensure in Special Education*. We have developed this project in order to meet several key needs for teacher quality improvements in IPS and to capitalize on the existing strengths of the IUPUI Transition to Teaching (T2T) program. IPS, like many urban school districts, has faced declining enrollment, increasing poverty, and high teacher turnover. In fact, the percentage of students qualifying for free or reduced lunch in the district has increased from slightly over 50% in 1994 to over 85% (See Appendix A for Partner Eligibility Criteria). All schools in the district qualify for Title I, and the Legislature recently approved a budget that slashes another \$28 million (Scheider & Nichols, 2009) in State support. Recruiting qualified candidates for STEM and other high need subject teaching positions is a significant challenge, fueled primarily by better-paying and higher-prestige employment opportunities typically open to individuals with backgrounds in these areas. The shortage of math and science teachers is felt nationwide, even in the most well funded school districts that compensate teachers at higher rates (Learning Points, 2006; Loucks-Horsley 1999; Settlage & Meadows, 2002). Teacher turnover, as Appendix A indicates, particularly in Science, Technology, Engineering, and Mathematics (STEM) subject areas, is high and IPS is also challenged to recruit and retain highly qualified teachers in math and science. Finally, special education and English Language Learning needs are on the rise.

The Indiana University School of Education at IUPUI has a long history of preparing teachers for success in urban schools. Teacher education, both at the baccalaureate and post-baccalaureate levels, is based on extended time in schools as well as a commitment to preparing all teachers to teach all learners, in particular those with special education and English Language Learning needs. The Transition to Teaching and Woodrow Wilson Teaching Fellows Programs, which will serve as the main programs for students recruited into this grant project, focus on providing rigorous coursework preparation and a series of clinical placements in urban schools. However, one area of growth, consistently identified by the faculty and past participants, has been the need for longer-term mentoring once students graduate and enter the teaching profession. In an independent evaluation of the Noyce Scholars program, a scholarship for Transition to Teaching students who are pursuing science teacher licensure, students reported that additional and structured mentoring was lacking at their first teaching job. One student said,

Well, I felt really ready to get out there after I finished [at IUPUI], and I was. Every lesson I have done really well came from my methods classes here, from [a professor in Science Education's] class. But in terms of mentors or even colleagues I can really bounce ideas off of...I don't really have that. I can talk to the chair if I need to, but some additional guidance, someone to help me make sure each lesson is really doing what it is supposed to do, that is just not here.

In our current Transition to Teach program for STEM teachers, which includes those involved in the Woodrow Wilson Scholars Program, we have been able to attract highly qualified students. Since 2004, we have graduated a total of 127 students, 33 of which were secondary STEM teachers trained with a strong emphasis on urban teaching. While many of our students return to take Master's level coursework, we have not been able to systematically track and/or support our graduates into their first teaching positions. State mandated school-based mentoring, as the quote above indicates, generally falls short. Further, IUPUI is unable, because

of financial and capacity constraints, to continue university-based mentoring or to support an active urban STEM teachers' network.

This grant will support both a robust school-based mentoring program in the form of a teacher residency and enhanced university-based mentoring, and a teacher induction program that follows our students into their first years of teaching. Through the additional coursework made available to the teacher residents, this grant will likewise produce STEM teachers who are dual licensed in special education and with significant course work in teaching English as a Second Language (ESL) students. In short, the needs of IPS, namely highly-qualified STEM teachers better prepared to teach in urban settings, and the needs of the IU School of Education at IUPUI to create a long-term mentoring program, will be met through this grant. The result will be twofold: (1) graduating STEM teachers will be better prepared to teach all learners in the urban setting and (2) a support system needed to help these new teachers transition from beginning teachers to master teachers will be developed and implemented. As a consequence of meeting these important needs, teacher retention will be improved.

Project Description

Overview

In order to meet the needs outlined above, IPS, the IU School of Education at IUPUI, and the Purdue School of Science propose the creation of a teacher residency program. This program will enhance the already strong Woodrow Wilson Indiana Teachers Fellowship (WWITF) and the Transition to Teaching programs by enabling participants to spend a year as a teacher resident in one of the IPS partner schools after completing their initial licensure. During this year, graduates will be mentored by a master teacher and will continue to gain confidence specifically in the urban classroom. Simultaneously, teacher residents will also take a series of courses leading to both a Master's degree in Education with dual licensure in Special Education.

By the end of the grant period, a well-developed teacher residency model will be in place allowing us to expand this option to other disciplines outside of STEM.

Urban Education Excellence Partnerships

As one of the outstanding urban research universities in the United States, IUPUI is Indiana's urban research university, located in the heart of Indianapolis, mere blocks from the Indiana Government Center and several Fortune 500 companies. IUPUI is Indiana University's home campus for state wide programs in medicine, law, dentistry, nursing, health and rehabilitation science, and social work. Moreover, it excels in providing programs in art, business, education, engineering, informatics, journalism, liberal arts, library and information science, physical education, public and environmental affairs, and science.

IUPUI is a campus of Indiana University that grants degrees in some 185 programs from both Indiana University and Purdue University. IUPUI offers the broadest range of academic programs of any campus in Indiana and is the state's principal site for graduate professional education. A commitment to civic engagement and service has been a fundamental component of IUPUI's mission from the beginning and remains a distinctive aspect of the campus culture. The 2007-2008 school year saw continued growth in service learning and other forms of engagement among students, faculty, and staff alike, with expanded participation in service learning and other community service and growing numbers of community partners. Finally, because of IUPUI's emphasis on the life sciences and community engagement, there is a long history of collaboration between the School of Education and other units on campus sharing a STEM education mission.

The formation of UCASE, the Urban Center for the Advancement of STEM Education, has been an exceptionally fruitful partnership between the School of Education, the School of Science, and the School of Engineering and Technology on campus. Currently, UCASE serves as the umbrella organization for numerous funded programs that collaboratively address issues of

K-12 education and teacher preparation, including three NSF Robert Noyce Scholarship programs, an NSF GK-12 program, and the WWITF program. Each involves substantial STEM Education and teacher preparation, and provides a significant opportunity for collaboration to enhance the quality of urban STEM Education in Indiana and the reputation of IUPUI in STEM Education nationwide. These projects were able to be competitive when seeking national funding largely because of the strong collaborative efforts of UCASE faculty.

Faculty from the School of Education, the School of Science, and research staff from UCASE collaborated with principals, teachers, and program directors from the Indianapolis Public School District to develop this grant proposal. The Superintendent of Indianapolis Public Schools has agreed to extend IUPUI's robust partnership with IPS by serving as the LEA for this proposal. The Schools of Science and Education have a long history of collaboration with IPS that includes both formal MOUs (e.g. Pathways Initiative, George Washington Community School, and Crispus Attucks Medical Magnet) as well as informal connections with regards to internships, student teacher placements, and professional development. Faculty from the School of Education offer pre-service courses in IPS elementary and community schools (grades 7-12), and teachers from the district enroll in graduate courses offered via IPS Online. The School of Education hires IPS teachers and administrators to teach as adjunct faculty in the areas of Educational Leadership and Special Education. This grant would add significantly to the mutually beneficial relationship that currently exists between IUPUI and IPS. In addition to the partnership between IUPUI and IPS, a coalition of community centers (Concord Center, Mary Rigg Center and Hawathorne Center), called Project Impact, has agreed to be part of the partnership as well. Project Impact serves approximately 30% of the students in IPS at after-school and/or summer programs.

The Woodrow Wilson Foundation represents a critical partner in the collaborative. The Indiana Woodrow Wilson Teaching Fellows Program is providing financial support to recruit and graduate 20 STEM/year teachers who commit to teach in urban schools. In 2007, the Woodrow Wilson National Fellowship Foundation selected IUPUI as one of four host institutions for its Indiana STEM Teaching Fellowships. The Woodrow Wilson Fellowship, which is being scaled up state by state starting with Indiana, has two purposes: 1) to create the equivalent of a National Merit Scholarship for teachers that will recruit the best and brightest to careers in middle and high school teaching in science and math, the areas of greatest need; and 2) to improve the quality of teacher education in America's colleges and universities through careful efforts to rethink the teacher preparation curriculum to expand both the rigor of the academic program and the depth of the clinical experience for the candidates in partner schools (i.e. develop a residency model within the existing program). Universities participating in the program also commit to supporting their graduates for three years as new teachers.

After a state-wide review of graduate education programs, Woodrow Wilson selected IUPUI because of its strong leadership, its commitment to the goals and standards of the Woodrow Wilson Teaching Fellowship, and its capacity to create an exemplary clinically-based program in mathematics and science teacher education. IUPUI receives 20 Fellowships per year for two years (██████ per Fellow) and ██████, which it must match, for redesigning and implementing a model teacher education program based on Woodrow Wilson standards (standards were established by a national advisory panel). The Woodrow Wilson Foundation, in coordination with the university's admissions office, recruits and selects the Fellows. The Fellows enroll in the University's Master's program in teacher education and commit to teach for at least three years in a high-need in-state school after graduating. To reduce teacher attrition,

Fellows receive three years of mentoring from the university in addition to that provided by the school district. The Foundation has retained an external assessment firm (the Urban Institute) to do a thorough evaluation of the impact of the new programs on student learning in the classes of Fellows and on the retention of Fellows as teachers.

Goals of Partnership

This proposal outlines the ways in which this partnership will enhance the current Transition to Teaching (T2T) program that educates Woodrow Wilson Fellows at the Indiana University School of Education at Indianapolis to include a coordinated **Teacher Residency Program** at seven community schools in the Indianapolis Public School District. The program will build on the existing program that currently generates qualified math and science teachers supported by the Indiana Woodrow Wilson Teaching Fellows Program and the T2T Program. The recently revised curriculum is situated around preparing teachers to facilitate inquiry learning that has been shown to be effective at engaging urban youth in science and math (Bransford, Brown, & Cocking, 1999; Barman, 2008). The grant will also support coordinated induction and mentoring programs and additional coursework leading to a dual license in special education that has long been a missing component to an otherwise strong teacher education program. The partnership has defined a clear set of goals and objectives aligned to requirements in the Request for Proposals.

GOAL 1: Recruit the highest caliber candidates, including individuals from underrepresented groups, using a rigorous selection process.

Objective 1: Partner with the national Woodrow Wilson Foundation to recruit participants.

Objective 2: Recruit students from universities that traditionally serve students from underrepresented groups.

GOAL 2: Prepare a cohort of 5-12 students per year in high need areas to work in urban schools.

Objective 1: Prepare highly qualified teachers in the STEM disciplines and special education (dual licensure).

Objective 2: Prepare highly qualified dual licensed teachers in other identified high need areas.

GOAL 3: Integrate rigorous graduate coursework with intensive clinical experiences.

Objective 1: Prepare teachers to address the learning needs of all students, including those with special needs and those who are limited English proficient.

Objective 2: Use evidence-based practices about teaching and learning in coursework and classrooms.

Objective 3: Prepare teachers to collaborate effectively with parents and community organizations on behalf of students.

Objective 4: Enhance learning through the use of technology for online/distance education.

GOAL 4: Place and prepare teacher residents with trained and experienced mentor teachers.

Objective 1: Prepare and support mentor teachers.

Objective 2: Establish communities of practice that includes teacher residents, mentor teachers, and university faculty.

GOAL 5: Support teachers through a two year induction and professional development program.

Objective 1: Re-establish the “New Urban Teacher Collaborative” as a vehicle to network and support teacher residents.

Objective 2: Support teachers to complete special education certification coursework.

GOAL 6: Design and implement a comprehensive project evaluation system.

Objective 1: Collect formative and summative data on teacher effectiveness and student outcomes.

Objective 2: Use data for decision making with key stakeholders.

Timeline of Implementation of Proposed Teacher Quality Components

In order to meet the goals and each of their objectives, the partnership has proposed a systematic program that guides exemplary secondary school teacher education candidates to become effective urban educators. Table 1 summarizes the trajectory for success for cohorts of program participants. Following the table, the major elements of the Urban Education Excellence program are described.

Table 1

Urban Education Excellence Program Timeline

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Cohort 1 (10 WWTF)	Complete Initial Licensure Program	Residency; Mentoring; Award Masters	1 st Year of Teaching; Mentoring	2 nd Year of Teaching; Mentoring	3 rd Year of Teaching; Mentoring
Cohort 2 (12 WWTF)		Complete Initial Licensure Program	Residency; Mentoring; Award Masters	1 st Year of Teaching; Mentoring	2 nd Year of Teaching; Mentoring
Cohort 3 (5 T2T)			Complete Initial Licensure Program	Residency Year; Mentoring; Award Masters w/SPED Dual License	1 st Year of Teaching; Mentoring
Cohort 4 (5 T2T)				Complete Initial Licensure Program	Residency Year; Mentoring; Award Masters w/SPED Dual

					License
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WWTF-Woodrow Wilson Fellows Cohort
T2T- Transition to Teaching Cohort

GOAL 1: Recruit the highest caliber candidates, including individuals from underrepresented groups, using a rigorous selection process.

As we outlined in the needs assessment, recruiting qualified candidates for STEM and other high need subject teaching positions is a significant challenge. For this grant, our partnership with Woodrow Wilson will help meet this challenge. Specifically, the Foundation has successfully developed and implemented a strategy to recruit highly qualified and motivated applicants in 2008 for 60 open STEM Teaching Fellowships at three Indiana universities. The Foundation would employ a similar strategy to recruit Fellows for IUPUI’s Teacher Quality Partnership Residency Program.

The 2008 Indiana campaign included the development and disbursement of targeted recruitment materials (posters, postcards, etc.); emails to approximately 11,000 potential candidates, and 3,500 faculty/community leaders; a personal invitation to apply to the program to 60,000 rising college seniors with strong backgrounds in the STEM disciplines; advertisements on Facebook, CareerBuilder, Idealist, NACElink, and Experience Web sites; a targeted email to 8,000 *Science* magazine job list subscribers; radio spots in five key Indiana markets; fellowship advertisements in both commercial and campus newspapers, among others; and in-person recruitment events at all four of the partner institutions.

IPS, the Woodrow Wilson Foundation and IUPUI believe it is critical to recruit as many qualified minority teachers as possible. Especially in urban schools where the majority of children represent minority groups, far too few teachers and role models are minorities (Artiles & McClafferty, 1998; McNulty & Brown, 2009; Su, 1997). Woodrow Wilson Foundation’s

recruitment efforts reflected this philosophy by targeting minority campus organizations and minority-run businesses. The campaign yielded over 4,000 unique visitors to the Woodrow Wilson Indiana Teaching Fellowship Web site- 318 applications, and 114 finalists. The finalist pool was particularly strong, with the vast majority of candidates having STEM majors and GPAs in excess of 3.0.

A recent survey conducted by the Foundation collected data from the applicants regarding decisions to apply to the program and recruitment drivers. The results point to the success of casting a very wide net, with no one or two strategies truly emerging as the strongest. The Foundation is continually revising and improving its recruitment and selection process, which would greatly benefit the TQP residency program.

The partners have developed a rigorous selection process. To select Fellows, Woodrow Wilson established an Advisory Panel comprising national and state experts to set standards for admission that Fellows had to meet. This brought additional prestige and interest to the program and the Fellows, as well as gave outside credibility to admissions standards. The panel recommended a set of characteristics associated with the most successful teachers, including a superb academic track record, completion of a bachelor's degree with majors in math or science, and strong motivation for becoming a teacher. The Woodrow Wilson Foundation reviewed all applications and selected 114 final candidates for the 60 open Fellowships. All finalists were then interviewed, primarily in Indiana, over three weeks in late January and February 2009. Candidates spent an entire afternoon working with Woodrow Wilson staff and three Woodrow Wilson selectors (the selectors are veteran teachers and content experts hired by Woodrow Wilson). Each candidate presented a sample teaching lesson on a subject of their choosing in front of a group of their peers and a selector, completed an on-site writing sample related to

STEM education, and participated in a 30-minute one-on-one interview with a selector with expertise in their STEM discipline. Each session ended with a question-and-answer period for the whole group. Following interview days, Woodrow Wilson staff reviewed selectors' comments and recommendations before making final selection decisions to accept, reject, or wait-list candidates. Accepted candidates were sent to partner universities for review by their faculty committees and final admissions decisions. Wait-listed candidates were plugged into university slots as they became available.

Selection of the inaugural cohort of Indiana Teaching Fellows was final on May 1, 2009, with 59 candidates officially accepting the Fellowship offer and admission to the partner institution. Statistics on this first cohort demonstrate that they are a high-caliber group representing diversity across many sectors. The vast majority (97%) majored in a STEM discipline, with 88% completing their undergraduate degree with a GPA in excess of 3.0, and 32% with a GPA of 3.5 or higher. Twenty-seven percent of the cohort holds advanced degrees, including four MBAs and two Ph.D.s. Most (85%) are either changing careers or returning to the workforce, with 49% completing their undergraduate degree more than five years ago and three Fellows returning to the work force from retirement. Fifteen percent of this year's Fellows graduated from their undergraduate institution this spring.

GOAL 2: Prepare a cohort of 5-12 students per year in high need areas to work in urban schools.

Our overall project design includes three integrated parts. In the first year, students recruited into the prestigious Woodrow Wilson Fellows Program will complete coursework in their STEM discipline and pedagogy, leading to initial licensure in a STEM subject area. During this time, they will complete clinical hours in a middle school and a high school in Indianapolis

Public Schools. Upon completion of the first year, students will move into a teacher residency under the guidance of their teacher mentor and university mentor. During this year, they will also complete graduate coursework leading to their Master's degree and dual licensure. There are three phases to the teacher induction process: *Initial licensure coursework and clinical hours*, *Master's degree coursework* (explained in the following sections), and *teacher residency* (explored specifically below).

GOAL 3: Integrate rigorous graduate coursework with intensive clinical experiences.

University Coursework

The program at IUPUI aims to prepare exemplary secondary teachers in science, mathematics, engineering, and technology to serve diverse learners in urban settings. The Fellows will attend a secondary school-based, graduate-level, teacher education program that is complemented by intensive mentoring during the pre-service year and throughout the first three years of teaching. The Woodrow Wilson Indiana Teaching Fellowship curriculum at IUPUI is research-based and designed by an interdisciplinary team of faculty members from three nationally reputable academic units: the Purdue School of Science, the Purdue School of Engineering and Technology, and the Indiana University School of Education.

Inquiry-based learning serves as the central philosophy of the program. The National Science Education Standards (NSES) state that students should understand the nature of science as inquiry (National Research Council, 1996). Inquiry-based teaching develops a deep understanding of science concepts by engaging students in activities centered on authentic questions generated from student experiences (National Research Council, 1996). This philosophy is carried out in both the coursework and clinical experiences aspects of the Woodrow Wilson Program.

The curriculum of 36 graduate credits focuses on developing the depth of content knowledge and on integrating inquiry-based instruction in an inviting, collaborative, and rigorous learning environment. The Woodrow Wilson Fellowship Program at IUPUI embraces the following core values:

- Creation of supportive and reflective learning environments that respect diversity
- Use of ongoing assessment of student learning to evaluate and improve practices
- Development of expertise in designing and implementing culturally responsive and equitable learning opportunities

The curriculum is structured around Indiana Professional Standards Board competencies for middle and high school science and math teachers, Indiana Department of Education academic standards for student learning in the STEM disciplines, and the Indiana University School of Education Principles of Teacher Education. Fellows will qualify for the Indiana teaching license certification at the end of the first year of the program and will complete the remaining six credits necessary for graduation during their first year of full-time teaching. Three courses in particular set the curriculum apart from others in the State and around the country.

Nature of Science-This course is designed to provide an introduction to the profession of middle and secondary teaching in the STEM disciplines. Students will examine the nature of history of the STEM disciplines, roles of STEM in society and schooling, and strategies used in teaching STEM disciplines.

Diversity and Community Engagement- This class explores issues related to teaching all learners in increasingly complex secondary schools. It draws on anthropology to understand diversity across culture, sociology to examine the social complexities of pluralistic societies, and special education to address the individualized student needs. The course emphasizes educational

practice and communities of learners, and explores issues related to teaching all learners in increasingly complex secondary schools.

Action Research- This course serves as an introduction to the basic philosophy and methods of action research. Students will design an action research project and write a proposal. In this class, the student will learn how to conduct action research. They will learn to select an area of focus, collect data, organize, analyze and interpret data, and take action based on their findings. They will plan an action research study and write a formal proposal for that study.

Clinical Experiences

In the current Woodrow Wilson curriculum, great emphasis is placed on supervised and supported time working with students in urban school settings. Students complete two clinical placements, one in a middle school and one in a high school. Support from the Teacher Quality Partnership Grant will allow the program to expand the both university and school-based mentoring programs. First, students will be matched with the mentor teacher with whom they will be completing their teacher residency with by the time they begin their clinical placements. Although not all clinical placements will be with the mentor teacher, the student and mentor will meet regularly throughout the year. Strong relationships will already be developed between the mentor teacher and the student as the transition to the teacher residency occurs. The recruitment and training of mentor teachers is described more fully under goal 4, below. In addition, the university coaches, who will be working with the students from their initial licensure year through their third year of service, will begin observing students and meeting with them during this phase.

Master's Degree with Dual Licensure in Special Education

In addition to the content area training and clinical experiences in the initial licensure phase, our program will lead to Master's degree (e.g. Biology, Education, or Mathematics) with dual licensure in Special Education. The coursework required for the Master's is offered during the year of teacher residency using online and face to face formats. Additional coursework/certification in special education is a critical need for all teachers, especially those who work in urban settings where there is significant overrepresentation of students in special education (Harry & Kingner, 2006; Klingner, Artiles, Kozleski, et al., 2005; Skiba, Simmons, Ritter, et al., 2008). For example, in the Indianapolis Public Schools, over 19 percent of the student population is identified as eligible for special education supports and services (Indiana Department of Education, 2009). Teachers in urban settings must be skilled at addressing the many complex academic and social/emotional/behavioral needs of youth, regardless of whether they have been labeled with special needs. Currently, there are no programs which specifically couple STEM teacher preparation with Special Education. Adding special education certification will enable these teachers to be highly qualified.

Current Woodrow Wilson Fellows will be strongly encouraged to enroll in the Special Education courses during their Residency year. Beginning with the 2011 cohort, the newly proposed T2T program participants will complete their Master's with dual certification in their subject area and special education. The course work builds off the strong foundation in the current program and strengthens teachers' ability to connect with students and families in the urban context. The courses will be revised to specifically meet the needs of the teacher residents. First, many of the courses will be offered partially on-line and each will include coaching components that are aligned with the Mentoring program. A new hire in Special education

faculty will coordinate teaching assignments in the following courses to include collaborative teaching with faculty in math education, science education and in the School of Science:

- K548 Families and Schools and Society
- K553 Classroom Management and Behavior Support
- K565 Collaboration and Consultation
- K510 Technology Applications
- K525 Assessment and Instruction 1
- K541 Transition Across the Lifespan
- English as New Language Workshops

The university mentors (who are IUPUI faculty) will coordinate with the teacher mentors to make sure that the coursework is tightly connected to classroom practices. Teachers completing the coursework and residency will have a much stronger understanding of how to apply their discipline knowledge in urban settings and to reach all learners. The teacher residency model and use of university mentors in order to connect university to classroom is expanded upon in the next sections of this proposal.

GOAL 4: Place and prepare Teacher Residents with trained and experienced mentor teachers.

Our approach to identifying, training, and supporting Teacher Mentors is based on the model developed by the Chicago-based Urban Teachers Residency United. The Urban Teacher Residency United (UTRU) is a not-for-profit organization that serves a growing national network of innovative teacher preparation programs. In the first two years, we propose to contract and participate in UTRU's training and consultancy program for schools and universities who are developing a teacher residency program. Research based on the UTRU model has shown that

teacher residency programs impact teacher retention in the urban setting. While over 50% of teachers, nationally, leave teaching within the first three years, teachers completing teacher residencies have a retention rate of 85%. (UTRU, 2009)

Urban Teacher Residencies adhere to a four-pronged approach in developing and sustaining teacher quality: “1) targeted recruitment and rigorous selection; 2) intensive pre-service preparation focused on the specific needs of teachers in diverse urban schools; 3) coordinated induction support and 4) strategic placement of graduates” (Urban Teacher Residency United, 2009, p. 2). Focusing on these primary areas allows for the greatest positive impact on teacher development, specifically in terms of increasing knowledge, enhancing skills, and cultivating dispositions for success over time. It also ensures that their students will meet or exceed expected learning gains. While we are relying on the strength of the UTRU’s model and their ongoing consultancy, the model we employ will be an adaptation of UTRU’s residency.

As explained in Goal 1, the program recruits talented professionals who reflect the diversity of students in our urban public schools, and seeks career professionals who are interested in a change of occupation. This program will attract and prepare talented teachers in high-needs areas such as math, science, and technology; and work closely with the Woodrow Wilson Teaching Fellowship Program to recruit candidates to fill these slots. Teacher Residents will be selected through a rigorous and highly competitive process. Applications will be reviewed by committee, and finalists will be invited to take part in a set of performance activities, including mini-teaching presentations and individual in-depth interviews.

Salary and Application Process for Teacher Residency

All Woodrow Wilson and subsequent T2T students who successfully complete the requirements for initial teacher licensure will be invited to apply for the 5-12 Residency slots.

The application will ask for a personal statement about teacher's perspective on teaching in urban schools, program transcript, and letters of recommendation from pre-service student teaching placement. Top candidates will be interviewed by a committee comprised of university faculty, partner school teachers, and members of the Indianapolis community. Once selected for participation, potential Teacher Residents will be required to sign the contract stating that s/he agrees to serve as a full-time teacher for not less than three years in a high needs school or subject area that is designated as high needs or agree to re-pay salary and benefits. Salary will be equal to that of a first year teacher. Likewise, they agree that before beginning their in-service career, they must meet highly qualified status (which they will by completing the program). The contract will also provide provisions for reasonable conditions for pro-rata repayment.

Recruitment of Teacher Mentors

Mentor teachers will be recruited from secondary school STEM teachers in the Indianapolis Public Schools. The program, which offers a \$5,000/year stipend will be advertised in all of the participating schools in the district. In addition, based on recommendations from principals and IUPUI faculty currently working in the schools, we will approach teachers to invite them to apply. All teachers must have been teaching at least seven years, the last three of which must have been in IPS. Interested teachers will submit an application which will include an essay discussing excellence in teaching. The application will also include a portfolio of lesson plans, assessments, and student work. A panel, consisting of STEM faculty, UCASE professional staff, and the Executive Associate Dean of the School of Education will conduct interviews with finalists.

Mentor Teachers will go through an initial, 30-hour training, based on the training model developed by the Urban Teacher Residency United program. UTRU will be hired as consultants and will work with the project steering committee to develop this program. Once they have

completed this program, they are eligible to mentor a resident. However, all mentor teachers will attend professional development once a semester in order to continue to work on their own mentoring skills.

Mentor teachers, after completing the training outlined above, will mentor a resident, participate in the New Urban Teachers Collaborative (which we explain below) and collaborate with university mentors to ensure that coursework and clinical experiences are reflective of each other. In exchange for this commitment, teacher mentors will receive 1-course release from IPS and [REDACTED]/year stipend.

GOAL 5: Support teachers through a two-year induction and professional development program.

Students will be guided through an induction process as they transition from initial licensure through teacher residency and dual licensure in Special Education. The two-year induction program, including the teacher mentor component, is framed around Communities of Practice (Stein, Silver, & Smith, 1998; Wenger, 1999; Buysse, Sparkman, & Wesley, 2003) and contains three related elements: Preparation of the Teacher Portfolio, New Urban Teacher Collaborative (NUTC), and the STEM teachers Urban Education Conference. See Figure 1 for a visual representation of the induction program elements.

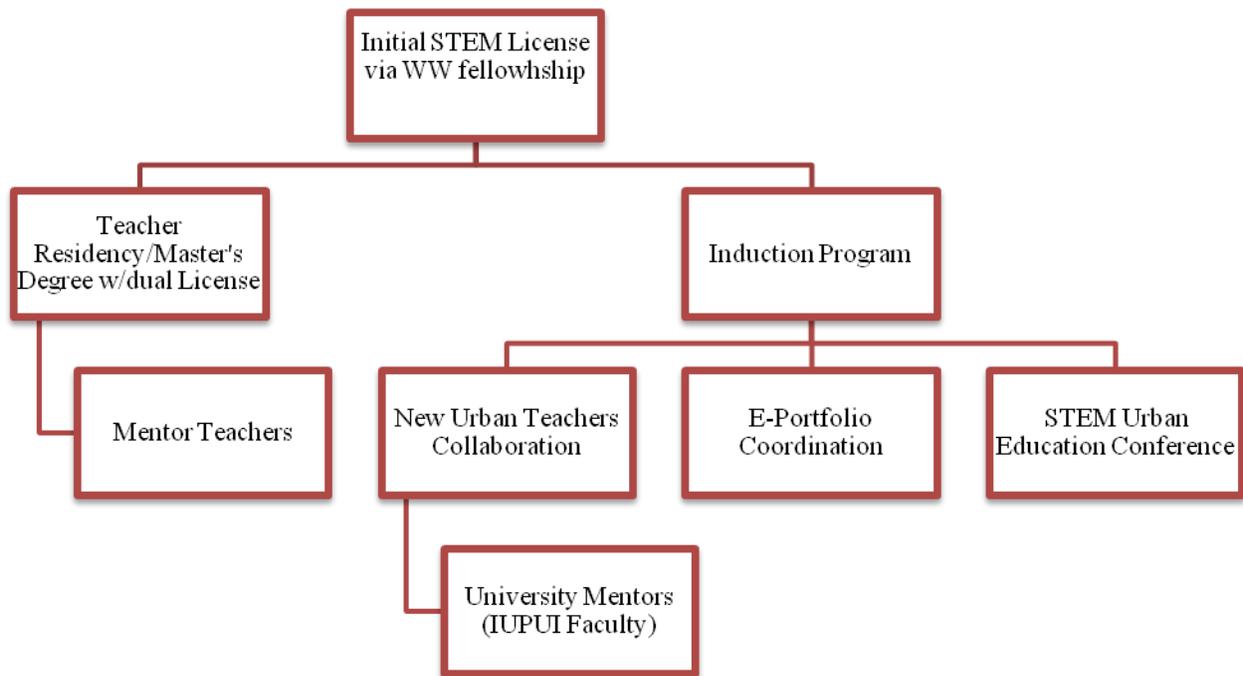


Figure 1. Urban Education Excellence Induction Program

E-portfolio

This portfolio of work allows students to demonstrate their understanding of the teaching-learning process in the classroom. This portfolio is the final exhibition to qualify for an Indiana teaching license and contains evidence from students regarding how they think about teaching and learning in the classroom. It asks for evidence of lesson planning, student work and assessment, teaching, and self-analysis and reflection. The portfolio asks students to link their planning with their practice and calls upon their reasoning and judgment to link the success of the learner to their instructional practice. This process is also designed to provide practice in completing a teaching portfolio as required by the Indiana Department of Education's (IDOE) Office of Educator Licensing and Development (OELD) in the second year of teaching. All

beginning teachers in Indiana must complete the Indiana Mentoring and Assessment Program (IMAP) in order to receive the *proficient practitioner license* at the end of the second year of teaching. This portfolio will be completed as part of the last seminar of the program during the Summer I session. It is a representative look at student's teaching-learning process focusing on the artifacts students produce to show that they understand how to help students learn.

Students are expected to demonstrate their ability to use a backwards-planning model, fairly and accurately assess student work, use assessment data to inform their teaching, and accurately self-assess to improve as a teacher. For example, in one element, students select 1-2 lessons (about 3 days) to showcase. The documentation also includes a 10-15 minute videotape from the selected lesson(s) and a written script of the lesson(s) completed by an observer. The assessment of the portfolio involves how *specifically* the students are able to comment on and analyze various artifacts they have included and how *accurately* they have self-assessed. In addition, students select two learners to spotlight in the portfolio. They include examples of these students' work and commentaries that demonstrate the assessment of their performances and ability to differentiate instruction and/or assessment to meet their learning needs.

There is a competency completion level expected for this portfolio. If students fail to meet the minimal expectations, they will be asked to redo part(s) of the portfolio to receive a recommendation for an *initial practitioner license*. Evaluation of this portfolio is based on the Six Principles of Teacher Education: conceptual understanding of core knowledge, reflective practice, teaching for understanding, passion for learning, understanding school in context of society and culture, and professionalism.

New Urban Teacher Collaborative Project

The New Urban Teacher Collaborative (NUTC) project is based on the data that once new graduates leave the college environment and obtain employment as teachers, they become isolated from their previous support system of university professors and each other, with no one to turn to for encouragement or assistance as they begin their challenging careers. By building a virtual community website that could keep them connected with their old support system or a new mentoring system, fewer new teachers would become disillusioned and then abandon their chosen profession.

The NUTC website serves as the primary communication tool as well as an information rich resource with sections for General Questions, Celebrations, Classroom Management/Behavior, Professional Readings, Elementary Curriculum, Middle and High School Curriculum, and Technology. When new teachers post concerns, problems, or challenges in the discussion forums, they receive comments from first and second year new teacher colleagues. A university coach also posts comments and responses to questions and monitors feedback.

This resource will also include: a lesson plan bank, chat rooms for discussions on instruction, bulletin boards for posting short questions about content or pedagogy, an interface for contact with content area specialists, discussion groups targeted at providing feedback on teaching STEM, and discussion groups aimed at peer evaluation of and assistance with lesson implementation (teachers will be encouraged to share videos of their lessons in order to gain feedback and offer suggestions about teaching). Project Impact, the coalition of community centers serving 30% of IPS students in after school and summer programs, will also have access to NUTC. A Project Impact representative will also be able to answer and ask questions to the collaborative. The inclusion of Project Impact will help bridge the school-community divide and

introduce additional resources to new teachers. The NUTC website will be housed and monitored in the Office for Professional Development.

Urban/STEM Educators Conference

At the end of the residency year, cohorts of residents and their mentors will present findings from their action research culminating in a major conference in STEM education. In year three of the TQP grant, we will host a conference focused on STEM education in urban schools. This conference, part of the NUTC program, will bring together all of the participants in our program as well as STEM teachers from the other urban school districts in Indianapolis and other urban areas in Indiana. The conference will feature the action research projects produced by participants in the Wilson and Teacher Residency programs. This will create the opportunity for STEM teachers to focus on sharing inquiry-based practices with each other. The Urban/STEM Educators Conference will also provide workshops on inquiry-based instruction, action research, and new frontiers in the STEM disciplines. These workshops will be designed and led by IUPUI faculty from the School of Education, School of Science, and the School of Engineering. This focus will allow teachers to connect with new university partners and interact with new knowledge that they can incorporate in their classrooms. Although outside of the scope of this grant, IUPUI plans to develop this conference as a biennial event. The TQP will make the inception of this conference.

University Faculty Mentors

As explained above, in addition to the IPS teacher mentors who will guide the participants in their residency year, residents will be paired with a university mentor. This pairing will happen during their Woodrow Wilson fellowship year and the relationship will follow them through their third year of teaching. Mentors will be IUPUI faculty teaching in

STEM teacher preparation program, Special Education program and ESL teacher education program. The mentors will be trained to use the Electronic Quality of Inquiry Protocol (EQUIP) to formatively assess the instruction of the fellows during the middle and high school field experiences. During the pre-service year, a modified version of the instrument will be employed. This protocol has been modified based on the recommendations of two of its creators (Marshall, Horton, Smart, & Llewellyn, 2008; Marshall, Horton, White, 2009). This training will include multiple opportunities to practice using the instrument and discuss the results of the assessment. In addition, the mentoring coordinator from UCASE will independently assess the instruction of the Fellow and compare the results of those assessments with those completed by the mentors. The mentoring coordinator will meet with the mentors on a bi-weekly basis to assess the progress of the fellows and to address any concerns about the mentoring process.

During the participants' pre-service placements, teacher residency, and first year of teaching formative assessments of instruction will occur at least three times for each fellow during each semester (spring and fall). The assessment process includes: a.) assessment of the teaching of one class period by the university mentor and/or classroom mentor teacher and the fellow himself; b) reflection meeting where assessment results are compared and a plan for improvement of instruction is devised collaboratively based on the assessment results; and c) revision of the assessed lesson by the Fellow based on the assessment results. Each step of the assessment process will be recorded in an e-portfolio (described below) specifically designed to help the Fellows track and evaluate their progress toward proficient inquiry instruction.

Beyond the assessment procedure described above, the mentors will work with Fellows on lesson plan design and reflective teaching practices. Finally, the mentors will be active leaders in the New Urban Teacher Collaborative for both the participants and the mentor teachers.

Finally, after completing the residency, but during the first three years of in-service teaching each Fellow will meet bi-monthly with his/her mentor. At this time the mentor will use the original version of EQUIP to assess performance. This assessment will also be documented in the e-portfolio (explained below) so that the Fellow will have a clear record of his/her progress throughout the program.

Sustainability

One of the partnerships main goals in applying for this grant is to establish an induction program, as described above, that follows students through their first years of teaching. All of the elements of the induction model which will be created, piloted and practiced through the grant, will be able to be expanded to all Transition to Teaching students after the grant finishes. Likewise, as stated above, the purpose of building this teacher residency model through the TQP grant is to create a strong model that can be expanded to other program areas. However, in order to expand the teacher residency model the IUPUI will need to be able to attract additional funding. Currently, our Governor, Mitch Daniels, has included some money in his budget plan for teacher residencies. We expect this may expand over the next few years. This grant will allow us to develop a strong program and show its success. Ultimately this will allow us to attract the funding necessary to make the program sustainable.

GOAL 6: Design and implement a comprehensive project evaluation system.

External Evaluation

Because of our partnership with the Woodrow Wilson Foundation, the external evaluation of this grant will be linked to the evaluation contracted by the Woodrow Wilson Foundation to evaluate the impact of the Woodrow Wilson Indiana Teaching Fellowships at IUPUI and at the other three participating universities. Woodrow Wilson has contracted with the

Urban Institute to conduct an independent impact assessment over the next six years, through 2015. The evaluation will examine the impact of the two cohorts of Woodrow Wilson Fellows and consequently also the teacher residents. The key questions that Woodrow Wilson and the Urban Institute will focus on in the evaluation are:

- How effective are the Teaching Fellows in improving students' academic performance relative to non-Fellows?
- What is the retention rate of Fellows as compared to non-Fellow new teachers?

Through cooperation of the participating universities and of the Indiana State Department of Education, data on teachers, their schools, and their pupils will be gathered and analyzed for each cohort of Fellows. IUPUI would like to continue this program of evaluation with Woodrow Wilson and the Urban Institute to address the same questions of the TQP residency Fellows. The Woodrow Wilson Foundation would develop and manage the entire evaluation, building on the work that it has already done. In addition, the Foundation has developed and will implement an assessment of changes in the teacher preparation programs at each institution. This aspect of the evaluation is managed by an external consultant under contract to the Foundation who has extensive experience in design, monitoring, and assessment of complex teacher education interventions.

Additionally, the Woodrow Wilson Foundation plans to do its own research and evaluation project that would complement the evaluation work of the Urban Institute. The project would examine the effectiveness of IUPUI's STEM teacher education program as compared to those of the other three partner universities. Each of the four universities in Indiana has developed and adopted STEM teacher education programs with different designs, and each used a different process to plan, adopt, and implement its new program. This provides an ideal

laboratory for examining and comparing practices in STEM teacher education and change strategies. The local evaluation team, described in detail below, will coordinate with the Woodrow Wilson Foundation and the Urban Institute to gather all the data needed to measure the outcomes outlined above. This will include all of the GRPA measures required by the grant. Below, we outline how we are meeting Competitive Priority 1 and explain in detail the local evaluation and GRPA measures.

Competitive Priority 1

To evaluate the effect on K-12 student performance, the effectiveness of Woodrow Wilson Teaching Fellows must be compared to the effectiveness of one or more comparison groups of new teachers prepared through a different program or “route.” The study will be conducted in three steps. (1) Because estimating “value-added” models has some specific data requirements, the first step is to collect state or district data that include individual student test scores that can be tracked over time and that can also be linked to the teachers who instructed these students. (2) With these data sets, linking pupils and their teachers, the analysis will then generate “value-added” scores for Fellows and non-Fellows using a value-added model. (3) The third step will then compare the average as well as the distribution of teacher effectiveness of Fellows and non-Fellows (including various comparison groups, such as inexperienced non-Fellows, fully certified non-Fellows, and non-Fellows graduated from the same education programs in the participating universities).

To obtain value-added estimates of teacher effectiveness, longitudinal data on individual students who can be linked to their teachers are essential, as are student-level test scores. Through the Indiana Department of Education, Indiana already has unique student identifiers (Student Teaching Number; STN) and collects most information required for this type of

evaluation study. This means that basic student demographic information is available. A teacher data file is also available that uses unique teacher identification numbers. The teacher file includes basic teacher demographic data, licensure and certification status, assignments, classes, and so on. While the teacher and student data files are not currently linked, Indiana is working on this through a State Longitudinal Data System (SLDS) grant from the U. S. Department of Education to create a comprehensive P-20 data system.

Local Evaluation

The local evaluation team in the Center for Urban and Multicultural Education (CUME) will employ qualitative and quantitative data collection strategies both to document the implementation fidelity of the program for WWTIF and, consequently, the teacher residency, to examine the impact of the program on Woodrow Wilson Scholars and secondary school students. The local evaluators will work closely with evaluators at the Urban Institute to generate annual reports on the required GPRA measures for Teacher Quality Partnership Grants.

Formative outcomes. CUME will conduct five observations per scholar during the field placement period and three observations of class sessions per semester. For both of these observational settings, CUME will revise current observation protocols to evaluate classroom dynamics, instructional practice, and student engagement. In addition, CUME will conduct three interviews at the beginning, middle, and end of the program. In order to evaluate recruitment, retention, and programmatic development, CUME will conduct participant observations of all planning meetings for the Woodrow Wilson Program. Students will compile and submit their final teaching portfolio that demonstrates that they have met all Standards that have been aligned with North Central Accreditation Standards. Each portfolio will be rated by two science teachers or science education faculty at IUPUI according to the processes described above. Formal and

informal interviews with program directors, faculty, and recruitment committee members will be conducted. Given that recruitment and retention of under-represented students is a major program goal, examining collaboration around this aspect of the grant is critical. Based on Creswell (2005) and Carspecken (1996) this ethnographic approach is appropriate for building a detailed account of how the objectives of the grant are being implemented and how this implementation changes over time. Formatively, this will be critical for gauging whether the program is meeting its stated objectives. CUME will conduct content analyses of curriculum and student produced materials (both for university courses, fieldwork, and lesson plans). This content analysis will follow Neundorf (2002) and Krippendorf (2004) models for internally consistent document review. As a partnership, IPS and IUPUI are interested in making this program a sustainable new model for teacher education in Indianapolis. The emphasis on formative evaluation is important so that during the grant process the project can make adjustments to the program. We see this as crucial to the overall summative success of the model.

GPRA Measures

Summative outcomes. Evaluators at CUME have developed a database that contains pre-program information and will be the source for tracking and monitoring the progress of Residents throughout their residency and first three years of teaching. Based on the MOU with the Woodrow Wilson Foundation, local evaluators have agreed to share data with the External Evaluators and will take over the summative evaluation for the remaining two cohorts in this program. The database will be set up around the major GRPA indicators required by the grant. These indicators and the corresponding data points appropriate for Indiana are indicated below.

Performance Measure 1: Graduation

- Timely completion of initial licensure (Woodrow Wilson or T2T Year)
- Timely completion of teacher residency year
- Graduation with Master's Degree
- Licensure in Special Education
 - Short-term Performance Measure 1: Persistence. The percentage of program participants who did not graduate in the previous reporting period, and who persisted in the postsecondary program in the current reporting period

Performance Measure 2: Employment Retention

- Program completers are tracked through first 3 years of employment
- Retention of other teachers hired at the same time as program completers will also be tracked
 - *Efficiency Measure: Employment Retention:* Cost of retaining the program completers after 3 years of employment
 - *Short-term Performance Measure 2:* Employment Retention. The percentage of beginning teachers who are retained in teaching in IPS after one year of employment (post-residency)

Performance Measure 3: Improved Scores

- Scaled scores on Praxis I and Praxis II in STEM and Special Education between program completers and average state scores

Beyond the GRPA measures already highlighted above, the database will include several other key data points necessary for the overall summative evaluation. These include:

- Percentage of highly qualified teachers who are members of underrepresented groups hired by IPS
- Percentage of highly qualified teachers hired by IPS to teach high-needs academic subjects (specifically STEM and Special Education which are the aims of this grant project)
- Percentage of highly qualified teacher hired by IPS who teach in high-needs areas (specifically Special Education)
- Percentage of teachers trained overall by the program

In addition to coordinating the gathering of these data from all relevant sources and communicating with the external evaluator, the local evaluator, CUME, will make sure these data are able to be reported on the Annual Performance Report.

Finally, the local evaluation will employ several short surveys examining the ways in which pre-service teachers and later Teacher Residents describe (1) the strengths of program, (2) their satisfaction with major elements of the program, and (3) the extent to which scholars use the knowledge and skills that comprise the instruction/reflection offered throughout the program (e.g., Master's degree, dual licensure, teacher mentoring, and university mentors). Quantitatively we will measure teacher growth in math/science education efficacy using two adapted pre/post measures: the Ashton Efficacy Vignettes (AEV; Ashton, Olejnik, Crocker, & McAuliffe, 1982) and the Science Teaching Efficacy Beliefs test (STEB; Riggs & Knochs, 1990).

Local evaluation management

The Center for Urban and Multicultural Education is a research and evaluation center located at IUPUI. CUME has many years of experience conducting both local and national evaluations, including of the Department of Education funded Partnerships in Character

Education Program in IPS and Anderson schools. Dr. Joshua S. Smith, who is the Director of CUME, will be the lead evaluator on this grant project. Dr. Smith is a leading expert on assessment and came to CUME from the University of Albany where he served as Director of Assessment.

Project Management

We have designed a two-pronged approach to project management. The entire project will be overseen by the Primary Investigator, Dr. Pat Rogan, supported by a project director. These two positions serve as the coordinating points for all aspects of the project throughout the grant period. Under the auspices of the project director, the Urban Center for the Advancement of STEM Education (UCASE) will administer the initial licensure year, as this is part of the Woodrow Wilson Indiana Teaching Fellowship Program. After completing this year, the participants' teacher residencies and university-based mentoring will be coordinated by the Office of Professional Development. Students participating in this program will be a part of the Woodrow Wilson Indiana Teaching Fellowship in their first year. All aspects of their admissions, matriculation, coursework, and clinical placements will be managed by this program, which is run by the Urban Center for the Advancement of STEM education (UCASE), which we describe in detail below.

From a participant's perspective, after the completion of the WWITF, the Office of Professional Development will become the main contact point. They will manage the teacher residency year and university-based mentoring for the first three years of teaching. In order to assure seamless transfer between these two groups, a project manager will be appointed. These two positions will serve as the point positions for the grant throughout its five-year existence. By using our existing organizational structure, namely UCASE and the Office of Professional

Development, we also ensure that all aspects of licensure that require coordination with the state are met.

The pre-service component of the program for WWITF students in the Urban Education Excellence Program will be administered by Dr. Kathleen A. Marrs, the director of UCASE. UCASE and the WWITF program are supported by a reputable management team comprised of the project personnel listed below. All of these are individuals are closely associated with UCASE and committed to the development of STEM teachers for high-needs urban areas.

Management Team

Dr. Pat Rogan. Pat Rogan is the primary investigator on this grant. She is the Executive Associate Dean of the Indiana University School of Education at IUPUI, and Professor in the area of special education. She has been a public school teacher and university faculty member for 30 years, with interests in secondary education, transition, supported employment, organizational change, and systems change. Pat works with faculty and staff to promote an exemplary urban teaching, research, and service agenda, and to expand the School's partnerships and impact at the local, state, national, and international levels. Prior to her current position, Pat was Chair of Graduate Programs, Chair of Secondary Education, and coordinator of the special education area in the School of Education. She was awarded the Indiana University Trustees' Teaching Award in 1997, 1998, 1999, 2000, 2001, 2003, and 2004, and was inducted into the Faculty Colloquium on Excellence in Teaching (FACET) in 2004.

Pat served as a Board member and then President of the National Association for Persons in Supported Employment (APSE) from 1996-2002 and is now a founding member of the National APSE Emeritus Circle. She was appointed to the National Adequacy of Incentives Task Force by the U.S. Social Security Administration from 2003-2005. Pat has coordinated the

National Organizational Change Coalition from 2000-present, and was Chair or Co-Chair of the Indiana Conversion Task Force from 1998-2003. She was a Governor Appointed Member of the Indiana Work Incentives Council from 2002 – 2005. Pat is the Director of the Back Home in Indiana Alliance, a statewide housing/home ownership initiative for people with disabilities, and remains active as a disability rights advocate at the state and national levels. She has written numerous articles and book chapters, and has co-authored several books: *Developing natural supports in the workplace: A manual for practitioners* (1993); *Closing the shop: Conversion from sheltered to integrated work* (1995); and *Make the day matter: Promoting typical lifestyles for adults with significant disabilities* (2007).

Dr. Kathleen A. Marrs. Dr. Marrs is an Associate Professor of Biology in the Purdue School of Science at IUPUI, an adjunct member of the faculty in the School of Education, and the current director of UCASE. Her primary responsibility in this proposal is to assure the overall success of the WWITF Program. Dr. Marrs reports directly to the chief academic officer on campus, Dr. Uday Sukhatme, Executive Associate Dean of the Faculty on the IUPUI campus and Professor of Physics. Additionally, she communicates regularly about the WWITF program with the Deans of the School of Science, School of Education, and communicates directly with the Woodrow Wilson Foundation and faculty from the other campuses administering WWITF programs. Dr. Marrs teaches the first course in the WWITF curriculum sequence, EDUC S502: The Nature of Science and the STEM Disciplines.

Dr. Kim S. Nguyen. Dr. Nguyen is the Associate Director of Operations for UCASE. Dr. Nguyen commits time and resources to the promotion of STEM teaching options throughout campus and between IU-system schools, and facilitates numerous NSF-funded programs on campus for minority students underrepresented in science. She communicates regularly with the

Woodrow Wilson Foundation regarding candidate selection, facilitates the logistics of campus admission and initial course registration, works with the School of Education's Student Services Office to ensure that the scholarship recipients comply with the requirements, and monitors the administration of the WWITF scholarship budget.

Dr. Signe Kastberg. Dr. Kastberg is an Associate Professor in Mathematics Education for the IUPUI School of Education, Associate Dean for Academic Affairs in the School of Education, and Assistant Director of UCASE. She provides the secondary mathematics methods instruction for the WWITF program, assists in the recruitment and selection of candidates, and serve on the Curriculum Committee.

Dr. Kathleen M. Allspaw. Dr. Allspaw is the mentoring coordinator of the WWITF program, and is responsible for selecting mentor teachers and university mentors, professional development for mentor teachers, and developing the Stem Instruction Study Group that is integral to the mentoring plan for WWITF. Kathleen is an Academic Specialist with over a decade of experience teaching science to secondary school children in a wide variety of settings including public, private, alternative, rural, urban and suburban. She teaches the second course in the WWITF curriculum sequence, EDUC S504: Introduction to STEM Teaching.

WWITF Program Administration. Once potential candidates have been identified by the recruitment skills of the Woodrow Wilson Foundation, the UCASE management team, in conjunction with appropriate STEM faculty, will review applicant transcripts, assist applicants with registration, and recommend any additional coursework they might need before entering the WWITF Program. Faculty who currently serve to review transcripts and recommend students for acceptance include faculty in mathematics and mathematics education (Drs. Jeff Watt and Signe Kastberg), science (Dr. Kathy Marrs and Dr. Andy Gavrin), and engineering & technology (Dr.

Charlie Feldhaus). In addition, the management team will provide information about the PRAXIS II review, which will take place before the candidates take the Praxis II tests in their major and minor areas. All WWITF project personnel participate in monthly meetings, chaired by Dr. Marrs. The purpose of these meetings is to evaluate the current project efforts, receive a progress report of the Fellows participating in the WWITF program, review curriculum goals and themes of the program, and to discuss future planning to enhance the effectiveness of the WWITF program.

With the project manager serving as a liaison between Indianapolis Public Schools and the Office of Professional Development (OPD), after students complete their Woodrow Wilson Indiana Teaching Fellowship, students' academic home will move to the Office of Professional Development. The entire teacher residency program will be facilitated from this office, which will also house the induction program elements including the university mentoring, New Urban Teachers Collaborative (NUTC), and the urban STEM teachers' conference. Further, it will coordinate the special education licensure program that accompanies the Teacher Residency. By using the OPD, we are able to ensure that timely coordination with the state with regards to licensure takes place, while still maintaining the emphasis on collaborating with IPS. One key feature to the organizational plan will involve an OPD professional staff person working part of their time at Indianapolis Public Schools, in their Forest Manor Office of Professional Development. This helps improve the quality of communication and coordination between the two collaborating partners.

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Appendix A
LEA and School Eligibility

HIGH-NEED LEA ELIGIBILITY								
Component A: Poverty/Rural Data								
Name of the LEA	A1	%	*Data Source	A2	#	*Data Source	A3 SRSA	A4 RLIS
IPS	X	29.07%	2007 Census					

Component B: Teacher Need								
Name of the LEA	B1	LEA %	State Avg. %	B2	Turnover %	B3	% at least 1.37%	Data Source
IPS		0						
IPS					10%			
IPS						X	5%	State HEA, Section 207 report

Note: Applicants may use this optional form or create their own to document LEA high-need eligibility.

High-Need School Eligibility										
Name of school	LEA	C1	% of FRPSL	Rank order	C2	% of elementary school FRPSL at least 60%	Feeder School(s) FRPSL at least 60%	C3	% of non-elementary school FRPSL at least 45%	Feeder School(s) FRPSL at least 45%
Emmerich Manual High School	IPS	X	73%	7/8						
Arsenal Technical High School	IPS	X	80%	3/8						
Broad Ripple High School	IPS	X	74%	6/8						
Northwest High School	IPS	X	77%	5/8						

George Washington Community High School	IPS	X	89%	1/8						
Arlington Community High School	IPS	X	82%	2/8						
John Marshall Community High School	IPS	X	79%	4/8						
T.C. Howe Community High School	IPS	X	72%	8/8						