The current education reform movement was triggered by the report of the National Commission on Excellence in Education A Nation at Risk (1983). Three subsequent reports shifted the national spotlight to the teacher education arena, those of Holmes Group (1986), the Carnegie Task Force on Teaching as a Profession (1986), and the Renaissance Group (1989). All merit the serious attention of schools of education and state departments of education. Nevertheless, the Holmes Group has had the most enduring influence on the revolution in the teaching profession (Lunenburg and Ornstein, 1996).

THE HOLMES GROUP
The Holmes Group is a national organization of some 100 research universities dedicated to solving problems associated with the generally low quality of teacher preparation in the United States. The initial focus of the Holmes Group was on improving teacher education programs in their own universities and in others sharing a kindred institutional orientation toward research.

The Holmes Group challenges the 250 leading research universities to engage in a serious commitment to quality, first in their own institutions and then in others throughout the nation. The universities in which these 250 education schools reside have a tremendous effect on the remaining one thousand places that educate teachers and other educators. These research universities develop the knowledge base for the field of education; they influence education policy; and they prepare most of the individuals who attain leadership positions in the education establishment.

The Holmes Group recently released its latest publication entitled Tomorrow's Schools of Education (1995). This report was preceded by two major publications: Tomorrow's Teachers (1986), which outlined a new plan for preparing teachers and Tomorrow's Schools (1990), which described the principles for design of Professional Development Schools.

The Holmes Group report (1995) Tomorrow's Schools of Education challenges the 250 leading research universities to raise their standards of quality by doing the following:

Redesigning the Curriculum. Here studies focus on the learning needs of the young and the development of educators across their careers--replacing studies less focused on
youngster's learning and development, organized by segregated roles for educators, and centered on initial credentialing.

Developing a New Faculty. Now a clear minority, the numbers of university faculty who are as at home working in the public schools as on the university campus will come to comprise the majority of the education school faculty. Board-certified teachers and other qualified practitioners will join these faculty as colleagues in conducting important research and in better educating the nation's educators.

Recruiting a Culturally Diverse Student Body. Before the next generation of educators retires, almost half of the nation's youngsters (46 percent) will be from one or another minority group. The nation's education workforce—teachers, administrators, counselors, and those who educate educators—must be more diverse than today. Programs must be mounted to actively recruit, retain, and graduate highly diverse groups of education leaders at initial and advanced levels.

Creating Professional Development Schools. Instead of working predominantly on campus and occasionally in schools across the American landscape, the faculty and students will do much of their work in Professional Development Schools. These are real public schools selected and joined in partnership with the university for their innovative spirit and serious intent to improve the quality of learning for educators and students.

Building Networks at Local, State, and National Levels. Long too remote from the professionals and public they serve, the education schools will together form an interconnecting set of networks at local, state, regional, and national levels-to ensure better work and accountability (The Holmes Group, 1995).

PROFESSIONAL DEVELOPMENT SCHOOLS

The Holmes Group emphasizes the academic and field experience components of professional education and their close articulation. The Holmes Group recommends establishing Professional Development Schools within public school districts analogous to teaching hospitals in medicine. The Professional Development Schools are unique in their ability to combine research, teacher training, and development of new models of teaching and learning simultaneously. While initiatives have addressed these concerns separately in the past, the professional development schools will permit the orchestration of a future vision of what schools will be like. The Professional Development School (PDS) is a commitment by a school of education and public schools to ensure student success and achievement. The PDS is a preparation site for preservice educators and for the continuing professional development of educators.

The PDS is far more than just a clinical setting. It is a comprehensive collaboration for school innovation, where a substantial amount of inquiry is ongoing. University faculty and PDS teachers are able to develop common research questions that link practical knowledge with scholarly pursuits. The PDS provides a place for university faculty to help shape quality programs that serve as models of learning, inquiry, reflection, technology, innovation and professionalism.

The PDS provides a place for the new kind of professional who is equally at home in the university and in the school, and who in fact, works in both settings. The PDS provides an indispensable context for this professional, as an institution where school and university personnel regularly meet in joint and collaborative work. PDS teachers serve as clinical instructors for professional preparation programs, and each master teacher holds an adjunct faculty status with the school of education (Darling-Hammond, 1994).
According to a survey of the American Association of Colleges for Teacher Education (AACTE), there are currently over 400 PDSs nationwide. Many of these teaching laboratories are associated with institutions that are accredited by the National Council for the Accreditation of Teacher Education (NCATE). As a result, NCATE is in the process of developing standards for PDSs that can be applied in lieu of the NCATE traditional approaches to teacher education standards used during on-site accreditation visits (Lunenburg, 1995).

Common ground can be found in the statements of purposes and principles made by networks and groups that have pioneered the PDS concept. These include the Holmes Group, the National Network for Educational Renewal, the National Center for Restructuring Education, School and Teaching (NCREST), the NEA Teacher Education Initiative, the AFT Professional Practices Project, and various state partnerships and networks.

These groups commonly agree that PDSs represent partnerships between schools and universities that come together for the following purposes:

1. To support the simultaneous renewal of schools and colleges of education;
2. To provide clinical education for new teachers in restructuring settings;
3. To support continuing professional development;
4. To support inquiry directed at the improvement of practice.

And the following criteria have emerged already for identifying PDS sites:

- University and P-12 school faculty share a learner-centered approach to teaching and learning.
- There is parity between school and university within the collaboration.
- Issues of equity are addressed in the partnership.

TEACHING INTERNSHIPS

To replace the "sink or swim" approach to teacher training, Arthur Wise, Linda Darling-Hammond, and Tamar Gendler (1990) proposed that a paid internship be required for aspiring teachers. Under the current system, the typical message to a new teacher is: Figure it out for yourself, do it all yourself, and keep it to yourself. Instead of that makeshift system, the Rand Center for the Study of the Teaching Profession recommends a new, one-year formal training program similar to those for engineers, architects, and physicians. The program would emphasize hands-on training along with guidance, support, and as the year progresses, increased responsibility. Teaching children means being prepared for complexity. Due to that complexity, even well intentioned initiatives such as student-teacher programs and mentoring may fall short.

Under the plan, students would serve as teaching interns after they graduate from college but before they could apply for a license. The primary purpose: to weed out the unqualified and provide a support system for the best teacher candidates. The interns would observe senior teachers and teach some classes, gradually progressing to greater degrees of responsibility. Interns also would teach students of different ages in urban, rural, and suburban settings.

Senior teachers and a director would head the internship programs. School districts could recruit current teachers for short or long stints to guide interns, consult with them, observe them, evaluate them, and share the responsibility for teaching their students. In addition, certain schools would be designated as "teaching laboratories" or Professional Development Schools. Most of those would be at schools with state-of-the-art teaching to
typically underserved populations.

While interns should be paid, the delicate issue of salary should be left up to individual states and localities. Because many interns will have only a part-time teaching load, school districts do not necessarily have to offer full-time pay, yet failing to offer any pay could discourage students from taking part. Union membership could be a potential stumbling block. To diffuse that issue, creating a partial union membership for interns may solve the problem.

A set of guidelines for a teacher internship program has been developed in Minnesota. The state is reviewing the guidelines and plans to ask the state legislature to fund a pilot program. If funded, every pilot program in the state would involve more than one school district and have a director who would select faculty and staff (Wise, Darling-Hammond, and Gendler, 1990).

PROFESSIONAL DEVELOPMENT AND TECHNOLOGY

Many schools have determined that onetime inservice training for the entire faculty is ineffective for teachers, particularly for teaching computer use and for helping teachers develop methods to use computers as instructional tools (Office of Technology Assessment, 1995). Innovative and relevant professional development programs are needed to meet teachers' diverse needs in technology. Such programs should offer teachers opportunities to learn, practice, and integrate what they learn. Additionally, they need to have informal and formal coaching on the new information, techniques, and pedagogy. Mergendoller and others (1994) suggest that technology should be seen as a means to an end, rather than an end unto itself.

Mergendoller (1997) reported that "even with a carefully designed professional development program, teachers who succeed in integrating educational technology into their instruction generally do so by spending a great deal of their own time before and after school." According to a study conducted by Mergendoller, Sack, and Horan (1995), teachers spend an average of 36 hours a year learning how to use technology in their teaching, and 60% of that time is spent working by themselves, while 17% of the time is spent in consultation with their colleagues. An even lesser percentage, 13%, is spent in inservice sessions or technology courses.

Prior to the Mergendoller, et al (1995) study, Marshall (1993) found that many teachers reported that their technology training was too hurried and lacked adequate follow-up support. They also reported that the training usually occurred just before the actual use was to begin; therefore, they complained that assimilation and practice of the newly acquired technique was not long enough. Regardless of the amount of professional development opportunities afforded to teachers, the major factor, according to Becker (1994), in differentiating schools with exemplary computer-using, technology-integrating teachers is on-going staff support.

Professional development is critical for the preparation and continued growth of teachers and administrators. Darling-Hammond and MacLaughlin (1995) suggested that professional development should provide opportunities for teachers to reflect critically on their practice and to fashion new knowledge and beliefs about content, pedagogy, and learners. Furthermore, they suggested that professional development should prepare teachers to see complex subject matter from the perspective of diverse students. As Darling-Hammond and McLaughlin (1995) called for a change in the professional development of teachers, Brown and Irby (1997) followed with a call for a change in the
professional growth of principals that would enable them to refine leaders practices and to increase school effectiveness. Brown and Irby suggested that principals who engage in self assessment, in problem-solving dialogue with colleagues, in reading to gain information, and in establishing professional goals, are principals who direct and enhance not only their own professional development but also the professional development of their faculty.

ADDED MATERIAL
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