A model for preparing teachers to teach successfully in a performance-based educational environment using Total Quality Management principles is called Total Quality Performance (TQP). On the TQP model everyone is involved in a process of continuous improvement toward the achievement of performance outcomes that are clearly defined and consistent with the mission of the organization. Other principles for teacher education programs should include elimination of emphasis on grades, provision of a research-basis for continuous program improvement, and development of a systematic approach to teacher preparation. There are five steps that are general guidelines for beginning the process of shifting from an input oriented program to one involving everyone toward the achievement of performance outcomes that are clearly defined and consistent with the goals of the organization: (1) develop a mission statement; (2) determine the performance outcomes; (3) evaluate current practices; (4) decide what changes need to be made; and (5) decide on a process for the transformation. Though Total Quality Management techniques are designed for businesses, many of its principles are consistent with the ideas of educators such as Dewey and others. The current velocity of change in education demands response to these challenges. (JB)
Practice What We Preach: Preparing Future Teachers for Outcome-Based Education

Bernard R. Brogan
Widener University

Practice What We Preach: Preparing Future Teachers for Outcome-Based Education

Bernard R. Brogan
Widener University

There is a movement of growing proportion in the United States to reconsider the fundamental purpose of business and industry in a way that emphasizes continuous improvement as a means of achieving total quality results. Outcome-based education, if considered within this context, has the potential to fundamentally change the expectations we have for student learning and the methodologies we use in the practice of teaching. The role that higher education will play in this transformation is uncertain yet will undoubtable have a major impact on the success of outcomes-based education and perhaps the future of teacher education programs themselves.

The purpose of this paper is to propose a model for preparing teachers to teach successfully in a performance-based educational environment. The model calls for an understanding of the connection between outcome-based education and total quality management as applied to teacher preparation. A basic premise of this paper is that outcome-based education as understood by many educators will have little impact on school improvement unless it is considered in a broader context where the process of learning is

the center of attention and outcomes of education are by-products of that process. Applying the principles of total quality management to the purposes of outcomes-based education provides a sensible direction for continuous school improvement and a basis for which to develop a model for providing future teachers with the knowledge, pedagogy, and learning assessment techniques they will need in Total Quality Performance (TQP) learning environments.

**Total Quality Performance: Linking Quality and Performance**

Changing to an outcomes-based learning environment requires first that we consider the very mission of the organization. To do so, it is important to consider what is meant by TQP. TQP means that everyone is involved in a process of continuous improvement toward the achievement of performance outcomes that are clearly defined and consistent with the mission of the organization. For many teacher preparation programs, TQM means adopting the principles of both outcomes-based education and total quality management. Foremost in the change process is the need to reexamine the very mission of the program, something that a number of school districts have been grappling with for the past few years.

One of the most frequently cited axioms to emerge from the exercise of defining a mission statement at the elementary and secondary level is "All children can learn." When introduced as part of an overall school mission statement there is a certain attraction to the concept. Variations on the theme, "All children can learn well," and "All children can learn, not necessarily on the same day in the same way" even add definition to its meaning. But after hearing this oft stated "revelation," one has the urge to yell out, "Was there ever any doubt that all children can learn?" Perhaps the more relevant proposition is that "All children want to learn." At first glance there does not appear to be much difference in can
learn and want to learn but only when we truly believe that all children want to learn (and all teachers want to teach) will we be in a position to create a learning environment which will nurture and promote in all children this innate desire. Achieving TQP as defined in this paper depends on a system that believes in and supports the joy of learning (and teaching). Teacher educations have the more complex challenge of considering the mission of not only elementary and secondary schools, both also the mission of their own programs.

Teacher educators must also consider the proposition that the success of their program should be based not on the amount of time students spent in the learning process, but rather on the results achieve through that learning experience. The need for this "paradigm shift" from inputs to outcomes in elementary and secondary schools has been supported by a number of noted educational reformers including Chester Finn, Albert Shanker, and William Glasser as well as a number of national and state education groups. Prompted by the concern that public education is not adequately preparing young people for the challenges of the future, there is an increased recognition that schools need to (1) establish what it is we want students to know and be able to do, (2) design appropriate assessments to measure how well students are achieving these outcomes, and (3) hold students, teachers and administrators accountable for reaching these goals and expectations. Holding college faculty accountable for reaching these outcomes may induce a culture shock for some, yet the call for outcomes-based assessment in higher education programs has continued since the early 1980's and is currently used as accreditation criteria by the Council of Postsecondary Accreditation and the U.S. Department of Education. The Praxis Series, recently introduced by the Educational Testing Service as a measurement of whether individuals are prepared to teach, also promises to be considerably more performance-based than the previous National Teacher Examination and may serve as a
catalyst for teacher preparation programs to align their program outcomes with those expected of their graduates on these more sophisticated assessment tools.

Although knowing what we want graduates to know and be able to do as a result of their educational programs is important at all levels, I argue that these outcomes should only be used to legitimize what really matters in learning - the process. The work of W. Edwards Deming provides the basis for a management theory that is well suited to a total quality educational experience; one that will result in students achieving agreed upon academic and personal outcomes. Although it is beyond the purpose of this paper to consider the full scope of the total quality management literature, applying aspects of Deming's theory to education provides three examples of beliefs that are consistent with but expand the purposes of outcomes-based education. It is interesting to note that although these beliefs were initially considered for the elementary and secondary levels they are consistent with and very much applicable to teacher education programs as well.2

1. **Elimination of Emphasis on Grades**

   William Spady states that "all students can learn, not necessarily at the same rate, at the same time, on the same day." TQP educational programs believe that all students want to learn and that they have a basic right to enjoy their work as students. Teacher preparation programs that operate on a system where the normal curve distribution of intelligence is applied to student evaluation, and students are sorted by letter grades not only allow for lower levels of achievement but also challenge the belief that all students can learn and, by placing emphasis on the grade and not the learning, diminish the joy and desire to learn. TQP recognizes that there are high performance standards that we expect all

---

2 These beliefs are based on the work on William Spady.
students to achieve. The first thing Deming told his students at New York University was that "you all have A's and now let's get on to the important business of learning." Teacher educators who place emphasis on performance rather than grades show their students through example how to provide an outcomes-based learning environment.

2. **Provide a Research-Base for Continuous Program Improvement**

A review of past efforts to restructure educational practice clearly shows that research-based effective practices are seldom implemented in the classroom. Teacher education programs are no exception to this rule. An essential component to Total Quality Management is the use of tools and techniques to collect, analyze, and understand how well educational programs are achieving their goals. This information is used to plan, implement, evaluated and plan the next unit to be done. The emphasis here is not on the final outcome but rather continuous improvement. When the focus is on the "process" the concern about individuals being "ready to teach" is significantly diminished. There are a number of "tools" developed by the Japanese for managing and planning for continuous progress that have been used effectively by school districts to achieve the transition to quality. (see the 7 Management and Planning Tools published by GOAL/QPC as the Memory Jogger Plus)

3. **Provide a Systemic Approach to Teacher Preparation**

There needs to be a systemic approach to teacher preparation that applies the principles of Total Quality Management to the formal operation of the program. The goal here is a system monitored, controlled and constantly improving where the administrators' and/or TQP team's role becomes one of helping the faculty do the best job possible, foreseeing and eliminating barriers that prevent individuals from achieving high levels of performance. Deming believes that all organizations must be viewed as systems whose
activities are aimed at fulfilling the mission of the organization with management's tasks to optimize the whole. A systems/process approach requires that teacher education programs reach out to all those that in any way influence the preparation process. This would naturally include other departments in the college, the state department of education, and perhaps most importantly area school districts. Effective, on-going communication would makes it possible for teacher educators to provide students with a realistic preparation for the academic and social challenges of teaching. Deming believes that knowledge is constructed from experience that is bound within a framework of ideas and beliefs and everyone within the organization needs the same theoretical road map. Achieving TQP will require continuous and evolving communication amongst all of the stakeholders in the system.

This section of the paper provided a rationale and framework for educators to consider in adapting an outcomes-based teacher education program. It is fitting to close this section with the observation by Deming that over 85% of variation from expected outcomes comes from problems in the system or process (failure due to common causes), and only 15% of the problem comes from the worker or individual process (failure due to special causes). This provides a compelling reason for those interested in promoting outcomes-based education at all levels to consider a systems-based model that will best promote these expected outcomes.

A Five Step TQP Model for Teacher Preparation Programs

Although there has been an effort in recent years for teacher preparation programs to implement some of the strategies that have proven effectiveness, many programs have yet to engage in the hard work of determining what it is that their graduates will need to know and be able to do as teachers in a rapidly changing, more challenging environment.
The following steps are proposed as general guidelines for beginning the process of shifting from an input oriented program to one where everyone is involved in a process of continuous improvement toward the achievement of performance outcomes that are clearly defined and consistent with the mission and goals of the organization.

**Step One: Develop a Mission Statement**

Perhaps the most important reason for teacher educators to consider a TQP model is because it necessitates a reexamination of the mission and purpose of the program. All stakeholders in the program, including faculty, staff and students, should participate in the development of the mission statement. As noted earlier in this paper, a mission statement gets at the heart of what the program cares about and is committed to in terms of values and beliefs. These are some of the questions that should be answered in the mission statement:

1. What expectations does the program have for its students? Is the program committed to ensuring that all students enrolled in the program achieve their full potential and/or graduate fully prepared to teach successfully in a performance based learning environment? If so, how does that impact on the admissions standards?

2. Is the program committed to building the following attributes in students: life-long learning, verbal and written communication skills, critical and creative thinking, risk-taking and leadership skills, awareness of diverse learning needs of children, etc.

3. Is the program committed to serving the local school community? How much interest is evident in working with school districts and educational professionals?

4. How does the mission statement reflect the program's commitment to the well-being of the students?
5. What commitment is there to supporting the faculty in their endeavor to assist students? Does the mission statement reflect a belief in quality teaching? What are the expectations of faculty in terms of teaching, scholarship, and service to the educational community?

6. Does the mission of the program encourage characteristics such as risk-taking on the part of the faculty and students?

Step Two: Determine the Performance Outcomes

Once the mission statement is agreed upon (not necessarily an easy task!), it is possible to determine what it is graduates need to know and be able to do in order to be effective teachers. These outcomes should be determined by a TQP committee consisting of faculty, administrators, students in the program, staff, representatives from other departments in the college, and school district personnel that will be working with student teachers or graduates. Because these exit outcomes will essentially determine the content and character of the program, they will take careful deliberation and considerable give and take. Although consensus may not be always possible, ensuring that everyone has the opportunity to provide input is essential to the success of the implementation. Here are some examples of possible exit outcomes:

By the time they complete their teacher preparation program, we expect that graduates will be able to:

1. Score in the 90 percentile on National Teacher Exam.
2. Demonstrate essential knowledge in their chosen discipline as well as the liberal and fine arts.
3. Maintain a productive, positive classroom environment.
4. Participate effectively in decisions that affect them as students in the program and as future teachers.

5. Accept personal and program responsibilities and provide service to others.

6. Demonstrate personal competence and the ability to foster the following in their students:
   - read critically, write clearly, and speak fluently.
   - evaluate and monitor their own academic goals and progress.
   - use research and other information-accessing skills competently.
   - solve problems independently and interdependently.
   - apply technology competently.
   - think critically and creatively.
   - distinguish between fact and fiction.
   - display global awareness and cross-cultural understanding.

Although not complete, the above exit outcomes serve as examples of what teacher preparation program should consider if they wish to prepare their graduates for an outcomes-based learning environment. These exit outcomes are consistent with those that school districts across the United States are expecting of their graduates. If graduates from teacher education programs cannot think critically and creatively, they will be hard pressed to assist their students in acquiring these skills.

**Step Three: Evaluate Current Practices.**

Once the mission is understood and the TQP committee determines what they expect graduates to know and be able to do by the time they graduate as certified teachers, the next step is to evaluate what aspects of the current program are enabling students to achieve the graduation expectations. This process requires a careful review of individual
courses, practicums, and student teaching experiences. For example, how consistent is course content with what is being measured on the national teachers examination? In what ways are students solving problems independently and interdependently? When are students required to read critically and speak fluently? How does the current student teaching program serve as a stage for students to authentically demonstrate the expected exit outcomes? Some teacher preparation programs may discover that much of what they currently do is consistent with their mission and graduation outcomes; other programs may recognize that in order to meet the desired outcomes students will need for more preparation in certain areas.

The important point in this step is, as Stephen Covey puts it, "to begin with the end in mind."

Step Four: Decide What Changes Need to be Made

The gap between "where we are" and "where we want to be" will depend in part on (1) the mission of the program (2) the responsiveness of the current program to the present and future challenges of teaching, and (3) the extent to which the TQP committee took seriously its charge to shift its criteria for graduation from time-on-task inputs to performance-based outcomes. Closing the gap may be accomplished in a number of ways including the following:

1. Demand high academic standards - and except no less - from all students and measure achievement using authentic performance-based criteria as opposed to multiple-choice type testing. Course outcomes should be consistent with graduation outcomes such as reading critically, writing clearly, and speaking fluently.
2. Teacher educators may decide to model the methods they expect their students to practice as teachers. If a course outcome is consistent with an exit outcome that students will demonstrate personal competence and the ability to foster in their students the independent and cooperative problem solving then it might be prudent for the professor to be the "guide on the side" rather than the "sage on stage."

3. Student teaching is the culminating experience for students in a teacher preparation program and should provide the opportunity for prospective graduates to showcase their talents and competencies. It is therefore important that teacher educators join in partnerships with cooperating teachers and school districts that have missions and performance expectations that are consistent with the teacher preparation program. For this reason alone, it is important to have teachers and other school district personnel on the TQP committee.

Step Five: Decide on a Process for the Transformation

Although this paper only touched the surface of what total quality really means, it is important to reiterate a point made at the beginning of this paper: teacher educators should devote their energy toward a quality process where everyone involved in the program works toward continuous improvement in achieving clearly defined performance outcomes that are consistent with the mission and goals of the program. There is a rich body of literature on the principles behind the movement for quality in the work place, a campaign that is profoundly influencing the way organizations - including schools- in the United States operate. This process of continuous improvement and evaluation provides a practical way for teacher education programs to accomplish their missions and for students to graduate with the requisite skills to teach successfully in a performance-based learning environment.
Concluding Remarks

Teacher educators and their institutions are being challenged by the velocity of change that is happening in education at all levels. If we fail to respond to these challenges we may find our role as the primary preparers of teachers diminished. As we all know, there are those who are saying, "If you don't think it can be done, get out of the way of those who are doing it." We cannot apply the quality improvement techniques advanced by Deming to educational institutions without first raising some issues and concerns. After all, educational institutions are not business, they are borne of a different culture and tradition. Nevertheless, there is good reason to hope that the TQP model could lead to a better system of education, including teacher education. After all, much of what Deming advocates is consistent with what others such as Dewey have been saying for quite some time. Regardless of how much we personally care to embrace the TQP model, it seems clear to me that we will see both a continued rise in the expectations held for teachers and teacher preparation programs and a continued growth in both the quality movement and outcomes-based performance standards.