

Christa McAuliffe Award

For Exemplary Programs in Teacher Education

Final Proposal

Name of Program: *Urban Teacher Education*

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ABSTRACT

The UMBC Urban Teacher Education (UTE) has significantly increased student achievement in Maryland's lowest-performing schools by enhancing teacher quality. Nearly one-third of the teachers are from UTE, 79% are of color, and first graders in these historically low-performing schools are performing above the national average in reading and math.

I. What are UMBC Urban Teacher Education’s Mission, Goals, Objectives, and Key Program Components?

A. UTE Mission, Goals, and Objectives

The mission of the University of Maryland Baltimore County (UMBC) Urban Teacher Education (UTE) is to improve student achievement and to eliminate the poverty and race achievement gaps in Maryland’s lowest performing schools by improving teacher quality.

Maryland’s lowest performing schools consistently have the highest concentration of poor and minority students and the highest concentration of inexperienced teachers and teacher attrition (Lee, 1998; MSDE, 2001). Today’s schools are segregated not only along student background lines, but also along teacher expertise. The forces that underlie housing and school segregation and inequitable school financing—institutionalized barriers stemming, in large part, from racial and economic prejudice—also impact the recruiting, training, rewarding, and ultimately the distribution of teachers. As a result, the economically disadvantaged and ethno-racial minority students have access to the smallest pool of¹ and least qualified teachers². The very students who need education to break out of the vicious cycle of intergeneration poverty and diminished opportunities also lack access to teachers who have the expertise to provide them the quality education they need.

Inequities in access to quality teachers begin with the paucity of teacher candidates who want to teach in and the lack of teacher education institutions that recruit and prepare teachers for urban and other high-needs schools (National Center for Education Statistics, 1998). To break this pattern of providing the lowest quality teachers and educational opportunities to students attending the lowest performing schools, UMBC partnered with the Baltimore metropolitan area’s largest school systems to establish the UTE in 1998. UTE recruits, prepares, supports, and retains high-quality teachers to improve the educational opportunities for students attending Maryland’s lowest performing schools (Goal 1) in order to improve their academic achievement (Goal 2). To achieve the aforementioned goals, UTE established the following objectives:

- ❑ Improve teacher recruitment to attract highly talented post-baccalaureate teachers dedicated to long-term teaching in high-need schools;
- ❑ Tailor teacher preparation for high-need schools, where most new hires are assigned;
- ❑ Improve teacher support during their induction years by providing them ongoing mentoring and professional development required to improve student achievement;

¹ In Maryland, school districts with the highest percentages of poor and minority students had the least number of applicants per student. In school year 1996-97, Baltimore, the third largest (with 108,759 students) and poorest (with 66.8% of the students receiving free or reduced price meals) school system in Maryland, hired 826 (that is, 45.9%) of its 1,800 applicants (Baltimore City Public School System, 1997). In contrast, Montgomery County, the second largest (with 122,505 students) and the wealthiest school system in Maryland (based on 1990 U.S. Census median family income figures), hired 665 (that is, 11%) of 6,109 applicants (Montgomery County Public Schools, 1997). Similarly, Howard County, the sixth largest (with 38,857 students) and the second wealthiest school system (based on 1990 U.S. Census median family income figures), hired 270 (5.1%) of its 5,336 applicants (Howard County Public Schools, 1997).

² Darling-Hammond (1995) notes in her review of research on teacher experience and effectiveness that studies consistently find that new teachers tend to be much less effective than their more experienced counterparts. Novice teachers experience a wide range of problems that more experienced teachers have mastered, including problems motivating students, assessing and responding appropriately to students with diverse learning needs, and managing student behavior. In keeping with this view of teacher effectiveness, non-tenured teachers, that is, teachers with less than two years of experience, will be treated as less effective than tenured teachers.

- ❑ Retain high-quality teachers in target schools to give school reform efforts time to take root.

B. UTE’s Key Components

UTE’s key strategies to realize the above objectives are:

- ❑ Provide financial incentives to all recent college graduates and career changers in the form of tuition and stipend scholarships and job placement;
- ❑ Provide innovative teacher preparation courses for teachers in high-need schools co-designed and team-taught by local school system, UTE, Arts & Sciences, Engineering, and business industry educators that are:
 - Standards-aligned, content-enhancing, problem-based, and research-supported instructional best practices
 - Performance-based—UTE candidates are evaluated based on their ability to demonstrate the UTE taught instructional practices in their own classrooms, including the integration of using technology and differentiating instruction for diverse learners
 - Achievement-based—UTE candidates must demonstrate that their teaching contributes to improved student academic achievement as measured by higher report card grades and standardized test scores
- ❑ Provide ongoing mentoring and supervision support to all new teachers during their induction years by accomplished mentors of teachers in high-need schools;
- ❑ Receive five-year teaching commitments from UTE candidates and then cluster the assignment of teachers so as to maximize the community and support for teachers.

Like many large local school systems (LSS) with high concentrations of low achieving, poor, and cultural and language minority students, a significant portion of Maryland’s LSS new hires are career changers and others who lack formal teacher preparation and/or licensure. To meet the needs of its partner LSS, UTE offers two routes for licensure and advanced study:

- ❑ Alternative-route to Certification Track (ACT)—a two-year program for career changers and others who simultaneously pursue teaching and teacher licensure/preparation
- ❑ Internship Track (IT)—a one-year apprenticeship/internship with an expert teacher

1. Transform Teacher Recruitment UTE offers 100% tuition and other financial support for those who commit to teaching five years in UTE partnership school. Applicants who meet UTE’s academic admission criteria (minimum GPA of 3.0/4.0, submission of writing samples, and/or work samples) undergo rigorous interviews by (1) UTE faculty and (2) UTE partnership school principals to assess their potential or performance working with diverse students in the most challenging teaching settings that require the most talented and dedicated teachers.

Candidates who pass the above requirements are assigned in teams to UTE partnership schools where they work with the school’s administrators, instructional leaders, parent representatives, and UTE faculty. The clustering of teacher assignment ensures that cohorts of new teachers not only take classes together, but also and importantly serve as one another’s support system at school. In its first four years, UTE has placed over 215 teachers in 75 of Maryland’s highest need schools.

These admission measures drastically reduce the number of candidates who make poor career choices due to misconceptions regarding the rewards and challenges of the teaching profession, thereby, changing teacher morale and school climate in UTE partnership schools and making

possible the transformation of low expectations, low quality instruction, and low student achievement into high expectations, high quality instruction, and high student achievement.

2. A New Teacher Preparation Paradigm UTE was designed in collaboration with Maryland's largest local school systems to meet their top priority—to accelerate the achievement of low performing students and schools—and is characterized by:

- Field/Clinically-based teacher preparation—all UTE candidates receive one to two years of teaching experience as part of their certification process;
- Standards-aligned content modules designed to equip teachers with the depth and scope of subject area knowledge required to teach effectively;
 - Spiraled problem-based content modules that explain, demonstrate, provide teachers the opportunity to practice, and then assess the efficacy of the lessons in improving student learning and achievement
 - All content modules demonstrate differentiated instruction for different age/grade and other diverse learners
 - Reading lesson on teaching comprehension strategies, for example, simultaneously teach age and developmentally appropriate predicting questions and retelling strategies for PreK-2, 3-5, 6-8, etc. students, as well as visual and audio enhancing techniques such as integrating the use of CDs and music into reading lessons
- Performance-based formative/ongoing and summative evaluation measures
 - Formative/ongoing performance evaluation—conducted at the entry point and on an ongoing basis to tailor the content enhancement modules to the background and knowledge of UTE candidates
 - Summative performance evaluation—required for successfully meeting licensure and program requirements as measured by
 - A portfolio of student and teacher work samples
 - ❖ Demonstration of accelerating student learning and achievement via
 - Student reading and writing work samples
 - Student achievement on curricula-based tests as well as local, state, and national exams
 - ❖ Demonstration of mastering content and pedagogy
 - Teacher-produced instructional tools, including multimedia CDs and websites
 - A teaching demonstration modeled after the National Board Certification in which graduates demonstrate their mastery of content knowledge, dedication, and teaching proficiency via presentation of student work samples and achievement gains, as well as teacher work samples
 - A two-year performance and summative self assessment narrative documenting both the teacher's and her/his students' growth and achievement
 - Performance evaluations by UTE candidates' principals and university faculty
 - Meeting state certification test and teaching performance requirements

3. Supporting Teachers During Their Induction Years To further support UTE candidates, UTE assigns mentors and supervisors to all candidates during their first two induction years. UTE mentors and supervisors meet biweekly with UTE instructors to review the performance of UTE candidates in both their university and K-8 classes as well as to coordinate efforts to better support them. In addition, UTE graduates, who are teaching at our

partnership schools, support candidates by serving as supervising teachers of new interns, as well as by being clinical professors and site coordinators.

4. Retaining Teachers to Reform Schools All UTE teachers contract to teach for a minimum of five years in UTE partnership schools. To date, only 12 out of 215 UTE teachers have left their school systems or failed to fulfill their service obligations—a *retention rate above 95%* in schools where over one-half of teachers leave within two years. Those unable to fulfill their requirements pay back a prorated sum of their financial support. The goal of UTE is to staff 33-50% of our partnership schools with UTE candidates within five years of partnership inception, to stabilize teacher attrition and allow reform efforts time to take hold.

II. What Evidence Supports UTE’s Impact on the Learning and Performance of Its Graduates?

There are four primary categories of evidence that demonstrate UTE graduates’ extensive knowledge and skills required to be effective teachers in the classroom:

1. UTE formative/ongoing assessments of knowledge, skills, and teaching performance
2. UTE summative assessments of graduating candidates
3. Demand for and recognition and success of UTE graduates
4. UTE partnership schools’ record of sustained and significant student achievement gains

A. Formative Assessment of UTE Candidates’ Knowledge, Skills, and Teaching

1. Module Pre- and Post-Test Results and Lesson Design

UTE performance-based, content-enhanced modules are developed and taught collaboratively by UMBC and other university Arts & Sciences, Engineering, UTE faculty as well as curricula specialists from partner LSS and businesses. To assess UTE candidates’ mastery of content knowledge and skills, as well as their ability to apply their newly learned knowledge and skills in their classes, *each module* has a pre- and post-test of content area knowledge and a lesson development and modification component (to assess students’ application of the content knowledge in designing their own students’ learning environment). UTE candidates who fail to demonstrate mastery of content knowledge, skills, and teaching performance must repeat the module until they demonstrate mastery of the required knowledge, skills, and performance. To date, less than five percent of UTE candidates have had to repeat any module.

For example, in math, candidates must demonstrate how to teach a given topic to diverse learners that accommodates their students’ different styles of learning/multiple intelligences. For example, UTE elementary teachers must demonstrate through lessons and results how to teach algebra to K through 8th grade students, using developmentally-appropriate visual aids, verbal and written explanations, manipulatives, etc. to assess the prior knowledge and learning needs of their students so as to provide each student the learning best suited to her/his needs and skills. While pre-test results vary across different topics (for example, computation, geometry, algebra, statistics, probability, etc.), 100% of graduates have demonstrated mastery of the knowledge and skill required to provide differentiated instruction to math learners with diverse learning needs and mastery across multiple grades.

Similarly, for the digital video production module, UTE students take pre-tests to document their knowledge and experience in digital video production—that is, writing movie scripts, working with lighting, video, and audio equipment, video recording and editing, including digitizing videos, compressing and then burning video clips onto PowerPoint presentations—to demonstrate their teaching proficiency to UTE and LSS faculty and administrators. In addition

to post-tests (to document their knowledge gain resulting from participating in the module), candidates must produce mini-movies to demonstrate their mastery of the key taught skills. To date, not one UTE candidate has had digital video production experience, but 100% of graduates have demonstrated mastery of the knowledge and skills required for video production through their production of mini-movies.

2. UTE Supervisors' Evaluation of UTE Candidates' Teaching To assess UTE candidates' mastery of content knowledge, teaching skills, and their teaching performance, each UTE candidate receives monthly written reports (aligned to partner school systems' teacher evaluations forms) detailing the areas and extent of each candidate's growth and the specific steps s/he must take to improve. Also, each candidate receives a detailed narrative/case study by her/his UTE supervisor conduct monthly evaluations. These on-going evaluations provide a qualitative and quantitative assessment of each candidate's mastery of content and application of this knowledge in their teaching. To date, all graduates have received a satisfactory to proficient review, with 93% receiving a proficient rating.

3. Self Assessment, Portfolio Development, Teaching Demonstration, and Praxis Performance Other formative assessments of UTE candidates include a program-long (two years for ACT and one year for IT) self assessment of their teaching (aligned to their school system's teacher evaluation forms), an electronic or non-electronic portfolio, as well as a presentation to demonstrate their proficiency in meeting each of the Interstate New Teachers' Assessment and Support Consortium (INTASC) Core Standards (INTASC, 1992). During each registered term, candidates work with their cohort instructors and study groups to develop and update the abovementioned products. These products also serve as key summative assessments of UTE candidates' mastery of content knowledge, disposition, and teaching performance. Finally, in compliance with the State of Maryland's licensure requirements, UTE candidates must pass the Praxis I and II exams. UTE candidates must receive proficient or satisfactory/passing on each of the above measures in order to participate in the UTE summative assessments.

B. Summative Assessments Requiring UTE Candidates to Demonstrate their Knowledge, Skills, and Teaching Performance

UTE candidates who successfully demonstrate mastery of content knowledge, skills, and teaching effectiveness participate in the UTE summative assessments—via developing and presenting a portfolio consisting of student and teacher work samples and student achievement data and usually containing video clips—to demonstrate their effectiveness as teachers. These summative assessments are required to successfully fulfill UTE program completion requirements and document in detail the breadth and depth of the knowledge and skills UTE graduates have gained in UTE. The summative demonstration and products are evaluated by UTE, Arts & Sciences and Engineering faculty (to assess UTE candidate content knowledge), as well as by partnership principals and staff.

C. Demand for and Recognition and Success of UTE Graduates

1. Recognition and Success of UTE Graduates As noted previously, most UTE candidates are career changers with full-time teaching positions in Maryland's lowest-performing schools. Although lacking formal teacher training during their undergraduate years, UTE candidates develop the content knowledge and skills required for effective teaching as UTE students and attain 'proficient' status by the time they graduate. Although UTE was established merely four years ago and has only two cohorts of graduates, their accomplishments include:

- ❑ Six school-based teachers of the year
- ❑ Two *Baltimore Sun* Reading by 9 Teachers
- ❑ Baltimore County Public Schools Rookie of the Year
- ❑ International Direct Instruction Teacher of the Year

2. Demand for UTE Teachers and Expanding UTE Partnership Schools

UTE began in AY 1998-1999 with 10 interns with funding from its LSS partners. The following year, with funding from LSS partners and the U.S. Department of Education Title II Partnership Grant to Enhance Teacher Quality, UTE expanded its scholarship awards to support 45 additional teachers and teacher candidates in AY 1999-2000, 70 additional in AY 2000-2001, and 90 additional in AY 2001-2002—a total of 215 students. For AY 2002-2003, UTE is expected to award 100-135 new tuition scholarships. These scholarships would not have been possible without federal and LSS financial support (over \$6.4 million for the Title II Partnership Grant) and the political commitment of the partnering schools and school systems. When UTE was established in AY 1998-1999, it had three partnership schools. In AY 1999-2000, UTE gained 11 additional partnership schools, another six in AY 2000-2001, and four more in AY 2001-2002—a total of 24 partnership schools.

UTE has been staffing Maryland’s lowest-performing highest-need schools not only with high-quality teachers, but also with teachers who are underrepresented in the teaching profession. *Seventy-nine percent*—169 of the 215 UTE teachers—are of color; 76% are African American, 2% Hispanic American, .5% Native American/American Indian, and .5% Asian American.

All of the reasons noted above have contributed to the meteoric rise in the number of UTE partnership schools, which, in turn, further demonstrates the trust and commitment of LSS principals and central office administrators in UTE. To date, UTE has been approached by 11 of the 24 school systems in Maryland, but presently remains in the three Baltimore area jurisdictions so as to ensure meeting the needs of the current partnership school systems.

D. UTE Record of Improving Student Achievement in Maryland’s Lowest-Performing Schools

In analyzing this achievement, one writer said UTE arms “...teachers with a solid understanding of their discipline, strong skills in classroom management and pedagogy, and the caring attitude needed to support our urban teachers.” The writer concludes that UTE’s success has been “stunning.”³ Although the extensive and various accomplishments of UTE graduates are noteworthy, the demand for expanding UTE partnership schools and graduates would not be (or would at least be less) warranted if UTE failed to demonstrate that its partnership school students improved their learning and achievement. In the next section, evidence of UTE partnership schools’ ongoing gains on national tests will be presented.

III. What Evidence Supports UTE’s Impact on Improving P-12 Student Achievement?

As noted in section I, the mission of UTE is to improve student achievement and to eliminate the poverty and race achievement gaps in Maryland’s lowest performing schools by recruiting, preparing, supporting, and retaining high-quality teachers. As UTE partnership schools attain a critical mass of dedicated high-quality teachers trained by UTE, teacher attrition is expected to stabilize, school climate to improve, and school reform efforts to take hold.

³ Weidemann, Craig, (2001). Technovation: Extra help for our urban teachers. *The Daily Record Online*, October 3.

As the percentage (and number) of UTE teachers hired by UTE partnership schools increases—from 16.5% (37) UTE teachers in AY 1999-2000 to 22.3% (50) in AY 2000-2001 and 30.8% (69 out of a total of 224 teachers) in AY 2001-2002—student achievement in UTE partnership schools, as expected, increases⁴.

The following charts in Appendix A—consisting of 12 UMBC UTE partnership schools and 12 matched comparison schools—reveal that students in UMBC UTE partnership schools outperform their counterparts on California Test of Basic Skills (CTBS) 1st grade reading and math median percentile scores.

On the CTBS Reading Test, the median percentile Reading scores for UTE Partnership School students for 1999-2001 were 35.5%, 48.8%, and 64.3% (a 81.1% gain over baseline during the three year period). By comparison, the median percentile Reading scores for control schools' students were 43.8%, 50.2%, and 35.1% over the same period (for a 19.9% decline over the baseline).

Similarly, on the CTBS Math Test, the median percentile Math scores for UTE Partnership School students for 1999-2001 were 29.4%, 45.2%, and 56.3% (a 91.4% gain over baseline during the three year period). By comparison, the median percentile Math scores for control schools' students were 34.5%, 38.4%, and 33.7% over the same period (for a 2.3% decline over the baseline).

These findings are remarkable in that UTE partnership schools historically have been the lowest performing schools with the highest concentrations of poor (over 85% of students receive free or reduced meals) and minority students (over 93%) in Maryland. By improving student achievement in low-performing schools with high concentrations of poor and minority students, UTE helps to eliminate the poverty and race achievement gaps and provides students—who historically lacked the skills and achievement to—the means to pursue postsecondary schooling and gainful employment.

Although additional years of student achievement, academic and economic attainment, and other data are required before conclusions can be drawn confidently about the value of UTE schools, these findings are promising and they suggest that UMBC UTE partnership schools, when working collaboratively with its LEA and other partners, can help to improve teacher quality and student achievement.

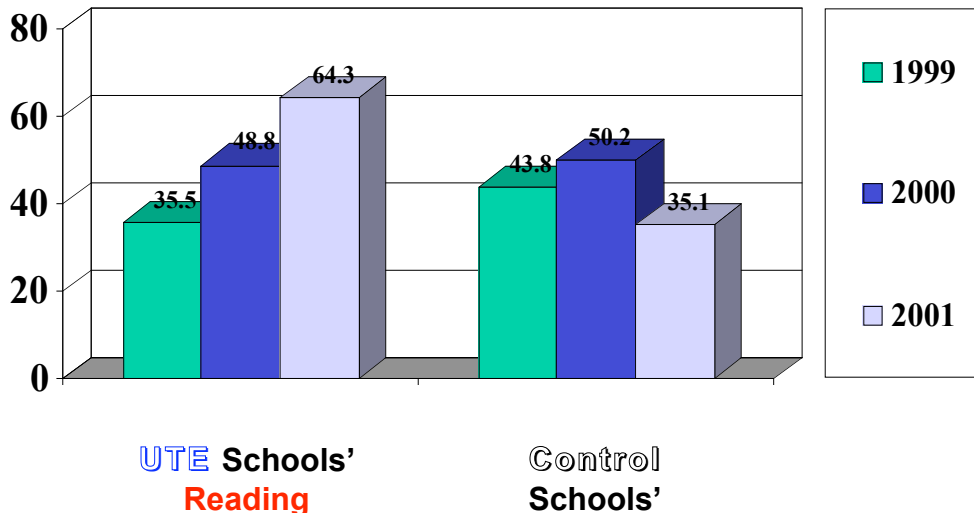
For its central role in improving teacher quality in Maryland's lowest performing schools, UTE was recognized by the Maryland State Department of Education and Maryland State Teacher Education Council (STEC) in 2000 as Maryland's exemplary teacher preparation program and was featured as a national model of best practice by the Council of Chief State School Officers (CCSSO) in its 2001 Annual Conference in Baltimore, Maryland.

UTE continues to work with local, state, and national educational stakeholders to make possible providing all students, especially those who historically have not had access to high-quality schooling, dedicated and talented teachers to realize their full potential as students and citizens.

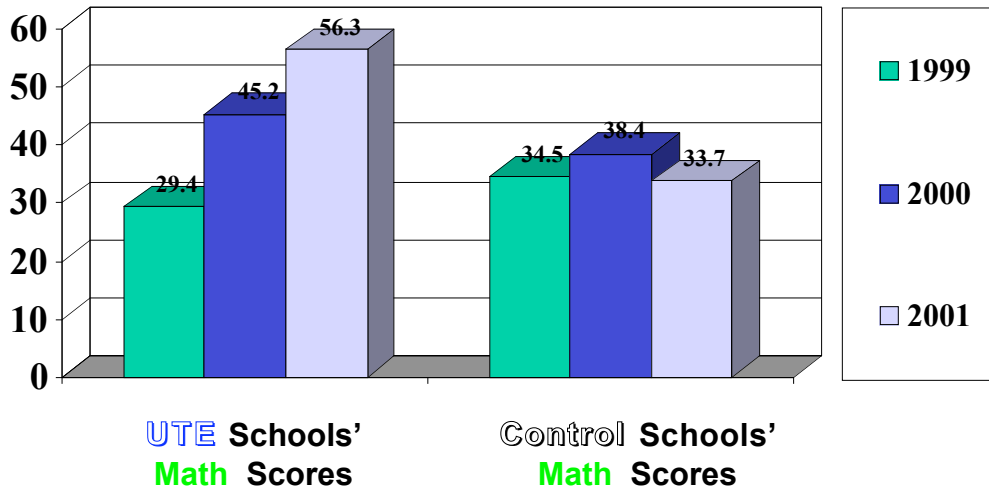
⁴ Maryland's local school systems currently lack the capacity to link individual student achievement, attainment, and background data with individual teacher data. Due to this and other limitations (the difficulty of attributing any one child's gains in reading and writing, for example, to any one teacher in today's interdisciplinary team-taught courses where students are reassigned weekly based on their performance on placement and formative assessments), analyses of student achievement and attainment are performed at the school level.

Appendix A

1999-2001 1st Grade CTBS Median Percentile Reading Scores for UMBC UTE & Comparison Schools



1999-2001 1st Grade CTBS Median Percentile Math Scores for UMBC UTE & Comparison Schools



Appendix B

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