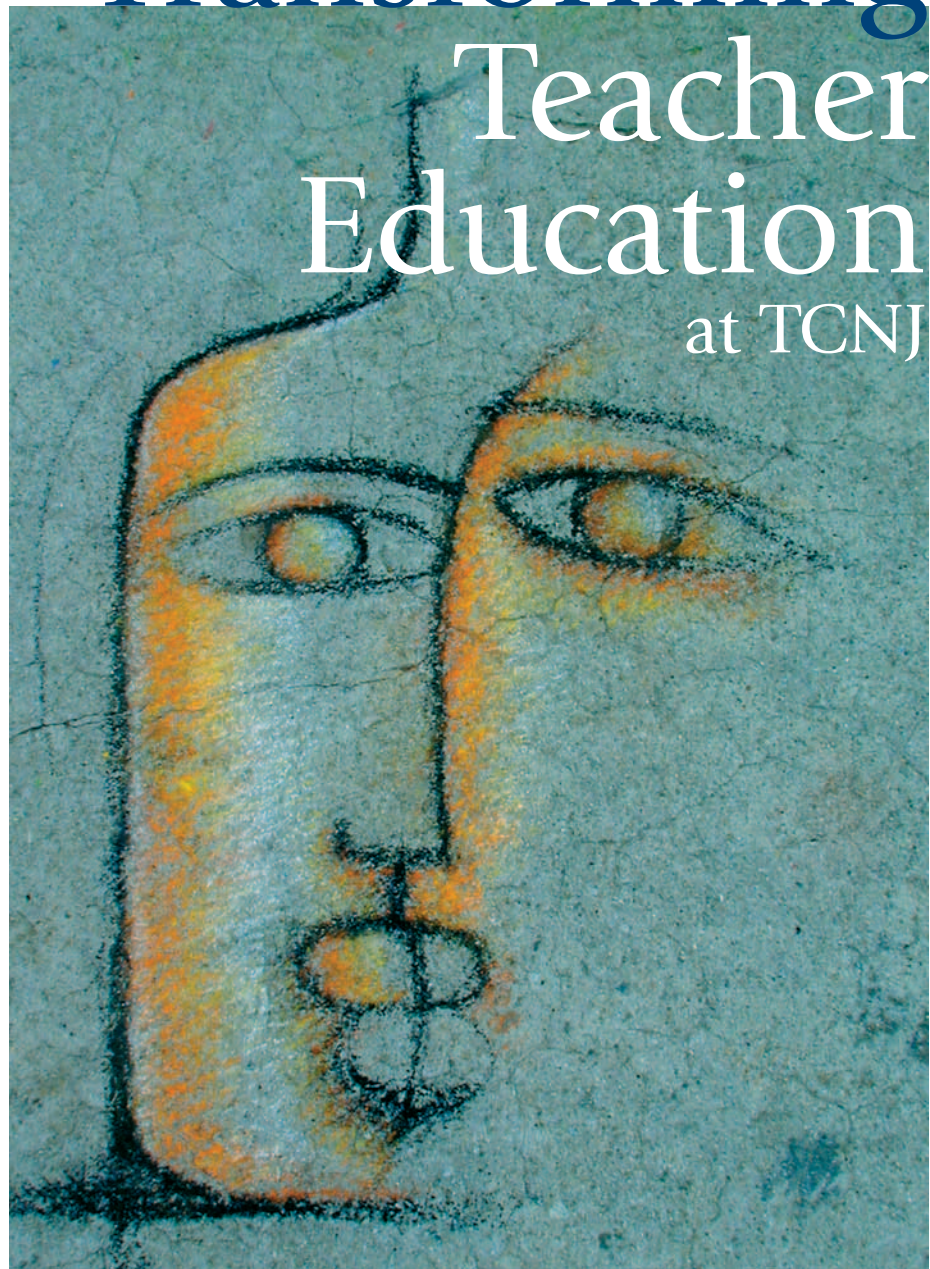


Transforming Teacher Education at TCNJ



Psychologists and philosophers have come together around the idea that knowledge is actively created in the mind of the thinker. Teachers versed in these processes will better understand what a student needs to succeed in a complex world.

by Terence W. O'Connor
Dean of the School of Education

"Some of them were evidently doubters, and came with the purpose of investigating the case, and watching the progress of events, before venturing to identify themselves with an experiment whose issue seemed so uncertain—an experiment viewed with jealous suspicion by many, with distrust by most, and yet with confident hope by a few."

William F. Phelps, first principal of the New Jersey State Normal School, writing in 1860 about students entering the first class in 1855.

After 150 years, questions about the future of teacher preparation at The College of New Jersey are still being raised. Since our founding in 1855, we have been the state's premier program for preparing educators. Today, our graduates are as eagerly sought after as ever. It is not our reputation among professional educators that is cause for concern. Rather, it is the loss of public faith in public education in general, and teacher preparation, in particular, that raises the greatest challenges for our School of Education.

Since *The Nation at Risk* report 20 years ago, politicians have regularly proclaimed that public schools were in crisis. On each occasion, they used their self-identified emergency to propose their agenda for reforming public education according to their political persuasion. After listening to a generation of criticism, the public has lost its trust in educators. Last year, the federal *Leave No Child Behind Act* produced a sweeping set of requirements that aim to closely monitor the details of education down to the school building level.

Professional educators read these stories of crises quite differently. The trend over the last century is that more students are being educated to higher levels. The rate of improvement has

been slow but steady. Likewise, the expertise of teachers continues to show improvement; more teachers know more about pedagogy and teaching methods than in previous generations. There have been no major drops in either teacher or student improvement that would indicate any major failings of the current system. These gains are largely the result of better research that is translated into better methods that are being disseminated through pre-service and professional development programs. No responsible educator would claim we have designed a school system that is effectively meeting the needs of all our children. Nonetheless, the educational system in this country is steadily improving our children's access to learning.

We know the critics are, in part, responding to the rapidly increasing demands of post-modern society. The information age demands for complex literacy are intertwined with almost every facet of our lives. To be under-educated is to be unable to find good work or choose good entertainment.

As much as the education system has improved, it has yet to make as dramatic a leap as society. Meeting this challenge is the charge of today's educators. It requires that we develop both the ideas and the organizations that produce new and powerful learning communities. Here is how we at TCNJ are responding to these challenges.

New rules and our success

The last two years have seen substantial change in our school. First, the College had committed itself to a program of curriculum transformation. As it was doing so, the federal government passed the *Leave No Child Behind Act*, altering the regulations affecting schools, teachers,

and teacher preparation. Finally, the New Jersey State Board of Education passed the first revision of the Administrative Code, the state regulations for schools and teacher preparation, in over 20 years. In response to these changes, the School of Education faculty has significantly redesigned the teacher preparation program.

These changes come at a time when the School of Education is already recognized for its accomplishments. Roughly a third of TCNJ's undergraduates select teaching majors. Over the last two years, our graduates have had a 100 percent passing rate on the PRAXIS II exam, the state's entry-level examination for teachers. Our graduates receive two or more job offers. They report satisfaction with their career choice and their college preparation.

This record of student success is based on the strong programs that had already been developed. Two years ago, the school received full accreditation approval from the National Council for the Accreditation of Teacher Education. In the past five years, we have received three "Best Practices" awards from the American Association of Colleges for Teacher Education. The changes we have undertaken were not efforts to shore up weak programs. They were efforts to, once again, take the lead in the state by accepting the new challenges and devising new learning experiences for our students.

There are four keys to turning ourselves into a more powerful learning community: 1) research, 2) systemic thinking, 3) collaboration, and 4) community involvement. Here is how each is contributing to our new master plan.

Last year, the professional education journal *The Kappan* published a series of

articles on the loss of trust in professional educators and teacher preparation programs. One of the problems, many argued, was that teaching appears to be a commonplace activity that anyone with knowledge about a subject area can perform. What we know, in fact, is that teaching and learning are complex social and psychological processes. The level of success that can be attained by instructors who are naive about these processes is relatively low. Society's current demand for achievement has long outstripped the usefulness of this approach.

Research-based education

Research over the last 50 years has converged with teacher experience to define some essential guidelines for effective teaching and learning. New teacher educators must be grounded in this expertise. We must produce teachers who are scholars of teaching and learning.

Our students begin to think of themselves as scholars in the College's revised Liberal Learning program, which will provide the essential skills of an educated person as well as experiences across the broad range of human scholarship. Elementary education students, for example, will have a course that brings art, theater, and music together around a work of literature. They also will have an interdisciplinary science course that focuses on a theme (such as cancer and the environment) rather than surveying basic science content. By developing their liberal learning abilities, our teachers will become ready to study teaching and learning.

A second feature of the new curriculum is that all teachers, from early childhood through secondary levels, will have a second major in an

academic discipline. Their work in the discipline is as rigorous as every other major in that field. They learn the same analytic and other research skills. Our teaching graduates, in other words, will have expertise in their fields.

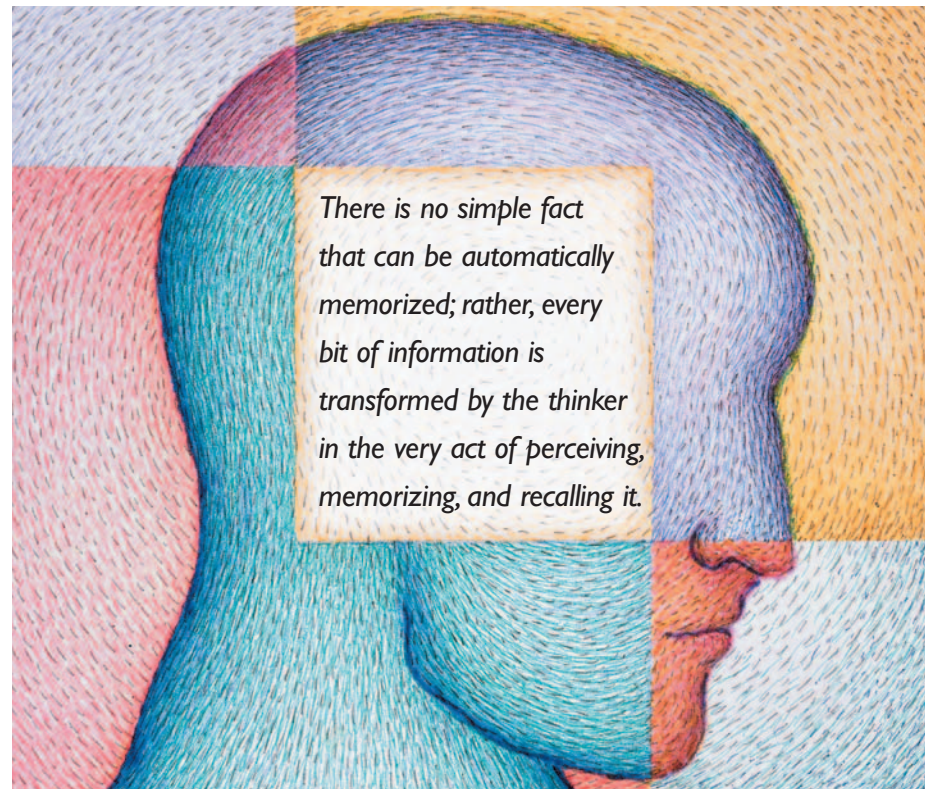
In addition, our graduates will also have intensified study of the teaching and learning processes. The new research on how people acquire knowledge will be at the center of their program.

Two exciting conclusions from the research on learning in the last century are becoming the basis for understanding the learning process. The first derives from studies on human thinking. Psychologists and philosophers have come together around the idea that knowledge is actively created in the mind of the thinker. There is no simple fact that can be automatically memorized; rather, every bit of information is transformed by the thinker in the very act of perceiving, memorizing, and recalling it. Teachers versed in these processes will better understand what a student needs to succeed in a complex world. Equally important, they can better diagnose which aspects of the process are not working for children who are not learning appropriately.

It is precisely this deeper understanding of human cognition that has been revolutionizing teaching methods. A simple presentation of information is unlikely to engage learners in the necessary mental processes for constructing knowledge. New methods lead students through phases that require active thinking. They develop problems that motivate; they draw on prior beliefs; they teach meta-cognitive strategies; they experiment with applications. The new teacher cannot be content with covering subject

matter but must, instead, understand how to design learning activities that facilitate human construction of knowledge.

The second breakthrough educational idea from the last century is that people construct knowledge very differently at various stages in life. A first-grader is not an immature, incompetent fifth-grader but rather someone who constructs the



world in a totally different way. The same information presented to both students will lead to vastly different understandings because each child's mindset is so differently organized. In psychology, this is called developmental theory.

New teachers are learning to create developmentally appropriate lessons that help students construct more complex knowledge at the stage they understand. As important, they are learning to use assessment techniques to identify where along the path of developmental progress each student is.

Instead of resorting to grades as a class ranking tool, today's teachers use it to diagnose student development and adjust instruction appropriately.

The old myth that anyone who knows the subject well can teach must be replaced by the recognition that teaching is a demanding intellectual challenge that requires deep understanding of principles of teaching

and learning. Our new programs have been designed to develop graduates who apply this research base to analyze problems in their teaching practice. Accordingly, their culminating experience involves a classroom action research project. Such scholars can devise teaching solutions that allow many more students to succeed than was possible under the old approaches.

Systems Thinking

A second revolution shaping the education world is one that has been influencing thinking in many other sectors of society. Whether in business or science or sports or government, problems are increasingly conceptualized and addressed as systems. It is rarely enough to consider a problem in isolation; rather, it is typically seen as a piece in a system of interdependent factors. Low-quality water is the result of an ecosystem. Business products are developed in a system of finance and marketing as well as production. Likewise, teachers at all levels are beginning to understand that learning activities are developed within a system of teaching initiatives, often described as a learning community.

In addition to teaching about learning communities, we have revised our programs so they apply systems thinking. This is most obvious in our approach to linking courses together. In several of our programs, for instance, students will take course work in mathematics and science content at the same time as they receive lessons in mathematics and science teaching methods. Additionally, they will have field experiences where they observe and assist mathematics and science teachers. This coordinated cluster of instruction encourages students to see the connections between subject matter content, pedagogical theory, and field applications.

We have also revised the student teaching experience so that it, too, provides an integrated cluster of experiences. In seminars during their practice teaching semester, students reflect on the pragmatic dilemmas of their initial experiences. We also

challenge them to examine the deeper philosophical choices behind their classroom decisions. Their action research project studies the impact their personal choices have on the lives of the children. In short, by approaching this semester as a system of related learning activities, students will be guided in the powerful work of bringing their beliefs and actions together using the habits of a scholarly mind.

The rich organization of semesters is, in turn, framed by an overall curriculum designed around the New Jersey Professional Teaching Standards. This set of 10 standards articulates over a hundred skills, dispositions, and knowledge requirements for effective teaching. While teacher certification once depended on successful completion of an approved course sequence, today it is determined by how well teacher candidates meet these standards. An effective teacher preparation program must develop students who will do so.

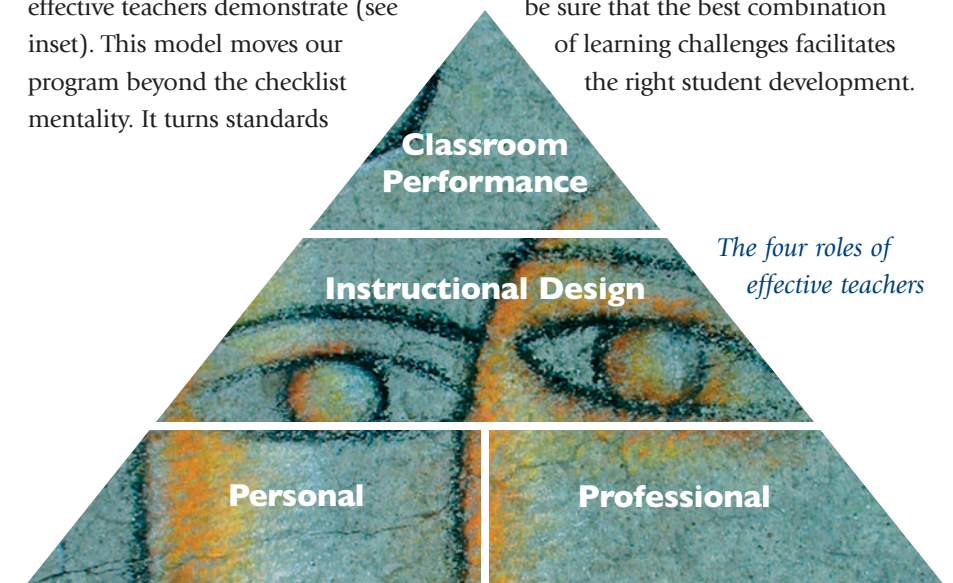
Once again, the approach we have adopted at TCNJ is to conceptualize the list of standards systemically. We have developed a working model that highlights four fundamental roles that effective teachers demonstrate (see inset). This model moves our program beyond the checklist mentality. It turns standards

into guideposts for developing expertise in each of these four roles. Every course, field experience, and assessment is expected to advance student progress toward success in each of these roles. All of this planning allows teachers to create lessons that respond to students' developmental needs as they work to achieve the demanding array of goals set for them.

The current demand for highly qualified teachers means that every one of our graduates will need to attain these high standards. In our research-based, systemically organized learning communities, we provide the programs through which they will.

Collaboration

Systemic programs require closer collaboration within the School of Education, the College, and the professional education community. Individual teachers working with students in isolation cannot bring together the range of experiences that integrate various roles while also blending theory and practice through emerging scholarly expertise. Faculty have to communicate at all levels to be sure that the best combination of learning challenges facilitates the right student development.



The School of Education's Professional Development Schools Network (PSDN) has become one of our most successful initiatives. Our PDSN office coordinates common professional development activities for 18 nearby school districts, bringing in speakers, conducting faculty workshops, and sponsoring a Summer Academy that attracts over 200 teachers. Together, we work on projects and grants. The network creates a rich exchange of ideas between public schools and connects our programs to partners across the region. This working collaboration provides frequent opportunities for our faculty and students to explore the union of theory and practice.

Another example of the potential of collaboration is emerging from our unique, five-year Deaf and Hard of Hearing program. Recently we became the home for the NJ Deaf Blind project. We also established a partnership with a private clinic, Speech and Hearing Associates, and plan to conduct child study teams for children diagnosed with hearing disabilities. An exciting round of discussions with the state's Marie Katzenbach School for the Deaf has identified a variety of common projects for our teachers and students. Additionally, the program has established close ties with the cochlear implant team at Children's Hospital of Philadelphia.

These affiliations, combined with TCNJ's Center for Assistive Technology and Inclusive Education Studies (See page 4), connects our faculty and students with leading practitioners. The challenges of educating children with hearing loss will not remain a textbook exercise at TCNJ. It will come to life because off these cutting-edge collaborations.

Community

The worth of an education is measured in the value it brings to the community. The real value of the School of Education's learning community will be judged by how well we prepare this new generation of teachers and how much they enhance the schools and the neighborhoods they serve.

Of course, we are proud of TCNJ's reputation for creating a welcoming intellectual community for our students. Inviting students into the community of learners in our profession is a vital step to encouraging them to join us in bringing scholarly vision to the schools. Our collaborations are able to draw them even more closely into the community of scholars in the world of practice.

Our programs also offer plenty of opportunities for our students to explore a school's culture. Where previously students visited schools to focus on teaching methods, they are now expected to ask questions about the culture of that school and the teachers' role in it. Field experiences aim to locate school practice within an understanding of the way the local learning communities have been constructed.

TCNJ students also are being asked to go beyond the school to the surrounding communities in the school neighborhood. We challenge them to study the interaction between lessons and the lives of the children. This study is not simply one of identifying interesting ethnic traits. It seeks a deeper understanding of how multiple culture groups struggle to define the public space of society. Our programs are especially committed to recognizing the nature of injustice that historically has

been woven into the status quo and defining the role educators can play in promoting social justice. Such themes are not left to lofty lectures. Each of the field experiences offers students assignments that probe the social connections between teachers and those who are taught.

In the end, this more demanding role of being a member of a community is precisely where John Dewey located education in a democratic society over 100 years ago.

Conclusion

The critiques and challenges facing today's educators are as demanding as at any point in American educational history. The weakness of the critics' arguments, however, is their assumption that nothing will ever change. Here at TCNJ, we are convinced that significant revisions in our own learning communities can help meet these concerns. We cannot predict that our research-based, system thinking grounded in collaborative, learning communities will resolve all these issues. However, we do believe they offer the sort of educational leadership the state has come to expect of TCNJ. In the spirit of some of those first students, we have "confident hope" that, as we prepare to celebrate our sesquicentennial, we are ready to meet the demands of our generation just as our forebears met theirs.

Terence O'Connor was named dean of the School of Education in 2002, after 16 years as a professor and administrator at Indiana State University.