The reform movements of the 1980s triggered numerous demands to reexamine and reform the way students and their teachers are educated. This Digest examines the implications for vocational teacher education emerging from general teacher education reform movements. It discusses how excellence in vocational education teaching can
be achieved and proposes 21st century models for vocational teacher education.

IMPACTS OF REFORM MOVEMENTS ON VOCATIONAL TEACHER EDUCATION

Several of the major reform initiatives of the 1980s and early 1990s argued that improving education requires improving teacher quality and, accordingly, teacher education. Numerous changes in teacher recruitment, preparation, and certification were proposed. (For a detailed list, see Hartley, Mantle-Bromley, and Cobb 1996.) In response to the calls for reform, general teacher education programs raised admission standards/exit requirements; revised curricula to reflect multiculturalism and new K-12 standards; paid more attention to pedagogy, teaching practice, and relevance; included clinical experiences in public schools and other learning environments; and proposed new model standards/principles for licensing beginning teachers (Lynch 1997).

As of 1989, the only major impacts of national education reform movements on vocational teacher education at the macro (national) level were stiffer requirements for entry into teacher education programs and, to a lesser extent, more credit hours/time devoted to student teaching/clinical-type experiences with public schools (Lynch 1991). Until 1993, the discussion of reform of teacher education in the vocational education literature was limited to individual authors' suggestions for a vocational education response to reform initiatives and comments on the problems posed by pressures for reform (Lynch 1997).

In response to mounting evidence of the deterioration of vocational teacher education, (Dykman 1993), the University Council for Vocational Education and the National Association of State Directors of Vocational Technical Education Consortium formed a joint task force that identified 13 points for initiating a reform process entailing designing and implementing a customer-driven learning system and an accountability system (Lynch 1997). Like earlier publications examining general teacher education, the responses to the task force report focused on the need for excellence in vocational teacher education.

ISSUES IN ACHIEVING EXCELLENCE

Debate on the question of how to pursue excellence in vocational teacher education programs focused on vocational education's mission, audience, and delivery.

NEW MISSION?

--Until the advent of the reform movement, vocational education had been viewed as a separate system of education intended to meet the nation's labor needs by providing
below-college-level training for specific occupations (Lynch 1997). In the late 1980s, that view began to change. Borrowing words used by Dewey in 1916, Tozer and Nelson (1988) urge vocational teacher educators to teach prospective teachers to provide students with generalizable higher-order skills by teaching "through vocations instead of for vocations" (p. 22). Sharp (1996), in his discussion of the transition to a "post-Fordist" economy, asserts that the recent blurring of traditional distinctions between mental and manual occupations and between academic and vocational education necessitates changing vocational teacher education so that future teachers can develop a new core work force with the technical and interpersonal skills required for a less hierarchical workplace. Gregson (1993) contends that vocational teacher educators must learn to produce teachers capable of transforming their students into the critical thinkers and problem solvers needed to make workplaces more democratic and emancipatory. Miller (1996) asserts that the mission of vocational education (and thus vocational teacher education) should be based on the principles of constructivism. Constructivism is a cognitive approach that emphasizes "constructing" knowledge through a problem-solving process designed to produce "learners who are problem solvers, lifelong learners, makers of meaning, collaborators, change agents who are also able to change, and practitioners of democratic processes" (ibid., pp. 69-70).

NEW AUDIENCE?

--Vocational education's changing audience has been another impetus for change in vocational teacher education programs. Rudolph, Fry, and Barr (1988) and Nolan and Venable (1988) underscore the importance of developing preservice and inservice educational activities to equip vocational education teachers with the knowledge and skills required to serve the growing numbers of minorities, at-risk students, itinerant populations, and adult students enrolled in vocational education programs.

NEW CURRICULUM?

--Hartley et al. (1996) propose a restructured teacher preparation program incorporating integrated content, integrated academic and work-based learning, partnerships with businesses/industries, full range of clinical experiences and applied instructional and curricular technology, and a degree required to teach (as opposed to alternative certification). Nolan and Venable (1988) emphasize the importance of responding to changing vocational student demographics by supplementing vocational education teacher curricula with courses in the psychology and learning processes of adult learners. Copa and Plihal (1996) question whether the vocational education curriculum should remain a collection of separate fields or be restructured into a "comprehensive subject for learning about work, family, and community roles" (p. 98).
NEW TEACHING METHODS?

--Gregson (1993) urges vocational teacher educators to replace their traditional "master-apprentice" relationship to their students with a critically oriented approach in which they view students as active learning partners, implement cooperative learning and choice, make learning experiences relevant and meaningful, encourage active citizenship, and create an environment conducive to reflective thinking. Biggs, Hinton, and Duncan (1996) assert that contemporary approaches to education (tech prep, integrated curriculum, cognitive and work-based apprenticeship, career academies, and magnet schools) require teachers to develop new methods suitable to their new roles as collaborators, facilitators of learning, and lifelong learners; become as familiar with the workplace as they are with the school setting; and make school settings reflect workplace environments. They also emphasize the importance of conducting prospective teachers' clinical learning experiences in schools that integrate teacher development and instructional programs and have a diverse student population.

NEW ASSESSMENT METHODS?

--Johnson and Wentling (1996) advise vocational teacher educators to abandon the traditional "testing culture" in favor of an "assessment culture" that is characterized as follows: an occasion for learning rather than testing; formative and ongoing; based on a criterion-referenced philosophy of evaluation that focuses on accomplishment rather than rank; based on what prospective teachers are expected to know rather than what is easy to score; and entailing the use of multiple performance assessments, teaching portfolios, and assessment centers.

NEW REQUIREMENTS?

--Some advocate easing educational requirements and establishing alternative certification routes (especially in occupational areas suffering from a lack of teachers), whereas others champion extended-time programs of study at the baccalaureate or master's level and/or probationary periods before vocational teachers are granted permanent certification (Dykman 1993). Griggs and Burnham (1988) and Luft, Zimmerer, and Kercher (1988), however, find little empirical evidence that more stringent academic/graduation, program, professional education, specialty area, and teacher certification requirements would increase teacher effectiveness.
MODELS FOR VOCATIONAL TEACHER EDUCATION IN THE 21ST CENTURY

Lynch (1997) offers the following principles as a foundation for vocational teacher education programs: (1) faculty are committed to students and their professional development as lifelong learners; (2) faculty use curriculum and instructional techniques to integrate theory with practice, academic and work force education, professional education and subject matter, and learning theory and work force preparation; (3) faculty understand the philosophy and effective practice of work force preparation and development; (4) faculty use dynamic pedagogy based on learning theory and practices appropriate for youth and adults; (5) faculty are partners in learning communities through which they model collaboration and democratic processes for their students; (6) programs are dynamic and change oriented; (7) programs are grounded in academic education, workplace subject matter, technology, professional education, and clinical practices; (8) colleges/universities provide adequate resources to sustain programs at high quality levels; and (9) academic and clinical faculty view vocational and technical educator preparation as a top priority (p. 57).

One model for work-based teacher education programs consists of the following components (Lynch 1997): (1) assessment; (2) curriculum framework (general education; common core and specialized work force education and work force preparation processes; knowledge of the learner, pedagogy, instructional technology, and professional education; and occupational and education clinical experiences); (3) standards of knowledge and practice; (4) principles of vocational and technical teacher education; and (5) philosophical foundations (pragmatism, progressivism, and constructivism).

The need for lifelong professional development for vocational education teachers is another important theme throughout the reform literature. Niven (1993) lists 15 innovative techniques for delivering distance professional development programs in the workplace, including directed reading, project work, telephone tutorials, mentoring, interactive video, electronic mail, and television/radio broadcasting.

Vocational teachers are being expected to know more than ever before. On the one hand, they are expected to keep pace with rapid technological advancements in their occupational field and in the teaching profession. On the other hand, they are expected to reach out to new, nontraditional audiences. These increased expectations are increasing pressure to make the process of becoming a vocational teacher lengthier, more rigorous, and more costly. As Dykman (1993) points out, however, making it more difficult for individuals to become vocational education teachers may exacerbate the problems of declining enrollments in vocational teacher education programs and shortages of vocational education teachers in many high-demand fields (such as health occupations). Proposed changes in vocational teacher education and certification programs be weighed carefully to obtain the greatest possible improvements in program quality at the lowest possible cost.
REFERENCES


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