Western Kentucky University

Documentation of the Teachers for a New Era Learning Network

INTRODUCTION

This case study is one of nine prepared by AED to document evidence of institutional change in teacher preparation at nine of the thirty universities that took part in the Teachers for A New Era (TNE) Learning Network. AED selected the nine universities based upon a variety of factors, including their degree of engagement in the Learning Network, and their willingness to specify a program objective and indicator(s) of change that reflected important work underway and could serve as the focus of a case study.

Institutional change, for the purposes of this study, means change that goes beyond adjusting course curricula, or degree requirements, or even holding meetings across university departments. It means change that transforms a teacher education program's organizational structure, culture, external relationships, and ways of assessing the outcomes of its work. Such change is often based on research evidence, involves sustained partnerships with school districts and personnel, establishes cross-college and cross-departmental pathways for work and communication, increases the quality and length of time that candidates spend in school settings, and assesses its teacher candidates on their effectiveness in the classroom. Institutional change is not change for change's sake, but a mission-driven effort to refocus the activities of the teacher education program on the effectiveness of their graduates in helping pupils learn.

The TNE Learning Network was established in 2005 with a grant from the Annenberg Foundation and additional support from Carnegie Corporation of New York (CCNY). Its purpose is to broaden and deepen the profession's understanding of how the Teachers for a New Era design principles could contribute to the reform of teacher education, and to encourage the institutions of higher education that belong to the Learning Network to reach out to others with similar interests. Like Teachers for a New Era (TNE)², launched in 2001 by CCNY, with additional support from the Ford and Annenberg foundations,





Arizona State University, Indiana State University, Jackson State University, Montclair State University, New York University, University of Dayton, University of North Carolina Greensboro, Western Kentucky University, and Western Oregon University.

²⁾ The goal of TNE was to strengthen K-12 teaching by developing state-of-the-art teacher education programs at selected colleges and universities through a focus on the three design principles. The 11 institutions participating in the TNE initiative are Bank Street College of Education; Boston College; California State University, Northridge; Florida A&M University; Michigan State University; Stanford University; University of Connecticut; University of Texas at El Paso; University of Virginia; University of Washington; and University of Wisconsin, Milwaukee. Most are completing the 5-7 year process of institutional change under TNE.

the Learning Network promotes the TNE design principles: (a) grounding teacher education on sound evidence, including measurement of pupil learning; (b) engaging the arts and sciences disciplines; and (c) understanding teaching as an academically taught clinical practice profession.

Based upon the nine case studies, the AED research team has prepared a cross-case study that documents and analyzes evidence with bearing on four broad research questions:

- 1. Is there evidence of institutional change along the lines of the TNE design principles in the preparation of teachers at these institutions?
- 2. What are the primary categories of change being undertaken on each campus?
- 3. What are the indicators of these institutional changes?
- **4.** What aspects of the Learning Network, if any, are reported to have triggered or enhanced the occurrence of change or supported its continuation?

A final report on the TNE Learning Network, which will include the cross-case study and nine case studies as well as recommendations for next steps, will be published in November 2009, with funding from the Annenberg Foundation.

The Academy for Educational Development (AED) sent a research team to Western Kentucky University (WKU) on June 19-20, 2008 to conduct interviews with individuals who play important roles in the university's teacher preparation program (see Appendix A). These interviews, along with additional documentation provided by WKU and identified by the AED research team, provide the basis for the case study that follows.

DETERMINING THE FOCUS FOR THIS CASE STUDY

University-based teacher preparation is a complex enterprise with many elements and many players, and this is especially true for universities attempting fundamental change. To provide a manageable focus for these case studies, AED staff asked the TNE Learning Network universities to prepare a "Measuring Progress" statement (see Appendix B) which would specify one program objective by which they would wish to document their progress. AED asked that this objective (1) reflect an important aspect of teacher preparation at the institution, (2) address one or more of the TNE principles, and (3) logically connect to pupil success. They were also asked to specify indicators that the change sought was occurring.

The authors of the WKU Measuring Progress statement selected as their objective:

Develop a Comprehensive Induction Program for New Teachers. More specifically, develop and implement a new mentoring model and process for all new teacher graduates in the Bowling Green Independent and the Warren County Schools by the Fall of 2008.

This objective, they noted, would address the third TNE principle, "Teaching as an academically taught clinical practice profession," specifically part 4, which defines a university role in the new teacher's first two years in the profession.

"An exemplary teacher education program, however, should consider the teacher candidate's first two years of full-time regular service in the teaching profession as a

residency period requiring mentorship and supervision. During this induction period, faculty from the higher education institution, inclusive of arts and sciences faculty, will confer with the teacher on a regular basis, arrange for observation of the teacher's clinical practice, and provide guidance to improve practice." (*Carnegie Corporation of New York*, p. 9)

The choice of this objective was determined by the leadership's assessment that "while WKU faculty serve on new teachers' [Kentucky Teacher Internship Program] internship committees, the University as an institution, is not providing systematic mentoring and assistance to recent graduates." This recognition, along with the university's decision that its accountability for its graduates should extend beyond their graduation, led to the decision to develop a more comprehensive induction program for all new teachers in the two districts that are WKU's primary partners, Warren County and Bowling Green.

The authors of the statement also selected four indicators of change by which they would assess their progress toward this objective (see Appendix B for complete text):

- 1. The WKU/Bowling Green/Warren County Mentoring Leadership Team ... designed a program that will prepare all principals, resource teachers, teacher educators, and arts and sciences faculty, to implement the New Teacher Mentoring Model for all first-year teachers in the two school systems during the 2008-2009 school year.
- 2. A second mentoring workshop is scheduled for early May 2008
- 3. A second pilot mentoring program using the New Teacher Mentoring Model ... with 20 middle school science teachers. Ten teachers will receive mentoring and ten will not be mentored....
- **4.** Pilot-testing a new field-based, standards-based, and web-supported master's degree for new teachers.... as a prototype as a two-year induction program.

Lastly, the authors of the statement hypothesized that "improving new teacher performance through focused mentoring in the use of instructional tools that produce higher levels of learning" would result in increased P-12 student success. To provide direct evidence of the impact of mentoring, WKU's intention was to collect work sample data on new teachers as well as the CATS (Commonwealth Accountability Testing System) scores of pupils taught by Western's graduates in Warren County schools.

HISTORY OF INNOVATION

WKU was one of the thirty universities selected to take part in the TNE Learning Network by the Annenberg Foundation and Carnegie Corporation of New York. At that time, in 2005, the university had already progressed significantly along the lines envisioned in the TNE principles.

Located in Bowling Green, Kentucky, WKU was founded in 1906 as a normal university. Its mission has always encompassed the preparation of teachers, and the university continues to prepare more teachers than any other institution in Kentucky. WKU graduates about 400 teachers each year, with 356 undergraduates completing a teacher education program.

Beyond its initial identity as a normal school, Western Kentucky has had a national reputation for more than a decade as a university committed to improving the quality of the teachers it prepares. The leadership of WKU's College of Education and Behavioral Sciences (CEBS) has taken part in such reform organizations as the National Commission on Teaching and America's Future, the Renaissance Group, and the Title II Teacher Quality Enhancement Project, as part of which they were significant players on the Renaissance Teacher Work Sample (TWS) taskforce. In particular, the Renaissance TWS taskforce was an important event in WKU's gaining national recognition, as the university was one of the founding institutions and sustained a substantial institutional commitment to the effort. In addition to Title II funds and other grants, WKU won a SKyTeach grant in 2007 from Exxon Mobil. Representatives of WKU have also held many leadership roles in national organizations, including the current CEBS dean's board service for Kentucky's Education Professional Standards Board and for the American Association of Colleges for Teacher Education.

The Commonwealth of Kentucky faces significant challenges on the education front. Poverty continues to be an issue, for the Commonwealth is $46^{\rm th}$ in per capita income in the United States. Kentucky's population is also unusually oriented towards home: of young people who attend college, 85 percent remain in the Commonwealth after graduation. These facts of course provide the Commonwealth with heightened incentive to ensure that the teachers its universities graduate are well-prepared, because so many are likely to become the teachers of Kentucky's next generation, a generation facing profound educational and economic challenges.

Kentucky has a recent history of educational reform that has pressured its teacher preparation programs towards improvement, according to WKU's leadership. These include a commitment to school reform, new requirements for universities to be accountable for the performance of their graduates, and STEM initiatives.

The cornerstone of Kentucky's efforts to ensure the preparation and retention of high quality teachers, however, is the Kentucky Teacher Internship Program (KTIP), established in1986, which all new teachers must complete. KTIP's main goal is to ensure that new teachers experience a successful first year. KTIP interns are supervised and evaluated throughout their first year of teaching by a three-member team that includes their principal, a paid resource teacher, and a university-based teacher educator. Each new teacher intern must complete ten teaching tasks and submit ten successful teaching exhibits in order to obtain Kentucky's provisional certification. Four of the ten tasks involve designing an instructional unit, teaching the unit, and analyzing and reporting learning results for all the pupils in their class. Commonwealth funding cuts have reduced the university's role in KTIP.

HISTORY OF INTRA-UNIVERSITY PARTNERSHIPS

The collaborative working style of WKU's College of Education and Behavioral Science (CEBS) is a fundamental characteristic that encompasses its on-campus partnerships as well as its external partnerships with school districts and other entities. The successful pursuit of the \$2.4 million SKyTeach grant, for example, intended to improve teacher education in math and science, reflected partnerships both with the Ogden College of Science and Engineering and with 10 of the 31 school districts in the Green River Educational Consortium (GRECC).

The Ogden College of Science and Engineering

WKU's Ogden College of Science and Engineering has an active and ongoing commitment to teacher preparation and to collaborative partnerships. As one college leader explained, "We've all understood we can't solve this on our own." The leadership of Ogden College recognizes the shortage of prospective math and science teachers in the state, the ignorance of young Kentuckians about their employment prospects in science, as well as the great potential of applied research in science and engineering for transforming the region's economic life. All these factors drive their commitment to improving teacher preparation.

According to college leaders, their priorities are applied research and hiring for K-12 experience and commitment. Their goal is to build both capacity and a new workload structure for Ogden College, including buy-out time for successful research. Faculty members from Ogden College are engaged in an array of applied research and economic development regionally and globally, ranging from contracts with the USDA research center, a collaboration with Mammoth Cave and the National Park Service, to an emissions reduction project at coal-fired plants in China. For the university these engagements are a welcome source of fee-for-service revenue, but they are also a constant reminder to Ogden College of the shortage of a Kentucky-based workforce prepared to take advantage of employment opportunities in applied research enterprise. Faculty and administrators trace that shortage back to public schools whose teachers and administrators do not understand these employment options or prepare students for them.

As one Ogden administrator observed, "The pipeline of students is the issue." With literally hundreds of job openings for scientists in the region unfilled, the challenge is to educate not only college students but high school and middle school students and their schools to these opportunities. Representatives of Ogden College visit high schools to recruit students with the promise of industry placements during their studies at WKU and employment in these new industries once they graduate. Ogden employs a P-12 science liaison to conduct outreach, managing such activities as bringing 2,000 middle school students to campus and subsequently tracking their education paths.

Faculty members from Ogden College played leadership roles in both the Learning Network minigrants that WKU received, including two faculty members who'd had substantial high school teaching careers before becoming university-based scientists. Through the 2006 mini-grant, faculty piloted an online mentoring community to facilitate improved performance of new teachers, with particular focus on 22 second-year teachers in K-5 science/mathematics instruction. The rationale for the mentoring component was to help teachers incorporate into their teaching what they had learned at WKU in math and science courses: "It was the primary goal... to implement and evaluate a mentoring program that would assist second-year elementary teachers in designing instruction in mathematics and science that incorporates the concepts and strategies learned in their summer graduate content courses." The math and science teachers who taught the summer courses were the primary mentors, with field mentors—selected for their teaching effectiveness—playing a support role. Skype and video conferencing were the primary communication tools.

The initial results from this effort were mixed but intriguing and led to three significant findings, each of which in turn produced new initiatives:

- 1. "An acute sensitivity to the value and challenge of a comprehensive mentoring and preservice/new-teacher induction program." This recognition led directly to WKU's collaboration with Warren County Schools, Bowling Green Schools, and the New Teacher Center to develop a more comprehensive induction program.
- 2. "A much greater awareness of the challenge of preparing elementary teachers with the pedagogical content knowledge in mathematics and science to address state content standards with their students." This recognition led to course redesign, a second mini-grant, and ultimately, the W-TEMP program.
 Since the mini-grant, video conferencing using Skype has become the common-place mentoring tool in a three-year Teacher Quality grant project with math and science teachers in 18 middle schools.

Five departments from Ogden College served on one of the taskforces established under the second mini-grant, awarded in 2007, which supported the redesign of academic content courses to prepare elementary education teacher candidates to more effectively address Kentucky's K-5 core content standards in science and social studies. Prior to the taskforce, there was a pre-existing Ogden College of Science and Engineering Science Alliance for faculty interested in education, so those organizing the science taskforce drew upon the Alliance for members.

The Taskforce for Science Content Course Revision included three school teachers as well as science faculty members. Having teachers on the taskforce was helpful both for their knowledge and for the credibility that it gave the taskforce with the schools, which were in the midst of an effort to incorporate science into reading and math. "Everyone who worked on it had buy-in," noted the Assistant Dean and taskforce chair. The taskforce oversaw pre and post tests of the content knowledge of new teachers—all of whom were WKU grads—in both science and math, and the results caught them off guard. "They knew nothing they should have," observed a senior member of the college. The outcome of these findings was the revamping of six WKU courses for all future elementary candidates, three in math and three in science, beginning with the math modules in fall 2009 and science in fall 2010.

Another outcome of the taskforce's findings was that Ogden faculty members also became involved in planning and implementing W-TEMP, an intensive master's degree program of 30 semester hours for elementary school teachers, introduced in the fall of 2007 and offered to a cohort of 22 first-year KTIP (Kentucky Teacher Internship Program) teacher interns. The concept was to combine the KTIP internship with two summers of graduate study. Based on the Kentucky core concepts, the W-TEMP program offers special mentoring during year one and professional development in year two. Because the W-TEMP interns teach in schools that are distances of 50-60 miles from WKU and from each other, the program is experimenting with Skype as a tool for sustaining face-to-face mentoring. Faculty believe that Skype is "more immediate and potent" than email and more useful in addressing technical and process issues.

Science faculty engaged in W-TEMP described themselves as motivated to be "change agents" in the way that science teachers do their work. One noted that "the loss of elementary science is huge": many scientists find science at the elementary level too general, and many teachers don't know how to make science fun and engaging for young students. The faculty modeled pre and post testing with the interns, which also helped the faculty identify misconceptions held by the interns. As a result, the faculty decided that they should offer three courses—earth, life, and physical science—in W-TEMP.

Interns enrolled in the W-TEMP program spoke very positively about the experience. They were very grateful for their KTIP mentors, describing these as strong relationships, to the point of wondering how they would "survive" without a mentor. Some were comfortable with the dual role of the mentors—mentoring and evaluating—while others would have preferred a two-year model in which the first year focused on mentoring, the second, evaluation, an approach for which both WKU educators and district educators expressed support during the site visit. The interns also agreed that taking science coursework after their first year of teaching was especially valuable because they now understood the

classroom: "It did not make sense to me until I'd been a teacher. You can't get to know kids till you're in there five days a week. We got out into the classroom [as student teachers], but it doesn't prepare you."

Potter College of Arts and Letters

The leadership of the Potter College of Arts and Letters has also taken steps to become engaged in teacher preparation. Faculty and administrators noted their natural concern to see that their discipline is well taught in the schools, their attendance at Learning Network meetings, and the revision of the college's

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promotion and tenure policies to strongly affirm the value of engagement in teacher preparation. Several faculty members with extensive K-12 background have already passed promotion review under these new guidelines. One department has led three-week institutes for high school teachers funded by the National Endowment for the Humanities, which faculty members found to be an outstanding professional experience for themselves as well as for the teachers.

Through the 2007 mini-grant, faculty members from five Potter College departments—history, geography and geology, economics, and political science, as well as teachers, participated in the Social Science Content Taskforce. At the time of the site visit, this taskforce had fewer outcomes to report than the science taskforce, but had issued recommendations for changes to the coursework required of elementary education candidates, and expressed strong commitment to the process and intent of the taskforce. Participants noted the value of the taskforce's having brought together school teachers and faculty members to discuss content areas, learning standards, and requirements. As a professor of history and chair of the taskforce observed, "For the first time—I've been here 30 years—I was in a discussion with elementary teachers about curriculum. I'm involved because I'm crucially concerned how history is taught at the elementary level." Faculty praised their meeting with the teachers, held in the old school district boardroom, which focused on an initial report drafted by the taskforce: they reported that the teachers were "comfortable, talkative, and offered constructive and open communication."

Potter College faculty and administrators were surprised both by how supportive the teachers were and how adamant they were about recommended preparation, part of that driven by their need to

prepare students for the CATS (Commonwealth Accountability Testing System), which assesses the performance of schools and districts in Kentucky. The discussion also raised the concept of offering special sections of history for elementary teaching majors. Potter College staff thought that it would be valuable to continue taskforce discussions. As the chair noted, "You can look at standards, but we need to know more about what's happening in the classroom." The special assistant to the dean of CEBS added, "Academic folks must be the ones to make sure the concepts are sound that we provide to teachers. It's the idea of their owning the problems that teachers have to address, and standards—these are very difficult."

HISTORY OF SCHOOL PARTNERSHIPS

Western Kentucky University works primarily with two school districts, Bowling Green Independent School District and Warren County School District. Together both districts employ a total of 100 new teachers each year, many of whom are WKU graduates, since 70 percent of WKU's graduates are employed by schools within 100 miles of the campus.

The city of Bowling Green is the county seat of Warren County, with slightly fewer than 55,000 residents in 2007. Of its student population of 3,700, approximately 53 percent receive free/reduced lunch, and more than 36 percent are of minority heritage. Warren County School District serves nearly 12,000 students in the county that surrounds Bowling Green, an area dotted with affluent new suburbs and a student population that grows by about 250 students annually. The district's free/reduced lunch rate is 42 percent, and it serves increasing numbers of Limited English Proficiency (LEP) students.

Warren County district representatives, discussing the strengths of their relationship with the university, pointed to a number of factors, of which the first is communication and collaboration around a shared sense of mission: "Western is a teacher college... we both want to produce the best possible students. We're just not satisfied. They look at us as friends. They are great partners, and it just gets better." Secondly, they noted that people from Western are open to criticism, and responsive to issues and challenges. Thirdly, "they really want to know what's going on in our schools." For example, the dean of CEBS attends important functions in the school district, including board meetings and professional development events. CEBS has also asked Warren County representatives to serve on faculty and administrative hiring committees as well as on the taskforces established through the Learning Network grants.

Bowling Green representatives also spoke positively about their relationship with WKU. They noted that the district has a "great relationship" with the student teaching placement office, which is "very helpful." They also observed that WKU is changing how it prepares teachers in directions that promise to produce the most qualified teachers.

One example of a meaningful collaboration between Warren County school district and Western began with the district's concern, evidenced by CATS results, that their elementary school teachers did not have an adequate grasp either of math concepts or of how to teach math to children. The district brought in an external team of auditors to assess math instruction in the district. Their findings "made us mad and humble," as one district administrator expressed it. The district contacted the

dean of CEBS, who rapidly set up a roundtable meeting that included WKU's math department chair, other faculty members, and public school teachers. The university also gave a sixth grade pretest to its elementary teacher candidates, whose scores were "awful." The dean shared this report with Warren County's superintendent, and began making changes in the required math coursework for elementary teacher candidates. At the same time, the district sent out the message that they would not hire any teacher who had not passed a math course.

WKU has also collaborated with Warren County and other districts on grant proposals. The director of WKU's Center for Gifted Studies approached Warren County's superintendent about collaborating on a Javits Gifted and Talented Students Education Act grant, and the partnership that resulted was one of seven nationwide to receive a grant, in November 2008. This five-year, \$2 million grant for Project GEMS (Gifted Education in Math and Science) will "target upper elementary children from low-income backgrounds and minorities who are under-represented in STEM disciplines by providing services for children who are gifted in math and science at four elementary schools with more than half their children qualifying for free or reduced meals." Previously, WKU worked closely with Warren County to develop a math and sciences academy. Western's art department collaborated on a proposal to the National Endowment for the Arts to bring WKU faculty to elementary schools to teach teachers how to integrate arts into math and science. The SKyTeach grant involves ten school districts.

PLANNING AND IMPLEMENTING A COMPREHENSIVE INDUCTION PROGRAM

By comprehensive, the architects of the new induction program meant that everyone who played a role in assisting new teachers in Bowling Green and Warren County school districts—including teacher educators, arts and sciences faculty, master resource teachers, and school principals—should be engaged and trained. Implicit in this vision of the new induction program was the recognition that it could only be accomplished through partnerships beyond WKU's College of Education and Behavioral Sciences and its faculty. On the university side the partners would also include the Ogden College of Science and Engineering and the Potter College of Arts and Letters. The two school district partners would be Bowling Green Independent Schools and Warren County Schools. The WKU/Bowling Green/Warren County Mentoring Leadership Team, created to guide the consortium, included two teachers and a curriculum coordinator from each school district, three WKU teacher educators, and four WKU faculty members from Ogden and Potter Colleges.

The decision to pursue a new model of induction reflected general dissatisfaction on the part of both the schools and the university with the mentoring offered through the KTIP internship. Representatives from both school districts commented that under the KTIP structure, the evaluator role supersedes the mentor role. The training the state provides to KTIP mentors emphasizes instruction rather than relationship-building between the mentor and the new teacher. Warren County hires 80-100 teachers each year, so the number of new teachers their principals must oversee is considerable. The county holds a teacher orientation day, but it had provided only the basics. As Warren County's assistant superintendent for professional development observed, "We do great at the hiring process. Teacher induction was where we'd come nowhere."

Those involved with teacher preparation at Western were also dissatisfied with the mentoring provided through KTIP internships, and felt accountable for improving the situation, even though Commonwealth funding cuts had reduced the mentoring role that universities play in KTIP. Western's concern was not only for new teachers, but also for the 400-450 student teachers placed every year. Every student teacher has a cooperating teacher, as well as a university supervisor who goes into the field six times a semester to observe. WKU seeks to place student teachers with the best teachers, but recognizes that teaching excellence does not guarantee skill as a mentor.

The university trains its 4.4 supervisors, and the districts train their cooperating teachers, but those involved believed that the opportunity presented through the Carnegie Corporation of New York 2007 grant to the New Teacher Center (NTC) could enhance the preparation of all those engaged in mentoring. The Mentoring Leadership Team believed that the quality of the new induction program would depend on ensuring that its design reflected concepts, structures, and processes that were research-based, one factor in WKU's decision to bring the New Teacher Center into its planning process. WKU sent a team to the NTC Institute in Chicago that included four representatives from WKU as well as Warren County's assistant superintendent for professional development. Subsequently WKU submitted a successful application for the second phase.

The first NTC training took place at Warren County's central district office in the fall of 2007, attended by 13 principals, 15 teachers selected by the principals, 5 curriculum coordinators and, from WKU, 10 arts and science faculty and 12 teacher educators. In May 2008 Warren County invited the same group to participate in a second workshop conducted by NTC, "Analysis of Student Work, Differentiation, and Lesson Planning," and subsequently to serve as trainers for their colleagues. At the time of the site visit, Bowling Green's first NTC training was scheduled for July 2008. A second round of training for 300 teachers was originally scheduled for fall 2008 but the NTC grant would not cover these costs, so WKU negotiated with NTC to provide materials and planned to insert the mentoring element into the informational sessions that the school districts offer shortly after school begins in the fall.

Both school districts adjusted their programs and policies to resemble the NTC model of induction and mentoring. The Mentoring Leadership Team designed a model (see appendix C) that would prepare all principals, resource teachers, teacher educators, and arts and science faculty to assist all first-year teachers in the two school systems. The model was the outcome of the team's having studied the NTC model and constructed their own, patterned after NTC's, but reflecting their own language and processes.

Central office administrators, principals, and teachers are positive about this shift and about the NTC approach. Their enthusiasm could be summed up as the conviction that the NTC training emphasized mentoring as a relationship, and offered a variety of excellent tools for structuring that relationship. As one principal observed, "Some resource teachers are naturals at relationship building, but others are not, so to me the biggest thing is that this training will help those who don't know how to mentor." She noted that even the most accomplished veterans can reflect on their practice and improve: the

³⁾ In February 2007, the New Teacher Center, based at the University of California Santa Cruz, announced a new professional development opportunity in induction for university-based teacher preparation programs, to be funded by the Carnegie Corporation of New York. Universities participating in either Teachers for a New Era or the Learning Network were invited to participate in an "induction institute," and subsequently to apply for a second phase of more extensive assistance from NTC, specifically an assessment visit to be followed by professional development tailored to the local partnership's needs.

Kentucky Teacher of the Year, employed at her school, attended the training and reported: "I went back and saw what I was doing wrong and changed it."

The specific outcome that both university and school-based staff sought was the development of a trusting relationship between the KTIP interns and their mentors. To that end, they wanted the training to provide strategies to help resource teachers build trust and give constructive feedback, and to model how to ask questions as a mentor. Specific tools and techniques that participants found valuable included protocols for meetings between interns and mentors, analysis of student work, teaching interns to reflect, and acquainting them with NTC's new teacher developmental cycle, so that they would understand and anticipate the ups and downs to be expected in their first year of teaching. Others also hoped to see discussion of classroom management topics, such as resource planning, building positive relations with students, pre-testing strategies, differentiation, and role playing of parent conferences.

One topic that both university and school staff raised repeatedly was the challenge inherent in the KTIP mentor role of serving as both mentor and evaluator of the new teacher's performance. Their concern was that it inhibited the intern's comfort in asking questions or expressing confusion. They also noted that the tension between mentoring and evaluation made the relationship taxing for the mentor as well.

EVIDENCE OF INSTITUTIONAL CHANGE

At the outset this case study described WKU's proposed program improvement objective, as well as the indicators of change and evidence of pupil success hoped for. The program objective was "to develop a Comprehensive Induction Program for New Teachers, more specifically ... a new mentoring model and process for all new teacher graduates in the Bowling Green Independent and the Warren County Schools by the Fall of 2008."

At the time of the site visit in June 2008, the university was well on its way to achieving this objective, having established the mentoring model and process and begun the training of all those from both the school districts and the university who would be engaged in mentoring new teachers. The challenge that remained at that time appeared to be sustainability: how to ensure that as additional school and university personnel took on the mentoring role, they would receive the same level of training, especially in light of state cuts in professional development funding.

Of the four indicators of change, WKU had made significant progress toward achieving at least three at the time of the site visit. Most significantly, the Mentoring Leadership Team, which represented a collaboration among three university deans and two school districts, had designed and begun to implement its program "to prepare all principals, resource teachers, teacher educators, and arts and sciences faculty, to implement the New Teacher Mentoring Model for all first-year teachers in the two school systems during the 2008-2009 school year." They had also successfully held a second mentoring workshop, "Analysis of Student Work," conducted by the New Teacher Center. They attempted the proposed comparison of ten middle school science teachers mentored by WKU faculty, with ten teachers who were not mentored and served as controls, to explore the impact of mentoring on teaching practice, but found so much variance in the mentoring provided that the data were not useful. The W-TEMP masters' degree program for new teachers, envisioned as a prototype for a two-

year induction program, was initiated through a collaborative effort among teacher educators and arts and sciences faculty at WKU, as well as school practitioners.

Lastly, the authors of the statement hypothesized that "improving new teacher performance through focused mentoring in the use of instructional tools that produce higher levels of learning" would result in increased P-12 student success. To provide direct evidence of the impact of mentoring, WKU's intention was to systematically collect work sample data on new teachers as well as the CATS scores of pupils taught by Western's graduates in Warren County schools. This approach did not materialize, in part because few new teachers were assigned to classrooms that had CATS testing. Instead WKU has begun to look at work samples produced by 20-30 student teachers, examining the gain scores from the units they teach, the pre- and post-classroom assessments for the unit, and the clarity of their learning goals. Although they would like more evidence, this does provide some evidence of pupil learning produced by WKU teacher candidates.

ELEMENTS OF LEARNING NETWORK INFLUENCE

A core purpose of the site visits was to document any evidence that participation in the Learning Network contributed to institutional change in teacher preparation at the university. Western Kentucky University was an active member of the Learning Network, sending teams to all three annual meetings, winning two mini-grants, and taking part in the New Teacher Center professional development opportunity. The dean of CEBS believed that the support provided by the New Teacher Center, and the opportunity to explore online mentoring through the 2006 mini-grant, were probably the "most significant contributions of the Learning Network to the improvement of WKU's teacher preparation program."

MEMBERSHIP IN THE LEARNING NETWORK. The fact of WKU's selection for membership in the Learning Network added credibility to their work in teacher preparation, according to the dean of CEBS, which he saw as value-added despite the national reputation that the university already enjoyed for teacher preparation excellence.

ANNUAL MEETINGS. University representatives reported that they found the annual meetings valuable: for interaction and exchanges with colleagues, learning what other universities were doing relative to the three TNE principles, learning about resources at other institutions, insight into changes occurring in teacher preparation in classrooms and universities across the U.S., and visibility for WKU. They also noted that the experience of creating cross-disciplinary teams, and bringing them to a national forum where reform was discussed, opened the door to collaboration at home involving new players around new purposes. Arts and sciences deans and faculty noted that the experience "helped me see things from a different perspective," and that it was useful to meet other arts and sciences people at these meetings, to see how their conversations were changing.

MINI-GRANTS. The dean of CEBS observed "I'm totally convinced that without the mini-grants we wouldn't have leveraged what we did. I'm thankful for that opportunity."

With each of the two grants, WKU engaged partners, including K-12 teachers, in taskforces, and used them to build bridges between work already underway and work envisioned. The mini-grants helped

expose deficiencies in the academic content preparation of their elementary teacher candidates, and provided resources to examine and address those deficiencies. Participants concur that the composition of the taskforces—university administrators, faculty, and K-12 teachers—achieved buy-in from key players and led to the revamping of coursework basic to the math and science preparation of elementary teachers, exploration of what does and does not work in online mentoring, and provided impetus for the decision to pursue a new and comprehensive induction program.

NEW TEACHER CENTER. The response from those who took part in the New Teacher Center workshops organized through WKU's grant was generally very positive. Participants found that the training and associated materials enhanced the capacity of the university and the school districts to provide new teacher induction, and held promise to take new teacher induction "to a new level." They were convinced that induction of higher quality would also enhance the ability of new teachers to produce learning in K-12 pupils.

CULTURE OF EVIDENCE. The leadership of CEBS also argues that the progress that WKU has made toward developing a "culture of evidence" at WKU is linked to the university's participation in the Learning Network. WKU began its "quest for accountability" for the performance of its candidates in the late 1990s by initiating a data management system that would store and analyze "process qualification and performance data" on those candidates (Evans et al 2008). Their engagement in the Learning Network, and association with other universities pursuing the realization of TNE principle 1, ensured that they would have contact with others involved in similar work. WKU's leadership note that they can now document that collecting and analyzing evidence about the performance of their teacher graduates has led to significant program improvements, such as the institution of the W-TEMP program.

OTHER FACTORS CONTRIBUTING TO INSTITUTIONAL CHANGE

The site visit documented other factors that have contributed in important ways to WKU's successful history of innovation in teacher preparation, and continue to do so.

UNIVERSITY COMMITMENT TO TEACHER PREPARATION. A major factor at Western Kentucky is the university's historical and ongoing commitment to teacher preparation. That commitment is written into the mission statement and articulated by the current leadership, as the president's statement reflecting on the university's receipt of the SKyTeach grant notes: "All areas of the university recognize teacher preparation as an important mission of the institution, and not just the responsibility of one group." Deans and faculty from the sciences, arts, and humanities recognize teacher preparation as "a core thing for this institution," as their "bread and butter."

Other characteristics of WKU and the CEBS reflect the university's commitment to teacher preparation. The provost noted the hiring stream as one such reflection: she noted that "the first thing" the new math department chair did was to bring more teacher educators into that department. The new building under construction for CEBS, which will become a "hallmark building," is another symbol of the university's long-term commitment to teacher preparation. CEBS has also risen to the challenge of seeking (and obtaining) substantial grants in response to WKU's president's high premium on development. As the provost noted, "It's unusual to have an education college that is such a great grant seeker."

Administrators believe that the university has also benefited from a series of leaders committed to the improvement of teacher preparation, beginning with the deanship of J.T. Sandefur, through to the current dean and others in leadership positions. The provost herself was previously Dean of the School of Education and Human Services at California State University, Fresno. A notable feature of WKU's leadership is a tendency toward lengthy tenure. The current dean arrived at the university 18 years ago as an associate professor and has served as dean for more than five years. The provost has served in her role for more than twelve years.

COLLABORATION AMONG COLLEGES AND DEPARTMENTS. Another factor that both administrators and faculty point to is CEBS's collaborative experience and approach. The college partners with others across campus, working with science departments, for example, to pursue grants such as SKyTeach. (The PI of SKyTeach is a physics professor, and the co-PI is the director of GRECC.) The college regularly brings cross-discipline teams to AACTE and other meetings.

As one faculty member involved in the W-TEMP degree program observed: "We have something unusual here. We have administrators who get along. We have support from the top. We'll still have to go through the committee, but we already have buy-in from several different departments—the nuts and bolts are ahead, but the dean's office has already said we'll make this happen."

OFF-CAMPUS COLLABORATION. The collaborative stance of CEBS extends to its relationships with people and groups outside the university, most notably with the Bowling Green and Warren County school districts. GRECC, the regional organization for school superintendents, is physically housed on campus and CEBS pays part of the director's salary. Also housed at the university is the Commonwealth of Kentucky's initiative to prepare more teachers to become National Board-certified.

CEBS is also engaged in a collaboration with the Bowling Green Housing Authority. Western underwrites the authority's director of learning, who coordinates faculty members who teach there as well as field experience placements for WKU students. There is evidence of comprehensive improvement in the reading skills of the children who are the target of this assistance.

CAPACITY FOR SUSTAINABILITY. Several among WKU's leadership and partners noted its capacity for sustainability as an important institutional characteristic. For years, WKU has been among the leading universities in the Commonwealth in terms of the numbers of teachers it prepares, and it continues to draw a larger proportion of candidates than other Commonwealth universities.

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APPENDIX A

INTERVIEWEES

Barbara Burch, Provost

Sam Evans, Dean of the College of Education and Behavioral Sciences

Mary A. Evans, Principal Cumberland Trace Elementary School, Warren County

Blaine Ferrell, Dean of the Ogden College of Science and Engineering

Tony Kirchner, Manager, Ed Tech Center

David Lee, Dean of the Potter College of Arts and Letters

Bruce Keller, Assistant Dean and Chair of Science Content Taskforce

Ken May, District Personnel Director, Bowling Green Independent Schools

Kerrie McDaniel, Assistant Professor of Biology & Taskforce Leader for Science Content Course Revision

Marsha Ingram, Principal W.R. McNeill Elementary School, Bowling Green

Alice Mikovch, Coordinator of Student Teaching

Tim Murley, Assistant Superintendent for Professional Development, Warren County Schools

Tony Norman, Associate Dean for Accountability and Research CEBS

Roger Pankratz, Special Assistant to the Dean and Professor

Tom Renick, Principal, Henry F. Moss Middle School, Warren County Schools

Larry Snyder, Assistant Dean of the Potter College of Arts and Letters

Rico Tyler, Joint Appointment, Dept. of Physics and Astronomy & Teacher Education

Richard Weigle, Professor of History and Chair of Social Science Content Taskforce

APPENDIX B

LEARNING NETWORK - MEASURING PROGRESS

NAME OF INSTITUTION: Western Kentucky University TNE Principle Being Addressed:

C. Teaching as an academically taught clinical practice profession. Part 4. Induction

"An exemplary teacher education program, however, should consider the teacher. Candidate's first two years of full-time regular service in the teaching profession as a residency period requiring mentorship and supervision. During this induction period, faculty from the higher education institution, inclusive of arts and sciences faculty, will confer with the teacher on a regular basis, arrange for observation of the teacher's clinical practice, and provide guidance to improved practice." (Carnegie Corporation of New York, p. 9)

Objective Related To Program Improvement:

Develop a Comprehensive Induction Program for New Teachers. More specifically, develop and implement a new mentoring model and process for all new teacher graduates in the Bowling Green Independent and the Warren County Schools by the Fall of 2008.

Indicator of Change in Institution, Program, or Faculty:

Background: Western Kentucky University (WKU) graduates about 4,00 new teachers each year. Above 70 percent of WKU's teacher graduates are employed by schools within 100 miles of the campus. Kentucky requires all new teachers to complete a one-year internship supervised and evaluated by a three member team, a paid resource teacher, the school principal, and a teacher educator. During this first year as a full-time teacher-intern, the new teacher must complete ten teaching tasks and submit ten successful teaching exhibits to obtain provisional certification in Kentucky. Four of the ten tasks involve designing an instructional unit, teaching the unit, analyzing and reporting the learning results of all children in their class. While WKU faculty serve on new teachers' internship committees, the University as an institution, is not providing systematic mentoring and assistance to recent graduates. Since WKU's involvement with The Learning Network, the University has developed a special collaborative effort between the College of Education and Behavioral Sciences, the College of Science and Engineering, the College of Arts and Letters, the Bowling Green Independent Schools, and the Warren County Schools for the express purpose of developing a more comprehensive induction program for all new teachers. The two school systems surround the University campus and employ about 100 new teachers each year. The first step in developing an expanded induction program is to design and implement a mentoring program that uses concepts, structures, and processes that are research-based, and used by all persons assisting new teachers in the Bowling Green and Warren County Schools including teacher educators, arts and sciences faculty, master resource teachers, and school principals. The four party consortium effort is guided by a Mentoring Leadership Team composed of two teachers and a curriculum coordinator from each of the two school districts, three WKU teacher educators, and four arts and sciences faculty.

Indicators of Progress:

- A mini-grant from The Learning Network during the 2006-2007 school year supported a
 pilot mentoring program to follow second-year elementary teachers who completed graduate
 mathematics and science courses in the summer immediately after their first year of teaching.
 A mathematics and science professor who taught the courses provided the on-line mentoring.
- 2. In the fall of 2007, The New Teacher Center at the University of California, Santa Cruz, conducted a two-day Mentoring New Teachers Workshop for 50 University faculty and school practitioners (10 principals, 15 teachers, 5 curriculum coordinators, 8 arts and sciences faculty, and 12 teacher educators). The workshop trainers and materials were provided by The Learning Network.
- 3. The WKU/Bowling Green/Warren County Mentoring Leadership Team, with full support of the three University college deans, has designed a program that will prepare all principals, resource teachers, teacher educators, and arts and sciences faculty, to implement the New Teacher Mentoring Model for all first-year teachers in the two school systems during the 2008-2009 school year.
- 4. A second mentoring workshop, "Analysis of Student Work," is scheduled for early May 2008, also conducted by The New Teacher Center, Santa Cruz, and supported by The Learning Network. The same 50 teacher educators, arts and sciences faculty, teachers, and principals who completed the Fall 2007 mentoring workshop will be invited to participate and serve as trainers for their respective colleagues.
- 5. A second pilot mentoring program using the New Teacher Mentoring Model, is being conducted with 20 middle school science teachers. Ten teachers will receive mentoring and ten will not be mentored. Middle school students will be pre-tested and post-tested on an instructional unit in science to determine the effects of focused mentoring on learning.
- 6. WKU teacher educators, WKU arts and sciences faculty, and school practitioners collaboratively designed and are pilot-testing a new field-based, standards-based, and web-supported masters' degree for new teachers. This innovative graduate program is being tested as a prototype as a two-year induction program. A second cohort of first-year teachers has been enrolled in the pilot program.

Institutional Change:

The bold actions of WKU in taking specific steps to develop comprehensive induction programs for new teachers, represents a significant, positive development and improvement in the preparation of teachers. Also, the direct involvement of the College of Science and Engineering and the College of Arts and Letters in working directly with new teachers represents a clear change from the past. While WKU and the two local school systems have worked together in the past, the new commitment by all parties to collaboratively and actively work toward the implementation of a clinically-based induction model with an implementation time line, definitely takes assistance and mentoring of new teachers to a new level. The Learning Network has made a significant contribution to the expanded collaborative efforts and induction development at Western Kentucky University. Association with other institutions at the annual meetings and the mini-grants have played a very significant role in stimulating new ways of thinking about induction and mentoring, and providing seed money to

train trainers and pilot-test new structures and processes. An example of the positive influence of The Learning Network has been the support to bring arts and sciences' deans to the annual meeting. Here they were able to interact with their counterparts from other Learning Network institutions and see the importance of the arts and sciences faculty taking an expanded role in the preparation and induction of new teachers.

Relationship of WKU's Institutional Objective and Indicators to Student Success:

Over the past seven years, teacher preparation at WKU has undergone a paradigm shift from a focus on teaching to a focus on student learning. Teacher candidates are provided with many more teaching tools that enable them to produce learning with all their students. Also, much more attention is given to preparation in knowledge and understanding of academic content essential for new teachers to be able to address Kentucky's Content Standards. However, putting research-based strategies coupled with content knowledge to work in new teacher classrooms to produce learning remains a challenge. The value of mentoring for improving teacher performance has been supported in studies by Villar, Strong & Fletcher (2007); Villar & Strong (2007). Thus, improving new teacher performance through focused mentoring in the use of instructional tools that produce higher levels of learning links WKU's above institutional objective to P-12 student success. WKU is systematically collecting work sample data on new teachers and state-administered CATS achievement scores of students taught by Western's graduates in Warren County to provide direct evidence of the effects of mentoring.

The new mentoring program is only one component of a more comprehensive induction program at WKU, however, we believe a very important one. We are grateful for the professional interactions with other Learning Network institutions and mini-grant support provided by the Carnegie and Annenberg Foundation to help WKU achieve its teacher preparation improvement goals.

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APPENDIX C

A PROPOSED MENTORING MODEL FOR NEW TEACHERS IN BOWLING GREEN AND WARREN COUNTY

It is the goal of Bowling Green Independent Schools, Warren County Schools, and WKU, that all three members of Assistance and Assessment Teams for KTIP Teachers in Bowling Green and Warren County complete training in the BG/WC/WKU Mentoring Model and use the processes and tools of this model with all KTIP teacher interns beginning in the 2008-2009 school year.

ELEMENTS OF THE PROPOSED MODEL

Element #1 - Belief in Eight Guiding Principles

Guiding Principle #1: A period of teacher induction is important for all new teachers.

Guiding Principle #2: New teachers benefit from opportunities to collaborate with veteran colleagues.

Guiding Principle #3: The needs of beginning teachers are different from those of veteran teachers.

Guiding Principle #4: The relationship between the new teacher and the mentor is key to the success of the induction program and the mentor.

Guiding Principle #5: New teacher support and assistance must be tailored to the assessed needs of individual teachers.

Guiding Principle #6: Professional norms are established during the first few years of teaching.

Guiding Principle $\#_7$: Teacher development is ongoing over a professional lifetime.

 $Guiding\ Principle\ \#8: Veteran\ teachers\ improve\ their\ skills\ from\ working\ with\ new\ colleagues.$

Element #2

One Additional Belief: Trust between mentor and new teacher can be fully developed only if the mentor is free from serving an evaluation role. Therefore, the intern's resource teacher should be relieved of the mentor/evaluator role presently required and be free to direct all efforts toward becoming a fully-trusted mentor.

Element #3 - Recognition of First-Year Teacher's Phase Development

➤ August-September: Anticipation

➤ September-October: Survival

➤ October-December: Disillusionment

> January-March: Rejuvenation

➤ March-April: Reflection

➤ April-June: Anticipation

See Attachment: Appendix A.

Element #4 - A Conceptual Framework for Differentiated Mentoring

Support and Assessment Strategies:

- ➤ Instructive
- ➤ Collaborative
- ➤ Facilitative

See Attachment: Appendix B.

$Element \ ^{\#}5-Mentoring \ Conversation \ Protocol$

- ➤ Assess the Teacher's Needs by:
- ➤ Establish a Focus for Work by:
- ➤ Support the Teacher's Movement Forward by:
- ➤ Promote Accountability by:

See Attachment: Appendix C.

Element #6 - Use of Mentor Conversation with Teacher Tools

- > Paraphrasing
- ➤ Clarifying
- ➤ Mediational Questions
- ➤ Suggestion Stems
- ➤ Teachable Moments
- ➤ Non-Judgmental Responses

See Attachment: Appendix D.

Element $\#_7$ – Use of Collaborative Assessment Log

- ➤ What's Working
- ightharpoonup Current Focus Challenges Concerns
- ➤ Teacher's Next Steps
- ➤ Mentor's Next Steps

See Attachment: Appendix E.

A PROPOSED START-UP IMPLEMENTATION PLAN FOR THE BG/WC/WKU MENTORING MODEL

Timeline	Activity
January 17 Meeting of Mentoring Development Team	Approval of Mentoring Model and Work Plan
By January 31	Bowling Green Schools, Warren County Schools, and WKU identify Mentoring Model trainees
By February 29	Training cadre from BG/WC/WKU meet to develop a training package and identify materials needed for training
By March 30	Materials will be developed and/or acquired to train principals, resource teachers, and university committee members who potentially will have KTIP interns in Bowling Green and Warren County in 2008-2009.
By April 30	Bowling Green Schools, Warren County Schools, and WKU each identify school practitioners and university faculty that need mentor training for the 2008-2009 year and publish a training schedule May through August
By May 31	Bowling Green, Warren County, and WKU, each or collectively, will have conducted mentor training with at least one group, evaluated mentoring workshop and materials, and analyzed results.
By June 15	Mentoring Development Team meets to review progress on implementation and makes recommendation for future actions.