INNOVATION and REFORM in Teacher Preparation

AECTE's 5th Annual Day on the Hill • June 17–18, 2009
About AACTE

The American Association of Colleges for Teacher Education (AACTE) is a national, voluntary association of higher education institutions and other organizations and is dedicated to ensuring the highest quality preparation and continuing professional development for teachers and school leaders in order to enhance PK-12 student learning. The almost 800 institutions holding AACTE membership include private, state, and municipal colleges and universities large and small located in every state, the District of Columbia, the Virgin Islands, Puerto Rico, and Guam. In addition, AACTE has a growing number of affiliate members, including state departments of education, community colleges, educational laboratories and centers, and foreign institutions and organizations. Collectively, the AACTE membership prepares more than two thirds of the new teachers entering schools each year in the United States.

Mission

To promote the learning of all PK-12 students through high-quality, evidence-based preparation and continuing education for all school personnel.

Strategic Goals

1. **Build Consensus on Professional Issues:** Unify the membership by developing clear statements, based on evidence and professional consensus, about educator preparation in five areas: standards, curriculum, assessment, accountability, and who belongs in the profession.

2. **Advocate in State and Federal Policy Arenas:** Establish and maintain a credible voice in state and federal policy making, advocating for high quality in student learning.

3. **Strengthen Programs and Enhance Their Capacity:** Strengthen programs and build their capacity to prepare educators who can teach every child effectively.

4. **Improve All Educators’ Ability to Serve Diverse Learners:** Increase the diversity of education candidates and improve programs’ curriculum to ensure that all educators can serve diverse learners.
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Dear Colleagues:

On behalf of the American Association of Colleges for Teacher Education (AACTE), we are pleased to introduce you to *Innovation and Reform in Teacher Preparation*. This is a compilation of impressive and diverse examples of the efforts of schools, colleges, and departments of education to create new and better ways to prepare educators for today's rapidly changing world.

The nation's more than 1,200 collegiate-based schools of education prepare professionals for diverse career paths—including teachers, administrators, counselors, school psychologists, researchers, policy analysts, human resources managers, and trainers—who are employed in P-12 and higher education as well as in corporate, government, and nonprofit settings. These institutions award over 275,000 bachelor's, master's, and doctoral degrees in education\(^1\) and produce about 80% of the newly hired teachers each year, through both traditional and alternate routes.\(^2\)

Educator preparation is undergoing major reform to meet 21st-century challenges, and rightly so. Our products—teachers and school leaders—are the “first responders” at the forefront of the rapidly changing demographics of the K-12 student population. Over one third of the U.S. population, and about one half of children under the age of 5, are racial or ethnic minorities. Twenty percent of school-age children speak a language other than English at home.\(^3\) All the K-12 student growth through 2020 will occur among minority students, and by 2030, the first language of 40% of school-age children will be other than English.\(^4\) Teachers of these students must be exceptionally skilled. They must be steeped in their content, technologically savvy, culturally competent, current in their fast-changing fields, and able to effectively teach students with disabilities as well as beginning English learners.

Well-prepared teachers, in adequate numbers and equitably distributed, are critical to the success of our nation. They are essential to overcoming today's shortages of math, science, special education, language-minority, and urban and rural teachers, as well as to rectifying U.S. students' low standing on international assessments. Perhaps most important, highly effective teachers are fundamental to our ability to close the nation's pervasive achievement gaps. The price for not doing so was dramatically presented in a recent McKinsey & Company report, which found that U.S. education achievement gaps have created the economic equivalent of a permanent national recession.\(^5\)

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Fortunately, teacher candidates of higher caliber are now entering the field. As a recent ETS study reports, the academic profile of the entire teacher candidate pool has improved, both in terms of SAT scores and undergraduate GPAs, over a recent 8-year period. Individuals from more diverse sources than ever before are showing an interest in teaching. Some are young, just out of college, but without the typical “ed” degree. Others—considerably older—whose fields range from business to engineering to real estate, find their first career unfulfilling and want to “make a difference in people’s lives”; and many are soccer moms, Little League dads, or community activists who, after seeing their own kids through school, seek to develop others’ minds in a more formal way.

Colleges of education are revamping, revitalizing, and reforming their programs in many ways, as this publication illustrates, to provide solutions for preparing a cadre of new, highly effective teachers to meet the critical needs described above. The following profiles describe innovations at various levels, ranging from single programs within a college to a major restructuring of a university education school to entire statewide efforts to improve teachers and teaching. Many of the solutions relate to teaching practice and teacher support, and others are directed at broad teacher policy issues.

One of the most profound aspects of this changing landscape is the creation of preparation programs online. In just 4 years (2004–2008), the percentage of schools of education offering online college-level, credit-granting courses has risen from 59% to 72%. (See the Online Learning profiles in this publication from the University of Phoenix, University System of Georgia, Kent State, University of Tennessee–Knoxville, University of Texas at Arlington, Western Governors University, and Walden University.) Higher education–based preparation programs all across the country are revamping and extending the clinical components of their programs, as exemplified by St. Cloud State, Penn State, and education programs at nine other institutions profiled herein. Other adaptations address particular teacher shortage areas and the staffing requirements of high-need schools. Many “alternative” programs for teacher candidates—in fact, about half of all such programs—are administered by collegiate-based preparation programs. Just one example, included in this volume, is the University of Toledo’s UT3 Program (UToledo, UTeach, UT Touch the Future).

Schools of education are leading the transformation of a profession undergoing dramatic change. The solutions outlined in the following profiles—many supported by federal as well as private funds—are just a few examples of innovative efforts to address the need of 21st-century schools for high-performing educators. We are creating the personpower that will educate the workforce competing for our nation’s global preeminence. We cannot imagine a more compelling case for exponentially increased federal, state, and institutional investments to prepare, support, and retain education professionals, than that presented by these examples.

Sandra L. Robinson
Chair, Board of Directors

Sharon P. Robinson
President/CEO

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This publication provides examples of innovation and reform in schools, colleges, or departments of education. Entries are arranged in alphabetical order by state.

AACTE invited its members in March 2009 to submit profiles of their teacher preparation programs that exemplify innovation or reform. Examples include efforts to increase teacher recruitment in high-need fields, partnerships between 4-year and 2-year programs, new online preparation programs, strengthening clinical preparation, efforts to close the P-12 achievement gap, preparing teacher candidates to use technology, and more. Institutions were asked to submit a description of their program, any funding that supports it, and a summary of the impact that the program is having on P-12 education.

The examples included in these pages show clear evidence of improving teacher quality and P-12 student learning. This publication provides just a small sample of the exemplary work under way in higher education–based teacher preparation programs.
Innovation or Reform Area:  History

Funding: National Endowment for the Humanities, the Fund for the Improvement of Postsecondary Education (U.S. Department of Education), Apple Computer, Auburn University, Indiana University, and Auburn City Schools

Description: The Persistent Issues in History (PIH) Network (www.pihnet.org), a curriculum reform project founded in 2001 at Auburn University (AU), develops and supports a national community of teachers who are skilled in engaging their students in problem-based historical inquiry. AU believes that precollegiate history study should develop citizens who can critically weigh evidence for historical claims and use deep content knowledge generated from sound historical analysis to inform their decisions about enduring societal questions. University faculty worked with teacher colleagues to develop a set of practices that have been tested and refined in the context of real classrooms. These practices form the core of PIH professional teaching knowledge. The online component of the initiative provides teacher resources that include classroom videocases of inquiry-based instruction, model PIH curricula, a discussion forum, and authoring tools that support teacher development of new PIH curricula. The most recent online project became available to teacher educators in November 2008: the PIH Videocase Database, featuring expert teachers from around the nation modeling PIH teaching strategies. Currently, 33 social studies teacher education programs across the nation are using this resource to disseminate PIH professional teaching knowledge. For the past 3 years, AU has worked to establish a local PIH professional knowledge community that includes the entire history faculty at Auburn Junior High School (AJHS) as well as AU historians, social studies educators, and preservice teachers. Establishing a professional knowledge culture in AJHS provides an incubator for generating grounded knowledge that can be shared and replicated with educators in other contexts in order to continually expand the PIH professional knowledge base. More immediately, this setting provides a unique laboratory for AU preservice teachers to test PIH practice. The fall semester methods class meets on the AJHS campus so that the students can observe, discuss, and replicate research lessons with AJHS students. Each spring, AJHS hosts a group of AU interns who are mentored by this evolving community of practice. Preservice teacher professional teaching knowledge, as measured by professional work samples and by surveys that assess PIH teaching knowledge as candidates enter and exit the program, demonstrates much more nuanced PIH teaching rationales and abilities to implement and assess problem-based inquiry instruction.

Outcome Data: Much of the K-12 performance data that has been collected at this point is anecdotal, based on teacher reports, student interviews, and classroom observations. AU has conducted several in-depth case studies of history classrooms and found that students who experienced PIH-based lessons performed as well as their peers in non-PIH classrooms on tests of basic factual knowledge and performed significantly better in contextualizing historical knowledge within broader contexts and in higher order reasoning as measured by essay tests and persuasive presentations. Students in PIH-based classes also demonstrated high levels of engagement and reported enjoying historical study (Saye & Brush, 1999; 2002). In addition to PIH, AU also directs the Social Studies Inquiry Research Collaborative. This is a consortium of 30 social studies teacher educators across the United States who are studying the effects of Authentic Intellectual Work in social studies classrooms on student performance. As part of that work, the PIH Network is presently engaged in a larger study of PIH-based classrooms and more traditional history classrooms that compares the performance of students on both higher order and lower order measures of historical knowledge. The collaborative plans to have results by December.
Anticipated Long-Term Impact: Due to the popularity and effectiveness of the local lesson study project, the PIH project was extended beyond its 3-year timeline. PIH has also been nationally recognized for its substantive professional development program and is involved in the design of several Teaching American History Grants for the 2009 funding year that include substantive comparisons of student achievement in PIH and non-PIH classrooms. The projects, if funded, would extend the institution’s reach to high-need populations in both urban and rural districts, in Alabama and New York City, while generating a large data set on the effects of PIH-based instruction. The existing partnerships with schools will continue to provide strong environments for inducting new teachers into this method of history teaching and to assist veteran PIH teachers in developing new curriculum. Finally, Auburn will continue to support a growing group of teachers across the country who use the resources on the web site and collaborate with colleagues at other higher education institutions who are using the Videocase Database so that the institution can develop activities that incorporate these cases into the professional development of preservice teaching candidates.

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Innovation or Reform Area: Math/Closing the Achievement Gap

Funding: 2008 - 2011, National Science Foundation, $9.9 million; Malone Family Foundation of Dothan, AL, $304,975; Auburn University $100,000

Description: The Transforming East Alabama Mathematics (TEAM-Math) Math-Science Partnership is comprised of Auburn University, Tuskegee University, and 14 school districts. The partnership focuses on increasing all students’ mathematics achievement and their motivation to learn mathematics through intense professional development of mathematics teachers; improving the preparation of new teachers; aligning the mathematics curriculum grades K-12; providing outreach to administrators, counselors, and parents; and developing a network of teacher leaders through professional development and advanced degrees in mathematics education. Given that the 14 school districts are all quite small, the partnership allows them to act as a “super-district,” thereby pooling resources. Using a cohort-based professional development model, teachers at a school participate in a summer institute with follow-up meetings throughout the school year in addition to other workshops and school-based activities focused on developing professional communities of practice (Wenger, 1999).

Outcome Data: Data-collection efforts have related to students’ achievement data, measuring students’ motivation and attitudes, recording teachers’ participation in TEAM-Math events, and measuring teachers’ attitudes and practices. In addition, a qualitative study has been conducted to study schools’ involvement in TEAM-Math at different levels.

- The percentage of students at participating schools (joining in 2005) who achieved proficiency on the state assessment rose substantially over a 3-year period:
  - for grade 4, it increased from 75% to 80%
  - for grade 6, it increased from 54% to 63%
  - for grade 8, it increased from 51% to 55%

- Moreover, there is evidence of the gaps closing between subgroups, categorized by race/ethnicity and ability. Analyses of student data show significant differences in motivation and attitudes among students who report that their teachers use instructional practices aligned with TEAM-Math.

- Analyses of teacher survey data show that TEAM-Math participation is positively correlated with teacher beliefs about mathematics instruction and with their use of instructional practices aligned with the partnership. School-level support is also an important factor in the successful implementation of TEAM-Math.

- The total number of participating teachers has risen from 898 in the first year of the project to 1,691 after 4 years. The number completing at least 60 hours of professional development has risen from 271 to 1,174. A total of over 150,000 hours of professional development has been delivered over the past 5 years. In addition, a total of over 175 administrators and 100 guidance counselors have attended TEAM-Math events.

- The number of new secondary mathematics teachers has increased from 11 annually to over 15 annually.

Anticipated Long-Term Impact: The partnership is committed to closing gaps in mathematics achievement between subgroups of students distinguished by race/ethnicity, gender, economic conditions, and special needs and to ensuring that all students in the area receive an equitable mathematics education. The project also aims to continue to build the long-term capacity of the system to provide quality instruction of mathematics that endures, as typified in the relationships it has informally forged with other organizations.

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**Innovation or Reform Area:** Special Education

**Funding:** 1996-2003: The Coca Cola Foundation; The Kellogg Foundation; Gregg, M. & Casareno, $340,000; Charitable Donations Committee, Sisters, Faithful Companions of Jesus; The Fig Tree Foundation; Joseph P. Kennedy, Jr. Foundation Career Development Award

**Description:** The goal of the Multiple Abilities Program (MAP) is to enable graduates to accommodate the wide range of learning styles, backgrounds, and abilities of all learners in a given classroom, regardless of the labels with which students may be identified. MAP leads to dual certification in elementary and special education and focuses on three themes: understanding diversity, empowerment, and authentic instruction and assessment. Central to the MAP philosophy is the idea that teachers must be reflective decision makers capable of differentiating curriculum based on the needs of individual children, and that this stance is best developed through extensive structured field experiences that begin the first week of the program. The cohort meets in the partner school several times each week, immediately practicing what is covered in the coursework. Semester-long experiences of individual tutoring, small group teaching, whole group teaching, collaborative teaching, two summer camp internships, and two semester-long internships are the primary experiences through which students come to understand theory–practice connections. The practica and internships are carefully balanced so that MAP students have the opportunity to teach in a wide variety of settings: urban, rural, suburban; upper elementary and lower elementary; and inclusion and resource special education classrooms.

**Outcome Data:** MAP graduates are highly sought-after for positions in local school districts and neighboring districts and states. Superintendents and principals report that the newly graduated students are more like third-year teachers than first-year teachers and are very proficient in using technology. The university has never been required by a school district to remediate any MAP graduate; MAP receives straight A’s on the Alabama State Department of Education Report Card for teacher education programs. One hundred percent of MAP seniors pass the College of Education EXIT exam, and 64% graduate with a 3.5 or above grade point average. Of the 68 MAP teachers that the university has graduated since 2002, 61 are still teaching. One of the MAP graduates left teaching to run a city-wide after-school program for at-risk children. More than half of the graduates have taught in both special and general education settings since they began teaching. Several MAP graduates have been named Teacher of the Year in Alabama and Georgia. MAP typically graduates 20 students every other year, but in response to superintendents’ requests for MAP graduates, the university will begin an additional cohort so that MAP teachers enter the field every year. MAP recently was awarded the International Reading Association’s prestigious Certificate of Distinction, indicating that the program is an exemplary model for teacher education.

**Anticipated Long-Term Impact:** The Multiple Abilities Program is a model of an integrated field-based program that prepares preservice teachers to become competent beginning special education teachers or general education elementary teachers capable of and determined to meet the needs of every child in their classrooms. Because most students served by special education are placed in inclusion classrooms, the need for dually certified teachers is greater than ever. MAP graduates enjoy serving as mentors to student teachers and take pride in providing them with models of integrated curriculum and differentiated curriculum.

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Innovation or Reform Area: Special Education/Technology/Clinical Preparation

Funding: 2007-2010, $800,000 from the United States Department of Education Office of Special Education Programs

Description: The Transforming Elementary Educators Into Advocates, Change Agents, and Highly Qualified Special Educators (TEEACH) project is a partnership between the University of Alabama and school districts in 13 West Alabama counties. Since 2007, two cohorts of Project TEEACH scholars have continued to teach in public schools while earning Alabama Collaborative Teacher Program (K-6) special education certification and a master's degree. Professors in the Department of Special Education and Multiple Abilities at the university infuse exemplary training practices into four Project TEEACH design and delivery components: (a) content-rich special education courses, (b) extensive closely supervised field experiences, (c) frequent immediate instructive feedback, and (d) authentic continuous mentoring. Immediate feedback is given to teacher candidates during their field experiences using bug-in-ear (BIE) technology. The Bluetooth earpiece allows the teacher candidate to receive the feedback from TEEACH faculty while delivering classroom instruction and without interrupting the lesson. The advanced online BIE makes available virtual feedback that is immediate, unobtrusive, and affordable ($136). Combining two effective tools—supervision and BIE—has significantly enhanced the clinical component of the preparation program.

Outcome Data: Over the past 2 years, Project TEEACH personnel have carried out a series of high-quality research investigations to evaluate VBIE efficacy. Data have included over 500 video-recorded teacher/classroom VBIE sessions and written reflections. Quantitative results indicated that the advanced online BIE technology was a practical, efficient, and statistically significant way to provide immediate feedback to increase teachers' in-training use of research-based instructional and behavioral practices in the classroom, and that these improvements were accompanied by marked increases in students' on-task behavior (from 74% to 94%). Longitudinal data have confirmed that teachers in training maintained their increased use of these practices over time and under differing conditions (i.e., when no feedback was provided). Thus, they did not develop a dependence on the advanced online BIE feedback. Also, the increases in their students' on-task behavior continued over time. Qualitative analyses indicated that teachers in training viewed the advanced online BIE technology as a powerful tool for improving the teaching and learning process.

Anticipated Long-Term Impact: To date, the project has resulted in a variety of desirable outcomes in participating districts, including (a) improved supply and diversity of highly qualified special education teachers; (b) increased use of collaborative, research-based teaching practices to meet the academic and social needs of students with high-incidence disabilities, including those who are culturally/linguistically diverse; (c) reduced disproportionality and overrepresentation of culturally and linguistically diverse students in special education; (d) improved student outcomes in accordance with IDEA 2004 and NCLB mandates; and (e) successful transition in employment from general to special educator. Moreover, careful analysis of Project TEEACH advanced online BIE technology has produced research data and practice “know how” that should have a profound effect on improved general and special education personnel preparation programs.

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**Innovation or Reform Area:** Mentoring/Clinical Preparation

**Funding:** None

**Description:** The Mentor Teaching Program (MTP) was designed to address the increasing problem of teacher attrition in a local school district. The main goal of the program was to develop a cadre of teachers better prepared to overcome the educational challenges present in K-12 schools. The second goal was to increase teacher retention by providing better instructional training through significantly increasing field experience for MTP candidates. The College of Education and a school district partnered to develop teams to support teacher candidates. These teams consisted of a mentor teacher (MT), a university supervisor, and 2 MTP candidates. The program was implemented during the 2006-2007 and 2007-2008 school years in schools identified by the partnering district as “hard to staff” due to academically and behaviorally challenging students, but also having an exemplary principal, and having unfilled teacher positions. As a vacancy existed in a particular grade level, and an excellent mentor teacher also existed on the same grade level, the MT was removed from the classroom and replaced by two university student teachers, or MTP candidates. The job of the MT was to provide guided instruction to the two MTP candidates for a period of one academic year. Thus, the MTP candidates performed duties of the regular classroom teacher from day one, while the mentor provided the guidance and support, rotating between the two classrooms. When the MTP candidates graduated in December, they remained in these classrooms as employed first-year teachers. The MT remained as their full-time mentor and with the added support of the university supervisor for a full year as well.

**Outcome Data:** Based on the quantitative and qualitative data, the program was successful in graduating knowledgeable teachers who felt better prepared to meet the challenges of today’s students. At the program’s end, 37 of the 38 candidates successfully completed the program, each having varying degrees of strengths and areas of need. At the conclusion of Year 1, 95% sought a contract in the schools where they completed the program, the same schools that are typically characterized as being hard to staff, with high levels of at-risk students. At the end of Year 2, 89% of the candidates reported they would like to remain in the schools where they completed the program.

**Anticipated Long-Term Impact:** Overall results indicate that MTP candidates felt that they received substantial support during many of the challenges they encountered throughout the entirety of their first year as teachers. In particular, the role of each mentor was critical in assisting candidates in preparing themselves, their classrooms, and their curriculum for the first day of school. For the first time, MTP candidates experienced firsthand the initial challenges faced by novice teachers. Fortunately, as MTP candidates were experiencing these challenges for the first time, they were able to look to their mentors and supervisors for support and guidance and both worked together to overcome each challenge as it was presented. As the impact of this innovation is considered, it is apparent that the preparation of future teachers and a true partnership between the public schools and university is a necessity.

**Contact:** Andrea M. Kent, Director of Field Services and Assistant Professor (akent@usouthal.edu)
Innovation or Reform Area: Clinical Preparation/Online Learning

Funding: None

Description: Virtual Schools: A Vehicle for Realistic and Experiential Learning—The development of the “Virtual School” is a concept designed to immerse students into realistic and experiential problem-solving situations within the context of more traditional educational boundaries. The resulting experience increases the relevancy of instruction, necessitates higher-order cognitive processing, and facilitates authentic forms of assessment. In the “real world,” it is common for schools and organizations to share information through their Internet and intranet sites. Virtual schools have been built using the same technology, but with “transparent” components, allowing for all of the organization’s information to be made available for student analysis. Prompted by a series of carefully designed and sequential assignments, students explore a virtual school district in order to obtain the information necessary to learn concepts and solve problems.

In this model, students are allowed to examine highly confidential and sensitive information such as student files, test scores, accounting and budgeting specifics, and human-resource issues. By using virtual information, students engage in the same processes, using the same sources of information they would use in actual schools to make evaluations, do analyses, create solutions and reflect on their own results to promote improvement. The Virtual School was first introduced into the research courses in the MAED programs. Data in the school was used to help teach University of Phoenix students the concepts and process of action research using a variety of data, including student test scores, classroom grades, student and teacher profiles, human resource information and anecdotal information. Additionally, students in initial teacher preparation programs use information in the virtual schools to analyze lesson plans based on a particular make-up of classroom students, examine best practices for classroom layouts, review books in the virtual library and discuss real-life scenarios before stepping into their actual practicum courses.

Outcome Data: Outcome data, as indicated on surveys, indicates students feel the virtual schools greatly enhance their preparation in specific areas, prior to entering an actual school setting. In particular, they feel better prepared to analyze data and use it to improve and enhance instruction. Lesson planning skills are improved through the review and evaluation of lessons posted in the virtual K-12 classroom and the virtual supply cabinet. The ability to review “confidential” and cumulative records allows students to explore elements that may affect student achievement outside of the classroom.

Anticipated Long-Term Impact: This concept is now being adopted throughout the University of Phoenix. Based on an interdisciplinary approach, students across colleges can practice in virtual businesses with human resource, information systems and accounting departments; student in health care programs have hospitals and counseling centers to explore; a resort with restaurants has been developed for students in hotel and restaurant management.

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Innovation or Reform Area: Math/Online Learning/Clinical Preparation

Funding: None

Description: The University of Phoenix is undertaking a partnership with Insight Schools, an online public high school, to design virtual field experience opportunities for teacher education candidates to complete portions of their field experience (prior to student teaching) in an online high school setting. The initial group of students will begin their field experience in fall 2009. Candidates in secondary math methods courses will be paired with high school students from Insight Schools who have been identified as needing additional mentoring and coaching in mathematics. Teacher education candidates will design lessons and provide instruction in an asynchronous environment during their methods course work in an effort to improve student achievement in math. Candidates' lessons, delivery, and assessment will be evaluated by the classroom teacher and university faculty. Evaluations will be conducted with all stakeholders at the end of the semester to determine the effectiveness of the field experience, identify best practice and make modifications for subsequent cohorts.

Outcome Data: This project will begin in fall 2009 and evaluations will occur at the end of the semester. Evaluations will occur upon completion. Data from this project and its analysis will be available in spring 2010.

Anticipated Long-Term Impact: Field experience opportunities in online K-12 school settings establish an alternative clinical approach for working with students in multiple modalities; expanding candidates thinking beyond the traditional K-12 classroom and utilizing technology to provide instruction. Teacher preparation programs provide pedagogical preparation and expose candidates to relevant theory and practice but providing candidates with field experience in an online setting allows them to think beyond the traditional classroom, apply their knowledge of learning styles, adjust their instruction to meet the needs of diverse learners, and teach without boundaries. The increasing presence of online K-12 schools will require teacher candidates to have the skills needed to successfully teach in an online setting. This ability is not inherent and teachers must be provided opportunities to learn and practice strategies for working with K-12 students in a non-conventional model. Studying the impact, for all stakeholders, of allowing candidates to conduct field experience in online K-12 school settings will challenge perceptions of online learning, teacher training, and teacher professional development.

Contact: Meredith Curley, Associate Dean (meredith.curley@phoenix.edu)
Innovation or Reform Area: Science

Funding: 2008, the Stephen Bechtel Fund, $265,000; 2008, the Flour Foundation, $75,000; 2008, Raytheon, $10,000

Description: On behalf of the California State University and in collaboration with federal and state partners, Cal Poly has created the Science Teacher and Researcher (STAR) program intended for preservice and early-career science teachers. The program is based in Cal Poly’s Center for Excellence in Science and Mathematics Education (CESaME). STAR involves an 8-week paid summer research and education experience conducted in federal laboratories and research institutes. The major goal of the program is to attract high-quality science majors into teaching careers and to retain them in the profession by cultivating their professional identities as both scientists and educators. Grounded in the approach of better connecting the doing of science to the teaching of science, participants work with scientists on cutting-edge research; learn about inquiry-based teaching and learning with experienced educators; get career and professional development mentoring; interact with their peers, master teacher-scientists, and university faculty to share experiences; and participate in the larger scientific community. The program began with 16 fellows at one national laboratory in summer 2007, expanded to 30 fellows at four laboratory sites in 2008 and to 45 fellows at seven laboratory sites in 2009. Current laboratory partners are Lawrence Livermore National Laboratory, Lawrence Berkeley National Laboratory, NASA Ames Research Center, SLAC National Accelerator Laboratories, NASA-Jet Propulsion Laboratory, Sandia National Laboratories/California, and SETI Institute. The ultimate goal is to have more engaged science teachers to inspire the next generation of children who will be better prepared to enter STEM majors and careers as well as to live in this 21st-century, technology-driven society.

Outcome Data: An independent evaluation using student data collected on pre/post instruments, surveys, and interviews of the STAR program was conducted in summer 2008 by an external team of researchers. The primary purpose was to examine the impact of the program on the participants’ view on the nature of science and their perceived effects of the experience on the attractiveness of teaching, future instructional practice, and participation in the scientific community. The findings indicated that the goals of the STAR program are being accomplished. For example, participant scores on the Nature of Scientific Knowledge Survey were higher on the posttest than on the pretest, and summer 2008 participants outscored their 2007 peers. In addition, on post surveys, nearly 90% reported overall satisfaction with the program, with high marks for their research and education mentors; 96% were satisfied with their peer learning community; and nearly 80% expressed an increase in their desire to become science teachers. Qualitative data supported these results; participants reported the experience as having a significant impact on their feeling part of a scientific community and on their credibility and abilities as science teachers. One of the most important goals of the STAR program is to improve the ability of science teachers to develop inquiry-based, real-world teaching practices. Interviews indicate that program alumni plan to incorporate a number of problem-based or inquiry-focused methods into their instructional approaches. Evaluation efforts will continue both for program improvement and to monitor STAR graduates in their career paths.

Anticipated Long-Term Impact: Cal Poly anticipates that the STAR program will have a long-term systemic impact on the recruitment and retention of science teachers in California, as well as providing a model for other university-external partnerships. In particular, in collaboration with the federal Department of Energy, Cal Poly is developing a template for a national STAR program and sustaining it long-term.

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Innovation or Reform Area: Closing the Achievement Gap

Funding: State Farm Insurance, Macy's West, United Way of the Bay Area, Auto Club of Southern California, and others

Description: The California State University Center to Close the Achievement Gap, a partnership between the business community through California Business for Education Excellence (CBEE) and the California State University (CSU), will transform preparation and performance of new teachers and administrators in participating CSU colleges of education across the state. The goal is to transfer best practice from high performing, high poverty K-12 public schools into CSU Colleges of Education to enhance the skills of new teachers and administrators to be able to close the achievement gap for their students.

CSU colleges of education will partner with local high-performing, high-poverty schools to study and replicate best practices that have contributed to their success. These schools are part of the annual Honor Roll campaign, an effort by the California business community to recognize the highest performing schools in the state. Partner schools have not only shown consistent increases in student proficiency on the California Standards Test over time, but they outperform look-alike schools in every subgroup of students (ethnicity, low-income, English learners, etc.). In other words, they are raising student academic achievement and closing achievement gaps in very challenging schools. The best practices of these schools are organized into a Best Practice Framework, developed through action research over the past 9 years, that organizes the practices of districts, schools, and teachers that have a direct impact on raising student achievement and that are consistent across high-performing schools. CSU has documented that schools on the Honor Roll implement these best practices with high fidelity, leading directly to increases in student achievement and closing achievement gaps. New teachers and administrators from participating CSU colleges of education will be tracked longitudinally to assess their value-added effect on student academic achievement and closing achievement gaps.

Outcome Data: This is a new endeavor; thus, data are not yet available on its impact.

Anticipated Long-Term Impact: Teachers and administrators graduating from participating campuses will have new skills to accomplish the following: significantly reduce the achievement gap in reading, writing, and math; improve college preparation for high school graduates; and decrease college remediation rates while increasing degree completion rates. The Center to Close the Achievement Gap will contribute to a system of reform through the following: provide a direct role for the business community to help improve teacher preparation and close achievement gaps; adjust the preparation of thousands of new teachers by integrating the best practices of high-performing, high-poverty schools across the state; place student teachers and principals in high-performing, high-poverty schools to learn firsthand what works to close the achievement gap; develop new data and best practice tools, including a longitudinal data system to track teacher graduates and their students' academic achievement; inform public policy on education; rapidly scale up effective practices that prepare more students for college and the workplace; and establish performance measures for new teachers based on student academic achievement outcomes, grade-level proficiency and college preparedness based on the CSU Early Assessment Program.

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Innovation or Reform Area: Math/Science


Description: Secondary schools in communities within south and south central Los Angeles that are served by CSUDH have experienced an acute shortage of highly qualified mathematics and science teachers for over 15 years. In response to the community’s needs, the Transition to Teaching (TTT), Math & Science Teacher Initiative (MSTI), and Noyce Scholars Program (NSP) are developing, supporting, and placing highly qualified mathematics and science teachers in schools where they are most needed. An important component of these programs is the immersion of the participants in the communities. This engagement has become the central focus for all of the programs. Currently, students recruited into MSTI and NSP serve as instructional aides with expert teachers in mathematics and science classrooms. As instructional aides, participants acquire the knowledge and skills to be successful teachers at the schools that they currently serve. In addition to serving as instructional aides during the week, participants in all three programs participate as teachers and instructional aides in Math Academies established by TTT, MSTI, and NSP in local high-need schools. The main goal of the Math Academies is to offer K-12 students remediation and enrichment experiences to acquire content knowledge and to prepare them for the state assessment. As they participate in these activities, program participants are exposed to classroom management techniques, instructional strategies, and learn about the culture and background of the students and schools. Once MSTI, NSP, and TTT participants become teachers of record, they have developed a solid foundation in content and pedagogical knowledge and are more likely to influence student achievement.

Outcome Data: The Transition to Teaching Program at CSUDH has been operating since 2001. CSUDH has been awarded three Transition to Teaching grants (in 2001, 2004, and 2006) by the Office of Improvement and Innovation, U.S. Department of Education. Since the program’s inception, over 250 secondary single-subject and special education teachers have been placed in and around the Los Angeles area. Following are the retention rates:

<table>
<thead>
<tr>
<th>Program</th>
<th>Years</th>
<th>Number of teachers</th>
<th>Retention rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTT</td>
<td>2001-2004</td>
<td>105</td>
<td>87.5%</td>
</tr>
<tr>
<td>TTT</td>
<td>2004 to present</td>
<td>120</td>
<td>96%</td>
</tr>
<tr>
<td>TTT</td>
<td>2006 to present</td>
<td>52</td>
<td>98%</td>
</tr>
</tbody>
</table>

Anticipated Long-Term Impact: The high retention rate can be attributed to the teacher preparation activities—in particular to the field experiences and mentorship that students obtain before becoming teachers of record. The high retention of these highly qualified teachers will not only stabilize the teaching force at hard-to-staff schools, but it will ultimately have a positive impact on student achievement, which is the long-term goal for all of the projects.

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California State University–Dominguez Hills

Innovation and Reform in Teacher Preparation

JUNE 2009
Innovation or Reform Area: Technology

Funding: None

Description: Two years ago, CSU-Fullerton began a program to prepare more teachers who can use technology effectively in the K-12 classroom. The 1:1 laptop cohort (30 students) is a 2-semester Multiple Subject Teacher Credential Program. Teacher candidates self-select to be considered, and acceptance is given to applicants with a positive attitude about the role of technology in teaching and learning and a willingness to learn about technology (see http://coeonline.fullerton.edu/tgreen/techrich/index.html). Through university support, 30 Macbook laptops were purchased for teacher candidate use during their involvement in the technology-rich cohort. Courses cover the same content as other cohorts; however, there is added emphasis on teaching and learning with technology. The cohort faculty leaders are educational technology faculty and conduct research on technology rich K-12 and higher education environments. Instructional faculty collaborate to integrate technology into the methods courses for the teacher candidates. In addition to the laptops, digital cameras, digital streaming media, interactive whiteboards, and Web 2.0 teaching and learning tools are integrated in authentic and meaningful ways into learning experiences for the teacher candidates. The technology-rich cohort has partnered with a local school district that has an established 1:1 laptop program at six of the district schools. In particular, all students in the technology-rich cohort are given the opportunity to spend time in a K-8 school in the district that has a 1:1 program in grades 2-8. The teacher candidates also receive professional development from teachers at the school. Further, each semester four candidates are placed at this school and one or two are placed at other 1:1 schools in the district for their student teaching experiences.

Outcome Data: Pre- and postparticipation surveys, interviews, and follow-up surveys were conducted with the teacher candidates. Data indicate that the teacher candidates’ perceptions of their abilities and their comfort level using technology to support their teaching to impact student learning increased from moderately to significantly. For example, one of the student teachers borrowed an LCD projector to connect to her laptop to teach a lesson that integrated streaming video. She invited the principal to observe. As a result, the school now subscribes to digital streaming video and is integrating it into learning experiences of the K-8 students. Preliminary data analysis indicates that the cohort (on average) has continued to integrate technology into teaching and learning in their first year of teaching. The cohort leaders conducted research and examined the impact of involvement in the 1:1 laptop cohort on faculty. Results indicated that as a group the faculty involved in the pilot began the program with hesitation, yet at the end of the first year, concerns had shifted to consideration of the innovation’s impact and expansion. Data indicated that faculty members who considered themselves technological neophytes gained firsthand experience and understanding of the power of technology for teaching and learning.

Anticipated Long-Term Impact: It is CSU-Fullerton’s goal to establish a culture of teaching and learning with technology. One way to do this is by creating technology-rich learning environments during a teacher’s preparation. As is evidenced in the data, this innovation has increased teacher effectiveness by graduating teachers who naturally think to use technology and are becoming technology leaders in the schools. Providing opportunities for K-12 students to be active learners and practice 21st-century skills will promote a future population of citizens who are prepared for the digital world in which they will work and live.

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Innovation or Reform Area: Math/Middle School Teacher Preparation

Funding: None

Description: California introduced the Foundational-Level Mathematics (FLM) credential in 2003 to increase the supply of highly qualified mathematics teachers. This new credential is intended primarily as a means to provide highly qualified teachers for middle school mathematics classrooms, in particular teachers of algebra. This is significant because several research studies have demonstrated the importance of middle school mathematics coursework and achievement to students’ future educational trajectory. Given that in California, in 2005, 35% of teachers of mathematics in the middle school did not hold a mathematics teaching credential, this is a particularly critical matter in need of a concerted effort of reform. At CSU-Fullerton, the FLM credential program exists apart from the mathematics credential program, which is more focused on high school teaching. This has allowed faculty to focus the FLM program intensely on middle school mathematics and the needs of learners in this age group. The College of Education has “marketed” the program as a pathway to consider for those with a strong mathematics background and an interest in working with early adolescent learners of mathematics who need teachers who not only understand the curriculum but have an ability to make learning accessible to a wide range of students. There is a strong focus on equity and access as issues in mathematics education that can and must be addressed by the new generation of teachers entering schools.

Outcome Data: To date, the FLM credential program has produced almost 100 graduates, the majority of whom are teaching in area middle schools. This has led to a doubling from 2003 to 2008 in the total number of mathematics credentials issued to students through the CSU-Fullerton credential program. In addition, 40% of FLM graduates are people of color and over 50% speak two or more languages. These teachers reflect the next generation of teachers in U.S. schools who bring not only content and pedagogical knowledge but also an awareness of the diversity of the communities served by the nation’s public schools. The FLM program has been highlighted as a model by NASALGC and promoted to other CSU campuses through the Mathematics and Science Teacher Initiative program.

Anticipated Long-Term Impact: By providing more (and more diverse) highly qualified teachers of mathematics in California middle schools, the state will be better equipped to meet the high standards in mathematics that have been established, including having students learn algebra by the eighth grade.

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CALIFORNIA

California State University–Long Beach

Innovation or Reform Area: English Language Learners

Funding: 2007-2012, U.S. Department of Education (Office of English Language Acquisition), $1,466,600

Description: Secondary Teacher Education for English Learner Integration (STEELI) is a professional development grant that focuses on curricular and instructional improvement for two subgroups: higher education faculty teaching core courses and teacher candidates within the Single Subject (Secondary) Credential Program (SSCP). This endeavor is unique in that it is a large-scale, long-term, collaborative effort across the university, including four colleges and a grant-based center in partnership with a local, large, urban district (Long Beach Unified). The overarching and immediate goal of the project is to improve faculty and candidate understanding of the academic needs of English learners and their ability to model and implement instruction that supports limited English learners’ acquisition of language, literacy, and content. Specifically, both the professional development for faculty and newly designed elective course for teacher candidates seek to expand their knowledge, skill, beliefs, attitudes, and confidence level in preparing to teach secondary content to English learners.

Outcome Data: CSU-LB analyzed the impact of this program through pre- and postparticipation surveys (of both faculty and candidates) looking at knowledge, beliefs/attitudes, and confidence levels; classroom observation protocols; evaluations (elective course, professional development sessions, overall program); revisions of syllabi/assignments (faculty); and course assignments (candidates). In the first year, 15 faculty completed the professional development (PD). Data suggest that PD activities improved faculty knowledge, skills, beliefs/attitudes, and confidence levels in preparing their candidates for instructing English learners. The strongest area of growth related to participants’ perceptions that their revised syllabi were more aligned to standards and more explicit about effective strategies for instructing English learners. Another area of growth was seen in an increase in participants’ perceptions of their ability to develop models of appropriate standards-based and content-specific assessments for English learners by language proficiency level. In the first year of the project, 100% of PD participants also completed a minimum of 15-hour observations in identified secondary classrooms of content-specific exemplary teachers. These observations helped to place in context the theory-to-practice link of first and second language acquisition and related issues. CSU-LB also developed a new course that focuses on the relationship between academic content (e.g., mathematics) and strategies for effective instruction for English learners. Of the 15 students who took the course, 14 passed and found that the course contributed significantly to their ability to be effective in the classroom.

Anticipated Long-Term Impact: STEELI is a testimony to how cross-university/school partnerships can improve the preparation of teachers through education at two levels: indirectly through enhanced knowledge of faculty and directly through improvements in programs (e.g., a new course). The strongest evidence of the sustainability of this project is that participants will have the opportunity to simultaneously grow comprehensive skill sets and attend to building habits of practice that will be generative and last years into their teaching careers. The ongoing professional development will allow faculty to acquire lasting knowledge and provide the time and collaborative community they need to redesign syllabi and be successful teacher educators of candidates who will one day instruct English learners.

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Innovation or Reform Area: Math/English Language Learners/Middle School Teacher Preparation

Funding: 2007-2010, Math/Science Partnership Grant (U.S. Department of Education), $2.6 million

Description: Faculty in the departments of teacher education and mathematics recognize that a key barrier to understanding mathematics for K-12 English language learners (ELLs) is the academic language inherent in the process of teaching and learning mathematics. Hence, faculty in the College of Education and the College of Science worked with teachers in grades 5-9 in an innovative professional development grant to raise student achievement scores in mathematics. This project resulted in not only raising test scores for ELLs in mathematics but also in significant reforms in mathematics education for preservice teachers. This project, the English Language Development Institute for Algebra Readiness Through the Support and Instruction of Educators, prepared teachers to use innovative language-based mathematics teaching methods to increase ELLs’ achievement in mathematics. Teacher education and mathematics professors from the university developed and provided integrated sequences of intensive professional development through summer institutes and evening sessions and carefully structured coaching designed to link new pedagogical content knowledge in mathematics to classroom implementation. A cohort of 76 practicing middle school teachers (grades 5-9) completed 80 hours of intensive professional development and more than 24 hours of classroom follow-up work including coaching implementation of select lessons, analysis of student work, and planning.

Outcome Data: The Math Resource Assessment Service (MARS) provides schools and districts with high-quality, open-ended problem-solving tasks in mathematics at a variety of grade levels. Findings from previous administrations of this assessment revealed that students (especially English learners) in the two participating districts struggle with these tasks. After completing one year of the professional development sequence, the assessment was administered to students of the teachers who participated in the professional development program and to a control group of teachers from the same school districts. For each grade level, a cut point was set for Meets or Exceeds Standards. The graph presented below summarizes control and treatment data on the MARS performance assessment of mathematical problem solving administered in March 2009. (See Figure 1.)

Figure 1. March 2009 Math Resource Assessment Service (MARS) Performance
(English Language Learners = EL)

Further evidence of the positive effects of the project was revealed through district benchmark assessments. The bar graph below indicates that students who learned mathematics from teachers who participated in the professional development program outperformed those students whose teachers did not participate in the program across all grade levels 5–9. (See Figure 2.)
Anticipated Long-Term Impact: Already, this innovative program has resulted in several significant reforms of the teacher preparation program at San Jose State University:

1. The project revealed the need for advanced work in mathematics education, especially for teachers in grades 5-9. Consequently a new emphasis in mathematics education has been developed for K-9 teachers that fosters content knowledge in mathematics together with knowledge of academic language and pedagogy appropriate for middle school age group.

2. Mathematics methods classes for all future teachers now include significant emphasis on academic language related to the teaching of mathematics.

3. Courses on teaching ELLs now include a strong emphasis on the development of academic language in all disciplines, not solely mathematics.

4. A new professional development program has been developed and implemented with student teachers’ field supervisors to prepare the supervisors to assess student teachers’ ability to incorporate instruction in academic language throughout the curriculum.

5. The program has fostered a respectful collaborative relationship among professors in the College of Science (where the math department resides) and the College of Education. Future projects are currently under way that involve faculty from both colleges.

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Innovation or Reform Area: English Language Learners/Urban Education

Funding: 2007-2012, $2.49 million, Office of English Language Acquisition, U.S. Department of Education

Description: The School of Education and Human Development (SEHD) at the University of Colorado–Denver is committed to its mission of “preparing and inspiring education and mental health leaders to have a profound impact in fostering student opportunity, achievement and success in urban and diverse communities.” Consistent with the mission, the SEHD currently partners with 6 metropolitan Denver school districts and 28 individual professional development schools to (a) improve student learning and achievement with a specific focus on serving traditionally underserved students, (b) prepare candidates in “real life” diverse urban schools utilizing “best practices” in urban teacher preparation, and (c) engage in simultaneous renewal of both K-12 schools and the SEHD.

In spring 2007, the SEHD at the University of Colorado–Denver entered an agreement with Denver Public Schools (DPS) and New America Schools to provide professional development for teachers working with English language learners. The ELA Professional Development Program has three components: (a) graduate course work in second-language learning and teaching, (b) instructional coaching to help teachers connect the content of the courses with their daily teaching realities, and (c) leadership training to help teachers influence school policies and procedures to improve English language learners’ school achievement and engagement. Five university professors, a team of instructional coaches, and over 40 school district personnel provided leadership for the endeavor. Forty-seven sections of eight different courses were offered during the first year. Intensive work in five secondary schools extended the effort through coordinated instructional coaching and school leadership efforts in data-based decision making.

Outcome Data: During the first year of the partnership (2007-2008), 736 teachers successfully completed 3,833 credit hours of course work dealing with language and literacy, effective instruction for second language learners, foundations of bilingual education, techniques in teaching English as a second language, and assessment. Teacher satisfaction was evaluated through end-of-course questionnaires. Aggregating across courses, 80% of teachers said they had a better understanding of English language learning and teaching as a result of the course work, 79% reported changing their instruction as a result of the courses, and 70% said they saw corresponding changes in student learning. A total of 22 DPS teachers and administrators participated in coaching activities at three secondary schools during the first year of the project. Research is under way to document the impact of coaching on the instructional practice of participating teachers and to use value-added methodology to investigate impact on student outcomes, including language acquisition, grades, and scores on district and state tests.

Anticipated Long-Term Impact: Evaluation measures seek to establish correlations between teachers’ involvement in professional development courses and coaching activities and the learning and engagement of English language learners. Empirical evidence of improved student learning in the classes of teachers participating in grant courses and activities provides a powerful argument for the continuation of the university-school district partnership and the investment in coaching in classrooms.

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Innovation or Reform Area: Urban Education/Clinical Preparation

Funding: Daniels Fund (Denver), $100,000; Johnson Family Foundation (Denver), $50,000

Description: The University of Northern Colorado Center for Urban Education focuses its teacher preparation program on a 4-year, 4-hour-a-day, on-the-job classroom teacher apprenticeship. The Center has three teacher licensure preparation paths: elementary education, early childhood education, and special education. Students work in classrooms (where they receive college credit) under the supervision and guidance of practicing classroom and retired master teacher mentors. School districts, charter schools, and private institutions hire the students as paraprofessionals (with pay) for classroom responsibilities where they work under the direction of teachers and also follow a university 4-year course of study. Much of the work is done in urban classrooms with children needing the know-how of teachers possessing outstanding skills and proven instructional practices. The Center’s student apprentices are part of these rich and challenging environments and at the conclusion of their approximately 3,000 hours of practical on-site teaching experiences are indeed ready for their own classrooms.

As part of their formal teacher training preparation, the Center students are engaged in teaching methods classes in their very first semester and have the opportunity to put what they learned into practice in their apprenticeship positions. This means that they immediately employ techniques and methodologies with children under the supervision and guidance of their teachers and mentors. The Center for Urban Education supplements the teacher preparation course of study with ongoing workshops with such topics as classroom management skills and understanding, school law, alternative methods for literacy development, conflict resolution, and stress management. During the summer, student apprentices in their third year lead reading classes in the Center’s Summer Reading Camp for children who come mostly from subsidized housing and have serious academic deficiencies. The Center students, under the tutelage of master reading teachers, achieve remarkable success with these children.

Outcome Data: Outcome data on the UNC Center for Urban Education are available primarily within the program.

- The retention rate for Center students is over 75%.
- The academic grade point average is approximately 3.5.
- Over 95% pass the state teacher licensure examination.
- Approximately 97% are hired in schools.
- Follow-up studies indicate that over 98% of Center graduates retain their teaching jobs.

Anticipated Long-Term Impact: With first-year teachers bringing 3,000 hours of classroom experience into their classrooms there is a significant reduction of early mishaps and an increased level of instructional efficiency. The crucial element of skill with classroom management will have already been learned and practiced in the preceding 4 years. Further, early leaving of the profession should be greatly reduced because of the familiarity gained in the extended classroom apprenticeship.

Contact: Irv Moskowitz, Director, Center for Urban Education (irv.moskowitz@unco.edu)
Innovation or Reform Area: Community College or Technical College Partnerships


Description: CORE (Creating Opportunities and Resources in Education) is a collaborative partnership consisting of partners from the University of Central Florida, Valencia Community College (a Hispanic serving institution in Osceola County), the School District of Osceola County (with a Hispanic population of 35%), and the Osceola School Foundation. Established in 2000, the purpose of the CORE Program is to prepare a diverse pool of teachers by enabling paraprofessionals, employed in the Osceola School District, to complete a degree in teaching through a fully articulated 2+2 program while maintaining their paraprofessional positions. Paraprofessionals bring a record of proven performance prior to entry into teacher education, representation from the local community, a diverse recruitment pool, and higher retention promise (White, 2004; Haselkorn, 2001). Upon graduation from CORE, these new teachers teach in Osceola County. CORE has assisted college students by providing: curriculum articulation and seamless transfer between 2-year and 4-year institutions; joint advisement, registration, and student financial assistance; joint faculty advisors from each institution of higher education; multiple mentors from school district and partner colleges; courses taught on line or face to face in Osceola County; use of a cohort model; early and continuous field and clinical experiences including student teaching in Osceola County; minimal disruption of CORE participants' work schedules; and, a 2+2 program that meets state certification requirements. In 2004, the University of Central Florida's College of Education received the AACTE Best Practice Award for Collaboration with Community Colleges and the Southeastern Regional Association of Teacher Educators Innovation in Teacher Education award for the CORE Program.

Outcome Data: To date, CORE has graduated 55 students with an additional 45 students in the pipeline. CORE graduates are now teaching in the School District of Osceola County. Teacher retention of CORE graduates in Osceola School classrooms is 94% as these new teachers receive support from the district's Co-Mentor teacher retention program. An added benefit of the CORE Program is that the teaching pool has become more diverse, better matching the population of students in the school district. In the first cohort of CORE graduates, one of the graduates achieved the highest grade point average in the University of Central Florida's College of Education graduating class: 4.0. Over the last few years, six CORE graduates have been selected as the Rookie Teacher of the Year for their respective schools after just 1 year of teaching.

Anticipated Long-Term Impact: The University of Central Florida has expanded its “paraprofessional to teacher” programs to three more large school districts in central Florida and has prepared 32 new teachers in the critical shortage area of special education who are now teaching and being supported through a university/school induction program. In another year, an additional 15 paraprofessionals will complete their baccalaureate degrees and begin teaching in special education classrooms. Commitment from school district, community college and university administrators remains strong and partnership efforts continue to provide seamless articulation and provision of degree programs to the paraprofessional population throughout central Florida.

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Innovation or Reform Area: Math/Science/Middle School Teacher Preparation

Funding: 2008-09, Lockheed Martin Corporation, endowed funds of $750,000 providing ongoing support annually from interest; 2008-09, Toyota Foundation, $270,000; 2008-09, Boeing Corporation, $4,500

Description: The Transition to Mathematics and Science Teaching (TMAST) Program is an innovative fast-track M.A. program targeted for professionals who have a background in STEM-related fields and wish to transition into a new career teaching middle school mathematics or science. The mission of TMAST is to increase the number of qualified middle school mathematics and science teachers by preparing professionals with a strong mathematics or science background to enter the teaching profession through a mentoring relationship and completion of a master’s degree; learn the art and science of teaching from academic and on-the-job perspectives; and share professional and life experiences so that young adolescents will be more motivated to take advanced mathematics and science classes in high-school. The TMAST program consists of a 1-year paid internship, four semesters of graduate course work, fellowships that provide tuition support, a cohort structure, and assistance with job placement.

Outcome Data: Data analysis of the program’s impact has been carried out via a survey instrument. Of those who responded, for example, 68% of the program participants indicated that TMAST had positively impacted their content knowledge of mathematics and science, and 94% agreed they would recommend the TMAST program to someone else. Participants were also surveyed about the usefulness about what they learned. Results were favorable. Sixty-five percent responded that they were always applying what they learned. Twenty-two percent sometimes applied what they learned. Only 13% (all of whom were no longer teachers) felt the knowledge acquired was not or was no longer applicable. Since the program’s inception in 2004, 70 teachers have completed the TMAST program. Forty-three percent of TMAST respondents had received some type of award or special recognition related to their career in the last 2 years.

Anticipated Long-Term Impact: The University of Central Florida anticipates that TMAST will create a network of school-based leaders in mathematics and science education; increase the pool of new and existing highly-qualified teachers of mathematics and science; improve teaching and learning in central Florida schools; develop a strong infrastructure of cohorts; and increase the number of students who enter high school and choose to enroll in mathematics and science courses that will prepare them for STEM careers.

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Innovation or Reform Area: Literacy

Funding: 2007-2008, Florida Department of Education, $250,000

Description: In order to ensure that its teacher candidates are prepared to teach reading skills effectively, the College of Education is preparing candidates to use the FUSION reading model. This program is designed to focus on integrating and applying multiple strategies necessary to improve reading comprehension of struggling adolescent readers. The FUSION Reading Program consists of newly developed reading interventions. These interventions have been organized into three components: (1) The Motivation Program, (2) The Bridging Intervention Program, and (3) The Comprehension Intervention Program.

The Motivation Program, “Possible Selves,” a validated motivation intervention, is used in this program to focus students’ attention on the importance of becoming an expert reader and how the benefits of being an expert reader help students reach their hopes and dreams. The program plays the role of the “pillar” supporting all other instruction.

The Bridging Intervention Program has three core components: decoding/phonics skills, reading fluency, and vocabulary. Bridging is designed to address the needs of students who struggle with word-level reading skills.

The Comprehension Reading Program consists of two key strategies. The prediction strategy, designed for making and confirming predictions, is taught during the ninth-grade year. In the second year of the program, summarization strategy is taught to increase recognition of text structures, application of paraphrasing, and summarizing. Two additional components were developed to increase the amount of time students spend with their “eyes on the page.” Guided reading is an instructional process teachers use to demonstrate expert reading behaviors and to forecast strategy application. The book study component is designed for extension and application of learned strategies and is completed outside the classroom. Students select books of their choice to complete the book-study assignments.

Outcome Data: UCF conducted a preliminary study (that included students at 3 middle schools and 2 high schools) on the impact of FUSION on elementary school students as compared to Read180 (a computer-based reading program that the school district had been using for a number of years). A greater percentage of FUSION students than Read180 students moved to proficient reading levels at the conclusion of the academic year. Of FUSION students, 11% (n = 32) moved to Level 3 (reading at grade level) or 4 (reading above grade level) as compared to 7.5% (n = 11) of the Read180 students. Descriptively, examining non-ESE (exceptional student education) students, there appears to be greater growth from 2007 to 2008 for FUSION non-ESE students as compared to Read180 non-ESE students. Although there were not statistically significant differences between FUSION and Read180 students, in light of the limitations of the study presented previously, the fact that most findings showed comparability between the groups suggests that the FUSION reading intervention shows promise in increasing reading performance of struggling readers. A clearly articulated, major theme emerged from focus groups with the teachers and students: Teachers could see the connection between teaching and student learning. The teachers also reported an increased use of the reading strategies by the students in multiple settings. When considering the impact on their students, another major theme that emerged was the fact that their students wanted to be involved in the learning process and to participate at increased levels during reading class.

Anticipated Long-Term Impact: The FUSION intensive reading program has the potential to greatly and positively impact both students and teachers through its focus on reading instruction, motivation, and classroom management with the end result being increased reading comprehension.

Contact: Mary Little, Associate Professor (mlittle@mail.ucf.edu); Debbie L. Hahs-Vaughn, Assistant Professor (dhahs@mail.ucf.edu)
Innovation or Reform Area: Special Education/English Language Learners


Description: The University of Florida's long history of innovation in teacher education has led to a cycle of redesign based on current research in teacher education and on feedback from program graduates. The current 5-year program, Unified Elementary Proteach (UEP), is the result of pilot work that began in the early 1990s. The UEP prepares teachers with dual emphasis in elementary and special education. All graduates also are prepared to work with students who are English language learners (ELLs). The program prepares graduates to create and maintain supportive and productive classrooms for diverse populations and to work collaboratively with school personnel, families, and members of the community to develop alternative ways of educating all children, including those who have traditionally been labeled hard-to-teach and hard-to-manage, and students who are linguistically diverse. The program also develops a cadre of special educators who are prepared with knowledge and collaboration skills necessary to serve as effective coteachers with elementary teachers. Important program features include the following:

- Unified course work provides pedagogical knowledge necessary to teach a diverse student population in inclusive environments. Methods and content appropriate for elementary educators are blended with pedagogy for meeting the needs of students with disabilities and ELL.
- Instruction within cohort groups facilitates coherent program sequence and the scheduling and monitoring of field experience.
- Early and continuous field experience includes a 20-hour-per-week preinternship in professional development community schools creates cohesive, inquiry-based field experience.
- The program culminates in a master’s degree and certification, enabling students to complete internships at the graduate level and develop enhanced expertise.
- Master's year enables students to select one of two tracks: Dual Certification (Elementary and Special Education certification) or Single Certification (Elementary certification with advanced course work in an area of specialization such as math/science or reading).

Outcome Data: Graduates are in schools throughout the state of Florida and beyond. Indicators of program quality include the following:

- Graduates have had a 100% pass rate on the Florida Teacher Certification Exam every year since 2003.
- Employers rate the performance of graduates each year on the Florida Accomplished Practices and on Professional Competencies.
  - On the scale of 1 (low) to 5 (high), the average rating on Accomplished Practices between 2004 and 2007 ranged from 4.41 to 4.62.
  - On Professional Competencies, the range was between 4.3 and 4.5.
- Faculty also conduct research on the impact of individual courses or semester experiences. Representative findings include these:
  - UEP students worked with elementary students in one high-poverty school in the area of science. In the year before this experience, only 8% of the elementary students passed the state science assessment. In the year when UEP students worked with the elementary students, 55% of the students passed the assessment.
The development of a one-semester emphasis on teaching in poverty schools increased the percentage of graduates accepting initial teaching positions in poverty schools. In the comparison group, 51% of the graduates accepted jobs in schools with high- or moderate-poverty schools; from those in the one-semester experience, 71% accepted positions in high- or moderate-poverty schools.

**Anticipated Long-Term Impact:** Faculty will work to strengthen the collaboration to move from a program that blends elementary and special education to one where the two areas are truly integrated. After the next round of innovation, all graduates will be dually certified, a modification faculty believe is essential to prepare graduates for inclusive schools and the requirements of the Response to Intervention program. The current program has solidified partnerships with schools that seamlessly create intersections of teacher education, professional development, and school reform. This recursive, generative process is the true systemic impact of UEP.

**Contact:** Dorene Ross, Irving and Rose Fien Professor of Education (dross@coe.ufl.edu)
Innovation or Reform Area:  English Language Learners

Description:  In Florida, all initial preparation programs for teachers must provide English for Speakers of Other Languages (ESOL) credentials for all graduating teacher candidates. To this end, most programs implement an “ESOL–infused” model or design, which combines specialist ESOL courses with general education course work in which ESOL teacher competencies are introduced and/or reinforced. After nearly a decade of design and implementation, little is known about the impact of the infusion model of teacher preparation on ELL achievement. Project DELTA addresses this gap through quantitative analyses of student achievement and teacher preparation data accessed from a large statewide database. Project DELTA also incorporates qualitative analyses of classroom observations conducted with case study teachers (n=12), as well as interview and survey data collected from these former Elementary ProTeach (see the previous entry) program graduates. The implementation of the ESOL-infused elementary teacher preparation program at the University of Florida (Elementary ProTeach) is treated as the innovation. Elementary ProTeach is a 5-year program leading to a Master of Education degree, with initial teacher certification in Elementary Education and an ESOL endorsement. The infused ESOL endorsement component of this program consists of several principal elements. First, teacher candidates take two ESOL-specific courses designed and taught by ESOL faculty. One course is offered at the undergraduate level and focuses on foundations of language and culture. The second course is taken in the 5th (graduate) year and addresses curriculum, instruction, and assessment issues. Florida standards for ESOL teacher preparation are infused into general education courses, particularly methods courses. Performance based assessments of these teacher standards are administered throughout the program.

Outcome Data:  Data from the teacher survey, which forms part of the larger Project DELTA study focused on five domains: sociocultural aspects of teaching English Language Learners (ELLs), content area teaching, language and literacy development, curriculum and classroom organization, and assessment. ProTeach program graduates were asked to respond to 49 statements using a Likert-scale response form to evaluate their levels of initial preparedness for teaching ELL students and their current level of efficacy in working with ELLs. They were also asked to indicate which of the preservice clinical or field experiences had been helpful in preparing them to work effectively with ELL students. The 85 ProTeach graduates who responded in full to the survey had an average of 5.8 years of teaching experience. Of the respondents, 24% indicated that they speak a language other than English at an intermediate level of proficiency or higher, and 27% indicated that they have lived outside the U.S. Overall, respondents felt they had been moderately prepared in all five domains. They felt best prepared in the curriculum and classroom organization domain. The lowest preparedness means overall were in the sociocultural domain, particularly on items relating to teachers’ knowledge of their ELL students’ home languages and their use of ELLs’ home languages in teaching. Teachers also rated their preparation to teach oral English language (pronunciation, grammar, and pragmatic communication) to their ELLs as particularly low. For most items, statistically significant differences (p < .05) were found between level of preparedness and level of effectiveness, with higher scores for effectiveness. This result reflects a common response pattern in the general education literature and will be explored through Project DELTA follow-up interviews and case study teacher observations.
Anticipated Long-Term Impact: Preliminary findings from the survey section of Project DELTA reveal that ProTeach graduates feel that they were relatively well prepared to teach ELLs, based on the infusion model. Their responses also indicate specific areas of program strength and weakness and highlight the important role of field experiences and internships in teacher preparation. These findings will have a significant and systemic impact on improving the infused ESOL teacher preparation program at the University of Florida. Ongoing findings can provide insights for other institutions and states working to develop programs to prepare general educators to work effectively with ELLs. Finally, findings can also inform future efforts to mentor beginning teachers through an induction process that attends specifically to ELL students and their needs in general education settings.

Contact: Ester de Jong, Associate Professor (edejong@coe.ufl.edu); Maria Coady, Assistant Professor (mcoady@coe.ufl.edu); Candace Harper, Associate Professor (charper@coe.ufl.edu)
Innovation or Reform Area:  Math/Science

Funding:  2007-2010, U.S. Department of Education, $22 million (to the Florida Department of Education)

Description:  Florida PROMiSE is a 3-year, $22-million U.S. Department of Education grant awarded by the Florida Department of Education to improve mathematics and science achievement of Florida students through professional development. Florida PROMiSE is a partnership among the three Florida public research/flagship universities (University of South Florida, Florida State University, and the University of Florida), four large school districts (Miami-Dade, Hillsborough, Duval, and Seminole), educational consortia (Heartland Educational Consortium, North East Florida Educational Consortium, and Panhandle Area Educational Consortium), Florida Virtual School, and Horizon Research, Inc. PROMiSE lays the foundation and leads development and implementation of large-scale, systemic professional development and teacher education programs to significantly improve learning in mathematics and science of all students by working collaboratively with a statewide network of stakeholders to implement the Next Generation Sunshine State Standards (NGSSS).

PROMiSE is broken into two tiers. Tier 1, the focus of Year 1, addressed the need to increase teachers’ understanding of the NGSSS for mathematics and science and their implications for instruction and raise teacher awareness and use of available curriculum resources for planning standards-based mathematics and science instruction. Tier 2, the focus of Years 2 and 3, will build capacity in the system to implement the NGSSS for mathematics and science. Teachers will engage in in-depth, content-based summer institute professional development (PD) programs to enhance their mathematics and/or science content knowledge so that they are well prepared to teach and support the teaching of the NGSSS for mathematics and science. Content specialists from Colleges of Arts and Sciences, Colleges of Education, and school districts will collaborate on the development and delivery of the Florida PROMiSE Professional Development program. Teachers of mathematics and science from partner school districts will participate in 2-week summer institutes and 4 days of follow-up training that will address key concepts in mathematics and science to support the implementation of the NGSSS. In addition, cohorts of elementary school teacher leaders and their principals will engage in professional development focusing on mathematics and science content, instruction, and assessment. The expectation is that the impact of Tier 2 activities will be the direct focus on improving classroom instruction by deepening teachers’ content knowledge, examining strategies to enhance students’ understanding of content, and examining evidence of student learning.

Outcome Data:  At this time, no data are available regarding the effectiveness of Florida PROMiSE professional development. Data have been collected that show the extent to which Tier 1 PD modules were used in partner districts. During Year 1, a total of 189 PD activities were conducted for 9,397 teachers and administrators.

Anticipated Long-Term Impact:  PROMiSE’s ongoing efforts will ensure that Florida teachers have continued access to the best information and programs available. By helping to improve the mathematics and science content knowledge of teachers, PROMiSE will be addressing the need for improvement of students’ mathematics and science achievement.

Contact:  Gladis Kersaint, Associate Professor of Mathematics Education, K-12, Coordinator of General Education & Chair of the General Education Council, and Principal Investigator, Florida PROMiSE (kersaint@coedu.usf.edu)
Innovation or Reform Area: Early College/Closing the Achievement Gap

Funding: Teacher Quality Enhancement Funding, U.S. Department of Education, $6.2 million; Bill & Melinda Gates Foundation and Woodruff Foundation, $450,000; Arthur Blank Family Foundation, $281,000; GSU Alumni Donor, $100,000

Description: Carver Early College High School and Georgia State University College of Education Partnership. Early College High School, a collaboration between Atlanta Public Schools and Georgia State University, opened its doors to 104 ninth-grade students in fall 2005 at the New Schools of Carver in Atlanta. Early colleges are “blended high school/college models” in which students have the opportunity to graduate with a high school diploma and up to 60 college credits simultaneously. Students enroll in Georgia State classes upon completion of 11th-grade requirements. The goals of the Early College High School Initiative are as follows:

- GOAL 1: To increase college readiness of high school graduates traditionally underserved in the University System of Georgia.
- GOAL 2: To increase the college success of students traditionally underserved in the University System of Georgia.
- GOAL 3: To develop and test model programs for young people, aged 14 to 20, that get better results, are more coherent and less duplicative, and make possible a shorter time to completion of an associate degree than the now-separate high school and 2-year college programs.
- GOAL 4: To study the effectiveness of the Early College model for reducing the high school dropout rate, and for increasing the college admission and college success rates of African American males, Hispanic students, and other traditionally underserved students.
- GOAL 5: To replicate throughout Georgia the successes of Early Colleges. In May 2009, the first cohort of Early College High School students will graduate.

Outcome Data: Before this high school was redesigned into four small schools within a school, the graduation rate was 29%. This year, 92% of ninth-grade students will graduate from the Carver Early College High. Of the 92%, 100% will enter a 2-year or 4-year higher education institution. Students have acceptance letters from colleges and universities throughout the country. The accompanying charts compare performance of Early College High School Students to other high school students in the same school district.

Anticipated Long-Term Impact: Early College High School will provide underrepresented youth a path to a college education by incorporating supportive learning environments, effective instructional and structural practices that blend high school and the first two years of college in addition to raising the high school graduation and post secondary success rates of underserved youth. This model also impacts the cycle of poverty in low-income communities by providing students an opportunity that will also benefit their children and future generations.

Contact: Gwendolyn T. Benson, Associate Dean for School/Community Partnerships, College of Education (gbenson@gsu.edu)
### 2006-2007 end-of-course test

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### 2007-2008 end-of-course test

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<td>Ninth-grade literature</td>
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<td>Algebra I</td>
<td>94%</td>
<td>66%</td>
<td>28%</td>
<td>71%</td>
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<td>Geometry</td>
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<td>30%</td>
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Innovation or Reform Area:  Teacher Recruitment

Funding:  2008-2009, state funding, $750,000; portion of NSF $32 million grant; Teacher Quality Enhancement Grant, U.S. Department of Education

Description:  The “20,000 x 2020” Initiative is designed to meet Georgia’s acute need for high-quality teachers, and specifically to meet 80% of the state’s need for teachers by the year 2020. Particular emphasis has been placed on targeting programs for hard-to-staff districts in urban and rural areas as well as targeting particular high need content areas. Based on projection data at the district and regional levels, the University System of Georgia (USG) Board of Regents P-16 department is supporting individual and multi-institutional collaborative programs designed to meet specific P-12 needs. Three institutions launched teacher preparation programs in 2008; institutions with established teacher preparation developed innovative delivery models; and innovative online teaching degrees were launched through USG’s Georgia ONmyLine. The Destination Teaching web site, which provides a “one-stop shop” for prospective teachers, had more than 2 million hits in 2008. Strong collaboration exists between USG and the Georgia Professional Standards Commission (PSC). The PSC has streamlined the new program’s startup process while still maintaining high standards. USG programs are NCATE accredited, although accreditation is not required by the PSC.

Outcome Data:  Since 2002, USG institutions have increased teacher production by 58% (2,660 in 2002 to 4,236 in 2008). Since 2004, USG institutions have increased the number of minority teacher graduates by 50% (601 in 2004 and 925 in 2008). Six institutions reported at least 25% of total production consisted of minority teachers (Armstrong Atlantic, Albany State, August State, Clayton State, Georgia State, and Fort Valley State). Of the 4,236 teacher graduates in 2008, 70% were from traditional routes and 30% from alternative routes. Production from 2007 to 2008 increased 11% overall, with an impressive 31% increase in minority teachers. Equally impressive, 98% of school administrators hiring USG graduates would recommend them, and the 2-year retention rate of USG graduates is significantly higher (90% compared to 78%) than non-USG graduates. Results of the 2008 USG Employer Survey, which is based on the Georgia Regents’ Principles for the Preparation of Teachers, indicate that employers of USG prepared teachers were very positive about their teachers’ first year teaching, their ability to create learning environments and manage a classroom, and their knowledge and ability to plan lessons and instruct students. Additionally, USG is working collaboratively with the Georgia Department of Early Childhood Learning, the Technical College System of Georgia, the Office of the Governor, and the Georgia Department of Education on a statewide longitudinal data system. Unique student identification is in place with the ultimate goal of being able to connect student classroom learning to the teacher and then back to the preparation institution.

Anticipated Long-Term Impact:  The long-term impacts are multiple. First, USG is preparing high-quality teachers who will impact the learning of children across the state, especially in hard-to-staff schools. Second, USG is meeting a critical need to increase the number of minority teachers entering Georgia classrooms. Third, the collaborations between institutions to maximize the use of resources holds future promise for other programs. The size of the University System of Georgia, combined with the diversity of the campuses, allows for a statewide approach to ensuring that all children have access to high-quality teachers.

Contact:  E. Lynne Weisenbach, Vice Chancellor of P-16 Department, Georgia Board of Regents (lynne.weisenbach@usg.edu)
Innovation or Reform Area:  Online Learning

Funding:  None

Description:  The University System of Georgia is offering a master of arts in teaching (MAT) degree online to respond to the need for qualified math and science teachers in Georgia. The program is innovative in the use of technology and collaboration, building a seamless network among participating institutions. The program is attracting an expanded target market for teachers: career changers and military personnel. The online MAT program builds on knowledge a candidate has gained from a bachelor’s degree in mathematics, one of the sciences, or in a related field and prepares him or her to obtain an initial teaching certificate. The program is a collaborative effort offered by Columbus State University in partnership with Georgia Southern University, Kennesaw State University, University of West Georgia, and Valdosta State University. The MAT consortium agreed to a common set of application procedures, admission requirements, program assessments aligned to national and state standards, procedures for supervision of field placements, and curriculum courses based on the strength of the individual institutions. Students enrolled in the program conduct most of the work, including team functions, exams, discussion posts, and case studies in an online environment. They are required to participate in diverse field experiences and teach in public school settings—which can be near the student’s place of residence. Students have access to academic resources, including an online library. The courses combine text materials, case studies, online team projects and assignments, discussions, and written project work.

The USG Board of Regents approved the program and the MAT consortium submitted the proposal to the Georgia Professional Standards Commission in December 2008 and received approval in January 2009.

Outcome Data:  While there was little time or opportunity to market the new online program for spring of 2009, 30 students have already enrolled and begun taking spring classes. Preliminary numbers for fall 2010 show 90 students already enrolled.

Anticipated Long-Term Impact:  This online MAT will increase the number of highly qualified teachers in the STEM fields for Georgia’s classrooms through an alternative delivery model that provides access and flexibility for individuals who are pursuing teaching as career changers or from the military. The program will produce teachers who positively impact STEM education and student achievement in middle school and high school classrooms.

Contact:  E. Lynne Weisenbach, Vice Chancellor of P-16 Department, Georgia Board of Regents (lynne.weisenbach@usg.edu)
Innovation or Reform Area: Clinical Preparation

Funding: None

Description: Responding to the National Council for Accreditation of Teacher Education’s (NCATE) focus on the impact of teacher candidates in the classroom, the teaching/learning faculty at Loyola University Chicago examined ways to assess the student teacher’s impact on K-12 student achievement. Beginning in spring 2008, all student teaching candidates were required to submit an Impact on Student Learning report in partial fulfillment of the requirements for the B.S. degree in education. Student teachers were responsible for the design of a unit, which they taught to K-12 students using scientifically-based research strategies. Each unit began with a preinstructional assessment of the students’ prior knowledge. Formative assessments provided the teacher candidates with information about student progress during the unit. A postassessment was administered at the completion of the unit. Teacher candidates used the data from the pre- and postassessments and the formative assessments to complete the Impact on Student Learning report. The scores of 15 teacher candidates in a PDS were reviewed to determine whether their scores on the Impact on Student Learning project reflected the achievement of their students. These 15 student teachers were placed at Hayt Elementary School, a Chicago public school that serves 901 students. Demographics of the school include White—9%, Black—16%, Hispanic—48%, Asian—23%. Ninety-two percent of the families are categorized as low income.

Outcome Data: This study focused on specific areas:

- Report of Pre- and Postinstructional Data: A Target score was recorded when the report provided an accurate summary of students’ performance on pre- and postinstructional assessments. Twelve teacher candidates were rated as Target in this area, and PDS candidates account for 50% of the Target scores.

- Analysis of the Test Data: A Target score was recorded when a clear and thorough analysis was reported on individual students and the whole group. Fifteen teacher candidates were rated as Target, and PDS candidates account for 46% of the Target scores.

- Evidence of Impact on Student Learning: A Target score was recorded when the analysis included evidence of the impact regarding the number of students who achieved and made progress toward the learning goals. Twenty teacher candidates were rated as Target, and PDS candidates account for 55% of the Target scores.

- Interpretation of Student Learning: A Target score was recorded when the report cited the evidence to support conclusions regarding student learning and multiple hypotheses were explored to account for why some students did not meet the goals. Fourteen teacher candidates were rated as Target, and PDS candidates account for 50% of the Target scores.

The students of Hayt School were tested using the Illinois State Achievement Test. Overall test scores indicate that 71% met or exceeded the standard in reading and 80% met or exceeded the standard in mathematics. Loyola University Chicago faculty will work with the Research and Evaluation Office of the Chicago Public Schools to review disaggregated data from Hayt School to further explore the impact that the student teachers may have had.

Anticipated Long-Term Impact: The teacher preparation programs at Loyola University Chicago will continue to use this Impact on Student Learning project report as partial fulfillment of the requirements for the B.S. in education degree. This project supports the teacher candidates as they demonstrate that they have the knowledge and skills necessary to determine that their students have learned from the units they have taught.

Contact: Dorothy Giroux, Program Director, Initial Teacher Preparation Programs, School of Education (dgiroux@luc.edu)
Innovation or Reform Area:  Teacher Recruitment

Funding:  State of Illinois; each project is funded separately and typically receives $190,000 annually.

Description:  “Grow Your Own—Illinois” (GYO-IL) is a statewide partnership between higher education institutions (i.e., colleges of education, community colleges), community-based organizations, and local high-need school districts. GYO-IL is modeled after a successful partnership between the Logan Square Neighborhood Association (Chicago) and Chicago State University, to recruit parents and other community members into careers in teaching, and to return them to their community where it is expected that they will remain in teaching. GYO-IL currently has 16 consortia across the state and enrolls over 500 teacher candidates. The GYO-IL candidates, as a group, are considerably more diverse than candidates in other teacher preparation programs: 57% are African American, 28% are Latino/a, and 72% are between the ages of 30 and 50. As the candidates move through the teacher preparation programs, the consortia are gaining valuable insight in the types of programs, supports, curricula, and field placements necessary to ensure that they are successful in hard-to-staff schools. Northeastern Illinois University is a partner on five GYO-IL projects.

Outcome Data:  The majority of the GYO projects began enrolling candidates in the fall of 2006. As of May 2009, there will be 13 graduates. Candidates who have entered colleges of education are excelling academically. The partnership between colleges of education and community-based organizations has resulted in significant conversations and retreats focusing on preparing community-based teachers. Perhaps the most significant outcome to date is that GYO-IL has been written into legislation through the works of seven of the community-based organizations. In 2004, the Illinois legislature passed the Grow Your Own Teachers Education Act. The legislation targets hard-to-staff schools and districts and sets criteria for GYO initiatives and for funding.

Anticipated Long-Term Impact:  GYO-IL is expected to address the continued problem of teacher turnover in schools located in underresourced neighborhoods. GYO candidates come from the local community and will return to their home community, the place where they are raising their own families, to teach. Northeastern Illinois University is developing a cadre of teachers through GYO who know and understand the local community, who can build on the strengths of the community by accessing local resources, who are able to use community organizing strategies to be advocates for the children they teach, and who are committed to improving educational policy and practice.

Contact:  Maureen D. Gillette, Dean, College of Education (m-gillette@neiu.edu)
Innovation or Reform Area: Mentoring

Funding: The Wheaton College Mentoring Initiative

Description: The mission of Wheaton College is to develop “whole and effective Christians through excellence in programs of Christian higher education.” The Department of Education has further interpreted this mission by endorsing a conceptual framework that attempts to prepare teachers as agents of change who work in the nation’s and the world’s public and private schools to ensure high-quality educational opportunities for all children. As a part of its efforts to encourage candidates in the initial certification programs to engage in activities that result in meaningful reforms, the Department of Education has offered opportunities for candidates to work as collaborators with faculty members on a variety of projects and endeavors. These efforts have been enhanced by the College’s new mentoring initiative that supports these one-on-one or small-group activities with the goal of helping students to grow both spiritually and professionally while providing vital services to educational entities. Almost all of the current Department of Education faculty members are currently engaged in one or more projects whose work ranges from support for male elementary education candidates to support for student teachers, economic concerns about the delivery of educational services, studies in neuropsychology, and special assistance for local districts. Presently the candidates participating in these activities do so voluntarily.

Outcome Data: While many individualized projects are ongoing, a number of teams have already completed their work. Some of the collaborative efforts have resulted in either published papers or presentations at professional conferences. While many institutions of higher education typically involve candidates in advanced programs in research and/or writing projects, it is important to note that Wheaton College does not offer any advanced programs. All of the candidates involved in these projects were completing initial certification programs.

Anticipated Long-Term Impact: The intent of the mentoring program and the student research teams is to prepare candidates to be thoughtful and creative teachers who can use a variety of research and inquiry-based techniques to make sound educational decisions for all children. As such, they should be able to assume leadership positions in their schools as they gain experience. A second purpose is to continue to work to improve programming based on this work, and one study has already paid such dividends. The Barwegen et al. (2009) survey of principals regarding their use of portfolios has resulted in some changes to the department’s assessment plan by significantly altering portfolio expectations.

Contact: Jillian Lederhouse, Professor and Chair, Department of Education (jill.n.lederhouse@wheaton.edu)
Innovation or Reform Area: Clinical Preparation

Funding: 2003-2008, Teacher Quality Enhancement Partnership Grant, $3.9 million

Description: Teacher education at Indiana State University has been fundamentally reformed based on two core design principles: understanding teaching as an academically taught, clinical practice profession, and engaging faculty members from the arts and sciences disciplines. Elementary, special education, and secondary education programs now include at least one course every semester that has progressively more intensive clinical experiences, culminating with a full semester immersion in a professional development school (PDS) prior to student teaching. Students will graduate with a substantial increase in the number of meaningful and practical field experiences. For elementary and special education students, the “TOTAL Semester” (Teachers of Tomorrow Advancing Learning) allows them to intern with a master teacher in a PDS. The interns take their core methods classes (reading, language arts, math, social studies) each Monday, and then each intern spends the rest of the week in a single classroom working with a master teacher who has received training and is designated as a “coaching teacher.” The intern starts out observing and performing many of the duties of a teaching assistant, gradually assuming more responsibility for teaching and behavior management as the semester progresses. During the second half of the semester, the intern takes responsibility for one subject during each of 4 focus weeks. The secondary program’s professional semester prior to student teaching is referred to as the “Immersion Semester” and is a true collaboration between content methods faculty in College of Arts and Science and the College of Education (COE) pedagogy faculty. Faculty from both colleges teamed together to revamp their courses, creating space for students to spend 3 hours a day for approximately 8 weeks placed with a coaching teacher in their content area in a local high school.

Outcome Data: Based on pre- and posttraining assessments, preservice teacher interns reported statistically significant changes in their overall beliefs in their teaching abilities, level of pedagogical skill, and confidence in their classrooms. In qualitative data gathered, students report being able to see the connection between the theories and methods they are being exposed to on Mondays in content methods courses taught by university faculty and what is actually happening in the classroom. Coaching teachers say the experience is good for everyone—they model their best strategies, the interns have the opportunity for a rich immersion into the whole life of the school, and the children in the classroom get more individualized attention. Parents are excited because they see the benefit of their children having two adults in the classroom. PDS principals whose schools host TOTAL interns like the idea of another trained pair of hands helping classroom teachers deliver their curriculum, as opposed to the old “pullout” model of early field experience, which many times was viewed as an interruption to the classroom curriculum and a scheduling burden for all involved. Pre- and posttests of K-12 pupil learning during clinical field experiences were used to measure ISU teacher candidates’ impact on P-12 student learning and revealed significant effects.

Anticipated Long-Term Impact: The embedding of more intense clinical experiences in teacher education programs at ISU has improved the preparation of teachers and the achievement of children in local schools. Through the process, the existing Professional Development Schools Partnership has expanded to become a university-wide partnership with the local schools. All colleges, not just the COE, that house teacher education programs or contribute courses to the program are now full partners with K-12 colleagues in improving K-12 student achievement. The professional semesters are also a source of job-embedded professional development for the classroom teachers who serve as coaching teachers for ISU interns, leading to an increase in commitment to the teaching profession.

Contact: Rebecca Libler, Associate Dean, College of Education (rlibler@indstate.edu)
Innovation or Reform Area: English Language Learners

Funding: 2007-2012, U.S. Department of Education/OELA: Professional Development Grant; 2005 to present, IU Southeast Commitment to Excellence Fund

Description: The Network Capacity Building in ESL/ENL Best Practices project was designed to increase the capabilities of local schools, school districts, and institutes of higher education to develop and implement best practices for the instruction of K-12 English language learners (ELLs). The project has been very successful, often surpassing its goals. The project takes a multifaceted approach to collaboratively addressing the issues of ESL/ENL best practices, targeting the needs of preservice and in-service students enrolled in the School of Education while simultaneously providing professional development, materials, and coaching services to participant districts (3), schools (6), and teachers that are currently serving ELLs. The program includes several components: ESL/ENL teacher licensing program; systematic K-12 professional development for regular classroom teachers (six all-day workshops); additional professional development for school personnel; resources and materials provision; capacity building among IUS faculty (professional development seminars directed to improve their own ability to instruct School of Education students on best practices for ELL; revision of syllabi; funding to attend conferences focused on ESL/ENL; ESL books and resources); cultural enrichment activities for ELLs in the network school; parents’ involvement and guidance; and a web site launched in June 2008: http://homepages.ius.edu/MHERDOIZ/newpages/newneighbors.htm.

Outcome Data: To date, the project has resulted in 45 teachers pursuing the ENL/ESL license; 71 regular classroom teachers trained in ENL best practices (48 participating in a professional development series of 6 days; 43 in two 1-hour sessions); 30 school psychologists (two 2-hour sessions); 35 speech therapists (one two-hour session); 21 office personnel and paraprofessionals; 36 food services staff; 96 transportation personnel; 230 parents attending special sessions; 130 ELLs participating in enrichment activities; ENL specialized faculty and school libraries; and other curriculum materials and supplies provided to network schools (about $10,000 per year). This has translated into several levels of success documented through systematic assessments of teachers’ pre/post surveys evidencing their empowerment as ENL educators and ELLs’ performance. Eight School of Education courses’ syllabi have been revised to respond to the need of ELLs in various areas; their impact is also being assessed among preservice and in-service candidates. Additionally, the project is collecting anecdotal records and follow-up surveys that measure impact of the professional development activities. These confirm the teachers’ improved preparation for teaching ELLs. Another aspect that is being documented is the development of real networking practices among teachers and the progressive capacity building in the six participant schools.

Participation in the IUS New Neighbor Capacity Building Network Jackson Elementary has resulted in an increased number of teachers trained and now implementing second language acquisition methodology and language data analysis to target and improve instruction for English language learners.

The project has supported growth in the areas of professional development, collaboration, and ELL achievement in both language and academics.

By focusing on professional development, parent participation, student instructional methods, Jackson Elementary ELLs met or exceeded for the last 2 years’ state academic AYP as measured by ISTEP+ as well as state AMAO language objectives as measured by LAS Links.
Jackson Elementary Students Meeting State Standards in Math

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>67.7%</td>
<td>66.9%</td>
<td>75.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>49.1%</td>
<td>55.6%</td>
<td>66.1%</td>
</tr>
<tr>
<td>White</td>
<td>70.9%</td>
<td>67.0%</td>
<td>75.7%</td>
</tr>
<tr>
<td>Free</td>
<td>60.8%</td>
<td>57.6%</td>
<td>66.9%</td>
</tr>
<tr>
<td>LEP</td>
<td>57.1%</td>
<td>64.1%</td>
<td>74.4%</td>
</tr>
<tr>
<td>SE</td>
<td>43.9%</td>
<td>45.6%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Jackson Elementary Students Meeting State Standards in English

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>65.8%</td>
<td>64.9%</td>
<td>68.4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>37.7%</td>
<td>50.8%</td>
<td>54.8%</td>
</tr>
<tr>
<td>White</td>
<td>71.1%</td>
<td>65.9%</td>
<td>72.6%</td>
</tr>
<tr>
<td>Free</td>
<td>58.5%</td>
<td>54.4%</td>
<td>59.0%</td>
</tr>
<tr>
<td>LEP</td>
<td>44.4%</td>
<td>55.1%</td>
<td>57.0%</td>
</tr>
<tr>
<td>SE</td>
<td>29.8%</td>
<td>28.6%</td>
<td>46.7%</td>
</tr>
</tbody>
</table>

All students at Fairmont Elementary and Jackson Elementary experienced either a gain or no change in their overall LAS Links Proficiency Level between 2006 and 2008. At both schools, the majority of students did gain in Overall Proficiency Level during the period:

<table>
<thead>
<tr>
<th></th>
<th>% with proficiency level increase</th>
<th>% maintaining proficiency level</th>
<th>% maintaining a proficiency level of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairmont ES</td>
<td>93</td>
<td>7.0</td>
<td>–</td>
</tr>
<tr>
<td>Jackson ES</td>
<td>83</td>
<td>8.5</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Anticipated Long-Term Impact: By reaching and surpassing its goals, the project is helping six schools in three districts of Southern Indiana become models for ENL/ESL best practices. This collaborative endeavor will demonstrate the power of holistic intentional interventions focused on building capacity in each school (conceived as a microsystem) and based on collaboration among all the stakeholders: teachers, students, administrators, parents, support personnel, schools, and higher education institutions.

Contact: Magdalena Herdoiza-Estévez, Associate Professor, Coordinator of Graduate Studies, and Director of Network Capacity Building in ESL/ENL Best Practices, School of Education (mherdoiz@ius.edu)
Innovation or Reform Area: Special Education/Early Childhood Education

Funding: 2008-2012, OSEP Personnel Preparation Project, Project HUE, $800,000; Sally Hare Shriver Early Childhood Unified Endowment; University of Kansas, Endowment Association

Description: In response to changes nationally and in the state, the University of Kansas designed and implemented a new Unified Early Childhood Education program. It focuses on preparing professionals to meet the learning and development needs of all infants, toddlers, preschool, kindergarten age, and early primary children (birth through grade 3), including those at risk for and with disabilities and their families within natural and inclusive settings. Competencies address interdisciplinary approaches that integrate developmentally appropriate educational and early intervention strategies into holistic and functional activities for all young children and their families in settings such as homes, community childcare programs, preschools, and kindergartens. Furthermore, the program emphasizes collaborative and team-based processes that empower families and program staff to work together to support the development of all young children. Those completing the program work in early intervention programs for infants and toddler and their families (e.g., Tiny-K Networks, Parents as Teachers, Early Head Start), preschool programs for children at risk and with established delays (e.g., Kansas Four-Year-Old At-Risk programs, ECSE preschool programs, Head Start), in public and privately funded early education and care programs, and in public preschool through third-grade classrooms with children with and without identified disabilities. In short, they are prepared to effectively work with all children and their families in the important early-education years.

Outcome Data: Currently the program has been in full implementation since fall of 2006. (Note: Students enter in the fall of their junior year, graduate with a B.S. in education, then as graduate students, complete a year of student teaching and graduate study). Thus one cohort has completed the program and a second cohort is in its final semester of student teaching. A comprehensive performance-assessment system is in place that provides for the assessment of teacher candidates as they progress through the program. Two aspect of this assessment system address the summative outcomes. First, the program completion component uses a set of eight assessment instruments/rubrics that include PLT and Praxis exams; a Teacher Work Sample addressing assessment, planning, instruction, and impact on child/student learning; and an observational evaluation tool of field experiences. The application for licensure and work performance assessment includes three end-of-program applications for licensure assessments: the Praxis II Education of Young Children, PLT: Early Childhood (0521), and the Kansas Performance Assessment (KPA). A minimum score of 161 is required for both the Praxis II and the PLT to obtain recommendation for the Early Childhood Unified (birth–K) license in Kansas. Surveys are sent out annually to the previous year’s program completers and their employers. At this point, data indicate that the initial group of students’ performance on exit assessments exceeded expectation (e.g., all students received passing scores on PRAXIS exam with 4 of 12 receiving perfect scores). Furthermore, students are all working as educators within the areas for which they were trained, and the university is beginning the follow-up interview process. Both sets of summative data will be available by the end of summer 2009 for Cohort 1 and end of program data for Cohort 2.

Anticipated Long-Term Impact: This program contributes to addressing the ongoing shortages of special educators and ensuring that those working with the most vulnerable, young children and their families have strong skills and the passion to appropriately support the successful learning of all children with those with identified disabilities, at clear established risk, or from the general population.

Contact: Eva Horn, Professor (evahorn@ku.edu)
Innovation or Reform Area: Math/Science

Funding: 2007-2009, Ewing Marion Kauffman Foundation $250,000; 2007-present, Private Donors, $103,000; 2007-2012, National Math and Science Initiative, $1.4 million

Description: UKanTeach, http://ukanteach.ku.edu, is an accelerated pathway to teacher licensure in secondary mathematics and science at the University of Kansas that began in fall 2007. UKanTeach is a partnership among the KU College of Liberal Arts and Sciences, the KU School of Education, and Kansas school districts. It was approved as an innovative program for licensure by the Kansas Department of Education as a response to a critical shortage of mathematics and science teachers in the state of Kansas. As part of the program, students can complete their B.S. or B.A. in a field of mathematics or science along with the course work required to obtain a secondary teaching license in only 4 years. UKanTeach plans to double the number of KU secondary math and science teachers graduating, resulting in KU producing approximately 50 new teachers each year. Keys to UKanTeach success include the following: recruiting math and science students early in their college careers; requiring early field experience for future teachers; having successful, experienced secondary teachers serve as instructors and mentors for future teachers; offering internships and scholarships to UKanTeach students; providing induction support for new teachers during their first 3 years in the classroom to ensure success; and encouraging students to complete a master’s degree soon after graduation. UKanTeach began at KU as one of the first replication sites of the successful UTeach program offered at UT–Austin. It will have its first graduate in spring 2009.

Outcome Data: The UKanTeach program has more than doubled the number of students at KU pursuing a secondary math or science teaching license. Previously, the School of Education has had approximately 75 students a year pursuing licensure in secondary math or science and a degree in education. By its second year, the UKanTeach program has added another 110 students, and these students are also getting degrees in their math or science field of choice. UKanTeach plans to grow to 300 students in the program each year. The UKanTeach program is recruiting math and science majors who would not have pursued a degree in education in order to gain a secondary teaching license.

![UKanTeach Growth (first two years)](chart.png)
UKanTeach students teach math and science lessons that they design in 14 local schools starting in their very first UKanTeach course. Because of this, UKanTeach has placed more than 300 KU math and science students in local classrooms over the last 2 years. The teachers and students in these classrooms consistently have very high praise for the UKanTeach future teachers who visit them as evidenced in their written evaluations of the students. The UKanTeach students are of high quality. The average GPA for students in UKanTeach is 3.09 compared to 2.93 for the university as a whole. UKanTeach students have an average ACT score of 26 compared to 23.8 for the university as a whole.

**Anticipated Long-Term Impact:** Initially, UKanTeach will increase the number and quality of secondary math and science teachers licensed in Kansas each year. UKanTeach plans to at least double the number of students receiving math and science licensures at KU. Each teacher produced by UKanTeach will be highly qualified to teach his or her content area since each will have a degree in their field. In turn, through its graduates’ secondary classrooms, UKanTeach will better prepare America’s students in math and science. This will lead to more students having the skills to fulfill the jobs of the 21st century and being scientifically literate citizens.

**Contact:** Marc Mahlios, Professor & Chair, Department of Curriculum & Teaching, School of Education (mahlios@ku.edu)
Innovation or Reform Area:  Literacy

Funding:  2003-present, Dollar General, $10K/year; WKU matches dollar for dollar

Description:  Under the direction of literacy faculty, WKU's College Reading Success program serves two purposes: (a) to instruct and provide literacy and study skills support for current community college and WKU students who self-identify as struggling readers/learners, as well as those who may be referred by faculty, and (b) to prepare graduate students seeking degrees as advanced reading professionals to provide exemplary literacy instruction including appropriate assessments and materials and how to plan for literacy instruction that aids learners in making progress toward their personal and professional literacy goals. In a typical academic year, over 100 community college and/or WKU undergraduate students meet with literacy graduate students to improve their content area reading skills within the scope of courses in which the undergraduate students are presently enrolled. Students participate in pre- and postprogram surveys that gather demographic information and feedback from students regarding the most useful strategies.

Outcome Data:  Based on students' pre- and postprogram survey results, participants have shown substantial gains in their reading of course textbook assignments and use of successful study skills strategies. Last fall, a pre/post assessment was conducted on a sample of participants using a nationally normed reading test for adults. A sample of only six students could be assessed because the instrument required individual administration and scoring by a trained reading specialist. Regardless, results show participants making substantial gains in vocabulary (13%), comprehension (25%), and overall reading rate gain (150%). Plans are for all future participants to complete this assessment. One hundred twenty-three students are in the pre/post assessment group this year. Furthermore, 492 students have completed postintervention surveys regarding their confidence in reading-related skills and tasks with the following results:

- 88% report more confidence in vocabulary.
- 72% report more confidence in being able to handle the volume of assigned reading in multiple courses.
- 83% report more confidence in their ability to use retention strategies to recall key content.
- 69% report more confidence that they have strategies in place for knowing how to read and study print from a variety of texts.

Anticipated Long-Term Impact:  In a state with an abysmally low college-bound rate and equally low college completion rate, this program both empowers students underprepared to read at the college level to succeed and positively impacts the educational health of the state. The innovative nature of the program, as well as strong outcome data, has positioned WKU to receive state dollars for a College Readiness Pilot Program geared toward bringing together high school students, high school teachers, literacy faculty/graduate students, and content (arts and sciences) faculty. In summer 2009, 100 area high school students will come to WKU to complete dual-enrollment courses as they receive reading and study skills instruction alongside their courses. Both high school teachers and content faculty will also attend weekly workshops on how to incorporate literacy and study skills strategies into the course work. As content courses progress, these workshops will provide opportunities for high school teachers, faculty, and literacy instructors to share authentic successes and challenges related to supporting these students. Lessons learned from this pilot will be used to expand both College Success and College Readiness programs both in size (students served) and scope (reading, study skills, and math, writing, the sciences).

Contact:  Sam Evans, Dean, College of Education and Behavioral Sciences (sam.evans@wku.edu)
Innovation or Reform Area: Math/Science

Funding: National Math & Science Initiative, $1.4 million over 5 years

Description: Along with 12 other institutions nationwide that have received NMSI funding to replicate UT-Austin’s UTeach program, WKU began its SKyTeach (Southern Kentucky Teach) program in fall 2008. The program was developed to increase the numbers of college graduates prepared to teach in the math and science disciplines. Key features of the program include strong collaborative ties between education and science colleges leading to a joint program, using master teachers (proven K-12 teaching professionals) to mentor students throughout the program, and providing students with multiple field experiences from the very first semester of the program. Field experiences have been carefully selected to target culturally diverse, rural, and low-income school settings.

Outcome Data: In the first semester, 30 students enrolled in the first SKyTeach course of the semester; 26 returned for the next course in the spring (87% retention rate). A survey of these first students indicated that 95% were satisfied with the program so far. In the spring, 12 more students enrolled in the first SKyTeach course, for a total of 38 participants in the first academic year. These students represent eight different science majors, and 14% come from underrepresented ethnic groups. Their average GPA exceeds that of other students in the science college and WKU as a whole. Their ACT exceeds both WKU and national averages for entering college students.

Anticipated Long-Term Impact: For the upcoming fall semester, 80 students are projected to enroll in the first SKyTeach course; two course sections are being offered for the newly developed sophomore-level SKyTeach course for a potential of 50+ students. Enrollment is expected to exceed easily the target of 100 new and returning SkyTeach students this fall. NMSI will also match up to $1 million in funds for WKU dollars raised to sustain the program. To date, WKU has raised nearly $200,000 toward the match.

Contact: Sam Evans, Dean, College of Education and Behavioral Sciences (sam.evans@wku.edu)
Innovation or Reform Area: Special Education/Science/Clinical Preparation

Funding: U.S. Department of Education, $300,000 for MCERT

Description:

Special Education: The Department of Special Education at the University of Maryland College of Education offers a 5-year combined program leading to bachelor of science and master of education degrees in special education. This 150-credit-hour course of study prepares teachers to assume the increasingly complex and sophisticated responsibilities of a teacher of students with disabilities. Distinctive features of the program include extensive field experiences and two levels of special education certification: age-based generic special education and severe disabilities.

MCERT: The Master’s Certification Program (MCERT), within the College of Education’s Department of Curriculum and Instruction, is a graduate-level teacher preparation program that leads to elementary or secondary teacher certification and a master of education degree (M.Ed.). Content area specializations include art, elementary education, English, foreign language, mathematics, science, social studies, and TESOL (Teaching English to Speakers of Other Languages). Over the years, MCERT has grown to encompass partnerships with 25 professional development school (PDS) sites in the neighboring school districts of Montgomery, Prince George’s, and Howard counties. Integrating both theory and practice, program interns engage in learning and teaching activities at a school site on weekdays and also attend pedagogy and education courses several nights a week. In 2005, a hybrid of MCERT—the Transition from Laboratory to Classroom (TLC) program—was developed in partnership with Montgomery County Public Schools (MCPS). The program was created to prepare persons with advanced degrees who have laboratory experience for careers as secondary science teachers in MCPS. Distinctive features of the program’s professional preparation include assisting candidates in learning how to understand and accommodate diverse learners in the classroom and promoting an understanding of how teachers can build and support democratic learning communities. Students complete 30 credits over an 11-month period, extending from early June through mid-May of the following year. The program provides candidates with full tuition support, a stipend, and funds for books.

Outcome Data:

Special Education: The B.S./M.Ed. program has an excellent record of retention in the field. Out of the 500 graduates to date, data show that 5 years after graduation, over 90% remained in special education, and after 10 years, numbers were still high in the 80% range.

MCERT: To date, the TLC program boasts a 100% retention rate in terms of graduates who have remained in the teaching field.

Anticipated Long-Term Impact: If the B.S./M.Ed. program’s retention numbers and outcomes were generalized to all programs, the special education teacher shortage would be substantially reduced if not eliminated (e.g., the last SPENCE study in the Northeast reported the 5-year attrition rate in special education at 40%). TLC graduates have brought significant curriculum reform to MCPS schools and have all introduced more expertise into the science curricula. The long-term goal of the program is to bring science expertise and laboratory experience to the schools to increase the understanding of science for all students.

Contact: Donna Wiseman, Dean, College of Education (dlwise@umd.edu)
Innovation or Reform Area: Science
Funding: 2002-2009, National Science Foundation, Math-Science Partnership, $8.3 million
Description: The Vertically Integrated Partnerships (VIP) K-16 project is an NSF-funded Math-Science Partnership. Directed by the University System of Maryland (USM) office, the project is a partnership of Montgomery County Public Schools, Montgomery College, and five USM institutions (including research and comprehensive universities and research institutes). The goals of the grant are to provide professional development for MCPS teachers of high school science, to improve MCPS student achievement on the Maryland High School Assessments, to improve undergraduate science education, and to encourage more undergraduate and graduate science students to enter teaching. The primary strategy throughout these interventions is the use of learning communities that focus on inquiry instruction in science. Over the 5 years of the grant, the VIP project has provided science content professional development for 350 teachers in the form of workshops, seminars, an online community, and a summer institute that focuses on the teaching and learning of science. The faculty and the Montgomery County science teachers (in 5 different science disciplines) have been engaged in field testing and validation of dozens of new curriculum guides and assessments that are aligned with state and national science standards. In addition to the work on curriculum development and assessment, a number of different high school and university partnership activities have been developed, including internships for undergraduate science majors in high school science classrooms, summer internships for high school teachers in science research labs, and teacher/faculty learning communities that have produced extensive revisions of more than a dozen undergraduate science courses.

Outcome Data: A networking study determined that the number of collaborative partnerships among program participants that focused on inquiry teaching and learning increased sevenfold over the first 3 years of the grant. Similar increases in the size of the network were measured in relation to mentoring of undergraduates and in teacher leadership in planning grant activities. And while the increase in high school student achievement in biology cannot be solely attributable to VIP, it has had an impact.

Comparison of Passing Rates on the Maryland High School Assessment in Biology: MCPS and Statewide, 2002–2006
Anticipated Long-Term Impact:  The VIP partnership has resulted in stronger interinstitutional ties that have already formed the basis for new collaboration. In particular, the USM STEM Initiative has grown largely out of the work of the VIP grant. At several partner institutions, as well, a legacy of K-16 partnership and focus on teacher learning communities has blossomed. To name just a few of these sustained reforms: Inquiry-oriented curriculum guides are now in place in all MCPS high schools, a new science building at Montgomery College is being designed to facilitate active learning instruction, and a TA-training program has been implemented at the University of Maryland, Baltimore County.

Contact:  David May, Project Manager (dmay@usmd.edu)
Innovation or Reform Area: Strengthening Instructional Skills

Funding: None

Description: The University of Michigan is redesigning its approach to teacher education to focus directly on developing teachers’ skills with the core practices of teaching. This is in marked contrast to traditional teacher education, which often consists primarily of discussion about teaching and schools and leaves to “experience” the actual work of learning to teach. The university aims to break this pattern and to build a program centered around a small set of instructional practices that it has identified as most crucial to beginning teachers’ ability to produce student learning. These include skills of explaining content clearly, selecting and using productive instructional tasks, holding students to high standards while explicitly teaching them how to do complex academic work, establishing and maintaining a productive classroom climate, examining and assessing students’ work, and connecting effectively with students’ families. This approach combines the focus on the practice of teaching with the detailed knowledge of subject matter that teachers need in order to help students learn. Finally, faculty are building performance assessments that will enable the teacher preparation program to determine whether teacher candidates can perform their core tasks competently before being licensed to teach independently.

This work on the initial training teachers is part of a larger plan to design a comprehensive curriculum of professional training and licensure that spans preservice education through at least the first 5 years of teaching practice, with corresponding assessments that provide information about teachers’ competence as they become more experienced. As part of this project, faculty are also working to improve available understanding of the special kinds of knowledge and skill on which skilled teaching depends. The goal is to build a complete curriculum for preparing and developing teachers, with instructional materials and assessments for use at each stage of the teaching career.

Outcome Data: It is too early to produce evidence of the effectiveness of this approach, as faculty are currently building and beginning to implement it. Still, the logic of the program links more closely the training teachers will receive with the demands of their work as they begin to teach. Related to this is evidence on practice-oriented subject matter knowledge in mathematics, where teachers’ performance on measures of specialized mathematical knowledge for teaching (MKT) predict student achievement gains at the first- and fourth-grade level. Teachers’ scores are also positively correlated with the mathematical quality of their instruction.

Anticipated Long-Term Impact: The university is building a system that will help guarantee that beginning teachers can perform competently from their first day in the classroom. Right now, teachers are considered “qualified” simply by virtue of graduating from an accredited program. Program faculty intend to redirect attention from teachers’ educational credentials to their proven capacity to do the work that will help their students learn. The system that school of education envisions will ultimately impact every public school student in the United States and will provide a focus for teachers’ professional education from initial licensure through advanced practice. Supplying enough excellent teachers is one of the largest challenges facing American education. Teaching is complicated and demanding work and depends on skills that few people acquire “naturally.” Moreover, the country needs more than three million teachers every year. It is crucial that the educator preparation profession develop high-quality teacher education and professional development that will help large numbers of people develop instructional proficiency.

Contact: Deborah Loewenberg Ball, Dean, School of Education (dball@umich.edu)
Innovation or Reform Area: Clinical Preparation


Description: St. Cloud State University (SCSU) has transformed its student teaching experience to address several challenges related to placing teacher candidates, strengthening the teacher preparation program, and maximizing human resources in the classroom. The focus of this initiative is on the development, implementation, and evaluation of a coteaching model of student teaching. Coteaching in student teaching provides two professionally prepared adults in the classroom, actively engaged with K-12 students for greater periods of time, than does traditional student teaching. The coteaching model of student teaching allows children increased opportunities to get help when and how they need it. It affords teachers an opportunity to incorporate coteaching pedagogy, grouping students in ways that are not possible with just one teacher. To date, the coteaching intervention developed and implemented at SCSU has provided coteaching training to more than 700 cooperating teachers and over 2,000 teacher candidates. The SCSU coteaching in student teaching initiative has been honored in three formal ways. In 2006, the Minnesota State Colleges and Universities awarded the Innovative Partnering and Collaboration Award for SCSU's work in coteaching. In October of 2007, SCSU was awarded the American Association of State Colleges and Universities' prestigious Christa McAuliffe Award for Excellence in Teacher Education for the innovative use of coteaching in student teaching, and in February 2008, SCSU was awarded the AACTE Best Practice Award in Support of Research on Teacher Education Quality and Accountability.

Outcome Data: Comparing a coteaching and traditional model of student teaching, researchers examined the impact of student teaching on K-6 learning outcomes. Two academic measures, the Minnesota Comprehensive Assessment (MCA) and the Woodcock Johnson III-Research Edition (WJIII-RE), were used to determine academic achievement. In all 4 years, researchers found a statistically significant positive effect on reading and math scores for students in a cotaught classroom as compared to classrooms using the traditional model of student teaching. Additional analysis of the data compared the achievement of students in cotaught classrooms to students in a classroom with a single teacher and students in a classroom utilizing a traditional student-teaching model. The findings show that students in a cotaught classroom statistically outperform students with a single teacher. Most alarming were the results indicating that traditional student teaching, where teacher candidates are often left unassisted in the classroom, resulted in statistically significantly lower proficiency levels for students as compared with either a coteaching student-teaching setting or a single teacher.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cotaught student teaching</th>
<th>One teacher</th>
<th>Traditional student teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2005</td>
<td>82.1%</td>
<td>75.7%</td>
<td>65.3%</td>
</tr>
<tr>
<td>2005-2006</td>
<td>78.7%</td>
<td>73.5%</td>
<td>65.0%</td>
</tr>
<tr>
<td>2007-2008</td>
<td>80.8%</td>
<td>61.4%</td>
<td>62.1%</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Cotaught student teaching</th>
<th>One teacher</th>
<th>Traditional student teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2005</td>
<td>82.3%</td>
<td>75.8%</td>
<td>70.5%</td>
</tr>
<tr>
<td>2005-2006</td>
<td>68.9%</td>
<td>64.7%</td>
<td>57.9%</td>
</tr>
<tr>
<td>2007-2008</td>
<td>74.5%</td>
<td>59.5%</td>
<td>62.6%</td>
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</tbody>
</table>
In addition to studying the effect of coteaching on K-6 learners, the researchers have assessed the effect of coteaching on teacher candidates. Mean scores on a summative evaluation demonstrate that candidates participating in a coteaching experience during student teaching outperformed their peers who had a traditional student teaching experience in all 10 categories. According to an end-of-experience survey, teacher candidates indicate that participation in coteaching led to improved classroom management skills (93.5%), increased collaboration skills (92.5%), more time teaching (90.8%), a deeper understanding of the curriculum through coplanning (89.1%), and increased confidence (88.6%). In addition to the quantitative results, qualitative data collected through focus groups and surveys indicate a high level of satisfaction with a coteaching model of student teaching.

**Anticipated Long-Term Impact:** This new approach to student teaching has been implemented in over 800 P-12 classrooms, impacting in excess of 25,000 students. SCSU has also begun to share the model and implementation strategies with other teacher preparation programs not only across the state of Minnesota but also across the country, including Texas, Washington, Missouri, Ohio, Illinois, and Montana. Expanding the implementation of coteaching and undertaking more rigorous research regarding the outcomes for teacher candidates and students in both traditional and coteaching settings could change the face of teacher preparation and student teaching.

**Contact:** Nancy Bacharach, Professor (nlbacharach@stcloudstate.edu); Teresa Washut Heck, Associate Professor; Kathryn Dahlberg, Research Analyst
Innovation or Reform Area: Early Childhood Education/Online Learning/Technology/Special Education

Funding: None

Description: As a leader in online education, Walden University offers two Minnesota state-approved teacher preparation programs leading to initial teacher licensure in early childhood and special education. To enhance the knowledge and skills that teacher candidates gain in course work and are expected to apply in early and culminating field experiences, the online M.A.T. Teacher Preparation Program in the Richard W. Riley College of Education & Leadership maximizes the use of technologies. The licensure programs feature Virtual Field Experiences™, as well as school-based field experiences, and the Teacher Compass Tool, an online classroom observational/evaluation instrument. Both technologies are designed to support candidates in systematic learning opportunities to reflect on best practices of teachers, as well as their own practice.

Virtual Field Experiences™ (VFEs) are organized, purposeful, and thought-provoking video experiences that allow Walden teacher candidates to observe and analyze best practices demonstrated by teachers across the United States in a variety of classrooms, at multiple levels of learning, and with a rich diversity of P-12 students. VFEs supplement and augment course work through 25 experiences, consisting of recorded video clips of interactions between teachers and their pupils in diverse classrooms, including high-poverty urban schools and classrooms with English-language learners that aren’t necessarily available in every candidate’s community.

The Teacher Compass Tool, an online classroom observation instrument, is used during demonstration teaching—supervised final field experiences. Working in partnership with the Johns Hopkins University Center for Technology in Education, the instrument provides an innovative online tool to enhance Walden University’s process for conducting candidate observations and evaluations. Over the duration of the project, January 2009–2010, Walden University will collaborate with Johns Hopkins University in implementing this technology-rich process designed to conduct more efficient observations and evaluations aimed at improving teacher performance, combining high-quality online professional development, coaching, and evaluation consultation.

Outcome Data: The two initial licensing programs utilizing this technology were launched in January 2008, and the program will see its first completers this summer. The project will also include the fall 2010 candidates. Thus, data have not been analyzed for reporting at this time.

Contact: Richard L. Simms, Associate Dean, Educator Licensing and Undergraduate Programs, The Richard W. Riley College of Education and Leadership (richard.simms@waldenU.edu)
Innovation or Reform Area: Special Education

Funding: None

Description: The Georgian Court University Accelerated Teacher Certification Program is a 9-month course work and field experience program that provides an opportunity for postbaccalaureate candidates and second-career professionals to implement a career change to the K-12 classroom. The program is in its 4th year of operation. Every course (totaling 39 credits) and field experience (150 hours of observation and 15 weeks of student teaching) integrates an inclusive strand of teaching and learning that prepares candidates to teach general education and special education students. When candidates successfully complete the program, they are granted a certificate of advanced standing from the State Department of Education to teach in their chosen area (K-5 or a specific discipline K-12) along with an endorsement for teaching students with disabilities that mirrors the certification. Candidates may have this university certification apply towards a master's degree in education with the addition of 15 credits. All courses are taught in a trimester format in a parallel fashion in which several classes are taken at once. Students are in class 4 days a week for 6 hours per day, and 1 day per week (the 5th day) is spent in a K-12 school setting. Students form strong cohorts in which they begin to rely on one another for practical collaborative learning activities and interactive supportive feedback. This accelerated format has been highly successful in training future teachers for New Jersey classrooms.

Outcome Data: There have been 396 Accelerated Teacher Certification candidates enrolled in the program since its inception in 2001. There is a 98% success rate for candidates completing the program in 9 months. The effectiveness of the program can be measured by the requests to hire students in the various districts where they completed their student teaching. In a random sample of accelerated students and traditional students, accelerated students average CGPA was 3.90, whereas the traditional students' CGPA was 3.58. The median score for the accelerated students was 3.95, while the median score for traditional students was 3.58. Comments from clinical supervisors included “excellent classroom management skills,” “addressed the needs of diverse learners,” “technology utilized throughout the lesson,” “integrated historical content into a literature lesson.”

Anticipated Long-Term Impact: The impact of this innovation will be the production of highly qualified career changers. Many individuals who desire to become teachers beyond the traditional college age do not have the opportunity for extensive field experience prior to employment. Research reveals that many career changers leave teaching after a year or two. This program provides a benefit to the K-12 school and to the career changers. The school has the advantage of another pair of hands in the classroom for 180 hours during the fall and winter sessions and in the spring session for 15 weeks of student teaching. The advantage for the career changer is the ability to function in a classroom from September through May. This opportunity gives the career changer the chance to be actively involved in teaching prior to accepting a position as a teacher.

Contact: Joanne Kenny, Assistant Professor, School of Education, and Codirector, Accelerated Teacher Certification Program (kennyj@georgian.edu)
Innovation or Reform Area: Clinical Preparation/Middle School

Funding: Teacher Quality Enhancement Grant (Partnership - 84.336B): $5,877,591 October 1, 2004 – September 30, 2009. In-kind and matching contributions are made by the participating institutions.

Description: The New Jersey Consortium for Middle Schools (NJCMS) is a collaboration among four New Jersey institutions of higher education: Kean University (lead institution), Rider University, Rowan University, and William Paterson University. In its 5 years of implementation, NJCMS has significantly impacted education at the middle level in New Jersey.

- **Schools to Watch:** In collaboration with the NJ Department of Education Schools, NJCMS implemented Schools to Watch, a national program recognizing excellence in middle-level education. A team of educators from the state Department of Education, partner universities, and local education organizations has identified schools that have exemplary middle-grades programs. NJ Schools to Watch ensures that teacher candidates from universities will have quality placements for their preparation.

- **Statewide Conference on Middle Schools:** Kean University established a strong partnership with the NJ Middle School Association and together have transformed its small annual meeting into a statewide conference, attended by over 350 educators. More than 30 breakout sessions are presented by partners and other education experts.

- **Middle-Level Teacher Endorsement Programs:** Partner members of NJCMS played a key role in the development of teacher endorsements for the middle grades, which assured that teachers were prepared to be specifically skilled in meeting needs of students in grades 5–8. Kean University also supported the development of professional standards for teaching in New Jersey, which have standardized expectations for teacher preparation and professional practice. The university partners created programs to prepare middle school teachers and produced 292 teachers through the new middle-level endorsement programs.*

- **Professional Development Schools:** NJCMS implemented the professional development school (PDS) model in eight middle-level schools and provided resources such as laptops, professional development, and consultants to partnering high-need schools. The PDS model follows the standards of the National Council for Accreditation of Teacher Education as a guide and also creates support for teachers in the induction phase. Partnering districts acknowledge a significant improvement the quality and preparation of teacher candidates through the PDS model, improvement in supports for new teachers, and professional growth opportunities for veterans.

Outcome Data: NJCMS reports the following impacts on the 8 PDSs:

- Number of preservice teachers placed in PDS: 28 (Year 2), 110 (Year 3), 145 (Year 4)
- Impact of PDS placement for beginning teachers (in Years 1-3 of teaching experience): 84% to 96% of new teacher respondents strongly agreed with benchmark statements regarding experience in the PDS model (i.e., better able to integrate standards, expanded knowledge of subject matter content)
- Slight trends toward improvement on state testing such as NJ Assessment of Skills and Knowledge; however, it is not possible to directly associate this with the impact of the PDS model due to the complexity of factors known to influence student achievement
- 92% of new teachers indicated that they were more likely to stay in teaching as a career as a result of their involvement in the PDS experience

Impact on Partnering Universities:

- Developed program for middle school endorsement in all 4 universities
- Number of new teachers prepared specifically for middle school: 292*

* This number reflects only those students who specify middle school endorsement in their preparation program. Other students may opt to obtain the middle school endorsement or to teach in middle schools, but the systems are not able to capture that data at this time.
Anticipated Long-Term Impact: When NJCMS began in 2004, there was no acknowledgement at the state level of the critical issues and needs of students and educators in the middle grades. Now, in addition to a staff member in the NJ Department of Education there is

- A statewide program to acknowledge high-quality middle schools;
- A statewide conference that will continue to grow, celebrating the accomplishments and the professional education needs of middle-level educators; and
- A precedence for successfully implementing the PDS model in the middle grades.

In addition, an invitation was extended to middle-level educators to participate in the discussion of secondary school reform now taking place in the state. These reforms have created systemic change in how New Jersey views and supports middle-level education. This will have a long-lasting impact on the educational services and supports for students and educators for many years to come.

Contact: Gail Hilliard-Nelson (gnelson@kean.edu), Director, New Jersey Consortium for Middle Schools, with partners: Rider University, Rowan University, and William Paterson University
Innovation or Reform Area: Middle School/Technology

Funding: Teacher Quality Enhancement Grant (Partnership - 84.336B): $5,877,591 October 1, 2004–September 30, 2009. In-kind contributions and matching contributions are made by the participating institutions.

Description: Kean University partnered with McGinnis Middle School in Perth Amboy (NJ) in a professional development school (PDS) model for the past 5 years. This project was supported by a federal grant through the New Jersey Consortium for Middle Schools. During this period, the school has made great strides in school climate and student achievement, leading McGinnis to achieve “adequate yearly progress” in 2008 for the first time in 7 years. McGinnis is located across the Hudson River from New York City. It enrolls approximately 1,300 students, of whom 93.4% are Hispanic and 5.3% are African American. Some 78% of the students receive free or reduced-price lunch. Collaboration with Kean through the PDS model, combined with the district’s transformation of the school’s leadership team, has produced dramatic results. Key PDS elements include creation of an effective university/school improvement committee, development of targeted professional development to meet specific needs of faculty, placement of student teachers who function as team teachers in eight classes each semester, creation of support groups for all new teachers in the school, implementing an innovative “Laptops in the Classroom” Project, and infusion of technology and project-based learning throughout the school. Teachers now play a strong leadership role at McGinnis and are actively engaged in examining classroom and school data for improvement. The district and school leadership have joined with faculty to systematically develop programs targeted to specific needs of the at-risk students. A Saturday program was instituted to help children who were in danger of failing classes, the after-school program was revamped to increase critical thinking skills, and chronic discipline problems are being addressed proactively. The data below demonstrate just how dramatic the turnaround at McGinnis has been.

Outcome Data:

- **School Climate:**
  - Student retention in Grade 8 decreased by 59% from 2007 to 2008 (49 compared to 20)
  - Total OSS (out-of-school suspensions) decreased from 873 in 2006-07 to 468 in 2007-08
  - Average monthly student cutting of classes and detention decreased from 34% to 24%

- **Student Achievement:** A study was conducted to determine the effect of the 1:1 Laptop Initiative. The laptop students’ results from the 2007-08 NJASK7 were compared to a control group. The control group was similar in makeup to the laptop team (number of general education students, special education students, the same basic curriculum in math and language arts, and same instructional time allocations within the block schedule).
  - Language Arts—Control Group: 36% Proficient, Laptops Group: 62% Proficient
  - Mathematics—Control Group: 29% Proficient, Laptops Group: 59% Proficient

- In 2008, McGinnis Middle School made adequate yearly progress for the first time in 7 years.

Anticipated Long-Term Impact: The collaboration between Kean and McGinnis Middle School offers an exemplary case study for the use of the PDS model and university and local district collaborations in school improvement. By working together, bringing resources to the district, and adding a supportive on-site faculty member from the university, this school has created a thriving, learning community. This demonstrates the efficacy of the PDS model for producing school turnaround, when combined with vigorous leadership transformation in a challenging urban school.

Contact: Gail Hilliard-Nelson (gnelson@kean.edu), Director, New Jersey Consortium for Middle Schools, with partners: Rider University, Rowan University, and William Paterson University
Innovation or Reform Area: Technology/Special Education

Funding: New Jersey Department of Education Provisional Teacher Program and Monmouth University, West Long Branch, New Jersey

Description: The university’s unique and innovative approach to student learning brought alternate-route (Provisional Teacher) certification candidates into an arena with undergraduate special education teacher candidates to discuss various topics including communication, collaboration, and implementation of lesson plans using technology. Under the direction of two professors, the two classes were placed in mixed groups and discussed research-based topics related to special education law, such as IDEA and Response to Intervention, and their application in classrooms. The extension of the classroom discussions was continued by collaboration through the development of lesson plans using a wiki format that were related to the alternate-route candidates’ daily experiences in their classrooms. The special education teacher candidates contributed their ideas based on best practices for the inclusion of modifications and accommodations for struggling learners. The in-class and wiki exchanges provided rich opportunities for dialoguing that led to enhanced creativity and development of more meaningful, engaging artifacts. After all participants read articles related to the approaches of coteaching, the two professors developed a distinctive coteaching model that they demonstrated during each of the sessions. Coupled with the coteaching presentation, all participants completed a learning style inventory. The professors utilized the survey results by tapping each of the identified learning styles during the direct instruction component of the lesson. Further discussion and dialogue demonstrated how a classroom teacher incorporates these styles when implementing individualized education plans.

Outcome Data: The survey data and collaborative discussions posted on a class wiki found that the project impacted alternate-route and preservice special education teachers in many ways. The alternate-route group showed a significant (positive) change, based on pre- and postdiscussion surveys, in their disposition toward working with children with special needs. In the focus group interviews, the alternate-route teachers also stated that this new collaborative model positively impacted them. First, they said they learned substantial information about developing lessons that accommodate students with special needs. These teachers stated that they learned exactly what differentiation entailed. Moreover, the alternate-route and preservice special education teachers developed interdisciplinary lesson plans that accommodated different learning styles and disabilities. Corroborating the data the university found on changes in dispositions, alternate-route teachers stated that this project changed their views of teaching students with special needs. Finally, teachers stated that they are more confident in teaching and plan to integrate this new technology (wiki) into their everyday teaching.

Anticipated Long-Term Impact: Alternate-route and university-based programs seldom work together or collaborate to deliver high-quality programs. The present study indicates that participants responded very favorably to this new collaborative model, using the wiki as the format for collaborative reflection, and led to changes in dispositions in alternate route teachers. Monmouth University has thus expanded this model to include preservice teachers in a university-based program and has integrated a technological component.

Contact: Lynn Romeo, Dean; Terri Rothman, Associate Dean (trothman@monmouth.edu); Mary Brennan, Specialist Professor; Donna Mitchell, Codirector of Provisional Teacher Program
Innovation or Reform Area: Literacy


Description: For 10 years, William Paterson University has worked with William B. Cruise Memorial School in a professional development school model. Holding on-site teacher education courses at the school has resulted in significant benefits for teacher candidates, the K-12 faculty at the school, the university faculty, and the K-12 students. One particular focus for the partnership has been on improving the literacy skills of the K-12 students and the literacy instructional skills of the K-12 faculty and teacher candidates. First and second grade classrooms serve as laboratories for field-based literacy courses where students, teacher candidates, and course co-instructors (school-based and university-based faculty) learn with and from each other.

Outcome Data: To measure the impact of the literacy interventions, faculty at William Paterson University examined 80 teacher candidates (~90% of whom were European American and female) from 3 terms, 24 tutored children, and 24 nontutored children (100% of the children were Latino and second-graders). Quantitative data indicate that children involved in the program, including an entire year of tutoring in language arts literacy instruction, scored better on several standardized measures that did their nontutored peers. Qualitative data reveal that consistent, ongoing attention from a caring adult increased children’s motivation to read. Teacher candidates learned how assessment informs instruction by planning best practices literacy lessons to address the needs of learners with whom they work. School-based faculty experience professional development when they share their expertise with teacher candidates. Furthermore, teachers are empowered and experience increased accountability for teacher preparation. Course co-instructors all host practicum and student teachers in their classrooms; several have voluntarily implemented a program in which they meet with their student teacher before the start of the semester in order to involve interns in planning and classroom organization. University-based faculty benefit by spending more times in schools, thereby keeping them informed about the needs of schools for which the university’s candidates are likely being prepared. Because of this literacy course, approximately 7 university faculty members per semester are working in schools in a meaningful way.

Reader Levels—Letters Converted to Numbers

<table>
<thead>
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<th></th>
<th>October</th>
<th>January</th>
<th>May</th>
</tr>
</thead>
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<tr>
<td>William Paterson Program N=24</td>
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</tbody>
</table>

F (1,23) Tutor: = 3.41 n.s.; Time = 114.12 **; Time X Tutor = 3.57 *
*p<.05  **p<.01
Anticipated Long-Term Impact: Students at the William B. Cruise Memorial School in Passaic, New Jersey (a university PDS), continue to benefit academically and emotionally from having literacy tutors each semester from William Paterson University. Teacher candidates continue to benefit from authentic classroom experiences working with primary grade students teaching literacy skills and strategies under the supervision of the classroom teacher and a university professor.

Contact: Dorothy A. Feola, Associate Dean (feolad@wpunj.edu)
Innovation or Reform Area: Teacher Recruitment
Funding: Private Foundations; Buffalo State College Alumni

Description: In fall 2005, Buffalo State College initiated a new learning community for freshmen students called (at that time) Be a Hero—Be a Teacher. This learning community was developed for students who were considering the teaching profession and specifically for those who were interested in urban education. Students were given the opportunity to shadow and observe teachers in K-12 classrooms and were required to perform service learning in an urban public school. Faculty who participated in the learning community worked collaboratively in providing students with course work and experiences that allowed them to demystify urban public education.

Another component of the community has been an annual field trip to Washington, DC, where participants have met with various personnel at the Department of Education and then toured the Holocaust and Native American museums. This provided a wonderful opportunity for the students to learn about education policy at the highest level, but also to view education from a multicultural perspective in understanding and affirming diversity through the tours of the museums and learning about the importance of this information in the curriculum.

Over the past 4 years, the learning community has continued to evolve, starting with the name of the community, which is now In Teachers We Trust. Much of the course work has remained the same, and service learning has continued to be an important component of the program. The intent of this program is to expose students to urban education and specifically to serve as a method of recruitment for students who are interested in teaching in an urban school district.

Outcome Data: In the 4 years that the college has offered this opportunity, approximately 100 students have participated in the program. Overwhelmingly, students have expressed their appreciation for being afforded this unique opportunity so early in their education. It must be noted that for some students, there has been a change in major, because they felt that education may not be an appropriate profession for them. However, for others, it reinforced their desire to teach in an urban setting. In every year of this community, there have been students who have gone back to the schools where they did their service learning to continue to volunteer even though their assignment was complete. Thus, for the college students as well as the teachers and children in the public schools, everyone has been able to benefit from this experience. The first cohort participating in this program will graduate in the spring of 2010. Two thirds of the 100 who have participated in the learning communities to date are continuing on as education majors.

Anticipated Long-Term Impact: The mission of the Center for Excellence in Urban and Rural Education is to recruit and retain teachers for high-need urban and rural schools. One of the programs within the Center is the High School Future Teachers Club (HSFTC), which is affiliated with the national Future Educators of America (FEA). In this program, the college partners with the Liberty Partnerships to offer students SAT preparation, interview skills, tutoring opportunities, and more as well as implementing the FEA curriculum. Students are also brought on campus each year to tour and visit with education majors (we have had students from past learning communities participate in this aspect of the program). This is one of the college's recruitment initiatives, encouraging students from the HSFTC to attend Buffalo State College and enroll in the learning community. The college can then mentor and support them in their first semester of their program. The goal is to expand this program into an Urban Teachers Academy that would develop teachers who then go back to their communities to teach.

Contact: Kathy L. Wood, Director, Center for Excellence in Urban and Rural Education (woodkl@buffalostate.edu)
Innovation or Reform Area: Clinical Preparation

Funding: 2004-2009, U.S. Department of Education Teacher Quality Enhancement Grant, $3.5 million

Description: This Teacher Quality Enhancement (TQE) grant initiative has provided an embedded and sustainable professional development model that produces student achievement gains in grades Pre-K to 12 and has led to systemic change on the delivery of professional development. The success of the TQE model has been in putting all the pieces together, using proven research-based strategies, data-driven needs, multiple forms of assessment, teacher recruitment and retention across the school district, and balanced professional development in literacy and content areas. Another important component has been a consistency of Niagara University faculty and the hiring of school district personnel as adjunct faculty delivering specially designed graduate-level course work (16 new courses) based on school district data and standardized test scores. Over the last 5 years, in-service teachers (grades P-12) have had opportunities to participate in 50 hours of professional development annually. The first year focused on literacy, the second through fourth years on literacy integrated into all content areas, and the final year on integration across the curriculum.

The TQE model has three major components: (a) graduate-level courses based on a 45-hour model—15 hours working with university faculty, 15 hours of classroom application, and 15 hours of implementation and assessment; (b) teacher cohorts engage in a weeklong summer institute and biweekly meetings throughout the school year; and (c) preservice candidates in the College of Education are placed with TQE teacher cohorts in the fall and spring for both their teaching assistantship and first student teaching placement, and they receive 8 hours of training in the school district’s literacy program.

Outcome Data: The culminating outcome of this project is the 22 teacher leaders completing an Advanced Certificate of Study, comprising 18 graduate hours (grades Pre-K to 12) in all of the Niagara Falls School District’s 11 schools. Other pertinent data include the following:

- Total number of participating teachers: 500 out of 640 teachers for a 78% participation rate
- Total number of participating preservice candidates: 113
- The model of placing preservice candidates over two semesters in the same classroom produced a 96% satisfaction rate from cooperating TQE cohort teachers.
- Sixteen new NU graduate courses were developed for Niagara Falls teachers over a 5-year period.

### Grades 1-8 DRA Passing Rate and Subject Averages at 10, 20, 30, and 40 Weeks by TQE Served Status, 2006-2007

<table>
<thead>
<tr>
<th>Grades 1-8 subject</th>
<th>10 weeks % at or above standard</th>
<th>20 weeks % at or above standard</th>
<th>30 weeks % at or above standard</th>
<th>40 weeks % at or above standard</th>
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<tbody>
<tr>
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<td>66</td>
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<td>ELA grades</td>
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<td>Social studies grades</td>
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<td>91</td>
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</tr>
</tbody>
</table>
## Grades 9-12 Subject Averages at 10, 20, 30, and 40 Weeks by TQE Served Status, 2006-2007

<table>
<thead>
<tr>
<th>Grades 9-12 subject</th>
<th>10 weeks % at or above standard</th>
<th>20 weeks % at or above standard</th>
<th>30 weeks % at or above standard</th>
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<tr>
<td></td>
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<td>ELA grades</td>
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<td>Math grades</td>
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<td>Social studies grades</td>
<td>81</td>
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<td>76</td>
<td>73</td>
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### Anticipated Long-Term Impact:

The program has resulted in the City of Niagara Falls School District teachers receiving balanced professional development in both content areas and teacher leadership. The school district will have 22 teacher leaders to serve as curriculum specialists and turn key trainers at all grade levels, content areas, and in special education. This model provides for sustainability and continuity of professional development with a mentoring and coaching model used throughout the school district. The various areas of teacher expertise can be shared among buildings. The long range plan is for the teacher leader to participate in a week long summer institute annually with Niagara University faculty providing new research-based strategies and evolving issues around closing the student achievement gap.

### Contact:

Patricia Wrobel, College of Education, Assistant Dean for External Relations  
(pwrobel@niagara.edu)
Innovation or Reform Area: Math/Science

Funding: U.S. Department of Education, Title IIB, NCLB, Math and Science Partnership Grant

Description: Niagara Falls City School District (NFCSD) and Niagara University have received a Federal, Title IIB Mathematics and Science Partnerships (MSP) grant that is administered by the New York State Education Department. The Futures in STEM grant is a quasiexperimental design that serves one half of the NFCSD: four elementary schools, one preparatory school, and two of the houses at Niagara Falls High School. The STEM cohort is comprised of 215 participants out of the school district's 640 employees. The participating teachers are required to complete 60 hours of embedded professional development yearly over the 3-year grant cycle. Forty-one of those teachers have opted to take 18 graduate credit hours to become MST Content Specialists.

Outcome Data: Science and Math Instructional coaches were trained and placed in each of the participating schools to provide embedded professional development. The STEM initiative has allowed the school district to create a comprehensive STEM web site highlighting district curriculum maps, technology resources, suggested lesson plans that correlate to learning standards, and links to coach web pages. Niagara University has developed a MST (Math, Science, Technology) Master’s Degree Program, which will allow these 41 teachers to pursue the master’s degree and become teacher leaders in their respective schools. Teacher pre- and postprogram assessments are done annually to establish baseline data for professional development. The grant has facilitated pedagogical changes in the delivery of STEM content by its teachers and has created two STEM courses for students at Niagara Falls High School that offer strands in career awareness, higher level thinking skills, and problem solving. Teachers integrating inquiry-based practices, real-life applications, and hands-on manipulatives have made teaching math, science, and technology more relevant and meaningful. What makes this program different is that the partnership is building capacity from within while creating a sustainable STEM program for the future.

Under the 3-year grant funding beginning 2007-2008, STEM participating teachers will receive 18 graduate credits. To date, 41 teachers have received 12 graduate credits in MST integration. The teacher retention in the program is 93%. Also under the grant, a minimum of 200 teachers annually receive 60 hours of embedded professional development consisting of 30 hours at the district level and 30 hours at the school building level. The teacher retention rate is 98.6%.

Number of Participants, 2007-2008 and 2008-2009

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>MST content specialists</td>
<td>44</td>
<td>41</td>
</tr>
<tr>
<td>Overall STEM cohort</td>
<td>218</td>
<td>215</td>
</tr>
</tbody>
</table>
**Anticipated Long-Term Impact:** The Futures in STEM initiative has produced systemic change in bringing inquiry-based practices into an integrated teaching and learning environment. Each of the participating schools will be equipped with teachers who have expanded their content knowledge in science and mathematics, integrated literacy strategies into all STEM content, and use technology as a vital instructional tool. Through the support of an instructional coach model for professional development, teachers who may not have had a preference for science content have become more comfortable and have transitioned to teaching science as an investigation, expanding their knowledge and experimenting with new teaching strategies. The science and math instructional coaches have offered training in science and math content, inquiry processes, the workshop model for instruction, MST integration, engineering design, Smartboard technology, bioinformatics, and various district-wide technology initiatives—schoolisland, kidspiration, webquests, moviemaker, PASCO probeware, and forensic science, to name a few.

**Contact:** Patricia Wrobel, College of Education, Assistant Dean for External Relations (pwrobel@niagara.edu); Debra A. Colley, Dean, College of Education (dcolley@niagara.edu); Cynthia Bianco, Superintendent, Niagara Falls City School District (cbianco@nfschools.net)
**New York**

Innovation or Reform Area:  Clinical Preparation

**Funding:**  The Gates Foundation Grant for Small High Schools, $400,000 over 4 years

**Description:**  Pace University High School and Pace University's School of Education developed a unique partnership which has paid rich dividends for a targeted group of students who were not slated to pursue postsecondary education. In only 4 years, the school has been recognized widely as one of New York City's finest small, unscreened high schools. The school provides an extensive laboratory for the preservice teachers including a unique, yearlong, full-time internship that is tuition free and provides a small stipend for the selected participants. High school students have extraordinary opportunities to take tuition-free courses at the university, and many left high school with up to 15 transferable credits. The university also provides a 3-day orientation program for all incoming ninth-graders at the Westchester campus, where students live in the dormitories, are initiated in the university's library and technology systems, meet their teachers, and are presented with the school's expectations for their success. Pace University provides five full-tuition scholarships to each graduating class. By all measures, New York State Regents diplomas (96%), attendance (90+%), behavior, community service, and student/parent satisfaction with the school reside comfortably in the upper tiers of the city's respected high schools. There are currently 4,300 applications for 115 seats. Over 90% of the first graduating class (June 2008) are attending college.

**Outcome Data:**  SAT Verbal: 570; SAT Math: 590; 80% take 4 years of math, science, and social studies; 90% graduate on time; 97% completed 180 hours of community service; 96% earned Regents Diplomas; 45% earned Advanced Regents Diplomas; attendance rate: 90%; discipline incidents are well below city and state averages.

**Anticipated Long-Term Impact:**  This program is a blueprint for an effective university-school partnership that provides unique opportunities for collaboration in student learning, teacher support, curriculum development, and expanded educational opportunities for students seeking to achieve at ever higher levels. It is clearly an example of maximizing potential and opportunities for an underresourced urban community school.

**Contact:**  Arthur Maloney, Department Chair (amaloney@pace.edu)
Innovation or Reform Area: Online Teaching
Funding: None
Description: Kent State has developed and delivered a hybrid (combining online and face-to-face courses) program that represents an innovative approach to train teachers in contemporary topics. This degree program is innovative in both the delivery of the content and the content itself. Begun in spring 2006, this master's degree program of study leads teachers through contemporary topics related to educational assessment in a practical, application-based manner. All classes focus on day-to-day classroom instruction and require that candidates work through class activities using their own data generated from students in their classes. Course work focuses on topics related to understanding and using value-added assessment, evidence-based research, data-driven decision making, and using data and assessment to improve instruction and student learning. Additional course work focuses on contemporary topics such as differentiated instruction, standards-based education, and action research. These courses are highly related to what teachers do on a daily basis yet receive very little training in at the undergraduate level. This M.Ed. program is an intensive 16-month, cohort-based program that has all students complete the same courses in the same sequence. For teachers, one of the most significant advantages of this program is the format—teachers have to commit only one day a week to physically being in a classroom, yet they complete 32 credit hours in this condensed timeframe because they always have an online course paired with the face-to-face course they are enrolled in each semester.

Outcome Data: To date, 154 teacher candidates have participated in the hybrid program. As part of a culminating experience in a terminal master's degree program, 27 students participated in discussion groups and responded to a series of surveys that asked them to describe their experiences and perceptions of the 15-month hybrid master's degree program. (The university is seeking funding to support an analysis of learning by the K-12 students taught by teachers who have come out of the hybrid program.) Data collected from surveys reveal positive impacts of the program as it relates to student knowledge and confidence in understanding how to use data in their teaching practice. Furthermore, when comparing this program experience to the traditional face-to-face program experience, the majority of participants believed the format resulted in a more enjoyable experience (56%), believed they were more engaged in the course work (56%) and felt more connected to other students (76%). Eighty percent believed other students in the program were important resources for them during the program. Other benefits of the program format (cohort and hybrid) have been increased enrollment (400+%), a positive impact on graduation and retention rates (96% after first course), and a reduction in time to degree completion (this program is completed in 16 months, compared with an average master's degree completion time of over 2 years). In addition, teacher candidates in the hybrid program experienced a significant increase in their confidence around understanding and using value-added assessments to enhance their instructional skills.

Anticipated Long-Term Impact: The long-term systemic impact of this innovative approach to training master's-level teachers will be in how programs of study are offered and completed and the content that is included in these programs. First, the hybrid approach to course delivery avoids the weaknesses of programs that are offered either completely online (which can leave students feeling disconnected) or completely face-to-face (which is ill suited to students who cannot commit 2 to 3 days a week to class meetings in addition to working full-time). Second, the development of the program content was based not on what the program faculty believed was important but rather on what the contemporary realities of teaching are today.

Contact: Shawn M. Fitzgerald, Associate Professor and Program Coordinator, Evaluation and Measurement (smfitzge@kent.edu)
Innovation or Reform Area: Rural Teacher Preparation/Math/Science

Funding: Choose Appalachian Teaching (CAT) receives $1 million from the Ohio Board of Regents’ Choose Ohio First Scholarship Program, representing a major investment by the State of Ohio to strengthen its economy and workforce through improving its education at both the K-12 and postsecondary levels (current funding continues until 2014). An additional $1 million in cash and in-kind match is contributed by five universities and colleges in the SEODEC consortium: Ohio University’s main campus and five regional campuses, plus Shawnee State University, Rio Grande University, Marietta College, and Muskingum College. CAT receives additional indirect support and resources from numerous collaborating organizations.

Description: SEOTDC, South East Ohio Teacher Development Collaborative, engages higher education institutions and practitioners in improving education in the 32 economically stressed, low-resourced Appalachian counties of southeast Ohio. SEOTDC focuses on recruitment, retention, and professional development of first-rate teachers; encourages faculty responsiveness to the effects of poverty on student success; enriches veteran teachers with knowledge about research and policy changes; and influences policy direction.

SEOTDC’s major project, CAT (Choose Appalachian Teaching: Building a Community of Mathematics and Science Teachers for Southeastern Ohio), is an innovative teacher development initiative that will concurrently generate economic growth and educational excellence beginning this year. CAT offers an exemplary model of rural, geographically dispersed universities and colleges, previously competing for the same students, now collaborating to benefit the region. Supported by the Coalition of Rural and Appalachian Schools, a regional consortium advocating equity for underfunded rural Appalachian Ohio schools in 32 counties, CAT involves five universities and colleges and regional campuses in several creative components and offers $1 million in grant funds dedicated exclusively to student scholarships. All remaining project expenses and resources are subsidized by CAT institutions. An adaptable array of scholarships are offered by CAT institutions to preservice, in-service, and career-changing teachers, including 2-, 3-, and 4-year scholarships with flexible interinstitutional transfer arrangements at both bachelor’s and master’s levels. Preference is given to first-generation Appalachian Ohio students who commit to remain in southeast Ohio to teach math and science in grades 7 through 12. The curricular focus is on inquiry learning, action research, and STEMM (science, technology, engineering, mathematics, and medicine) literacy for both college and high school students. Students participate in an exceptional 3-year induction period and graduate residency, a professional learning community, student professional organizations, and an annual CAT Research Symposium supporting each phase of their learning cycle and continuing after graduation with 3 additional years of mentoring and progress tracking.

Outcome Data: Since forming in 2007–2008, SEOTDC has been successful in receiving 1 of 11 State of Ohio’s Choose Ohio First Scholarship Program grants for the CAT program, demonstrating Ohio Board of Regents’ recognition that SEOTDC—with Ohio University as the lead CAT institution—offers a promising consortium model capable of responding to unique regional issues. CAT represents a serious commitment among five regional SEOTDC universities and colleges, many previously in competition for the same students, plus five Ohio University regional campuses, to address critical teacher deficits through flexible joint teacher preparation activities. Institutions have donated cash, faculty and administrative time, classrooms, and other resources to ensure CAT’s success. Additional partners include Southeast Ohio educational service centers; the Coalition of Rural and Appalachian Schools; Ohio University’s South East Ohio Center for Excellence in Mathematics and Science, an NSF-funded Noyce Scholarship program; and other collaboratives supporting the preparation of teachers, particularly in math and science. The first participants will enter CAT institutions beginning fall 2009. Eventually CAT will produce 75 additional high school math and science teachers for southeast Ohio, a significant increase beyond the current shortage. CAT will award 30 2-year, 10 3-year, and 35 4-year scholarships for undergraduates. Twenty 2-year scholarships will be awarded to students currently in STEMM programs who shift their career goals to teaching math or science in high schools.
<table>
<thead>
<tr>
<th></th>
<th>Year 1 2009-10</th>
<th>Year 2 2010-11</th>
<th>Year 3 2011-12</th>
<th>Year 4 2012-13</th>
<th>Year 5 2013-14</th>
<th>Total scholar-years</th>
</tr>
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<tbody>
<tr>
<td>Scholarship students*</td>
<td>34</td>
<td>74</td>
<td>68</td>
<td>58</td>
<td>36</td>
<td>270</td>
</tr>
<tr>
<td>Scholarship dollars (OBOR funds)*</td>
<td>$116,000</td>
<td>$256,000</td>
<td>$252,000</td>
<td>$232,000</td>
<td>$114,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Cash match (CAT institution funds)*</td>
<td>$27,000</td>
<td>$32,000</td>
<td>$27,000</td>
<td>$22,000</td>
<td>$22,000</td>
<td>$130,000</td>
</tr>
<tr>
<td>Additional match (personnel, other scholarships)</td>
<td>$176,034</td>
<td>$177,881</td>
<td>$176,933</td>
<td>$181,408</td>
<td>$157,744</td>
<td>$870,000</td>
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<td><strong>Total match</strong></td>
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<td></td>
<td></td>
<td><strong>$1,000,000</strong></td>
</tr>
<tr>
<td><strong>Total costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$2,000,000</strong></td>
</tr>
</tbody>
</table>

**Anticipated Long-Term Impact:** SEOTDC through the CAT program addresses the immediate shortage of the region’s high school mathematics and science teachers, while tackling the major longer-range challenge of Ohio’s forthcoming curriculum changes. In 2014, Ohio’s Core Curriculum will require that Ohio high school students take additional advanced math and science courses, necessitating the employment of a considerably higher number of well-prepared teachers. CAT anticipates and addresses this issue. CAT significantly expands the pool of highly proficient mathematics and science teachers while building strong academic skills in high school students, thus developing their future academic and occupational opportunities in STEMM career fields. Ohio’s economy will benefit as persons with these advanced skills enter higher education and eventually its workforce. CAT strengthens the capacity of high schools in southeast Ohio to deliver world-class mathematics and science programs. Over 170 school districts in Appalachian Ohio will be positively influenced by the teachers who graduate from the CAT program. CAT’s focus on STEMM literacy, action research, and inquiry learning presents a unique opportunity to transform how math and science are taught and learned. Such methods not only excel at teaching math and science content, they ensure that students, both at the university and high school levels, will gain lifelong learning skills to continually improve their reasoning and research abilities and professional services.

**Contact:** Renée A. Middleton, Dean, College of Education (middletonr@ohio.edu)
Innovation or Reform Area: Math/Science

Funding: U.S. Department of Education Teacher Quality Enhancement; National Science Foundation, Noyce Scholarship Program

Description: UT Toledo, UTeach, UTouch the Future (UT3) recruits, trains, and retains high-quality mathematics and science teachers for the urban classroom. UT3 recruits candidates from other colleges within the university, from high schools, from community colleges, from other colleges/universities, and STEM professionals. UT3 provides a total of $12,800 per student to support math or science education students who are pursuing UT's traditional teacher education program. UT3 Noyce Scholars (UT3 NS) targets STEM professionals and provides $17,220 to 10 qualified graduate-level students entering the UT Ohio Educator Alternative License Program—a fast track to teaching. Potential recipients have a B.S. degree in one of the STEM fields (GPA of 3.0+). Program course work includes 12 hours, with an additional 6 hours required to move to the next level of licensure. Both programs include a service obligation stipulating the scholar will teach in a high-need school for up to 4 years, depending on the program.

Several unique features contribute to the preparation and support of the scholars. Science and math teachers from partner school districts can enroll in two courses to prepare them to provide preservice teachers with a rich and meaningful student teaching experience. School administrators can partake in a course that examines the role a principal can and should play in the continuing development of new STEM teachers. To encourage career or college major changers to consider teaching, the university offers a course that explores what it means to teach, learn, and know mathematics and science through university classroom experiences and urban school-based visits. UT3 utilizes technology to assist with student teaching observations through a Polycom system, to provide the project evaluator opportunities to observe graduates’ classrooms (Logitech cameras) and to provide induction-year support (NING on the web).

Outcome Data: Since the onset of UT3, the rate has doubled of science and math teacher graduates accepting positions in high-need schools. UT3 NS places an additional 7 to 10 teachers in the classroom each year. More than 12% of the scholars are from underrepresented populations. To date, a total of 75 UT3 scholarships and seven UT3 NS scholarships have been awarded. Because these projects focus on urban education, the number of new math and science teachers working in high-need urban school districts has increased. The 33 UT3 graduates received licensure and are teaching or substitute-teaching in high-need schools across the United States. Direct observation of graduates teaching in their classroom is measured using the Horizon Observation Protocol. To date, observations scores have been 3 or higher on a scale of 1 to 5, indicating that the teachers are integrating inquiry-based instructional strategies into their teaching. A “Cultivating Urban Teaching Series” was developed as a result of student feedback. It brings guest speakers to campus to discuss topics relevant to teaching in urban schools such as teaching in diverse environments, making math and science relevant to urban students, strategies for working within a bureaucracy, and a forum where UT3 alumni share their experiences. This series is open to the entire college, and attendance reflects a college-wide interest.

Anticipated Long-Term Impact: Better preparing teachers for the urban classroom will not only place more teachers but also increase their persistence rates in high-need, urban school districts. Currently, the UT Judith Herb College of Education is reviewing the feasibility of applying the UT3 model to its other licensure programs (social studies, English, early childhood education). An expanded model that includes all content areas and grade levels could dramatically improve not only the quality of teaching but also student comprehension and content mastery.

Contact: Charlene M. Czerniak, Professor and Director (charlene.czerniak@utoledo.edu)
Innovation or Reform Area:  Math/Middle School

Funding: Oklahoma State Regents for Higher Education (NCLB Title II, Part A)

Description: The Improving Mathematics Pedagogic and Content Knowledge for Teaching (IMPACKT) in Oklahoma (Years 1 and 2) project represents a collaborative partnership among the University of Oklahoma College of Education, College of Arts and Sciences Mathematics Department, and several Oklahoma public schools. This project was designed to bring together teachers of fourth- through eighth-grade mathematics to support their development of strong content knowledge and pedagogic practices in algebra, algebraic reasoning, number sense, number operation and computation, and data analysis and probability. Teacher participants and their principals analyzed current CRT data in order to develop lesson plans to increase student achievement. Student work samples along with pre- and postintervention assessment data were analyzed to determine the effectiveness of implementing these lesson plans.

Outcome Data: In the first year, the IMPACKT in OK project had 30 teacher participants who were pre- and posttested for pedagogic and content knowledge as it relates to algebraic reasoning and algebra. The results of this testing indicated an overall increase of 20% across all teachers and grade levels. Additionally, 21 of the 30 teachers participated in a lesson-study process involving 321 students in fourth through eighth grade. The pre- and posttests of the classroom students indicated a 35% increase in their content knowledge related to algebra. In the second year, the IMPACKT in OK project included 21 teacher participants. The pre- and posttest for this year focused on number sense, number and operation, and data and probability. The teaching content and pedagogical knowledge increased 7%. Additionally, 14 of the 21 teachers participated in the lesson study involving 256 teachers of fourth through eighth grade. The pre- and posttests results indicated a 40% increase in the students’ content knowledge related to number sense, number and operations, and data and probability. The teacher participants during this year also opted to conduct several math nights at different elementary school sites that involved numerous families in mathematics and math games with their children.

Anticipated Long-Term Impact: The participants in the project have and will continue to improve their pedagogic practices. Many recently presented for the first time at a Regional conference for the National Council of Teachers of Mathematics held in Oklahoma City. Likewise, several submitted and were successfully funded for grants for materials to support their effective teaching of mathematics. Both these experiences help transform teachers into teacher leaders in both their building site and their districts. Teachers were strongly encouraged and supported in both these activities and while this was not something directly measured as part of this project it has certainly been an outcome of the project.

Contact: Stacy Reeder, Assistant Professor Mathematics Education (reeder@ou.edu); Sacra Nicholas, Assistant Professor, Mathematics Education
Innovation or Reform Area: Special Education

Funding: None

Description: Preparing secondary teachers skilled in working with special education students within inclusive classrooms is a high priority for today’s middle and high schools. The Secondary Dual Educator Program (SDEP) is one of the few graduate teacher education programs in the nation where secondary and special education pedagogy is integrated and results in dual licensure and a master’s degree. Teacher candidates enter the program with a strong foundation in their content area. Through a series of courses taught across the two departments and field experiences SDEP teacher candidates learn how to (a) use various methods for teaching their content area; (b) differentiate units, lessons, and assessments for a diverse range of learners; (c) implement ongoing formative assessment for instructional decision making; (d) accommodate the needs of diverse students within inclusive classrooms; (e) use research-based practices for planning, instruction, assessment, and content enhancement; (f) teach reading to struggling readers and support reading comprehension in content areas; (g) adapt lesson plans and instruction for students with varying cultural, social, and linguistic backgrounds and specific strategies to support English language learners; (h) initiate collaborative planning, assessment, and problem solving; (i) implement coplanning and coteaching; and (j) become effective teacher leaders. The 6-term program includes over 800 hours of field work in special education and general education within the same middle and high school sites.

Outcome Data: The first 23 teacher candidates completed the program in 2006, and the next 22 will graduate in spring 2009 as highly qualified special education and secondary teachers. Of the 23 teacher candidates in the first cohort, one third took teaching positions in special education classrooms, another third took positions in content areas, and the remainder took hybrid teaching positions (teaching special education and content). Disaggregated pre/post assessments for the second SDEP cohort of teacher candidates’ work samples showed gains for all students (grades 7-12), ELL students, TAG students, and students with disabilities (see chart). Work sample analysis revealed that candidates used information from individual student profiles, learning surveys, Informal Reading Conferences, IEPs, and information about ELL levels to plan units; consulted with special educators and ELL specialists about supports in the classroom; differentiated objectives, learning activities, assignments, and assessments; used content enhancement (unit and graphic organizers) to explain objectives, expectations, classroom routines, and content; designed and used alternative assignments and assessments for particular students; and engaged in repeated formative assessment and used assessment data to make instructional decisions. Follow-up evaluation indicated that graduates continue to use inclusive practices. A year and a half later, principals who hired SDEP graduates were interviewed. Principals reported that, compared with singly prepared teachers, SDEP graduates have more empathy for students with disabilities, plan with needed accommodations in mind, advocate for accommodations with their colleagues, assess learning needs and address them, make data-based decisions, address student needs more frequently themselves rather than calling in a specialist, and have higher expectations for students with disabilities.
## First Cohort of Teacher Candidates—Work-Sample Data on Student Learning Gains (Grades 7-12)

<table>
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<tr>
<th>Name</th>
<th>Subject/grade level</th>
<th>N size</th>
<th>Size</th>
<th>Average learning gains</th>
<th>N size</th>
<th>Size</th>
<th>Average learning gains</th>
<th>N size</th>
<th>Size</th>
<th>Average learning gains</th>
<th>N size</th>
<th>Size</th>
<th>Average learning gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jo</td>
<td>Biology/10</td>
<td>18</td>
<td>13</td>
<td>17%</td>
<td>2</td>
<td>13%</td>
<td>13%</td>
<td>2</td>
<td>13%</td>
<td>10%</td>
<td>1</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Ber</td>
<td>Psychology/11-12</td>
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<td>32</td>
<td>80%</td>
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<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
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<td>Art</td>
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<td></td>
<td>17%</td>
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<td>10%</td>
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<tr>
<td>Ta</td>
<td>Social studies/cold war</td>
<td>73</td>
<td>49</td>
<td>80%</td>
<td>6</td>
<td>76%</td>
<td>12 73.5%</td>
<td>1</td>
<td>78.3%</td>
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<tr>
<td>Bn</td>
<td>U.S. history/8</td>
<td>107</td>
<td></td>
<td>54.6%</td>
<td>8</td>
<td>46%</td>
<td>5 41.5%</td>
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<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
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<tr>
<td>Am</td>
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<td>14</td>
<td>62.3%</td>
<td>3</td>
<td>85%</td>
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<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
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<td>D</td>
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<td>0</td>
<td>28.5%</td>
<td>1</td>
<td>24.5%</td>
<td>0 N/A</td>
<td>3</td>
<td>21%</td>
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<tr>
<td>M</td>
<td>Social studies/HS</td>
<td>30</td>
<td>25</td>
<td>50%</td>
<td>4</td>
<td>50%</td>
<td>1 55%</td>
<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
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<tr>
<td>Nk</td>
<td>Health/9</td>
<td>61</td>
<td>0</td>
<td>68%</td>
<td>10</td>
<td>75%</td>
<td>4 N/A</td>
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<td>Car</td>
<td>Integrated science/8</td>
<td>26</td>
<td>19</td>
<td>48.9%</td>
<td>3</td>
<td>36.7%</td>
<td>3 26.7%</td>
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<td>Na</td>
<td>Language arts/9-12</td>
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<td>39%</td>
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<td>0 N/A</td>
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<td>Art/9-12</td>
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<td>15</td>
<td>64%</td>
<td>3</td>
<td>66.7%</td>
<td>2 50%</td>
<td>3</td>
<td>73.3%</td>
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<tr>
<td>Ka</td>
<td>Integrated science/8</td>
<td>18</td>
<td>12</td>
<td>78%</td>
<td>3</td>
<td>58%</td>
<td>1 89%</td>
<td>2</td>
<td>74%</td>
<td></td>
<td></td>
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<tr>
<td>Na</td>
<td>Lang. arts/9</td>
<td>21</td>
<td>20</td>
<td>15.4%</td>
<td>1</td>
<td>50%</td>
<td>0 N/A</td>
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<tr>
<td>Lor</td>
<td>Advanced art/10-12</td>
<td>27</td>
<td>16</td>
<td>70%</td>
<td>6</td>
<td>60%</td>
<td>3 70%</td>
<td>2</td>
<td>70%</td>
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<tr>
<td>Le</td>
<td>Photo (art)/8-12</td>
<td>20</td>
<td>18</td>
<td>25%</td>
<td>2</td>
<td>20%</td>
<td>0 N/A</td>
<td>0 N/A</td>
<td>0 N/A</td>
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<tr>
<td>Be</td>
<td>Math/9-12</td>
<td>21</td>
<td>4</td>
<td>53.9%</td>
<td>3</td>
<td>45.8%</td>
<td>14 50%</td>
<td>0 N/A</td>
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<tr>
<td>Eli</td>
<td>Health II/10-12</td>
<td>31</td>
<td>24</td>
<td>38%</td>
<td>3</td>
<td>37%</td>
<td>4 38%</td>
<td>0 N/A</td>
<td>0 N/A</td>
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<tr>
<td>Pe</td>
<td>Art/9-12</td>
<td>17</td>
<td>3</td>
<td>33.6%</td>
<td>0</td>
<td>N/A</td>
<td>3 26.6%</td>
<td>1</td>
<td>40%</td>
<td>1 90%</td>
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</tbody>
</table>

**Anticipated Long-Term Impact:** Principals will be able to hire highly qualified teachers who can participate in school reform. They can fulfill many roles such as coteachers, inclusive content-area teachers, and teachers in accelerated or sheltered content area classrooms. Secondary Dual Educator Program graduates integrate instructional practices from both content specific pedagogy and special education to reach and teach the diverse learners in their classrooms. They comfortably work collaboratively with both special education and content teachers in their buildings, blurring boundaries and making the labeling of students almost obsolete within inclusive diverse classrooms. This ability will result in secondary schools where diverse students will feel welcome, accepted, and nurtured within content classrooms.

**Contact:** Barbara Ruben, Assistant Professor, Department of Curriculum and Instruction (rubenb@pdx.edu); Ann Fullerton, Director of Research, Graduate School of Education; Sue Bert, Senior Instructor, Department of Special Education
Innovation or Reform Area: Clinical Preparation

Funding: 1994-2004, Lucent Technologies, $630,000

Description: Penn State University and the State College Area School District have been engaged in collaborative professional development school (PDS) work for the past 11 years. This partnership offers undergraduate elementary education majors an opportunity to pursue a 30-credit, intensive field-based alternative for completion of their teacher preparation program. The mission of the collaborative, which both encompasses and extends the mission of each partner, is expressed by four goals:

1. Enhance the educational experiences of all learners.
2. Ensure high-quality induction into the profession for new teachers.
3. Engage in furthering professional growth as teachers and teacher educators.
4. Educate the next generation of teacher educators.

The fourth goal is informed in part by Penn State's involvement with the Carnegie Project on the Education Doctorate. Guiding principles of the “teacher educator education” aspect of the PDS include apprenticeships, rotations, and a focus on signature pedagogies in a laboratory of practice. This work is one aspect of the program that sets it apart from others nationwide. Success of the collaborative is evident in the numerous awards this program has received, including the 2009 National Association of Professional Development Schools Award for Exemplary Professional Development School Achievement. More information about the collaborative, including additional awards and recognition, can be found at http://www.ed.psu.edu/pds/index.html.

Outcome Data: The retention rate of former PDS interns who continue to teach in State College is very high—well over 90% for the first 5 years—but retention is not an issue in the district general. Currently, former interns teach in 18 states and 2 international sites. The 5-year retention rates of interns across those varied sites have been excellent as well, clearly over 70%. In addition, a 2006 survey of principals who had hired former interns as teachers between 2002 and 2005 found that the principals all rated the graduates as far better prepared (49%) or better prepared (51%) to teach than other beginning teachers that they had hired. This finding held true across all sites with a variety of different demographics.

The schools that Penn State works with are all making “adequate yearly progress.” In annual surveys, both parents and mentor teachers have consistently reported that the interns are having a positive impact on students with whom they work. During the first 10 years of the program, 3,267 parents have responded to the statement “My child benefited from having an intern in the classroom.” The responses for the item range from 1 (strongly disagree) to 5 (strongly agree). The mean response is 4.67, with a median and mode of 5.

In addition to the local impact on students, five of PSU's doctoral-level graduates, who had worked in the PDS as part of their doctoral preparation, have graduated and are currently engaged in leading PDS or partnership efforts in a variety of institutions across the country. Two programs led by former doctoral students were finalists for the 2009 ATE award for the Distinguished Program in Teacher Education.

Anticipated Long-Term Impact: Penn State's use of research-based and innovative understandings of teacher-educator education places continued emphasis on K-6 student learning environments and student achievement.

Contact: Jacqueline Edmondson, Associate Dean for Undergraduate and Graduate Studies (jedmondson@psu.edu)
Innovation or Reform Area: Mentoring

Funding: For reform #2, the university has received funding from the Arthur Vining Davis Foundation ($150,000, 2008-2010) and the Douty Foundation ($3,000, 2009-2010).

Description:
Reform #1: At the University of Pennsylvania, the Penn GSE/TFA Urban Teacher Master’s and Certification Program offers Teach for America (TFA) corps members in Philadelphia a coherent, research-based, and innovative degree program designed to prepare and support them to teach in urban classrooms. Building on the knowledge and methods introduced by TFA, this program builds deep understandings of urban education through close collaborative between university professors and local practitioners. The central goals of the program are to support classroom teaching in the content areas; enhance learning about urban education; provide theoretical and practical frameworks for understanding pedagogy, content, and urban students; develop ways to build positive and meaningful relationships with students, staff, and parents; support TFA corps members as teachers who learn from each other, from other teachers, and from students; and enable corps members to find ways to continue in the field of urban education, whether or not they remain in the classroom after their initial 2-year commitment. TFA corps members receive mentoring during their first year of teaching from several sources including Penn Graduate School of Education doctoral students. The mentors form a professional community of practitioners, dedicated to ongoing research of practical and theoretical issues in K-12 education.

Reform #2: The Philadelphia Area New Teacher Mentoring program provides professional development and support for new teachers teaching in the Philadelphia area who are graduates of CETE (Consortium for Excellence in Teacher Education) institutions, a group of 19 liberal arts institutions. The primary goals of the Swarthmore/University of Pennsylvania professional development and mentoring program are to provide monthly professional development meetings and a summer institute for first-, second-, and third-year teachers in the Philadelphia metropolitan area who received their undergraduate or graduate teacher preparation at a CETE institution; provide a summer institute for new teachers that will help them prepare for the beginning of school and will help them connect to and establish new networks for support and development; provide these same new teachers with mentors who will work with them in the context of their classrooms and schools; develop an education and support program for mentors that would consist of regular study groups and a course on mentoring offered through the University of Pennsylvania’s Graduate School of Education; and conduct research on the program including interviews with these new teachers and with the mentors who work with them as a way of documenting the effect of induction and mentoring programs on the experience and retention of new teachers. The central innovation of this program is the mentoring for early career teachers that is designed to help them remain in high-poverty urban classrooms, combined with a summer institute and monthly meetings.

Outcome Data: The university is in the process of collecting data for both of these projects.

Anticipated Long-Term Impact: The goal for reform #1 is to thoughtfully prepare TFA corps members as teachers in high-poverty, difficult-to-staff public schools in Philadelphia. The impact is likely to be on the achievement of the students in these classrooms. In addition, the initial findings suggest that over 40% of the teachers prepared through this program are remaining beyond their 2-year commitment. Likewise, the aim of the induction program is to support teachers to remain in classrooms in order to increase the retention of teachers who have strong liberal arts undergraduate degrees.

Contact: Kathy Schultz, Associate Professor of Education, Director of the Center for Collaborative Research and Practice in Teacher Education (kathys@gse.upenn.edu)
Innovation or Reform Area:  Closing the Achievement Gap

Funding:  Federal Funding, $500,000; state funding, $500,000/year; Mott Foundation, $8,000,000

Description:  The Center for Partnerships to Improve Education was created to reform underperforming schools. The Center is a consortium of educators, school districts, business and civic leaders, and the greater community collaborating to strengthen South Carolina students’ education outcomes. Located in the College of Charleston's School of Education, it was established in 2005 to address improvement of PK-12 education in South Carolina. The Center for Partnerships’ goals are to improve performance and reduce the dropout rates of students; increase enrollment of minority and low-income students in institutions of higher learning; prepare youth for employment in the 21st-century workforce; re-engage disaffected students in education; educate teacher candidates to work effectively in low-performing schools and to seek employment in such schools; establish expectations, incentives, and professional development for teachers to make a long-term commitment to work in low-performing schools; and improve understanding in higher education and businesses of the issues limiting urban and rural students’ futures and identify ways to address these issues. Currently, the Center has partnerships with four schools. The first partnership school was the lowest performing high school in the state, and the Center assisted in helping them overcome the failing status. Second, the School of Education’s graduate master’s program has been reformed to better meet the needs of teachers who work in low-performing, high-poverty schools. Third, one Department of Teacher Education was created to better respond to the needs of future and current teachers. Fourth, and most important, the Center has conducted research to determine what interventions are working and working best. Funding through the Center for Partnerships to Improve Education has enabled a joint research position with a local school partner, Charleston County School District.

Outcome Data:  Because of the success to date, the Center has been able to leverage other funding. For example, less than 1% of teachers in PK–eighth grade education are African American males. Conversely, the Center found that if an African American male child has at least one African American male teacher, he is three times more likely to graduate from high school and attend post secondary education. Therefore, the Center has received South Carolina funding to implement the “Call Me Mister” program and private funding to support African American males to enter a teacher education program. The Center for Partnerships’ model is being piloted in Charleston County School District and will eventually be disseminated for use in low-performing rural and urban schools across South Carolina. Through a combined effort of teaching and learning, research, and community outreach, the Center for Partnerships to Improve Education provides leadership for its long-term commitment to student achievement and community stewardship.

<table>
<thead>
<tr>
<th>Burke High School</th>
<th>2006-2007</th>
<th>2007-2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation rate</td>
<td>39.9%</td>
<td>63.1%</td>
</tr>
<tr>
<td>MAP reading (% meeting or exceeding Virtual Comparison Group - VCG)</td>
<td>48.2% (105 students)</td>
<td>50.9% (81 students)</td>
</tr>
<tr>
<td>MAP math (% meeting or exceeding Virtual Comparison Group - VCG)</td>
<td>41.0% (66 students)</td>
<td>56.8% (79 students)</td>
</tr>
<tr>
<td>EOC passage rate – English</td>
<td>35.3% (47 students)</td>
<td>40.1% (63 students)</td>
</tr>
<tr>
<td>EOC passage rate – algebra I/math</td>
<td>39.1% (62 students)</td>
<td>43.4% (69 students)</td>
</tr>
<tr>
<td>EOC passage rate – physical science</td>
<td>11.1% (11 students)</td>
<td>45.8% (11 students)</td>
</tr>
<tr>
<td>EOC passage rate – U.S. history</td>
<td>20.9% (14 students)</td>
<td>14.5% (23 students)</td>
</tr>
</tbody>
</table>
### Baptist Hill High School

<table>
<thead>
<tr>
<th></th>
<th>2006-2007</th>
<th>2007-2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation rate</td>
<td>69.4%</td>
<td>78.35%</td>
</tr>
<tr>
<td>MAP reading (% meeting/exceeding Virtual Comparison Group–VCG)</td>
<td>45.1% (93 students)</td>
<td>57.9% (154 students)</td>
</tr>
<tr>
<td>MAP math (% meeting/exceeding Virtual Comparison Group–VCG)</td>
<td>43.7% (80 students)</td>
<td>63.2% (115 students)</td>
</tr>
<tr>
<td>EOC passage rate – English</td>
<td>31.0% (44 students)</td>
<td>53.2% (59 students)</td>
</tr>
<tr>
<td>EOC passage rate – algebra I/math tech. 2</td>
<td>59.8% (76 students)</td>
<td>72.7% (72 students)</td>
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<tr>
<td>EOC passage rate – physical science</td>
<td>18.9% (23 students)</td>
<td>0.0% (2 students)</td>
</tr>
<tr>
<td>EOC passage rate – U.S. history</td>
<td>6.4% (3 students)</td>
<td>25.6% (23 students)</td>
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#### Anticipated Long-Term Impact:

Already, long-term systemic impact is apparent on the lowest performing high school in the nation—partnering, in the true sense of partnership, to move this school from the long-term failing status. This research-proven, shoulder-to-shoulder partnership model (having teacher education faculty work directly with teachers) now is being applied in other schools and realizing similar results. Fortunately, faculty have been able to form partnerships on campus so that the work of partnering to reform schools does not lie solely with teacher education but permeates the campus. The ultimate outcome is that novice teachers are better prepared to work in low-performing and high-poverty schools. And through the reformed M.Ed., the College is helping to maximize professional development and personnel resources to ensure current teachers are improved in their abilities to help educate all youth.

#### Contact:
Frances C. Welch, Dean (welchf@cofc.edu)
Innovation or Reform Area: Community College or Technical College Partnerships

Funding: U.S. Department of Education, Teacher Quality Enhancement Grant, $4.7 million

Description: South Carolina is a state disproportionately impacted by teacher shortages. Despite this fact, few pathways to teacher certification are available that do not begin at a 4-year college. There is no statewide community college system. A technical college system does exist, but these colleges do not systematically offer education coursework or promote careers in education. This omission is a major hurdle in efforts to expand the pool of teacher candidates in the state. Ironically, many of the technical colleges are located in the central urban and small-town rural areas most impacted by severe teacher shortages.

Beginning in 2004, the University of South Carolina (USC) and the College of Charleston began work with their local technical colleges (Midlands and Orangeburg/Calhoun with USC; Trident with the College of Charleston) to create regional “technical–to–4-year–college” teacher certification programs. These partnerships allow education majors to begin a program of study at technical colleges and then seamlessly transfer into an education program at the local 4-year college as juniors. Student recruitment and support were major components of this project. Support systems for technical college education majors were created at both technical and 4-year college sites.

A high degree of cross-institutional collaboration among students, K-12 teachers, and 4-year and technical college faculty was also established. Transfer students joined educator support groups that connected institutions and provided mentoring, textbook and scholarship assistance, and dedicated on-campus study/technology labs. Early, meaningful clinical experiences were also a central feature of this project. Twelve low-income schools near partnering technical colleges became clinical field experience sites for technical college education majors. These schools received classroom resources and sustained professional development geared towards the specific needs of each school. Project staff also worked within these schools supporting the implementation of recently learned instructional strategies with follow-up mentoring of school faculty.

Outcome Data: Clinical Field Experience Site Outcomes:

Adequate Yearly Progress (AYP): Only 18% of all South Carolina Schools met AYP criteria (mandated as part of the No Child Left Behind legislation) during 2007-2008. Forty-two percent of project schools met AYP in 2007-2008.

Student Achievement: Five project schools increased student performance on statewide achievement exams in all measured subject areas (English, math, science, and social studies). Three project schools increased student performance in at least two measured subject areas. Guinyard Elementary School, a project school where 98% of students receive free or reduced-price lunch, increased student scores on the science portion of the statewide achievement exam by 30% during the project.

Teacher Outcomes: Ten of the 12 sites increased (6) or maintained (4) teacher retention rates. Sixty-seven percent of project graduates who received scholarship support accepted teaching positions in project schools or in schools with similar demographic profiles. Over 60 inquiry-based instructional units tied to curriculum standards and professional development programs were developed and implemented with support from project faculty and staff.
Technical College Education Majors: Technical college students taking education courses increased from 0 in 2004 to 140 during 2008-2009. Technical college students transferring into teacher education programs increased substantially. When articulation agreements and support infrastructures were first implemented during the fall of 2004, 14 education majors transferred from partner technical colleges to USC. In fall 2008, 38 education majors transferred from partner technical colleges to USC, an increase of 171%. The number of technical college education majors who graduated from 4-year teacher education programs increased significantly. In 2007-2008, 15 technical college transfer students graduated from teacher education programs at USC. Approximately 20 are scheduled to graduate during 2008-2009, an increase of 33%.

Contact: Stephen Thompson, Associate Professor of Education (sthompson@sc.edu)
Innovation and Reform Area: Math/Closing the Achievement Gap

Funding: 2002-2009, National Science Foundation, $4.2 million

Description: Promoting Reflective Inquiry in Mathematics Education (Project PRIME) is a unique and innovative partnership of Rapid City Area Schools, Black Hills State University (BHSU), and a regional educational service agency in western South Dakota. Goals of the project are to improve mathematics instruction within the Rapid City school district and to reduce the achievement gap between American Indian and non-American Indian students. District-wide interventions include building-based math coaches and graduate-level classes for teachers that focus on deepening content knowledge and increasing understanding of student thinking. The project also supports the implementation of standards-based instructional materials, helps to coordinate parent nights, and provides professional development for district administrators. BHSU supports the work with faculty from both its College of Education and College of Arts and Sciences, providing graduate-level course work for teachers and administrators, facilitating leadership training for the math coaches, and guiding the project’s educational research. A hallmark of PRIME has been its strong emphasis on collecting, analyzing, and using data to highlight successes, to emphasize areas in need of additional attention, and to guide the overall direction. Among key data sources are student performance on the state’s multiple-choice accountability measure, student performance on a more performance-oriented measure developed by the Mathematics Assessment Resource Service, student attitudes, and teacher content knowledge.

Outcome Data: Teacher content knowledge has been measured using the Learning Mathematics for Teaching instrument, administered to a sample of 46 district teachers early in the project and again 2 years later. A significant increase in teacher content knowledge was evident from pretest to posttest with Cohen’s effect size of 1.0. (A Cohen’s effect size of 0.2 is considered small, 0.5 medium, and 0.8 large.) Teachers within the sample had completed an average of 80 hours of professional development facilitated by BHSU faculty in partnership with master P-12 teachers between pre- and posttest. On the state math assessment, Rapid City students in grades 3 through 8 showed statistically significant growth from 2003 to 2008 with an average effect size of 0.4. These data also show a significant decrease in the achievement gap between American Indian and non-American Indian students. The percentage of students scoring proficient or above on the state test in 2003 and 2008 is shown in Chart 1. Measured in terms of effect size, the achievement gap decreased by 11% at grade 4 and 17% at grade 8 over the same 5 years (see Chart 2). Consistent with results on the state test, student achievement has increased significantly on the performance-oriented measures. Measured this time over a 3-year window, growth at grade 4 had an effect size of 0.2, and growth at grade 8 had an effect size of 0.3. Student attitudes were measured in both 2006 and 2007 and disaggregated by race. Using a project-developed tool at the elementary level, attitudes about mathematics were generally quite positive, improved from 2006 to 2007, and differed little by race. Additional student attitude data will be collected and analyzed in spring 2009.
Anticipated Long-Term Impact: Mathematics instruction in the Rapid City school district and preparation of educators by BHSU at the graduate and undergraduate levels has changed to align with best practices in current research. Curricular materials have changed and teachers are prepared instructionally to deliver mathematics content at a higher level and with new instructional methods as intended. The long-term systemic impact of this reform is the continuing improvement in the achievement of P-12 students in mathematics in the Black Hills region, particularly in the mathematics performance of the Native American students.

Contact: Nancy Hall, Dean of the College of Education (nancyhall@bhsu.edu)
Innovation or Reform Area: Online Learning/Math/Science/Middle School Teacher Preparation


Description: This partnership expands the existing professional development school partnership between the University of Tennessee (UT) and Anderson County Schools (ACS) developed in the early 1990s to include in-service teachers and focuses the partnership on the STEM fields. Hybrid online courses (synchronous, asynchronous, and face-to-face) integrating content and pedagogy were developed and offered to middle school mathematics teachers from 2005-2007. Teachers signed on to class once each week in cohorts of two to three teachers, creating communities of learners. The four courses used the Connected Mathematics Project Curriculum to bolster content knowledge and the knowledge of reform-based pedagogy of the middle school teachers. Teachers engaged in lesson studies and in studying student work samples. PEP grants II and III focused on the integration of math and science through a modified lesson study. Math and science teachers worked together to create “grande lessons” that investigated real-world phenomena and used mathematics to make decisions. PEP IV capitalized on the richness of informal science and math when elementary math and science teachers collaborated to develop kits that provided lesson plans and materials for studying the wetlands created at four of the elementary schools in the district. PEP V brought together elementary math teachers and encouraged a focus on students’ mathematical thinking to bolster teachers’ content knowledge. District and university personnel collaborated with teachers on each of these projects, creating a community of learners spanning the K-14 spectrum, including district administrators. These projects have also strengthened the university/district partnership.

Outcome Data: The partnership has resulted in improved student achievement, with a sizeable increase in Tennessee Value-Added Assessment System middle school students’ math scores in the 2005-06 school year (see chart). The scores ranged from a 2.5 NCE gain for eighth grade to a 4.7 NCE gain for sixth grade in excess of the expected growth standard (0.0). The online courses and PEP II began during this year. Students continued to gain in the seventh grade over the next 3 years, but not as dramatically. Scores for sixth graders increased in 2006-07 but were below the growth standard for 2007-2008. The eighth-grade scores were below the growth standard in both 2006-07 and 2007-08. However, district scores were higher than state scores for all 3 years. Pre- and postintervention assessments of teachers’ content knowledge for each course varied. Those teachers who held elementary certification or were teaching out of area showed substantial gains. Those who held secondary mathematics certifications scores did not differ significantly on pre and post assessments. There was also an increase in the number of teachers acquiring a master’s degree. Four teachers who had participated in one of the projects described above have enrolled in advanced degree programs at the university. It is important to note that UT’s program is a 5-year program resulting in licensure and a master’s degree. Thus, many teachers in the surrounding districts hold master’s degrees.

Anderson County 6-8 Math Scores Gain by Year and Grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>2005-2006</th>
<th>2006-2007</th>
<th>2007-2008</th>
<th>ACS 3-year average</th>
<th>State 3-year gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>4.7</td>
<td>2.1</td>
<td>1.2</td>
<td>1.9</td>
<td>0.8</td>
</tr>
<tr>
<td>7</td>
<td>3.5</td>
<td>1.1</td>
<td>0.3</td>
<td>1.6</td>
<td>1.2</td>
</tr>
<tr>
<td>8</td>
<td>2.5</td>
<td>-1.1</td>
<td>-2.7</td>
<td>0.4</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Anticipated Long-Term Impact: The university/district partnership has been strengthened through these initiatives. The prolonged engagement of university professors in the district has created a rapport between elementary and middle school teachers and the university professors built on trust and respect. Teachers are comfortable with professors visiting their classrooms and regularly invite them to visit classrooms when they have successes to share as well as when they have would like to brainstorm to overcome challenges. In addition, collaborations and sharing of materials are beginning to occur across elementary schools and between elementary and middle schools. The common goal among all participants is improvement in instruction and student achievement scores through methods that are based on research and proven effectiveness. Flexible communities of learners continue to be created and expanded.

Contact: Jo Ann Cady, Assistant Professor, UT (jcady@utk.edu); John Byrd, science consultant, ACS; Kathy Strunk, math coordinator, ACS; Denise Wilburn, Director of Federal Projects, ACS
Innovation or Reform Area:  Math/Science/Mentoring  

Funding:  Tennessee State Department of Education $500,000 over 5 years  

Description:  The statewide Tennessee Transition to Teaching (TNT2T) project assists State and local education agencies in identifying qualified candidates for streamlined licensure. The purpose of the TNT2T program is to alleviate the shortage of mathematics and science teachers and teachers of color in high-need middle and secondary schools, grades 7–12, throughout Tennessee. Candidates will be highly qualified midcareer professionals or recent college graduates who have majored in a core academic subject or paraprofessionals who have had at least 2 years’ experience working in a high-need school. The program is designed to provide higher education guidance and/or advisory support to the TNT2T candidates as they advance toward licensure through online pedagogy course work and professional development opportunities through workshops that meet the professional licensure standards for the state of Tennessee. One other aspect of the program is to provide intensive mentoring for the candidates. Representing each of the three grand regions of the state, these mentors for the TNT2T candidates are highly qualified, recently retired teachers who visit with the candidates at least once a week and continue to mentor during the second year of teaching. The employment of multiple pathways to professional licensure, including online instruction, along with the impact of 2 years of mentoring and membership in a professional learning community will build capacity in the schools in Tennessee. The TNT2T project represents a strong, committed partnership of high-need school districts, the University of Tennessee–Martin, and Tennessee Department of Education personnel.

Outcome Data:  Data for the first two cohorts (2007 and 2008) indicate success in retention of math and science teachers across 25 different school districts in Tennessee. There were 21 participants (13 math, 8 science) in the first cohort. Eighteen are still teaching in their second year, five moved to the apprentice licensure after the first year, and the remaining 16 are expected to receive the apprentice license after the second year. The 2008 cohort had 30 total participants (including 15 math and 8 science teacher candidates). Twenty-seven are currently teaching and are expected to move to the apprentice license this summer. Since all candidates in TNT2T are highly qualified when they are admitted to the program, there is assurance by the school districts that the candidate does have the content knowledge in the teaching area.

The University of Tennessee–Martin has collected data on student achievement in the classrooms of teachers in the first cohort.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Grade Level</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra I and Algebra II Gateway</td>
<td></td>
<td>97% pass rate (proficient or advanced)</td>
</tr>
<tr>
<td>Algebra I Gateway</td>
<td></td>
<td>96% proficient, 14 advanced</td>
</tr>
<tr>
<td>Algebra I Gateway</td>
<td></td>
<td>88% proficient or advanced</td>
</tr>
<tr>
<td>Algebra I Gateway</td>
<td></td>
<td>90% pass rate (proficient or advanced)</td>
</tr>
<tr>
<td>Geometry and Algebra II Gateway</td>
<td></td>
<td>97% (students moved to next higher math course)</td>
</tr>
<tr>
<td>Algebra I Gateway</td>
<td></td>
<td>76% proficient, 40% advanced</td>
</tr>
<tr>
<td>TCAP Math</td>
<td></td>
<td>88% proficient or advanced</td>
</tr>
<tr>
<td>TCAP Math</td>
<td></td>
<td>95% proficient, 21% advanced</td>
</tr>
<tr>
<td>Biology Gateway</td>
<td></td>
<td>97% proficient or advanced</td>
</tr>
<tr>
<td>TCAP Science</td>
<td></td>
<td>99% proficient or advanced</td>
</tr>
</tbody>
</table>
Anticipated Long-Term Impact: The long-term impact of this innovation will be to provide math teachers in high-need areas in Tennessee who have the content knowledge necessary to teach in a math or science area and need the pedagogy and mentoring to assure retention in teaching. The goal is to keep teachers of math and science in the classroom in both urban and rural areas. Due to the intensive nature of mentoring (the mentor is in the classroom 1 day a week during the first year of teaching and 1 day a month during the second year), a high percentage of the candidates remain in the school as indicated by the data above. One of the other strengths of this program is also the Comprehensive Organization and Management Program (COMP) that is introduced to the candidates during a summer orientation with a follow-up session in the fall. The facilitator for COMP also visits in the classroom of each candidate to assure strategies introduced in COMP training are being utilized in the classroom.

Contact: Mary Lee Hall, Dean (mhall@utm.edu)
Innovation or Reform Area: Math/Science

Funding: 2006-2011, U.S. Department of Education, Transition to Teaching Program, $2 million

Description: The Transition to Teaching Grant is a grant received from the United States Department of Education to train candidates who retire early, change careers, or are recent graduates to become secondary teachers of mathematics and science. The University of Houston's Transition to Teaching Grant resulted in a successful collaboration between the University of Houston and five high-need Local Education Agencies (LEAs): Alief, Galena Park, Houston, Pasadena, and Spring Branch. These districts represent some of Houston's most impoverished and socioeconomically diverse student bodies. The program, Executive Certified Authentic Teacher Educator (ECATE) is an innovative approach to preparing secondary mathematics and science teachers. The twin goals of ECATE are (a) to recruit prospective teachers not only through conventional methods, but also through partnerships with community and professional organizations and associations, and (b) to create a wholly new certification route for midcareer professionals as teachers of mathematics and science in high-need schools in high-need LEAs. ECATE is distinguished by several unique features:

1. Recruitment of prospective teachers through partnerships with professional associations such as CPAs, chambers of commerce such as the Hispanic Chamber of Commerce, and professional organizations such as the American Association of University of Women
2. An admissions screening process that provides candidates the opportunity to observe high-need schools in high-need LEAs before induction into the program
3. A compressed 10-month program based on standards and a differentiated curriculum
4. Use of diagnostic tests to create individual education plans that form the basis of the differentiated instruction of the curriculum
5. Mentor support throughout the students' participation in the program
6. Stipends and scholarships to help defray program costs
7. Innovative use of technology including the university's Distance Learning Center

Outcome Data: The grant has proven an effective source of providing certified and highly qualified teachers of secondary mathematics and science for five partner districts. Since the areas of mathematics and science are in such demand, the university's help in placing candidates in these areas has made a positive impact for K-12 district partners. Transition to Teaching Candidates are committed to working in their schools for a minimum of 3 years.

Anticipated Long-Term Impact: The long term systemic impact of this innovation would be for the Department of Curriculum and Instruction to include the ECATE Program as part of their traditional program for training secondary mathematics and science teachers. It is anticipated that the university will secure extraneous funding from partner institutions to sustain the funding currently provided by the Grant.

Contact: Melissa Pierson, Associate Professor and Director of Teacher Education (mpierson@uh.edu)
Innovation or Reform Area: Community College or Technical College Partnerships

Funding: None

Description: The UT Arlington Regional Community College Partnership was initiated in 2003. The goal of the partnership is to build relationships and increase communication between the faculty and advisers in the teacher preparation programs at the University of Texas at Arlington and the numerous community colleges in the North Texas area. UT Arlington is located in the middle of the Dallas/Fort Worth metropolitan area and receives a significant number of transfer students. Approximately 75% of students in the College of Education are transfer students. It is critical that these students receive accurate and timely information. Several specific articulation agreements between community colleges and UT Arlington are available to students who begin taking teacher preparation courses at the community college. The complexity of teacher preparation programs and the state requirements are factors that contribute to the importance of academic advising. Students come from over 15 community college campuses. Meetings are held every semester with the teacher preparation faculty and advisers. There are approximately 50 members in the partnership, with a regular attendance of 35 people. The meeting location rotates around the Dallas/Fort Worth area, to ensure strong attendance and active participation. Recently, staff members from UT Arlington's Undergraduate Recruitment Office have joined the partnership. The goal is to provide updated information on admissions requirements and financial aid deadlines to the partners in the community college.

Outcome Data: Approximately three fourths of education students transfer from community colleges, and the graduate rate at UT Arlington has remained stable. The aggregate student performance on the teacher licensure examination averages 99% passing. The UT Arlington Regional Community College Partnership has resulted in a high level of collaboration and trust between the representatives of the various institutions. This ultimately contributes to student success. When issues come up regarding degree requirements or the articulation agreements, they are handled in an efficient and positive manner. If students report hearing conflicting information, or misunderstand what advisers at one campus have said, the topic is brought to the partnership to clear up any misunderstandings. Community college representatives from various campuses have a unique opportunity to get acquainted and compare issues. The faculty and advisers come from different professional backgrounds and have membership in a variety of professional organizations. The networking opportunities of all are enhanced through this partnership. Students don't just benefit from the results of the partnership's semester meetings. Because of the personal relationships that have been established, advisers often call on each other directly when a student is present to ask questions or resolve an issue. This creates confidence in the accuracy and expediency of advising information and also creates a message of dedication to student success.

Anticipated Long-Term Impact: The UT Arlington Regional Community College Partnership is evidence of how a partnership between university and community college faculty and advisers can benefit the students in the teacher preparation program. It has also served as an opportunity for professional development for those involved. This partnership could provide a model for other academic units to follow, where similar groups for various academic disciplines could be established. The results could then impact students in all majors and academic programs.

Contact: Jeanne M. Gerlach, Vice President for K-16 Initiatives and Dean, College of Education (gerlach@uta.edu)
**Innovation or Reform Area:** Online Learning  

**Funding:** None  

**Description:** The College of Education formed an academic partnership with Higher Ed Holdings (HEH). Professors are developing and delivering online courses leading to a master's degree in curriculum and instruction with an emphasis in literacy, science, or mathematics or a master's degree in educational leadership. HEH provides state-of-the-art online course creation using the components developed by UT Arlington faculty. Each degree consists of 12 courses lasting 5 weeks each with 1 week off between courses. The degree can be completed in 18 months with a total cost to the student of $4,950, and there are between 6 and 8 student start dates in a year. The partnership allows greater access to a master's degree, is flexible enough to fit any work schedule, and is not cost prohibitive for students. The quality of the program is ensured through collaborative planning between UT Arlington and HEH, through the UT Arlington faculty selected to deliver the online instruction, and through the technology used by HEH to build the courses. This type of program has implications for state universities competing with private universities who offer only online degrees. There are also limitless opportunities to offer the courses in other states and internationally.  

**Outcome Data:** Because of the recent launch of the programs, the only data available are the number of students who have enrolled in the courses. For the literacy degree, 57 students have enrolled since January 2009. The planned start date for science and mathematics is April 2009, and 22 students have enrolled. The master’s in educational leadership is scheduled to launch in late June 2009.  

**Anticipated Long-Term Impact:** This partnership shows that the public and the private sectors of education can unite in efforts that result in increased student learning and access to higher education and that have real benefits to all partners. State universities are seeing a decline in enrollment because of student cost and student time involved in traditional degree programs. This type of partnership can reverse that trend and provide better educated and better prepared teachers and administrators for this country’s students.  

**Contact:** Jeanne M. Gerlach, Vice President for K-16 Initiatives and Dean, College of Education  
(gerlach@uta.edu)
Innovation or Reform Area:  Principal Recruitment and Preparation

Funding:  U.S. Department of Education

Description:  The Fort Worth Independent School District (FWISD), the fourth largest district in the state of Texas, is a large, urban district serving more than 79,000 students at 144 schools. FWISD faces many of the major challenges common among large, urban districts, including increasing learner diversity, large populations of LEP and economically disadvantaged students, and increasing demands for accountability and achievement at all levels. As one of several initiatives aimed at increasing high-quality leadership capacity within the district, FWISD developed the Aspiring Principals Program (APP) program, which will recruit, select, train, place, and retain four cohorts of 15 highly qualified individuals and provide them with an innovative master's and principal-certification training program that unites the theory of effective administrative leadership with FWISD's specific vision for best practices within its schools. The APP training program, in partnership with UT Arlington's College of Education, will be an expedited yet intensive yearlong program, which will include a full school year's residency on a FWISD campus. The APP residents will act as assistant principal on his/her campus at least 3 days per week and attend their course work at least 1 full day per week. APP course work will be designed in close partnership between FWISD and UT Arlington, in order to integrate Fort Worth's specific vision of leadership (as laid out in its Dimensions of Leadership). FWISD master principals and central administrators will teach at least half of APP course work as "teachers of record" with UT Arlington.

APP Program Design: research-based and program-aligned vision of effective leadership; targeted recruitment strategies and rigorous selection procedures; reflective and supportive cohort experience; instruction that unites theory and practice; mentoring support from expert mentor principals; on-site administrative experience; and continual program and candidate assessment.

Outcome Data:  This is a new program. Thus the first cohort (of 15 interns) has been selected and begins course work this summer. Mentors will be selected and placements made shortly.

Anticipated Long-Term Impact:  APP aspires to be a model for others in urban districts meeting the challenges linked to the recruitment, selection, hiring, and retention of the next generation of school leaders. Building a direct link between theory and practice, on-site and in-class experiences, as well as a cohesive cohort delivery strategy will make a difference for the leadership of FWISD and other districts in Texas and nationally. The ultimate goal is to improve learning for all children through principal leadership.

Contact:  Jeanne M. Gerlach, Vice President for K-16 Initiatives and Dean, College of Education (gerlach@uta.edu)
Innovation or Reform Area: Math/Science/Online Learning  

Funding: The Teachers College was given startup funding in 2001 by the Department of Education through a Star Schools Grant of $10 Million. That grant led to the development of the elementary education, mathematics, science, and ELL licensure programs. Currently, the university is funded by the Department of Labor in the amount of $3 million to provide support for mathematics and science students preparing for teacher certification in rural areas.

Description: Western Governors University (WGU) is the only entirely online, completely competency-based institution in the United States. Founded 13 years ago through a partnership of 19 Western governors, WGU’s Teachers College received National Council for Accreditation of Teacher Education (NCATE) accreditation 3 years ago, making it the only online institution with that recognition. While there is much to say about the WGU Teachers College, its success in the preparation of mathematics and science teachers at the middle grades and secondary level is of particular importance. Currently, more than 1,100 students are matriculated in the mathematics programs, and approximately 500 are matriculated in the science programs. During this academic year, WGU expanded its science offerings to include initial licensure programs in chemistry and physics.

Outcome Data: WGU teacher candidates know the subject matter that they plan to teach and can explain important principles and concepts delineated in professional, state, and institutional standards. WGU teacher candidates have a broad knowledge of instructional strategies that draws upon content and pedagogical knowledge and skills delineated in professional, state, and institutional standards to help all students learn. WGU teacher candidates can apply their professional and pedagogical knowledge and skills delineated in professional, state, and institutional standards to facilitate learning. They consider the school, family, and community contexts in which they work and the prior experience of students to develop meaningful learning experiences.

Percentage of WGU Employer Respondents* Who Agree or Strongly Agree With Statements About WGU Graduates’ Proficiencies

<table>
<thead>
<tr>
<th>NCATE standard statement</th>
<th>Agree or Strongly Agree responses from employers of WGU graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) WGU teacher candidates know the subject matter they plan to teach.</td>
<td>95.7%</td>
</tr>
<tr>
<td>2a) WGU teacher candidates can explain important principles and concepts delineated in professional standards.</td>
<td>100%</td>
</tr>
<tr>
<td>2b) WGU teacher candidates can explain important principles and concepts delineated in state standards.</td>
<td>95.7%</td>
</tr>
<tr>
<td>2c) WGU teacher candidates can explain important principles and concepts delineated in institutional standards.</td>
<td>91.3%</td>
</tr>
<tr>
<td>3) WGU teacher candidates have a broad knowledge of instructional strategies that draws upon content and pedagogical knowledge and skills delineated in professional, state, and institutional standards to help all students learn.</td>
<td>91.3%</td>
</tr>
<tr>
<td>4a) WGU teacher candidates facilitate student learning of the subject matter through presentation of the content in clear and meaningful ways.</td>
<td>95.7%</td>
</tr>
<tr>
<td>4b) WGU teacher candidates facilitate student learning of the subject matter through the integration of technology.</td>
<td>87% (13% No Opinion)</td>
</tr>
<tr>
<td>5) WGU teacher candidates apply their professional and pedagogical knowledge and skills delineated in professional, state, and institutional standards to facilitate learning.</td>
<td>100%</td>
</tr>
<tr>
<td>NCATE standard statement</td>
<td>Agree or Strongly Agree responses from employers of WGU graduates</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>6a) In order to develop meaningful learning experiences, WGU teacher candidates consider the school, family, and community contexts in which they work.</td>
<td>100%</td>
</tr>
<tr>
<td>6b) In order to develop meaningful learning experiences, WGU teacher candidates consider the prior experience of students.</td>
<td>95.7%</td>
</tr>
<tr>
<td>7) WGU teacher candidates are familiar with the dispositions expected of professionals. (For example they are: competent; caring; respectful and embracing of diversity; reflective; collaborative; and technologically proficient.)</td>
<td>95.7%</td>
</tr>
<tr>
<td>8a) WGU teacher candidates reflect the dispositions (as described above) delineated in professional, state, and institutional standards while working with students.</td>
<td>100%</td>
</tr>
<tr>
<td>8b) WGU teacher candidates reflect the dispositions (as described above) delineated in professional, state, and institutional standards while working with families.</td>
<td>90.9%</td>
</tr>
<tr>
<td>8c) WGU teacher candidates reflect the dispositions (as described above) delineated in professional, state, and institutional standards while working with communities.</td>
<td>91.3%</td>
</tr>
<tr>
<td>9a) WGU teacher candidates focus on student learning as shown in their assessment of student learning.</td>
<td>91.3%</td>
</tr>
<tr>
<td>9b) WGU teacher candidates focus on student learning as shown in their use of assessments in instruction.</td>
<td>87% (13% No Opinion)</td>
</tr>
<tr>
<td>9c) WGU teacher candidates focus on student learning as shown in their development of meaningful learning experiences for students based on their developmental levels and prior experience.</td>
<td>95.7%</td>
</tr>
</tbody>
</table>

* 55 surveys were e-mailed to employers of graduates of WGU TC programs. A total of 23 employers responded to these prompts, which represents a 42% response rate.

**Anticipated Long-Term Impact:** In the long term, the WGU mathematics and science programs will have a significant impact on the shortage of teachers in these curricular areas in the rural United States. In addition, the tremendous success of these programs provides a competency-based structure that is a model for other schools of education.

**Contact:** Philip A. Schmidt, Associate Provost, Academic Programs (pschmidt@wgu.edu)
Innovation or Reform Area: Special Education/School Counselor Preparation

Funding: Virginia General Assembly (current funding); ODU Office of Research

Description: Old Dominion University's (ODU) Center for Teacher Quality and Educational Leadership assists at-risk schools and school districts in creating evidence-based cultures that meet the educational needs of all children and their general well-being supported by coherent district organizations (see www.ctqel.org). Additionally, the Center serves as an incubator, catalyst, mirror, and training ground for this field. The College of Education at ODU carries out several initiatives through the Center, including the following:

- **Quality School Counseling Initiative**: In partnership with Norfolk State University, the Center has developed and is testing a Quality School Counseling Initiative in Newport News Public Schools. Using the American School Counseling Association (ASCA) model, the partners formed an action research team at each of the district's six high schools. A faculty member and a doctoral student are assigned to each team. They work side by side in the context of teaching and learning to fully implementing the ASCA model. The goals are to establish their school counseling program as an integral component of the academic mission of the school, ensure every student has equitable access to the school counseling program, identify and deliver the knowledge and skills all students should acquire, and ensure that the school counseling program is comprehensive in design and is delivered systematically to all students. Each action-research team developed a research topic. For example, one team selected ninth-grade transition, one selected high numbers of "Ds and Fs," and still another selected young Black males. Later this year, ASCA will conduct an audit. Training from University of Maryland faculty has been conducted on the ASCA model and will continue to be conducted.

- **Teacher Professional Development Initiative**: The Darden College of Education developed and tested a teacher professional development (PD) intervention for Norfolk Public Schools. Four elementary schools participated in a PD intervention designed to enable students to experience a strong sense of autonomy, competence, and relatedness. A graduate course was used as the modality as well as classroom training provided by faculty. The school district paid $50,000 for 61 teachers to take the graduate course. Teachers were organized into learning teams and provided with classroom training on Assessment for Learning competencies.

- **Teacher Retention**: The Darden College of Education enabled a rural district partner to retain 9 of 14 special education teachers who were slated to be terminated because they held only provisional licensure.

Outcome Data:

- **Quality School Counseling Initiative**: Student data from one high school provide a snapshot of increased student performance and reduced discipline issues. The school selected 14 young Black male students to work with to increase their active engagement. Results after one semester show promise. For example, the 14 young men increased their GPA from 1.79 to 1.83 in one semester, the number of absences decreased from an average of 7.2 absences to 5.28, tardiness decreased from an average of 6.2 incidents to 4.92, and referrals declined from an average of 1.07 to .042 over a semester.

- Student data showed 25% gains for core classrooms and 35% for inclusion classrooms—gains that are consistent with research (Black, William, & Dylan, 1998) that shows one can expect .04 to .07 effect size in classrooms where assessment for learning is used. No longer just a good idea, assessment for learning is now embedded in the National Council for Teachers of Mathematics standards. The success of this intervention led to development of a project to work with all nine Norfolk middle schools on assessment literacy. The project was funded by the State Higher Education Council for Virginia.
• **Teacher Retention:** Not only did the intervention enable the district to retain the special education teachers, but it also established a vehicle for developing and retaining quality educators. ODU established a Community Technology Center to link the isolated district with ODU via satellite. The Center was used to provide professional development via distance as well as graduate courses to the special education teachers so that they could become fully credentialed. The model's success enabled the district and ODU to develop and win a 5-year U.S Department of Education School Leadership grant for $654,000 that ODU was awarded in 2008, one of only 22 such grants in the nation.

**Anticipated Long-Term Impact:** The Center for Teacher Quality and Educational Leadership is an example of how university–P-12 school collaboration can leverage research and resources to build relationships that over time build internal capacity in schools and provide direct feedback to the teacher education program. This “outside-inside” approach is closing the loop between university and P-12 classrooms, thus improving teacher recruitment, preparation, and retention.

**Contact:** William Graves, Dean, Darden College of Education (wgraves@odu.edu)
Innovation or Reform Area: Literacy

Funding: Wachovia Bank, $25,000; Radford City School Board, $40,000

Description: As part of a professional development school (PDS) partnership with the Radford City, Virginia, public schools, the elementary education program at Radford University (RU) codeveloped a tutoring program for low-achieving first-grade readers at McHarg Elementary School, a PDS partner. The program is called “RU Reading: Impacting At-Risk Readers Through Preservice Teacher-Tutor-Training.” Beginning in August of each of the last 8 school years, 15 to 20 first-graders were identified and matched with incoming senior-level preservice teachers enrolled in the final yearlong component of the RU elementary teacher education program. This tutoring activity, which encompasses two weekly, 30-minute, early-morning tutoring sessions throughout the academic year, has become an additional program requirement during the field-based portion of their preservice training.

With the RU Reading program, a dual pedagogical model was developed targeting both primary-grade students and higher education preservice teachers with intensive intervention and practical application. At the first-grade level, at-risk beginning readers were provided with supplemental individualized instruction at low cost to the school district. These “tutorable children” may represent 10% to 20% of the students in any given classroom and are those children most prone to a special education label despite possessing normal intelligence. Fortunately, they are also the most likely candidates to benefit from early intervention and avoid the learning disabled tag. At the 16th grade level, preservice teachers are given the opportunity to practice newly learned reading strategies in a realistic school-based environment with students who could provide authentic response to their efforts.

Previous research studies have revealed the efficacy of providing clinical one-to-one tutoring experiences during preservice teacher training (Duffy & Atkinson, 2001; Worthy & Prater, 1998). The RU Reading experience was specifically designed to meet the needs of literacy learners at opposite ends of the grade level spectrum. Both 1st- and 12th-grade students are benefiting from a form of “early intervention” at their respective literacy learning stages.

Outcome Data: Since August 2001, approximately 145 students have received testing and remediation in the RU Reading program. Each of these students had not attained the fall benchmark score on the PALS assessment (Phonological Awareness Literacy Screening) at the start of first grade. During the course of the yearlong tutoring, each student was retested at the midpoint (January) and at the end of the year (May). In the first 3 years of the program, the identical instrument was used for retesting to assess gains. Considering that students were also receiving in-class instruction during the tutoring period, definitive correlation between the tutoring and PALS score changes cannot be claimed. However, the results portray steady gains in PALS mean scores across all 8 years. Unsurprisingly, individual classroom teachers regularly noted that as students began receiving tutoring remediation, classroom performance began to improve. First-grade teachers at McHarg Elementary School became convinced that the consistent twice-weekly morning literacy sessions were providing an instructional supplement that allowed these needy students to work more successfully with peers at the normal classroom pace.

Anticipated Long-Term Impact: Participating students benefited from remedial instruction without suffering the consequences of pullout time from the classroom curriculum. RU elementary education faculty are presently developing the RU Reading program in several of the university’s PDS sites.

Contact: Patricia Shoemaker, Dean, College of Education and Human Development (pshoemak@radford.edu); Deborah Bays, Associate Professor, College of Education and Human Development (dbays@radford.edu)
Innovation or Reform Area:  Early Childhood Education/Special Education


Description:  The Virginia Consortium for Teacher Preparation in Early Childhood Special Education, codirected by Radford University (RU) and Lynchburg College, works to alleviate the critical shortage of fully licensed early childhood special education (ECSE) teachers in the central and southwestern region of the Commonwealth of Virginia. The Consortium has as its guiding principles the best practices in instruction coupled with the latest technologies for course packaging and delivery to reach the largest numbers of teachers in its target areas and to support these teachers in learning to implement best practices in the field of ECSE. The Consortium began delivering specialized course work in ECSE in spring 2008 and has offered at least two courses to teachers each semester since its inception. The Consortium provides tuition assistance to provisionally licensed ECSE teachers, to other teachers pursuing an add-on endorsement, and to preservice teachers seeking degrees and licensure in ECSE. Consortium faculty, with support from the RU distance education staff, have studied and developed an effective model of distance education delivery utilizing live, interactive multisite videoconferencing, conference calling, and course-management software such as Adobe Connect and Blackboard. Courses have been delivered from RU and Lynchburg College to multiple sites, including established partners such as the Roanoke Higher Education Center and the Southwestern Virginia Higher Education Center, New College Institute in Martinsville, and others as well as to school divisions and individuals' homes in order to provide access to needed course work to teachers in a wide-ranging geographic area.

Outcome Data:  During the first year of the project, the consortium supported 17 provisionally licensed teachers who were able to complete the requirements of their provisional licenses in order to become fully licensed ECSE educators. A projected 10 to 15 more will complete requirements in the second year of the project. An additional 10 preservice teachers will complete their degrees and licensure requirements and be prepared to enter the field in 2009. During the first semester of the grant, 29 students were provided tuition support. During the second semester of the grant, 35 students were provided support. During the first semester of the second year of this grant, spring 2009, the ECSE consortium has supported 30 students (12 at Lynchburg College and 18 at RU). These 30 have received support for a total of 41 classes in the spring 2009 semester and represent ECSE master of science degree students or teachers with provisional licenses or plans to apply for ECSE positions. Each ECSE course that is taught is delivered to four to five sites, which are selected based on student needs and location in the region.

Anticipated Long-Term Impact:  As a result of this project, school divisions in the Commonwealth of Virginia will be able to reduce the number of provisionally licensed early childhood special education teachers as the pool of fully licensed special education teachers grows. The knowledge and skills of current early childhood special educators will be enhanced. The number of special educators with advanced degrees will grow as well. Specific school divisions will be positively impacted by the professional knowledge and skills that teachers who complete this project will be able to bring to their profession. For example, as Roanoke City Public School division moves toward serving preschoolers in inclusive models that combine the Virginia Preschool Initiative and Early Childhood Special Education services, both provisionally licensed ECSE teachers and licensed early childhood educators wishing to add on an endorsement in ECSE are completing the course work supported by this project. These teachers will serve as change agents for this particular school division as the program moves from self-contained preschool special education services to an inclusive model.

Contact:  Patricia Shoemaker, Dean, College of Education and Human Development (pshoemak@radford.edu); Deborah Bays, Associate Professor, College of Education and Human Development (dbays@radford.edu)
Innovation or Reform Area: Science

Funding: University of Wisconsin–La Crosse School of Education; University of Wisconsin–La Crosse Murphy Library

Description: The American Association for the Advancement of Science publishes a bimonthly journal, Science Books & Films (SB&F), which annually awards a Prize for Excellence in Science Books (see http://www.sbfonline.com/prizes.htm). SB&F believes that through good science books, this generation and the next will have a better understanding and appreciation of science. The University of Wisconsin–La Crosse has developed a model for a mock SB&F competition to increase teacher candidates’ engagement with science books and to help prepare them to do the same for their K-12 students (see http://www.uwlax.edu/murphylibrary/departments/curriculum/stem/mocksbf.html). The Mock SB&F Prize election promotes the critical analysis of science trade books by students, increases the use of high-quality science nonfiction in the classroom, illustrates the connection between literature and science, and enhances a school's science curriculum. Elementary and middle school teacher candidates participate in a mock competition during their preparation program.

Outcome Data: The mock competition model is in the first year of implementation, thus the election process has not gone on long enough to determine its impact on student achievement in science. However, some of the spring 2009 preservice teacher courses have held their elections. Their preliminary results are very similar to the results for their sixth-grade students. To date, 148 preservice teachers have participated in the elections and 30 middle school students have participated. For data see http://www.uwlax.edu/murphylibrary/departments/curriculum/stem/sbf-article-2009.pdf.

Anticipated Long-Term Impact: By targeting preservice teachers who will land teaching jobs, the university plans to increase the number of K-8 teachers who run elections in their K-8 school classrooms. The university is also expanding the mock competition to other teacher education programs to increase the number of preservice teacher courses (such as Science Methods or Reading Methods) that use this election to increase exposure to nonfiction STEM trade books.

Contact: Tim Gerber, Associate Professor, Biology Department, University of Wisconsin–La Crosse (gerber.dani@uwlax.edu); Eric Brunsell, Assistant Professor, The EXCEL Center, University of Wisconsin–Oshkosh (brunsele@uwosh.edu)
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<td>University of Michigan</td>
</tr>
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<td>California State University–Dominguez Hills</td>
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AACTE MEMBER INSTITUTIONS

**Alabama**
- Alabama A&M University
- Alabama State University
- Athens State University
- Auburn University
- Auburn University Montgomery
- Birmingham Southern College
- Jacksonville State University
- Miles College
- Samford University
- Spring Hill College
- Troy University
- Tuskegee University
- University of Alabama
- University of Alabama at Birmingham
- University of Alabama Huntsville
- University of Mobile
- University of Montevallo
- University of North Alabama
- University of South Alabama
- University of West Alabama

**Alaska**
- University of Alaska Anchorage
- University of Alaska Fairbanks
- University of Alaska Southeast
- Arizona
- Arizona State University
- Arizona State University at the West Campus
- Grand Canyon University
- Northern Arizona University
- University of Arizona
- University of Phoenix Arizona

**Arkansas**
- Arkansas State University
- Arkansas Tech University
- Harding University
- Henderson State University
- John Brown University
- Lyon College
- Ouachita Baptist University
- Philander Smith College
- Southern Arkansas University
- University of Arkansas
- University of Arkansas at Little Rock
- University of Arkansas at Monticello
- University of Arkansas at Pine Bluff
- University of Arkansas Fort Smith
- University of Central Arkansas
- University of the Ozarks

**California**
- Alliant International University
- California Lutheran University
- California Polytechnic State University
- California State Polytechnic University Pomona
- California State University Bakersfield
- California State University Chico
- California State University Dominguez Hills
- California State University East Bay
- California State University Fresno
- California State University Fullerton
- California State University Long Beach
- California State University Los Angeles
- California State University Northridge
- California State University Sacramento
- California State University San Bernardino
- California State University San Marcos
- California State University Stanislaus
- Chapman University
- Loyola Marymount University
- National University
- Pepperdine University
- Point Loma Nazarene University
- Saint Mary’s College of California
- San Diego State University
- San Jose State University
- Sonoma State University
- Stanford University
- University of San Diego
- University of San Francisco
- University of Southern California
- University of the Pacific

**Colorado**
- Colorado College
- Colorado State University
- Fort Lewis College
- Metropolitan State College
- University of Colorado at Boulder
- University of Colorado at Colorado Springs
- University of Colorado Denver
- University of Northern Colorado
- University of Phoenix Colorado

**Connecticut**
- Central Connecticut State University
Eastern Connecticut State University
Fairfield University
Quinnipiac University
Southern Connecticut State University
University of Connecticut
University of Hartford
Western Connecticut State University

**Delaware**
Delaware State University
University of Delaware
Wesley College
Wilmington University

**District of Columbia**
American University
Catholic University of America
Gallaudet University
George Washington University
Howard University
Trinity University
University of the District of Columbia

**Florida**
Bethune Cookman University
Florida A&M University
Florida Atlantic University
Florida Gulf Coast University
Florida International University
Florida State University
Nova Southeastern University
Southeastern University
University of Central Florida
University of Florida
University of Miami
University of North Florida
University of South Florida
University of South Florida St Petersburg
University of West Florida
Warner University

**Georgia**
Albany State University
Armstrong Atlantic State University
Augusta State University
Berry College
Brenau University
Brewton Parker College
Clark Atlanta University

Clayton State University
Columbus State University
Dalton State College
Emory University
Fort Valley State University
Georgia College & State University
Georgia Southern University
Georgia State University
Kennesaw State University
Macon State College
Mercer University
North Georgia College & State University
Paine College
University of Georgia
Valdosta State University

**Hawaii**
University of Hawaii at Manoa
University of Hawaii West Oahu
University of Phoenix Hawaii

**Idaho**
Boise State University
College of Idaho
Idaho State University
Lewis Clark State College
Northwest Nazarene University
University of Idaho

**Illinois**
Aurora University
Bradley University
Columbia College Chicago
Concordia University
DePaul University
Dominican University
Eastern Illinois University
Elmhurst College
Governors State University
Greenville College
Illinois State University
Lewis University
Loyola University Chicago
McKendree University
Millikin University
National Louis University
North Park University
Northeastern Illinois University
Northern Illinois University

**Delaware**
Delaware State University
University of Delaware
Wesley College
Wilmington University

**District of Columbia**
American University
Catholic University of America
Gallaudet University
George Washington University
Howard University
Trinity University
University of the District of Columbia

**Florida**
Bethune Cookman University
Florida A&M University
Florida Atlantic University
Florida Gulf Coast University
Florida International University
Florida State University
Nova Southeastern University
Southeastern University
University of Central Florida
University of Florida
University of Miami
University of North Florida
University of South Florida
University of South Florida St Petersburg
University of West Florida
Warner University

**Georgia**
Albany State University
Armstrong Atlantic State University
Augusta State University
Berry College
Brenau University
Brewton Parker College
Clark Atlanta University

Clayton State University
Columbus State University
Dalton State College
Emory University
Fort Valley State University
Georgia College & State University
Georgia Southern University
Georgia State University
Kennesaw State University
Macon State College
Mercer University
North Georgia College & State University
Paine College
University of Georgia
Valdosta State University

**Hawaii**
University of Hawaii at Manoa
University of Hawaii West Oahu
University of Phoenix Hawaii

**Idaho**
Boise State University
College of Idaho
Idaho State University
Lewis Clark State College
Northwest Nazarene University
University of Idaho

**Illinois**
Aurora University
Bradley University
Columbia College Chicago
Concordia University
DePaul University
Dominican University
Eastern Illinois University
Elmhurst College
Governors State University
Greenville College
Illinois State University
Lewis University
Loyola University Chicago
McKendree University
Millikin University
National Louis University
North Park University
Northeastern Illinois University
Northern Illinois University
Olivet Nazarene University
Roosevelt University
Southern Illinois University Carbondale
Southern Illinois University Edwardsville
University of Illinois at Chicago
University of Illinois at Urbana Champaign
Western Illinois University
Wheaton College

Indiana
Anderson University
Ball State University
Butler University
DePauw University
Franklin College
Goshen College
Grace College
Huntington University
Indiana State University
Indiana University
Indiana University East
Indiana University Kokomo
Indiana University Northwest
Indiana University Purdue University Fort Wayne
Indiana University South Bend
Indiana University Southeast
Indiana Wesleyan University
Manchester College
Marian College
Oakland City University
Purdue University
Purdue University Calumet
Purdue University North Central
Saint Joseph's College
Saint Mary of the Woods College
Saint Mary's College
Taylor University
University of Evansville
University of Indianapolis
University of Notre Dame
Valparaiso University
Wabash College

Iowa
Ashford University
Central College
Clarke College
Drake University
Graceland University

Iowa State University of Science and Technology
Loras College
Morningside College
Mount Mercy College
Saint Ambrose University
Simpson College
University of Iowa
Wartburg College

Kansas
Baker University
Benedictine College
Emporia State University
Fort Hays State University
Kansas State University
McPherson College
MidAmerica Nazarene University
Ottawa University
Pittsburg State University
University of Kansas
University of Saint Mary
Washburn University
Wichita State University

Kentucky
Asbury College
Bellarmine University
Berea College
Brescia University
Campbellsville University
Eastern Kentucky University
Georgetown College
Lindsey Wilson College
Morehead State University
Murray State University
Northern Kentucky University
Spalding University
Thomas More College
Transylvania University
Union College
University of Kentucky
University of Louisville
Western Kentucky University

Louisiana
Centenary College of Louisiana
Dillard University
Grambling State University
Louisiana College
Louisiana State University Alexandria
Louisiana State University and A&M College
Louisiana State University Shreveport
Louisiana Tech University
Nicholls State University
Northwestern State University
Southeastern Louisiana University
Southern University and A&M College at Baton Rouge
Southern University at New Orleans
University of Louisiana at Lafayette
University of Louisiana at Monroe
University of New Orleans

**Maine**
University of Maine
University of Maine at Farmington
University of Southern Maine

**Maryland**
Bowie State University
Coppin State College
Frostburg State University
Hood College
Johns Hopkins University School of Education
McDaniel College
Morgan State University
Mount Saint Mary's University
Salisbury University
Stevenson University
Towson University
University of Maryland Baltimore County
University of Maryland College Park
University of Maryland Eastern Shore
University of Maryland University College

**Massachusetts**
Boston College
Bridgewater State College
Framingham State College
Lesley University
Salem State College
University of Massachusetts Amherst
University of Massachusetts Boston
University of Massachusetts Lowell
Westfield State College
Wheelock College

**Michigan**
Andrews University
Calvin College
Central Michigan University
Eastern Michigan University
Ferris State University
Grand Valley State University
Madonna University
Michigan State University
Northern Michigan University
Oakland University
Saginaw Valley State University
Spring Arbor University
University of Michigan
University of Michigan Flint
Wayne State University
Western Michigan University

**Minnesota**
Augsburg College
Bemidji State University
Bethel University
College of Saint Benedict/Saint John's University
College of Saint Catherine
College of Saint Scholastica
Concordia College
Concordia University St. Paul
Gustavus Adolphus College
Metropolitan State University
Minnesota State University Mankato
Minnesota State University Moorhead
Saint Cloud State University
Saint Olaf College
University of Minnesota
University of Minnesota Duluth
University of Minnesota Morris
University of Saint Thomas
Winona State University

**Mississippi**
Delta State University
Jackson State University
Millsaps College
Mississippi College
Mississippi University for Women
Mississippi Valley State University
University of Mississippi
University of Southern Mississippi
William Carey College
Missouri
Avila University
College of the Ozarks
Culver-Stockton College
Drury University
Evangel University
Fontbonne University
Harris-Stowe State University
Lincoln University
Lindenwood University
Maryville University of Saint Louis
Missouri Baptist University
Missouri State University
Missouri Western State University
Northwest Missouri State University
Park University
Rockhurst University
Southeast Missouri State University
University of Missouri at Kansas City
University of Missouri Columbia
University of Missouri Saint Louis
Washington University
Webster University
William Jewell College

Montana
Montana State University
Montana State University Billings
University of Great Falls
University of Montana

Nebraska
Chadron State College
Concordia University
Creighton University
Doane College
Hastings College
Midland Lutheran College
Peru State College
Union College
University of Nebraska at Kearney
University of Nebraska at Omaha
University of Nebraska Lincoln
Wayne State College
York College

Nevada
Nevada State College
Nova Southeastern University Nevada

University of Nevada Las Vegas
University of Nevada Reno
University of Phoenix Nevada

New Hampshire
Keene State College
University of New Hampshire

New Jersey
Caldwell College
College of New Jersey
Georgian Court University
Kean University
Monmouth University
Montclair State University
New Jersey City University
Princeton University
Ramapo College of New Jersey
Richard Stockton College of New Jersey
Rider University
Rowan University
Rutgers University
Seton Hall University
William Paterson University of New Jersey

New Mexico
Eastern New Mexico University
New Mexico Highlands University
New Mexico State University
University of New Mexico
Western New Mexico University

New York
Adelphi University
Bank Street College of Education
Brooklyn College of City University of New York
City College of New York of City University of New York
College at Brockport, State University of New York
College of Saint Rose
College of Staten Island City University of New York
Columbia University
Dowling College
Five Towns College
Fordham University Lincoln Center
Hunter College of City University of New York
Iona College
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Molloy College
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<td>Xavier University</td>
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Oklahoma
Cameron University
East Central University
Langston University
Northeastern State University
Northwestern Oklahoma State University
Oklahoma Baptist University
Oklahoma Christian University
Oklahoma Panhandle State University
Oklahoma State University
Oral Roberts University
Southeastern Oklahoma State University
Southwestern Oklahoma State University
University of Central Oklahoma
University of Oklahoma
University of Science and Arts of Oklahoma

Oregon
George Fox University
Lewis and Clark College
Oregon State University
Pacific University
Portland State University
Southern Oregon University
University of Oregon
University of Portland
Western Oregon University
Willamette University

Pennsylvania
Alvernia College
Bloomsburg University of Pennsylvania
California University of Pennsylvania
Cheyney University
Duquesne University
Edinboro University of Pennsylvania
Gannon University
Indiana University of Pennsylvania
King’s College
Kutztown University
Lehigh University
Lock Haven University
Mansfield University
Penn State University
Shippensburg University
Slippery Rock University of Pennsylvania
Temple University
University of Pennsylvania
University of Pittsburgh
University of Scranton
Widener University

Puerto Rico
University of Phoenix Puerto Rico
University of Puerto Rico Rio Piedras

Rhode Island
Providence College
Rhode Island College
Roger Williams University
University of Rhode Island

South Carolina
Anderson University
Benedict College
Charleston Southern University
Citadel Military College of South Carolina
Claflin University
Clemson University
Coastal Carolina University
College of Charleston
Erskine College
Francis Marion University
Furman University
Lander University
Morris College
Newberry College
Presbyterian College
South Carolina State University
University of South Carolina
University of South Carolina Aiken
University of South Carolina Upstate
Winthrop University
Wofford College

South Dakota
Augustana College
Black Hills State University
Dakota State University
Mount Marty College
South Dakota State University
University of South Dakota

Tennessee
Aquinas College
Austin Peay State University
Belmont University
Carson-Newman College
Christian Brothers University
Crichton College
Cumberland University
East Tennessee State University
Freed Hardeman University
Lee University
LeMoyne Owen College
Lipscomb University
Middle Tennessee State University
Milligan College
Southern Adventist University
Tennessee State University
Tennessee Technological University
Trevecca Nazarene University
Union University
University of Memphis
University of Tennessee
University of Tennessee at Chattanooga
University of Tennessee at Martin
Vanderbilt University Peabody College

Texas
Angelo State University
Austin College
Baylor University
Lamar University
Midwestern State University
Our Lady of the Lake University of San Antonio
Sam Houston State University
Southern Methodist University
Southwestern University
Stephen F Austin State University
Texas A&M University
Texas A&M University Commerce
Texas A&M University Kingsville
Texas Christian University
Texas Southern University
Texas State University San Marcos
Texas Tech University
Texas Woman's University
Trinity University
University of Houston
University of Houston Clear Lake
University of Mary Hardin Baylor
University of North Texas
University of Saint Thomas
University of Texas at Arlington
University of Texas at Tyler
University of Texas of the Permian Basin
University of the Incarnate Word

Utah
Brigham Young University
University of Phoenix Utah
University of Utah
Utah State University

Vermont
University of Vermont

Virginia
Bridgewater College
College of William and Mary
Eastern Mennonite University
George Mason University
James Madison University
Liberty University
Longwood University
Mary Baldwin College
Marymount University
Norfolk State University
Old Dominion University
Radford University
Regent University
Saint Paul's College
University of Virginia
Virginia Commonwealth University
Virginia Polytechnic Institute and State University
Virginia State University
Virginia Union University

Washington
Central Washington University
Eastern Washington University
Evergreen State College
Gonzaga University
Northwest University
Pacific Lutheran University
Saint Martin's University
Seattle Pacific University
Seattle University
University of Puget Sound
University of Washington
Washington State University
Western Washington University
Whitworth University
West Virginia
- Alderson Broaddus College
- Bluefield State College
- Concord University
- Fairmont State University
- Glenville State College
- Shepherd University
- West Liberty University
- West Virginia State University
- West Virginia University
- West Virginia University at Parkersburg
- West Virginia Wesleyan College

Wisconsin
- Alverno College
- Cardinal Stritch University
- Marian University
- Marquette University
- Mount Mary College
- Silver Lake College
- University of Wisconsin Eau Claire
- University of Wisconsin Green Bay
- University of Wisconsin Madison
- University of Wisconsin Milwaukee
- University of Wisconsin Oshkosh
- University of Wisconsin Parkside
- University of Wisconsin River Falls
- University of Wisconsin Stevens Point
- University of Wisconsin Stout
- University of Wisconsin Whitewater
- Viterbo University

Wyoming
- University of Wyoming

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