A recent national conference on teacher quality, Secretary of Education Richard Riley said:

If I could boil down the biggest challenge to K-12 education in one sentence, it would be this: “We’ve got a record number of children to teach, and a shortage of qualified teachers.” Many school districts are reporting the worst shortages of qualified teachers in memory, particularly in math, science, special education, and bilingual education. It’s gotten so bad that some schools have been forced to put any warm body in front of a classroom. It has been estimated that 250,000 teachers are working without proper preparation in course content, or without any kind of training in how to teach. Even well-prepared teachers are being forced to teach “out of field.” (Riley, 2000)

A recent study of the teacher shortage through the academic year 2008-2009 substantiates the secretary’s claim. And it reports that 568,000 newly hired teachers are projected to be needed for private schools from 1998-1999 until 2008-2009 (Hussar, 1999). Moreover, Catholic educators from around the country have concurred with the predictable scenario—as the vacancies in public schools increase and differentials in remuneration remain as high as they are, the effect on Catholic schools could be very serious indeed (O’Keefe, 1999).

In light of the concern about teacher recruitment and retention, three recent studies related to new teachers will be reviewed here. They all came from publications of the American Educational Research Association. The first article, written by Richard M. Ingersoll (1998) of the University of
Georgia, examines the phenomenon of underqualified teachers in secondary schools. The second, by Marvin Wideen of Simon Fraser University, Jolie Mayer-Smith of the University of British Columbia, and Barbara Moon (1998) of the University College of the Fraser Valley, reviews the research on learning to teach. The third, by Ken Zeichner (1999) of the University of Wisconsin-Madison, reviews new scholarship on teacher education. It is hoped that these articles will help Catholic educators to think imaginatively about ways to bring new high-quality teachers into schools, and to create circumstances that will foster their vocation in the long term.

There is a shortage of people taking teaching jobs, but the problem is larger than that. In his article, “The Problem of Underqualified Teachers in American Secondary Schools,” Ingersoll (1998) demonstrates that a very large number of teachers are assigned subjects in which they have neither a major, a minor, nor even a state certificate. He explains the phenomenon of out-of-field teaching: how much of it goes on; to what extent it varies across different subjects, across different kinds of schools, and across different kinds of classrooms. He then speculates on the reasons why it continues. Ingersoll relies heavily on the federal School and Staffing Survey, last conducted in the 1993-1994 academic year (a round of data collection is going on during the 1999-2000 academic year). Table 1 gives a summary of his findings.

Table 1
Percentage of Secondary School Teachers in Each Field Without a Major or Minor in the Field

<table>
<thead>
<tr>
<th>FIELD</th>
<th>PUBLIC</th>
<th>PRIVATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>24.1</td>
<td>25.7</td>
</tr>
<tr>
<td>Math</td>
<td>31.4</td>
<td>42.0</td>
</tr>
<tr>
<td>Science</td>
<td>19.9</td>
<td>23.0</td>
</tr>
<tr>
<td>Life Science</td>
<td>33.1</td>
<td>34.0</td>
</tr>
<tr>
<td>Physical Science</td>
<td>56.9</td>
<td>53.9</td>
</tr>
<tr>
<td>Social Studies</td>
<td>19.3</td>
<td>23.9</td>
</tr>
<tr>
<td>History</td>
<td>53.1</td>
<td>53.1</td>
</tr>
</tbody>
</table>


With the exception of physical sciences (a slightly lower percentage in private schools) and math (a significantly higher level in private schools), the two sectors face the same problem. There are, predictably, differences within sectors. Ingersoll explains that in most fields, teachers in high-poverty schools are more likely to be teaching out of field than are teachers in more affluent areas. He continues:
Small schools (fewer than 300 students) have higher levels of out-of-field teaching in each of the core academic fields than do larger schools (600 or more). This gap is especially striking in the private sector. In a number of fields, large private schools have among the lowest overall levels of out-of-field teaching. On the other hand, small private schools (which represent over 80% of all private schools) have the highest levels. (Ingersoll, 1998, p. 30)

In speculating why this practice is so widespread, he echoes the lament of many about the low status of the teaching profession:

The comparison with traditional professions is stark. Few would require cardiologists to deliver babies, chemical engineers to design bridges, or sociology professors to teach English. The commonly held assumption is that such traditional professions require a great deal of skill or training—that is, expertise—and hence, specialization is assumed unnecessary. (Ingersoll, 1998, p. 35)

The strength of Ingersoll's (1998) argument is in the presentation of thought-provoking data. Less persuasive is his argument for improvement. He argues the obvious—teachers need more professional respect. But he does not offer any creative plans to overcome the situation. Second, he equates quality teaching with academic credentials. While such a link is plausible, the reader would benefit from more detailed studies of what actually happens in classrooms. Finally, it is interesting that his study completely neglects the teaching of foreign language.

Wideen, Mayer-Smith, and Moon (1998) review 93 empirical studies on learning how to teach in their article "A Critical Analysis of the Research on Learning to Teach: Making the Case for the Ecological Approach." The authors use a helpful framework to analyze teacher education literature. Studies are categorized by subject area, the largest being prior beliefs, followed by program monitoring, short-term interventions, long-term interventions, student teaching, and first year. The review supports the contention of many educators and politicians that most teacher education programs are quite ineffective. Yet there are lessons to be learned from these programs.

First, induction is key because beliefs about teaching are well established before a student goes to college. A necessary first step in the induction process is autobiographical reflection: What are the images, patterns, and techniques that the prospective teachers carry with them after more than 16 years of observing teachers as students? The authors quote Britzman, who described implicit institutional biographies in the cumulative experience of school lives that contribute to well-worn and common-sense images of the teacher's work (Wideen et al., 1998). In fact, the authors found that the most common recommendation made by researchers in the studies we reviewed
was that having beginning teachers examine their prior beliefs was an essential first step in the process.

Second, effective programs are idiosyncratic; there is no one best way to prepare future teachers. Yet, some positive elements do emerge. The authors state that the program features that appeared to best support beginning teachers were constant and significant support, working with cohort groups, and a systematic long-term message that provides some guidance and direction for personal development (Wideen et al., 1998). Each teacher and each program must be seen in their particular contexts, thus the ecological perspective.

Third, the authors notice an ethnic and racial mismatch between prospective teachers and their students. They state that in many settings researchers notice a homogeneous population of beginning teachers attempting to learn how to teach a heterogeneous population of students in schools (Wideen et al., 1998). Furthermore, this issue of ethnic divide has often gone unattended in teacher preparation programs.

Finally, Wideen, Mayer-Smith, and Moon (1998) notice a shift in the role of the university. In the past, prospective teachers experienced knowledge in a compartmentalized and decontextualized way. The authors explain:

The implicit theory underlying traditional teacher education was based on a training model in which the university provides the theory, methods and skills; the schools provide the setting in which the knowledge is practiced; and the beginning teacher provides the individual effort to apply such knowledge. (p. 167)

The Wideen, Mayer-Smith, and Moon (1998) article is especially helpful for those who hire teachers with little or no formal professional training in a university. Hiring untrained teachers has been common in Catholic schools for a long time and is now becoming more frequent in public systems, especially those that acutely experience the teacher shortage. The school is becoming the primary site for teacher preparation. Many of the lessons outlined in this article, gleaned from the experience in schools of education, apply as well to elementary and secondary schools that induct and mentor new members of the teaching profession. And as school administrators and teachers take on the role of teacher training, it behooves them to be conversant with the literature. Wideen, Mayer-Smith, and Moon provide an important service but try to cover too much ground in one article. Moreover, their recommendations for improvement are rather vague.

In “The New Scholarship in Teacher Education,” Zeichner (1999) examines the research on teacher education since 1978. The author explains that before 1978 very few researchers actually looked at the process of teacher education as it happened over time and how teachers and student teachers interpreted and gave meaning to the preservice and professional development programs they experienced. The author notes a shift from positivistic studies
to broader range, qualitative inquiry. The latter is more respectful of the complexity of activity of teacher education and teachers as intelligent beings capable of purposeful thought.

Zeichner (1999) uses five categories to organize the literature on teacher education: survey research; case studies of teacher education programs; conceptual and historical research; studies of learning to teach; and examinations of the nature and impact of teacher education activities, including self-study research.

Like many of his colleagues, Zeichner (1999) prefaces his review of the literature with an observation about the low status of teacher education, both in the university and among practitioners. He then describes important findings that come from the five research categories. The most notable follow.

Surveys substantiate the phenomenon of ethnic mismatch described earlier; as a result, teacher educators must ensure that newcomers learn cultural sensitivity through exposure to cultures other than their own and careful scrutiny of their own prejudices.

Case studies, especially those that have a longitudinal dimension, offer helpful concrete examples of programs that work. As opposed to the pre-1978 paradigm, this work provides a close-up and detailed look at particular teacher education activities and shows what a teacher education program looks like from the inside, from the perspective of students and faculty. These carefully detailed studies of practice often describe situations very different from those suggested by course bulletins and catalogues (Zeichner, 1999, p. 9).

Research that does not include empirical study of current realities, what Zeichner labels conceptual or historical, has articulated the long-standing debate in teacher education between a concentration on teaching methods and a focus on specialized disciplinary knowledge. This genre of research has also brought to light critical perspectives which include the pervasiveness of a market mentality in a capitalist culture, lingering effects of racism, and the centrality of gender roles in determining the work and status of teachers.

Studies of learning to teach illuminate the dynamics of the process in various settings. It is clear that one size does not fit all. Nonetheless, certain elements of success emerge (Zeichner, 1999): organizing students into cohort groups; new and more connected relationships between school-based and campus-based courses; using assessment tools (i.e., portfolios) that are more comprehensive than standardized examinations; service-learning experiences that expose students to local culture and need; and the use of case studies and narrative that help prospective teachers examine the beliefs and attitudes that they bring into the classroom.

Finally, Zeichner (1999) offers helpful insights about the business of teacher education. He provides insight into the politics of the American Educational Research Association in its turf issues and hierarchies. The cre-
ation of a distinct strand for teacher educators is called Division K and has allowed much of the new research to flourish. He examines the internal politics of the universities, where teacher education programs have long been cash cows, divisions that have large income from tuition but low salaries and high teaching loads for professors. He describes the dynamics of book publishing, mostly an English-only option because of the demands of the market and publishers’ desire for profitability. The article is thought provoking and informative. However, it is unfortunate that Zeichner offers no relief from the self-pitying tone of much teacher education literature that blames others as it bemoans the discipline’s lack of status in the academy, in state houses, and in schools.

SOME CONCLUDING THOUGHTS

During the 1994-1995 academic year, the National Center for Education Statistics conducted its periodic study of teachers, those who have stayed and those who have left the profession. It asked those who left to name the three major reasons for their departure. The leading reasons were: poor student motivation to learn (17.6% public and 5.7% private); student discipline (17.9% public and 10.5% private); poor opportunity for professional advancement (3.5% public and 14.6% private); and lack of recognition and support from the administration (13.8% public and 30.2% private) (Whitener et al., 1997, p. 15). The figures, especially those regarding recognition and support from private-school administrators, are challenging indeed.

In light of the teacher shortage in both numbers and quality and the movement to school-based teacher education, administrators will need to offer more recognition and support. They face new and important responsibilities for teacher training and retention. Articles such as the ones reviewed here offer a way forward.

Catholic educators have some unique advantages as they move ahead. For example, the Catholic understanding of vocation provides a framework for reflection on one’s past history, which has been identified as the crucial starting point in teacher education. The focus on community in Catholic education provides opportunities for support networks and shared reflection, which have been so helpful in the teacher-education cohort model. Catholic social teaching, with its clear statements on the sinfulness of racism and its stance on the dignity of people from all cultures, can address the ethnic mismatch that so many studies identify. Finally, the Catholic school, which has enjoyed a long tradition of site-based management based on subsidiarity and which is free from many governmental constraints, is well suited for this era of experimentation and change.
REFERENCES


