# Gathering Faculties

## The Old Divide Was between K-12 and Higher Education; the New One Is between Education and Liberal Arts Faculty

NANCY CARRIUOLO

As pre-K-12 classrooms become more diverse, and teachers and students are held ever more accountable for learning, the task of preparing pre-K-12 teachers becomes more of a hot potato. Reflecting public skepticism about whether teachers know as much as they should, Congress has required teacher preparation programs to report their graduates' pass rates on certification exams, and states are ranking colleges based on those results. The media, policymakers and the general public are all asking: Who is—better yet, who *should be*—responsible for preparing pre-K-12 teachers to enter classrooms fortified with the necessary skills and knowledge?

Education professors and pre-K-12 teachers are inextricably linked in the business of preparing new teachers. If nothing more, pre-K-12 and higher education have long cooperated over the student teaching experience (during which education majors are given an opportunity to teach under the supervision of a veteran teacher). Schools provide soon-to-be teachers with real-life classroom experience and—in good situations—mentoring by an experienced teacher.

Business and community groups, teachers unions, accrediting associations, foundations, professional associations, and state and federal education agencies have also had a voice in teacher preparation and provided much-needed resources. One group that is relatively new to teacher preparation discussions, however, is arts and sciences professors. What do these experts in "content" bring to the table? What should they take away?

### Arts and sciences expertise

Education professors, while knowledgeable about content, are experts in pedagogy—the art and science of teaching. Arts and sciences professors, in contrast, are experts in specific content areas such as math, English or science. They are the standard-bearers of the academic disciplines. They promulgate existing knowledge and, through their research, create new knowledge in their disciplines. They decide through their teaching what should be known by, for example, a math, science, history, art or English major in the 21st century. For an in-depth discussion of an academic issue centered around, say, mathematics, the academic community would turn to a mathematics professor, probably a graduate-level math professor, but not a math education professor and certainly not a pre-K-12 math teacher. The traditional academic pecking order places the graduate professor—with his specialized knowledge of an academic discipline—at the top, and the elementary school teacher—who must masterfully interconnect all the basic disciplines—at the bottom.

Education reformers of various stripes have argued that more and/or better content must be added to teacher preparation programs. The American Council on Education (ACE), the American Association for Higher Education, the Council of Colleges of Arts and Sciences (CCAS) and the American Association of Colleges for Teacher Education (AACTE) among others have concluded that arts and sciences professors' knowledge of content is vital to preparation of quality teachers.

Still, molding the perfect K-12 teacher requires a balance between knowledge and pedagogy. With the diverse ability levels and backgrounds of today's students, delivery of knowledge is just as important as knowledge itself. As a 1999 ACE report put it: "Teachers need to be knowledgeable about what they teach and proficient in how to teach it."

This message is also being delivered powerfully at the state level. As Rhode Island certification specialist David Roy explains, "Rhode Island's state program approval standards call for an assessment system to ensure that teacher preparation students meet the state's beginning teacher standards (how to teach) as well as content standards (what to teach). These two types of standards call out for collaboration between arts and sciences and education professors."

### Why doesn't collaboration just happen?

Reform of teacher preparation requires the combined knowledge of arts and sciences professors, education professors and experienced classroom teachers. Yet, in addition to the unjust academic pecking order—with the graduate faculty at the top and the classroom teacher at the bottom—a variety of differences in working conditions and expectations discourages collaboration among these practitioners. Consider:

**Reward systems.** Tenure and promotion decisions are usually based on a faculty member's record of research, teaching and service. The principle of

"publish or perish" has long haunted young arts and sciences faculty. To be promoted and to earn tenure, they must publish in competitive, scholarly journals within their disciplines. Spending time working with K-12 issues instead is unlikely to impress their colleagues on tenure and promotion committees.

Education faculty may be evaluated in the same general categories of research, teaching and service. But they are expected to work with schools, engage in research related to schools and publish in journals that have either a higher education or pre-K-12 audience.

Tenure and promotion committees and others must send out a new message about the rewards arts and sciences faculty may earn by working with schools. Sage policymakers should also devise rewards for senior professors who often have time to work with K-12 schools, but lack incentives to do so.

**Professional development.** Arts and sciences professors and education professors belong to separate professional organizations and usually attend separate professional meetings. Notably, however, groups such as the CCAS and the AACTE in recent years have designed national meetings to attract both arts and sciences and education faculty and to foster understanding of their joint role in preparing teachers.

**Academic silos.** Education programs are physically separated from arts and sciences on most college campuses. The two faculties usually do not see each other except perhaps at campus-wide faculty senate meetings, so they are unlikely to develop collegial relationships, read one another's research or chat about common academic interests. Moreover, on any sizeable campus, education and arts and sciences faculties report to separate deans with different goals. Bringing the faculties together in collaborative ventures requires the blessing of both deans and the strong encouragement of upper administration, as evidenced in institutional planning and resource allocation.

**Different ways of thinking and talking.** Seminal works used to support academic arguments in education differ from those used in arts and sciences. Discussion can be awkward because the two faculties do not use the same terminology.

**Expectations and academic freedom.** Arts and sciences professors are not threatened by the task of helping to reshape the education department's teacher preparation classes. But education majors also sit side-by-side with other freshmen and sophomores in entry-level, non-major classes designed to introduce all students to the arts and sciences. Arts and sciences professors asked to reshape these general education classes to meet content standards for teachers may feel that the sanctity of their classrooms is being threatened.

## Bringing the two faculties closer

K-16 councils are one model for collaboration (see National Association of System Heads at http://www.nashonline.org/). Since 1991, Georgia State University's arts and sciences and education faculties have worked together in a council to develop curricula for teacher preparation, spurred on in part by the university system's associate vice chancellor for academic affairs, Jan Kettlewell, a former education dean who knows well the difficulties of K-16 collaboration.

Team-taught classes offer another collaborative model. In Rhode Island, arts and sciences and education faculty and K-12 teachers team-teach a "standards institute" to their peers to demystify content standards. Two teaching salaries are required for one course, but the results are an enriched experience for the class and for the teamed faculty. Furthermore, teaming provides an opportunity for arts and sciences faculty to learn more about pedagogy from education faculty and K-12 teachers.

Joint appointments also break down barriers between education and arts and sciences faculty. A physics professor, for example, might hold a joint appointment in the education department where she teaches science education. Arts and sciences faculty are wary of these appointments, though, because attending two sets of departmental meetings, advising a double set of majors, and publishing in both arts and sciences and in education can spread the professor thin. Policymakers should limit the expectations of jointly appointed faculty and reward them perhaps with twice as much professional development funding as colleagues with single appointments.

Rhode Island is one of five states selected by the State Higher Education Executive Officers for study of statewide K-16 initiatives. The state also has received federal support under Title II for bringing together arts and sciences and education professors with their colleagues in pre-K-12 for discussion and for curriculum revision.

During 2000-2001, around 150 pre-K-16 faculty volunteered their time to discuss teacher preparation reform. A separate but linked discussion revolved around impediments to arts and sciences and education professors working together. Title II funded only the snacks at these meetings. Still, this small investment has yielded big payoffs.

These discussions produced recommendations and action plans for 2001-2002, which were reviewed and unanimously supported by the Rhode Island Board of Governors for Higher Education as well as by the Rhode Island Office of Higher Education's Teacher Preparation Policy Group, comprised of upper-level decision-makers in teacher preparation. This group includes the commissioners of education and higher education; representatives from business groups, community groups and teachers unions; and top administrators of public and independent colleges and universities that offer teacher preparation programs.

As part of the recommended actions, faculty are working to revise curricula that affect future teachers.

Not only education courses, but also arts and sciences courses taken by teacher preparation students have been the subject of these revisions, which were undertaken with Title II funding.

In summer 2001, University of Rhode Island Education Professor David Byrd directed a Title II-funded initiative that brought together arts and sciences professors, education professors and pre-K-12 teachers and administrators to ensure articulation between national content standards, the content knowledge of teacher education candidates, and their ability to apply this knowledge as beginning teachers. Says Byrd: "We asked ourselves, 'What do teachers need to know? Are there standards to guide us? Do current course assignments in arts and sciences and in education cover all standards?'"

At Rhode Island College, English Professor Marjorie Roemer and education Professor Carolyn Panofsky directed another Title II-funded project that brought together professors and teachers from a range of content areas to plan literacy instruction for education majors.

Policymakers and campus leaders need to understand the impediments to pre-K-16 collaboration so that they embed in programs and policies a variety of rewards and recognitions such as release time, summer stipends and credit toward promotion and tenure. Supportive public policy and institutional policy are vital to steadying the tentative steps that arts and sciences and education professors have taken toward working together and with their pre-K-12 colleagues.

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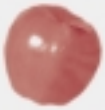
***Nancy Carriuolo*** *is associate commissioner for academic affairs in Rhode Island. She is on leave from the University of New Haven, where she was dean of a college of arts and sciences that included a department of education.*



## Digital Teaching

Eighty-four percent of public school teachers report having at least one computer in their classroom, and 64 percent report having Internet access in their classroom. But not all schools nor all teachers are equally equipped to integrate technologies into education.

Just 51 percent of teachers in largely minority or low-income districts have Internet access, according to a recent study by the U.S. Department of Education. And teachers in largely minority schools are much less likely to use email than those in schools with small minority populations.

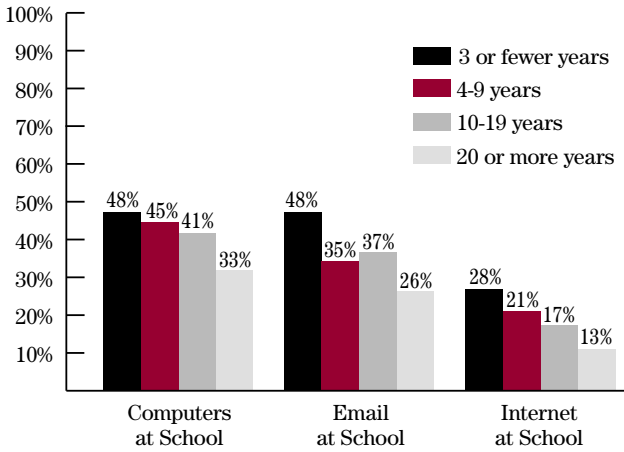
The federal study also finds that relatively new teachers are much more likely to use technology in the classroom than more experienced teachers. (See graph.)

Asked about barriers to using technology in instruction, more than 80 percent of teachers point to a lack of release time for practice using computers and the Internet.

A separate study by the national newspaper *Education Week* finds that despite the infusion of computers into schools, several groups remain on the wrong side of the Digital Divide: minority youngsters, girls, rural students, low achievers, children with disabilities and students for whom English is a second language. Just 29 percent of all middle- and high-school students surveyed for *Education Week* said that when they had trouble understanding a topic or concept, their teachers used computers to help them understand it in a different way.

Technological aspects of teacher preparation vary significantly from district to district, according to the *Education Week* data. Of the six New England states, only Connecticut and Rhode Island require technology training for initial teacher licensure, and only Connecticut requires technology training for teacher recertification. No New England state has time requirements for technology-related professional development.

**Percentage of Public School Teachers Reporting Significant Use of Computers, Email and the Internet at School, by Years of Teaching Experience: 1999**




**Teachers who reported that computers were not available to them anywhere in the school were excluded from the "Computers at School" analyses presented in this figure. Teachers who reported that email was not available to them anywhere in the school were excluded for the "Email at School" analyses. Teachers who reported that the Internet was not available to them anywhere in the school were excluded from the "Internet at School" analyses.**

*Source: U.S. Department of Education.*