Piecing a Quilt:
Redesigning Secondary Teacher Education in the Context of Statewide Educational Reform

By Elizabeth Spalding, Angene Wilson, & Rosetta Sandidge

At the University of Kentucky (UK), the quilt has become a metaphor for our redesigned secondary teacher education program, the Masters with Initial Certification (MIC) Program. The program is designed to help preservice secondary teachers integrate theory and practice during one field-based, professional year. Like the quilt, the MIC Program integrates the diverse—and historically, isolated—components of teacher education into a single, coherent pattern. The process of constructing the program, like quilting, has been a collaborative effort which has taken shape over time. And just as a quilt is a product of both serendipity and design, our program continues to evolve from the experience and knowledge gained as we work with schools in the midst of statewide educational reform.

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The MIC Program developed as both a response to the 1990 Kentucky Education Reform Act and as a result of a college-wide initiative to redesign its

secondary teacher preparation program. Research-based features of the program which have been strengthened and supported by the statewide reform include: (1) a standards-based curriculum; (2) continuous, authentic assessment, culminating in the preparation of a professional teaching portfolio; (3) an intensive field-based component; (4) an emphasis on understanding and meeting the educational needs of diverse learners; and (5) the integration of technology into classroom instruction.

As the reform plays out in Kentucky, however, the MIC model of teachers as "reflective decision-makers" may be growing incompatible with the reality of reform. Furthermore, issues within the college of education itself continue to challenge our attempt to offer an intensive, field-based program which integrates theory and practice. While few states have embarked on a program of reform as comprehensive as Kentucky's, most are engaged at some level in systemic reform. Our experiences of redesigning secondary teacher preparation in the context of statewide educational reform have implications for research and development in teacher education in Kentucky and elsewhere.

Impact of the Kentucky Education Reform Act on Secondary Teacher Preparation

The 1990 Kentucky Education Reform Act (KERA) was intended to revolutionize teaching and learning in a state which had historically hovered near the bottom on almost every measure of educational achievement. The goal of the reform—to ensure that all children learn and that they learn at a high level of academic knowledge and skill—dictated that major changes be made in the ways teachers were teaching and, by extension, in the ways teachers were taught. KERA obliged teachers to assume new roles and responsibilities and, consequently, pointed the way for a rethinking of teacher preparation (Condon & Clyde, 1993; Holland, 1997; Nystrand, 1993; The Prichard Committee For Academic Excellence, 1995).

Six Kentucky Learner Goals were formulated to guide learning and teaching statewide. The goals state that all students will be able to use communication skills, apply core concepts, become self-sufficient individuals, become responsible team members, think and solve problems, and integrate knowledge (Kentucky Department of Education, 1994). These broad goals, further specified in the fifty-seven Academic Expectations that accompany them, are consistent with principles of constructivist teaching and learning. Thus, teachers are expected to focus instruction on reasoning and problem-solving rather than facts; to value, model, and implement collaboration; to understand, accommodate, and build upon the differences among learners; to connect learning experiences to students' worlds and school subjects to one another; to use multiple means to assess and evaluate learning and teaching; to reflect upon teaching, students, and schooling and act upon their reflections. KERA's emphasis on educational equity also highlighted the need for

teachers who could use technology to help "level the playing field" for students in schools and districts which had heretofore been resource-poor (Simmons, 1996; Smith & Mazur, 1996).

The Kentucky Instructional Results Information System (KIRIS) was created to monitor students' and schools' progress toward the learning goals and to hold schools and teachers accountable for this progress. At the time, no existing, norm-referenced, multiple choice test was deemed appropriate for measuring "proficiency" in meeting KERA goals. Furthermore, "[t]he hope of those who developed KERA was that an authentic, performance-based assessment system would *compel* [emphasis authors'] educators at all levels...to focus instructional activities on the kinds of higher level skills that will be essential for success in the 21st century" (Guskey, 1994, p. 3). The assessment system, redesigned in 1999 and renamed CATS (Commonwealth Accountability and Testing System), is high-stakes in that teachers in schools whose students perform well on the assessments receive financial rewards and schools whose students fail to improve or whose scores decline are sanctioned. School scores are widely publicized in the media.

KERA also established an Education Professional Standards Board charged with overseeing the development of performance standards and a performance-based assessment system for new and experienced school personnel which aligned with the goals of the reform (Nelli, 1996). In 1994, the Board published the Kentucky New Teacher Standards. The eight standards are: (1) Designs/plans instruction; (2) Creates/maintains learning climates; (3) Implements/manages instruction; (4) Assesses and communicates learning results; (5) Reflects/evaluates teaching/learning; (6) Collaborates with colleagues/parents/others; (7) Engages in professional development; and (8) Knowledge of content. Each standard restates the Learner Goals and is further defined by performance criteria which differ by standard but which share common themes, such as knowing students, involving them in learning, showing sensitivity to differences, and integrating technology into instruction. Figure One portrays in its entirety one illustrative standard, Standard III—Implements/Manages Instruction.

At the same time, the existing Kentucky Teacher Internship Program (KTIP) was refined in order to provide a support system for first-year teachers as they worked toward meeting the newly developed Kentucky New Teacher Standards (Education Professional Standards Board, 1994; Simpson & Sandidge, 1994). KTIP is also high stakes. Each beginning teacher is assigned a committee consisting of an experienced resource teacher, the school principal, and a teacher educator. The committee works with the intern throughout the first year and must reach consensus by the end of the first year about whether the intern has met the New Teacher Standards. Beginning teachers who do not meet the standards may not be recommended for certification (Brennan, Thames, & Roberts, 1999).

Among the many task forces and committees which grew out of the passage of KERA was the Task Force on High School Restructuring charged with reviewing

Figure One:
Kentucky New Teacher Standards

New Teacher Standard III: Implements/Manages Instruction is reproduced in its entirety below. The "Standard Statement" which prefaces the "Performance Criteria" for each standard reiterates the learning goals and academic expectations for all Kentucky students (Kentucky Education Professional Standards Board, 1994; Kentucky Department of Education, 1994).

NEW TEACHER STANDARD III: IMPLEMENTS/MANAGES INSTRUCTION
Standard Statement III: The teacher introduces/implements/manages instruction that develops student abilities to use communication skills, apply core concepts, become self-sufficient individuals, become responsible team members, think and solve problems, and integrate knowledge.
PERFORMANCE CRITERIA: The extent to which the teacher:
1. Communicates specific standards and high expectations for learning.
2. Links learning with students' prior knowledge, experiences, and family and cultural backgrounds.
3. Models/demonstrates the skills, concepts, attributes, and/or thinking processes to be learned.
4. Uses multiple teaching/learning strategies that are appropriate to student developmental level and actively engages students in individual and cooperative learning experiences.
5. Makes appropriate provisions for learning to address diversity among learners.
6. Elicits samples of student thinking and stimulates student reflection on their own ideas and those of others.
7. Uses appropriate questioning strategies to engage students' cognitive processes and stimulate higher-order thinking.
8. Guides students to express, examine, and explain alternative responses and their associated consequences relative to moral, ethical, or social issues.
9. Demonstrates interpersonal/team membership skills and responsible caring behavior with students in facilitating instruction.
10. Uses multiple perspectives and differing viewpoints to facilitate the integration of knowledge and experiences across disciplines.
11. Makes creative and appropriate use of media and technology.
12. Makes efficient use of physical and human resources and time. Facilitates equitable engagement of students on productive tasks.
13. Provides opportunities for students to use and practice what is learned.
14. Identifies student misconceptions, provides guidance, and offers students continuous feedback on progress toward outcomes and expectations.
15. Links learning with student aspirations for future roles.

graduation requirements in light of the new Learner Goals and Academic Expectations (Fischetti & Dittmer, 1996). This group identified eleven "fundamentals" of high school restructuring including curriculum redesign, student engagement, alternative uses of school time, teacher involvement in school decision-making, and community participation in the educational process. In order to implement these recommendations, high school teachers would need to design, develop, and deliver engaging and challenging curricula rather than cover content in a textbook; to think flexibly about time in school rather than accept the traditional divisions of the school day, term, and year; to develop the leadership, decision-making, collaborative, and communicative skills to serve on school councils and to engage the community rather than play a passive role in the educational hierarchy and close their classroom doors to the larger world. Engagement in high school restructuring remains voluntary.

Clearly, the success of KERA will depend on teachers who possess expertise, not in subject-matter alone, but in a broad range of pedagogical skills, and who are reflective decision-makers, effective collaborators, and lifelong learners. The MIC Program addresses both the state's need for highly qualified teachers who can help students reach higher academic standards and national calls for reform of teacher preparation. In addition, it reflects the faculty's commitment to a teacher education program based on a reflective, decision-making model with a performance-based outcomes approach (Darling-Hammond, 1992; Darling-Hammond, Wise & Klein, 1995; Darling-Hammond & Falk, 1997; National Commission on Teaching and America's Future, 1996; Schon, 1983).

UK's Masters with Initial Certification Program

Since 1984, the MIC Program had served as an alternative path toward secondary certification for career-changers who already held degrees in a variety of fields. These non-traditional students were able to obtain secondary certification together with a Masters degree in education and to move back into the work force in one or two years. The MIC option co-existed with a traditional, undergraduate secondary teacher education program.

In 1992, the college appointed a task force to study how it could best prepare all prospective secondary teachers. Ultimately, the task force adopted a conceptual framework of "teacher as reflective decision-maker," developed by an all-college committee. The task force reviewed research on teacher preparation, sought input from classroom teachers and school administrators who had worked with UK undergraduates and MIC graduates, and surveyed graduates from both programs concerning their satisfaction with their teacher preparation and their perceptions of their own effectiveness in the classroom.

The task force concluded that the MIC Program was the more promising path for preparing secondary teachers to be reflective decision-makers. First, candidates

entering the program would already have completed all content area requirements and, thus, could concentrate solely on their teacher preparation. Second, a full-time graduate program would enhance opportunities for curriculum integration and faculty collaboration since teacher education coursework would be offered in large blocks of time rather than separate course sections. Third, the interdisciplinary cohort structure would enable faculty and students to collaborate with schools and to work toward our goal of becoming a field-based program. Finally, because of UK's mission as a research university and its relatively small teacher preparation program, members of the task force agreed that a fifth-year graduate program was not only feasible but offered the opportunity to implement recommendations for reforming teacher education and study their effects (e.g., Holmes Group, 1986, 1990; Shulman, 1987). Although undergraduates may prepare for the MIC Program in our college, the fifth-year, graduate program is now UK's only route toward secondary certification in business, English, foreign languages, mathematics, science, and social studies.

The admissions process is selective and designed to ensure that applicants know their subjects, are committed to helping all students learn, and are disposed to develop the pedagogical, collaborative, and reflective skills consistent with KERA goals and the college's reflective decision-making model. Applicants document these qualities in an entry portfolio which is reviewed by a team of content area faculty who also interview applicants about such topics as their motivations for teaching, their conceptions of an ideal classroom, and their experiences with people of diverse backgrounds. In addition, applicants must meet criteria for competency in their subject areas. For example, foreign language education applicants must demonstrate oral proficiency in the target language; English education applicants must demonstrate the ability to edit high school students' papers. As a prerequisite to admission, applicants must document 100 hours of experience working with adolescents. Applicants must hold a bachelor's degree, have completed major (and sometimes minor) requirements in their subject area, and meet GPA and GRE standards set by the College of Education and the Graduate School. Since the program now serves recent college graduates as well as career-changers, students range in age from early twenties to mid-fifties and bring with them a wealth of career and life experiences.

MIC Program Overview

When the program begins each year in August, students are organized into interdisciplinary cohorts of about twenty members each. The program has grown from two cohorts (40 students) in 1996-1997 to four cohorts (80 students) for school year 1999-2000. Our long-term goal is to graduate 100 students annually. Each cohort is partnered with a local high school engaged in some of the restructuring initiatives described earlier. During the fall semester, students work in schools four mornings each week. A faculty member leads each cohort and is responsible for

most of the instruction in the "Common Core" of learning, which continues throughout the professional year.

Common Core topics, such as planning for instruction, creating positive learning environments, and assessing and communicating learning results are directly linked to the Kentucky New Teacher Standards. Students receive a thorough grounding in educational reform: the history and goals of KERA, the state's assessment and accountability system, high school restructuring initiatives, and the functions of site-based decision-making councils. Topics such as adolescent psychology, students with special needs, and foundations of education are addressed in weekly plenary sessions by faculty who specialize in these areas. In addition to the Common Core, students take subject-specific methods courses during the first semester. In the second semester, students continue their study of the Common Core and subject-area methods as they complete their student teaching. Students may enroll in summer session courses either before or after this year in order to fulfill other masters degree program requirements.

Helping students construct a coherent understanding of teaching from these diverse "squares of the quilt" is a major responsibility of faculty who serve as Common Core cohort leaders. Cohort leaders observe and teach MIC students in the field experience schools and attend the weekly plenary sessions, so that they can facilitate discussions within each cohort of issues and topics that arise over the course of the semester. Equally important is each cohort leader's role in building a sense of tradition and community within and across cohorts, so that students develop support networks that will sustain them through this demanding preservice year and beyond (Clift, 1990). Now that enrollment has grown to four cohorts, a program coordinator helps ensure that faculty, who may be stitching different "squares," are working on the same "quilt."

Program evaluation is ongoing. MIC students complete interviews and questionnaires at key points in the academic year. In addition, cohort leaders review students' weekly reflective journals and their reflections on school-based projects for insights into which aspects of the program are working or not working. Teachers in the field experience schools (described below) evaluate both the MIC students and the program. At monthly meetings, MIC Program Faculty review formative evaluation data and discuss mid-course adjustments that seem feasible. At an annual end-of year meeting, MIC Program Faculty review data gathered from student interviews, questionnaires, and exit portfolios and recommend changes for the next year. Cohort leaders, teacher liaisons, and principals of the participating high schools meet annually to debrief on the successes and challenges of the past year and to plan for the future. The qualitative data reported here are drawn from these sources.

Points of Convergence between KERA and the MIC Program

Founded upon a commitment to equity and influenced by constructivist principles of teaching and learning, KERA was passed at a time when the college was already rethinking its practices in teacher education. Elsewhere in the nation, teacher educators are laboring to supplant traditional paradigms of teaching and learning with new models which feature high expectations for all students, active learning, and authentic instruction (Newman, Marks & Gamoran, 1996). In Kentucky, change is not simply optional. Below, we highlight some of the features of the program, which have developed from the convergence of the state's vision of educational reform and UK's vision of teachers as reflective decision-makers (e.g., Ross, 1990; Weible & White, 1997).

A Standards-Based Curriculum With Continuous, Authentic Assessment

The Kentucky New Teacher Standards provide the foundation for the development of curriculum, instruction, and assessment in the MIC Program. Since the standards outline what beginning teachers in Kentucky should know and be able to do, faculty use the standards and performance criteria as targets from which to "plan backwards" (Wiggins & McTighe, 1998). The standards guide the topics addressed in the Common Core (e.g., planning, assessment, classroom management) and the knowledge and skills emphasized within the topic. (See Figure One for examples of knowledge and skills associated with one standard.)

Students receive copies of the New Teacher Standards and the Learner Goals and Academic Expectations on the first day of the program; these documents serve as a springboard for an initial discussion of what constitutes excellence in teaching. In the Common Core, students regularly revisit the New Teacher Standards, identify how coursework and field experiences are contributing to their understanding of the performance criteria, and assess their own progress toward meeting them. As a mid-point assessment, students view a videotape, produced by the Kentucky Teacher Internship Program, of a novice teacher (portrayed by an experienced teacher) and use the standards to write an analysis of the teaching.

In the second semester, subject area faculty and mentor teachers use the Kentucky New Teacher Standards and materials developed for the Kentucky Teacher Internship Program to focus classroom observations of, conferences with, and feedback to student teachers. The standards provide the framework for an exit portfolio, which serves several purposes. Subject area faculty evaluate the entire portfolio as evidence of successful completion of student teaching. In addition, each student selects and presents evidence of the ability to meet one of the New Teacher Standards as the final assessment in the Common Core. Panels of peers, classroom teachers, and MIC Program faculty evaluate this portfolio exhibition. Finally, the

portfolio is offered to prospective employers as evidence of an applicant's knowledge, skills, and professional potential and becomes the foundation of the portfolio required of all beginning teachers by the Kentucky Teacher Internship Program.

Intensive, Field-Based Experience

Four area high schools engaged in restructuring participate in the MIC Program. These schools were selected because they offer our students unusual opportunities to observe, experience, and reflect upon the process of educational change. In size, geographical setting, demographic, and socioeconomic characteristics, three of them represent "typical" Kentucky high schools. That is, each enrolls about 1200 students in grades 9 through 12 and serves a rural/suburban community. The majority of students are white, with African Americans constituting the largest minority. In these schools, there is more socioeconomic than ethnic diversity. In the 1999-2000 school year, a fourth school, more typical of a Kentucky urban/suburban environment has been added.

These schools have provided MIC students with a variety of experiences in educational reform. Two recently adopted block scheduling, giving MIC students the opportunity to observe how administration, faculty, and students identified and resolved issues which arose in the course of the transition. At Scott County High School, MIC students helped teachers get organized in a brand-new facility and observed how the newly credentialed principal set the tone for the school. East Jessamine High School opened in November, 1997, as a state-of-the-art facility which emphasizes interdisciplinary teaching, technology, and the school-wide theme of "a community of learners."

Each school serves a distinct community, and MIC students explore the links between the school and the community and between home and school cultures (Cochran-Smith, 1995; Ladson-Billings, 1995; Reynolds, 1992). Strengthening connections between school and community is also a major goal of KERA. As one of the first Common Core assignments, students use Peshkin's (1991) ethnography of a multicultural school community as a framework for conducting research on selected aspects of the community. For example, students in the Scott County cohort have researched the impact on the community of the recently built Toyota plant. Students at Woodford County, a center of tobacco and horse farming, have explored how the community is responding to its growing Hispanic population. Students often share their findings with the school and community by constructing displays, by giving mini-lessons in high school classes, or by donating their projects to local historical societies. This initial project sets the tone for collaboration throughout the program, eases students' entry into the school settings, and gives them visibility in their respective school communities. More importantly, this project is intended to broaden their understanding of the contexts of teaching and to encourage them to be students of their school communities throughout their careers.

Three other major projects give focus to the field experience and contribute to

the growth of the prospective teachers' pedagogical, reflective, and analytical skills. First, students complete a project that demonstrates their ability to teach an individual or small group. One preservice social studies teacher led a small group of ninth-graders on a fact-finding expedition through the community. He reflected:

> ...I was childishly proud of the fact that I was smart enough to put the students into a group to work on their project. Imagine my chagrin, then, when I later heard from the teachers...that these were "KERA kids": they were so used to cooperative learning that they could almost function in groups without a teacher's supervision. Though fallen from my self-assigned pedestal, I was still able to see the worth of cooperative learning. However, now that I am contemplating it, I must say that I worry that some teachers are using this method poorly. I have seen, on several occasions, teachers put their kids into groups to do work that is not really suited to cooperative learning. They are putting the class on cruise control, so to speak.

This comment reflects both positive (widespread implementation of cooperative learning) and negative (lack of preparation in the implementation of cooperative learning) effects of KERA on classroom practice.

Second, MIC students carry out a project that benefits a subject department or the school. Our students have installed and taught teachers and students how to use mathematical software; analyzed data on the effectiveness of an attendance incentive program and delivered a report to the school council; and inventoried, organized, and constructed a database of a science department's equipment and materials. Even a "low tech" project, such as setting up the book room for an English department, can yield insights into teaching, learning and schooling. The book room project, for example, led four future English teachers to write:

> These physical objects also gave us some insight into the priorities of the English department.... The books presently used reflect diverse reading; women writers and authors of color are well represented. Obviously, some texts are no longer part of the common core; they physically appear old, and too few remain to make up a complete class set. *Wuthering Heights* probably hasn't been taught for a while, and *Jonathan Livingston Seagull* has lost its luster.

Third, MIC students design and implement an interdisciplinary teaching unit. Since KERA emphasizes helping students connect knowledge across disciplines and to their own lives, teachers in the participating schools welcome this contribution by MIC students and frequently make these units a permanent part of the curriculum. At Scott County High School, for example, the principal has created a permanent resource library for faculty from MIC students' interdisciplinary units. Often, these collaborations are enlightening for our students, who have little or no experience in others' disciplines. For example, one student wrote:

> On a scale of one to five I would rank the potential for interdisciplinary work between mathematics and English with an overwhelming *5!*....there are a multitude of applications and connections between these two beautiful subjects just in

> the field of geometry. I could go on with each field of mathematics.... It is imperative that students learn to read and hear mathematical concepts and be able to translate that information into an equation or graph. Isolating one from the other will lead to disjointed views within the mathematical discipline and just bolster the confusion of students who see mathematics as a collection of unrelated ideas with little or no connection between them.

Recently, this MIC graduate, now a first-year high school mathematics teacher, reconnected with his former collaborator, now a first year high school English teacher, to brainstorm ideas for an interdisciplinary project involving mathematics in *Alice in Wonderland.*

The three projects are designed and carried out in consultation with cohort leaders and faculty in the field experience schools. Taken together, these projects encourage prospective teachers to take responsibility for their own learning, to assume professional roles, and to value collaboration—all characteristics of reflective decision-makers and of KERA's vision of excellent teaching.

The experience of immersion in one school, shared by each cohort and cohort leader, forms the true "Common Core" of the MIC program. Issues and incidents that arise in the course of the field experience give substance to discussions of theory, and students keep weekly reflective logs in which they link practice and theory. After nine weeks, students may move to a different school for their student teaching, or they may stay on to student teach in the field experience school. In either case, MIC students consistently cite the intensive field experience as a strength of the program. As one student put it, "The field experience prepared me for my student teaching experience by providing me with a great deal of confidence. I felt I was ready to step into a classroom. Of course, I was not prepared, but at least I thought I was at the time."

Typically, participating teachers respond positively to the presence of MIC students in their schools and classrooms. As one science teacher wrote,

> Mr. Smith helped tremendously by assisting me in lab, helping students with problems, and explaining material to my classes. I let him teach an entire chapter to...[two] classes, which I hope will give him an edge in student teaching. I don't know how I will manage lab...without him. My students really responded to him. We were also helped by their arranging our store room, too.

At the same time, not every teacher in every school either supports or participates in the program. Some see MIC students as problems who take up faculty parking spaces and jam copiers.

Emphasis On Meeting The Educational Needs Of Diverse Learners

If KERA's guiding principle—that *all* students can learn to high levels—is to be realized, then teachers entering the profession must not only be aware of the many aspects of diversity present in the student population but must also know how

to design curriculum and select instructional strategies that are effective with diverse learners (Larkin, 1995). Because the majority of MIC students are white (in 1999-2000, 91 percent), middle class, and grew up in environments they perceived to be ethnically homogeneous, they tend to lack knowledge of and experience with adolescents who differ from them ethnically, culturally, linguistically, socioeconomically, or in sexual orientation (Sleeter, 1995). Therefore, multicultural awareness is a recurring square in the "quilt," reinforced throughout the year in Common Core cohort and plenary sessions.

Among the experiences intended to enhance MIC students' awareness and understanding of diversity are visits to restructuring urban and rural high schools; a language immersion experience followed by a reflective discussion of language, education, and culture; interaction with multicultural specialists and global educators via video teleconferencing; and discussions with activists in the local African American, Hispanic, Asian, and Appalachian communities.

In the first semester, MIC students learn and practice teaching strategies, such as Complex Instruction, which have been identified as effective in heterogeneous classrooms (Cohen, Kepner & Swanson, 1995). They focus observations in the field experience schools on the roles class, gender, and ethnicity play in classroom interaction. In the second semester, they create and implement a multicultural unit plan in their content area (Bennett, 1998). In exit interviews and course and program evaluations, students consistently cite the multicultural emphasis as one of the strengths of the program. They appreciate this strand from a personal growth perspective ("It was a pain, but it really opened my eyes."), a pedagogical perspective ("The multicutural session helped me understand differences...and helped me to be a versatile teacher who can respond to different groups."), and a pragmatic perspective ("As I worked on ...[the multicultural unit plan]. I wanted to do a good job because I knew I'd be able to use [it] again.").

Developing Technological Expertise

The passage of KERA created a critical need for teachers who are willing and able to integrate technology into instruction. When students enter the program in August, they spend most of the first two weeks immersed in a technology workshop taught by specialists. All students are required to demonstrate mastery of a common core of applications. Those who enter the program with high levels of skill are challenged with more advanced tasks and have the opportunity to explore more sophisticated applications of instructional technology. Over the course of the professional year, students complete two projects which integrate technology into instruction. MIC students have also provided substantial support for classroom teachers attempting to learn new technologies. Each semester, students explore and discuss on-line a case study which portrays beginning teachers struggling with various aspects of educational reform in Kentucky (Bliss & Mazur, 1998). The case studies reinforce students' technological skills, while allowing them to hone their

analytical and reflective skills. At the same time, they gain insights into teaching dilemmas which have arisen in the wake of KERA.

The MIC Program is still evolving, but the feedback we have collected to date is positive, mirroring findings of other studies of fifth-year programs (Darling-Hammond, 1998). Many graduates are recruited by schools and districts throughout the state which are striving to meet KERA expectations. Nine years into KERA, however, the reality of statewide educational reform and the MIC model of teachers as reflective decision-makers may be diverging.

Points of Divergence between KERA and the MIC Program

The Kentucky New Teacher Standards provide teacher educators with clear goals for teacher preparation and preservice teachers with clear expectations for learning. Wherever MIC graduates go in the state, they know that their teaching will be guided by the Kentucky Learner Goals and Academic Expectations, and that their performance will be judged by the same set of standards which they first met in their teacher education program. If they leave the state, they will take with them a thorough understanding of educational reform.

On the other hand, the Kentucky New Teacher Standards list teacher behaviors which will eventually contribute to a high-stakes decision at the end of an intern's first year of classroom teaching. The observation instrument developed from the standards translates the performance criteria into more concrete behaviors. Sometimes, subtle differences can be lost in translation. Figure Two shows the performance criteria for Standard Three—Implements/Manages Instruction as they appear on the observation instrument. While the same number of criteria appear in both the Standards and the observation instrument, some statements have been abridged noticeably.

These behaviors are most clearly observable in didactic or whole class instruction. When teachers implement constructivist approaches, such as collaborative learning, experimental inquiry, reciprocal teaching, or peer reviewing, these criteria are less readily apparent. Consequently, preservice teachers are sometimes reluctant to implement such strategies when they know they are being observed by a faculty member, cooperating teacher, or university supervisor. To the extent that the standards reduce teaching to observable and measurable behaviors, they may be sending the message that what matters most in the classroom is what the teacher, rather than the learner, does. Thus, we face the dilemma of preparing teachers to meet a set of "teacher-centered" standards in the midst of a "learner-centered" reform.

Reflection is a major emphasis in the MIC Program, and we encourage students to reflect on their learning and experiences from a variety of perspectives—reflection-in-action, personalistic, deliberative, and critical (Valli, 1992). On the

Figure Two:
Kentucky Teacher Internship Program Observation Instrument

Standard III: Implements/Manages Instruction

STANDARD III: IMPLEMENTS/MANAGES INSTRUCTION
In the space below, provide evidence that illustrates the extent to which the intern...
1. communicates specific outcomes.
2. links learning with students' prior knowledge, experience, and family and cultural backgrounds.
3. models/demonstrates the skills, concepts, attributes, and/or thinking processes to be learned.
4. uses appropriate multiple teaching/learning strategies.
5. makes appropriate provisions for learning to address diversity among learners.
6. elicits samples of student thinking and stimulates student reflection on their own ideas.
7. uses appropriate questioning strategies.
8. guides students to express, examine, and explain alternative responses and their consequences.
9. demonstrates interpersonal/team membership skills.
10. uses multiple perspectives and differing viewpoints to facilitate the integration of knowledge.
11. makes creative and appropriate use of media and technology.
12. makes efficient use of physical and human resources and time.
13. provides opportunities for students to use and practice what is learned.
14. provides students continuous feedback on progress toward outcomes and expectations.
15. links learning with student aspirations.
Data from Observation:

other hand, reflection is represented on the observation instrument described above as, "Accurately assesses effectiveness of instruction." While this is certainly one dimension of reflection, it fails to express the need for preservice teachers to reflect upon the moral, ethical, political, and sociocultural dimensions of teaching as well (Zeichner, 1983). Indeed, one is hard-pressed to find any evidence within the standards that knowledge of these foundational areas of education is essential to effective teaching.

The assessment and accountability component of KERA has been perhaps the most controversial aspect of the reform. The current system, the Commonwealth Accountability and Testing System (CATS), has been designed to address the most serious flaws of the original Kentucky Instructional Results and Information System (KIRIS). Those flaws included validity and reliability issues arising from the use of performance assessment, lack of scores which could be compared to national norms, inefficiency of scoring and public reporting, and perceived inequity in the distribution of rewards and sanctions. For much of the public and many teachers, KIRIS (now CATS) and KERA have been one and the same. Although CATS retains some of the features of the original KIRIS (e.g., constructed response, writing portfolios at specified grade levels), CATS now includes a substantial multiple choice component. Critics have charged that "[t]he accountability system forces teachers to focus on whatever is thought to raise test scores rather than on instruction aimed at addressing individual student needs" (Jones & Whitford, 1997, p. 277). For example, techniques for generating open-ended responses, intended to encourage higher-order thinking, are widely taught formulaically. Beginning teachers, then, are held accountable both to the New Teacher Standards and for their students' statewide test scores. To the extent that the standards and the tests support effective teaching practices this is at least reasonable. But if the standards and tests are at odds or encourage questionable teaching practices, then standards-based reform may work counter to our goals in teacher education.

Another hallmark of standards-based reform is the principle that "less is more" (Wiggins & McTighe, 1998). While we have pared down the MIC curriculum considerably in order to offer a one-year program and to enhance interdisciplinary collaboration, the state's expectations for the content of teacher education programs seem to be expanding. For example, recently the media widely publicized the finding that only 29 percent of a random sample of new teachers in Kentucky reported that they were extremely or very-well prepared to "prepare students for KIRIS testing" (Pankratz, 1998, p. 3). Apparently, the assumption is that teacher education programs *should* be performing this function. Such a finding raises questions about the role of teacher education programs in furthering the goals of the state and the extent to which the state's agenda for reform should drive the teacher education curriculum.

We have taken only the first steps on the path toward forming professional development school partnerships with the high schools that currently work with us

(Clarke, Dwyer, Glesne, Kostin, Meyers & Prue, 1997; Mantle-Bromley, 1998). KERA has both enhanced and impeded our progress toward this goal. The state's mandate that each school in Kentucky develop and implement a consolidated plan has brought focus to school improvement efforts, and K-12 school faculties now have a great deal of freedom to design their own professional development plans. On the one hand, the consolidated plan provides a concrete starting point for discussions of how the school and the university can mutually benefit from collaboration. On the other hand, schools and teachers may be understandably reluctant to enter formalized professional development school partnerships for which the immediate "payoff" in terms of the goals stated in the consolidated plan is uncertain.

In short, we are increasingly concerned that UK's model of teachers as reflective decision-makers may be out of sync with pressures on teachers to become compliant technicians. From this concern have emerged the following questions for research: (1) What perceptions of educational reform and of testing and accountability do preservice teachers hold and how, if at all, do those perceptions change in the course of a teacher preparation program and as a result of classroom experience? (2) What do preservice teachers learn from inservice teachers about educational reform and accountability? (3) How do preservice and novice teachers view teaching standards, like Kentucky's New Teacher Standards, and how, if at all, do they use them to reflect upon their own teaching practices? (4) What aspects of statewide educational reform enhance or impede the formation and maintenance of professional development partnerships? and (5) How are preservice and inservice teachers' roles changing as a result of statewide educational reform and to what extent can or should teacher education programs prepare them to play these roles?

Challenges from Within

Redesigning secondary teacher education has required a high level of commitment from various departments and individuals in the College of Education and a degree of teamwork rarely found in large universities. MIC Program faculty meet monthly and spend a good deal of time wrestling with bureaucratic issues, such as the cumbersome admissions process and the distribution of credit hours to individual faculty and departments. One challenge the faculty faces is to maintain its commitment, cooperative spirit, and problem-solving attitude as the program grows and matures. As Ross (1990), among others, has pointed out, "...[T]here are few institutional rewards for these extremely time-consuming tasks" (p. 114). To date, we have expended most of our energy simply getting the program to function.

We must now engage in reflective decision-making ourselves and begin to pursue such questions as the following: (1) Given the weak impact of traditional undergraduate teacher education programs on preservice teachers' beliefs (Pajares, 1992), what difference, if any, does an intensive fifth-year program make? (2) Is

reflective decision-making better developed over an extended period of time? (3) Given calls for increased subject-matter knowledge in teachers, what difference, if any, does it make that our preservice teachers enter the program with baccalaureate and advanced degrees? and (4) Given our belief that teaching is "centrally concerned with helping all students learn worthwhile content, within the context of a multicultural and pluralistic society" (Grossman, 1992, p. 171), how can we recruit students of more diverse backgrounds into the program and graduate teachers who more adequately reflect Kentucky's increasingly diverse population?

Final Thoughts on Piecing a Quilt

Just as teacher education programs have historically been offered in discrete and sometimes disjointed components, so educational reforms have often been implemented through piecemeal and sometimes conflicting mandates. KERA was enacted all of a piece. Guided by the principle of equity, the tenets of constructivism, and the premise that all students can learn to high levels, this "top-down" reform converged with the faculty's "bottom-up" re-examination of secondary teacher preparation at UK. This convergence produced a more coherent and focused program.

The originators of KERA knew that change takes time and envisioned a twenty-year timeline to achieve its goals. We too have learned that change takes time. Within the college, it has taken time to address bureaucratic and administrative issues and to develop and maintain solid, working relationships across departments. It has taken time to build partnerships with participating high schools and to gain the trust and support of high school faculties. It has taken—and continues to take—time to create an MIC Program culture of high expectations, active learning, reflective decision-making, and collaboration among teacher candidates whose educational experiences have often accustomed them to passivity, compliance, and competition.

Change takes time. But times change. As the influence of the original key players in KERA has waned, new visions of the goals of K-12 reform and how best to achieve them have emerged. In 1999-2000, for example, two of the four high schools which participate in the MIC program have new principals. Within the college—as at most major land-grant institutions—pressures for increased enrollment, for more efficient use of faculty time, and for formalized professional development school partnerships cause MIC faculty to defend program design and programmatic decisions.

Designing a program which offers both a masters degree and certification in a single year has caused the faculty to make some difficult choices about the combination of knowledge, skills, and experiences which will best meet the needs of secondary teacher candidates. The amount of time devoted to some time-honored topics in teacher preparation has been reduced or restructured, while the amount of

time students spend immersed in schools has been increased. We have chosen to control our students less and trust them more.

At the conclusion of the film, *How to Make an American Quilt*, Anna, the leader of the quilting group, reflects on the process: "You have to choose your combinations carefully. The right choices will enhance your quilt. The wrong choices will dull the colors, hide their original beauty." We like to keep Anna's advice in mind as we prepare secondary preservice teachers to succeed as reflective decision-makers in the context of statewide educational reform.

References

Bennett, C.I. (1998). *Comprehensive multicultural education: Theory and practice.* (4th ed.). Needham Heights, MA: Allyn & Bacon.

Bliss, T. & Mazur, J. (1998). *Secondary and middle school teachers in the midst of reform: Common Thread cases.* Upper Saddle River, NJ: Prentice-Hall.

Brennan, S., Thames, W., & Roberts, R. (1999). Mentoring with a mission. *Educational Leadership, 56*(4), 49-52.

Clarke, J., Dwyer, M., Glesne, C., Kostin, M., Leo, K., Meyers, H., & Prue, J. (1997). Adapting teacher preparation courses to support high school reform. *Journal of Teacher Education, 48*(5), 358-366.

Clift, R.T. (1990). Research contributions to reflective practice. In R.T. Clift, W.R. Houston, & M.C. Pugach, Eds., *Encouraging reflective practice: An analysis of issues and programs* (pp. 208-222). New York: Teachers College Press.

Cochran-Smith, M. (1995). Color blindness and basket making are not the answers: Confronting the dilemmas of race, culture, and language diversity in teacher education. *American Educational Research Journal, 32*(3), 493-523.

Cohen, E.G., Kepner, D., & Swanson, P. (1995). Dismantling status hierarchies in heterogeneous classrooms. In J. Oakes & K.H. Quartz (Eds.), *Creating new educational communities: Ninety-fourth yearbook of the National Society for the Study of Education, Part I* (pp. 16-31). Chicago, IL: National Society for the Study of Education.

Condon, M.W.F. & Clyde, J.A. (1993). New roles and relationships in teacher preparation. *Equity and Excellence in Education, 26*(3), 73-76.

Darling-Hammond, L. (1992). Accountability for professional practice. In M. Levine (Ed.), *Professional practice schools: Linking teacher education and school reform* (pp. 81-104). New York: Teachers College Press.

Darling-Hammond, L. (1998). Teachers and teaching: Testing policy hypotheses from a National Commission Report. *Educational Researcher, 27*(1), 5-16.

Darling-Hammond, L. & Falk, B. (1997). Using standards and assessments to support student learning. *Phi Delta Kappan, 79*(3), 190-201.

Darling-Hammond, L., Wise, A.E., & Klein, S.P. (1995). *A license to teach: Building a profession for 21st century schools.* Boulder, CO: Westview Press.

Education Professional Standards Board. (1994). *New Teacher Standards For Preparation And Certification.* Frankfort, KY: Education Professional Standards Board.

Fischetti, J. & Dittmer, A. (1996). High school restructuring. In *A review of research on the Kentucky Education Reform Act 1995* (pp. 131-139). Frankfort, KY: The Kentucky Institute for Education Research.

Grossman, P.L. (1992). Why models matter: An alternative view on professional growth in teaching. *Review of Educational Research, 62*(2), 171-180.

Guskey, T.R. (1994). Introduction. In T.R. Guskey, Ed., *High stakes performance assessment: Perpectives on Kentucky's education reform*, pp. 1-6. Thousand Oaks, CA: Corwin Press.

Holland, H. (1997). KERA: A tale of one teacher. *Phi Delta Kappan, 79*(4), 264-271.

The Holmes Group. (1990). *Tomorrow's schools: Principles for the design of professional development*. East Lansing, MI: The Holmes Group.

The Holmes Group. (1986). *Tomorrow's teachers: A report of the Holmes Group*. East Lansing, MI: The Holmes Group.

Jones, K. & Whitford, B.L. (1997). Kentucky's conflicting reform principles: High-stakes school accountability and student performance assessment. *Phi Delta Kappan, 79*(4), 276-281.

Kentucky Department of Education. (1994). *Kentucky's Learning Goals and Academic Expectations: What Kentucky High School Graduates Should Know and Be Able to Do As They Exit Public Schools*. Frankfort, KY: Kentucky Department of Education.

Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into practice, 34*(3), 159-165.

Larkin, J.M. (1995). Curriculum themes and issues in multicultural teacher education programs. In J.M. Larkin & C.E. Sleeter, Eds., *Developing multicultural teacher education curricula* (pp. 1-16). Albany, NY: State University of New York Press.

Mantle-Bromley, C. (1998). "A Day in the Life" at a professional development school. *Educational Leadership, 55*(5), 48-51.

National Commission on Teaching and America's Future. (1996). *What Matters Most: Teaching For America's Future* (Executive Summary). New York: National Commission on Teaching and America's Future.

Nelli, E. (1996). Education Professional Standards Board. In *A review of research on the Kentucky Education Reform Act 1995* (pp. 43 - 56). Frankfort, KY: The Kentucky Institute for Education Research.

Newmann, F.M., Crow, L.W., & Bonnstetter, R.J. (1996). Authentic pedagogy and student performance. *American Journal of Education, 104*(4), 280-312.

Nystrand, R.O. (1993). The challenge of reform to higher education. *Equity and Excellence in Education, 26*(3), 31-36.

Pajares, M.F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research, 62*(3), 307-332.

Pankratz, R. (1998). *The preparation of teachers for Kentucky schools: A longitudinal study of new teachers. Summary report for 1996 and 1997: Key findings, discussion, and recommendations*. Frankfort, KY: The Kentucky Institute for Education Research.

Peshkin, A. (1991). *The color of strangers, the color of friends: The play of ethnicity in school and community*. Chicago, IL: University of Chicago Press.

The Prichard Committee for Academic Excellence. (1995). *Keepin' On: Five Years Down The Road To Better Schools*. Lexington, KY: Author.

Reynolds, A. (1992). What is competent beginning teaching? A review of the literature. *Review of Educational Research, 62*(1), 1-36.

Ross, D.D. (1990). Programmatic structures for the preparation of reflective teachers. In R.T. Clift, W.R. Houston, & M.C. Pugach, Eds., *Encouraging reflective practice: An*

analysis of issues and programs (pp. 97-118). New York: Teachers College Press.

Schon, D.A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.

Shulman, L.S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*(1), 1-22.

Simmons, E. (1996). Multicultural education. In *A review of research on the Kentucky Education Reform Act 1995* (pp. 188-197). Frankfort, KY: The Kentucky Institute for Education Research.

Simpson, K.J., & Sandidge, R.F. (1994). *Determining the success of teacher preparation by assessing what teacher education graduates know and are able to do.* (ERIC Document Reproduction Services No. ED 378 164).

Sleeter, C.E. (1995). White preservice students and multicultural education coursework. In J.M. Larkin & C.E. Sleeter, Eds., *Developing multicultural teacher education curricula* (pp. 17-29). Albany, NY: State University of New York Press.

Smith, D.C., & Mazur, J. (1996). Education technology. In *A review of research on the Kentucky Education Reform Act 1995* (pp. 151-166). Frankfort, KY: The Kentucky Institute for Education Research.

Task Force on High School Restructuring. (1993). *Report On High School Restructuring: Final Report*. Frankfort, KY: Kentucky Department of Education.

Valli, L. (1992). *Reflective teacher education: Cases and critiques*. Albany, NY: State University of New York Press.

Weible, T. & White, J.E. (1997). Context: Overview and framework. In D.M. Byrd & D.J. McIntyre, Eds., *Research on the education of our nation's teachers: Teacher education yearbook V*, (pp. 1-6). Thousand Oaks, CA: Corwin Press.

Wiggins, G. & McTighe, J. (1993). *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development.

Zeichner, K. (1983). Alternative paradigms of teacher education. *Journal of Teacher Education, 34*(3), 3-9.

Schoolwide Enrichment:
Improving the Education of Students ~~at Risk~~ at Promise

By Genevieve Marie Johnson

The term *at-risk students* encompasses many categories of children and youth: "those who become pregnant, those who commit crimes, those who commit suicide, those who drop out" (Martin, 1991, p. 69). Educational concern with at-risk students is not simply that they are failing to learn, but also that they will enter adulthood "illiterate, dependent upon drugs and alcohol, unemployed or underemployed, as a teenage parent, dependent on welfare, or adjudicated by the criminal justice system" (Barr & Parrett, 1995, p. 3). The ultimate risk that students face is that they become "disconnected from the functions of society, from economic productivity, and as citizens in a democracy" (Johnson, 1997a, p. 35). Collectively referred to as *risk outcomes*, the negative life experiences that threaten at-risk students include high school dropout, suicidal behavior, adult dependency, substance abuse, incarceration, and unwanted sexual experiences such as pregnancy and disease (Johnson, 1998a). Given this broad range of adverse outcomes, it has been suggested that approximately one-third of children could be considered at risk (Hamburg, 1992; Takanishi, 1993).

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