

Massachusetts Comprehensive Assessment System exam (a requirement for receiving a high school diploma);

- Encouraging and supporting schools and colleges in applying for and receiving national program approval and helping students to earn industry or State-recognized credentials;
- Supporting the development of a career and technical assessment system that would lead to issuing a certificate of occupational proficiency;
- Providing strong tech-prep programs that lead to increased numbers of CTE students successfully transitioning to and completing two-year and four-year postsecondary programs of study; and
- Providing technical assistance and professional development specifically targeted to increasing the number of CTE students enrolling in and completing nontraditional programs.

In its grantback application, the MADOE states that for the past two years, the CTE unit's administration and staff have analyzed the data collected from their work addressing the four core indicators and identified particular areas of need for the focus of the grantback application. In addition, the Perkins program compliance audit, conducted in May 2002 by a team from the Department's Office of Vocational and Adult Education, and subsequent report support the need for the initiatives outlined in the grantback application.

F. Proposed Initiatives

The following is a description of the seven proposed initiatives, as outlined in the MADOE's grantback application:

(1) Successful transition of CTE students from high school to college—competitive grant program.

The MADOE proposes to offer a competitive request for proposal (RFP) to Perkins-eligible secondary and postsecondary institutions to develop collaborative programs that focus on intensive college transition and preparation programs for CTE high school students. This initiative would focus on the academic and technical preparedness needed for a student's success at the postsecondary level. Programs would include academic school year preparedness and transition activities with an intensive summer program for entering college students.

(2) Development and dissemination of Statewide secondary-to-postsecondary pathways in information technology, health and pre-engineering/engineering career fields.

The MADOE's CTE unit proposes to develop specific high school-to-college

(four-year high school to one-year, two-year and four-year college) program pathways in health, information technology and engineering.

Competencies, course and program sequencing, syllabi, curricula, articulation processes, workplace opportunities and assessment models will be identified in all three career areas. All of the resources produced as part of this initiative will be posted at the CTE unit's Web site for employers, schools and colleges. The CTE unit also will provide professional development opportunities to support Statewide implementation of the pathway models. This initiative will be aligned with and be part of the implementation of the new system to issue Certificates of Occupational Proficiency and the new Massachusetts Vocational-Technical Career 74 Regulations.

(3) Workplace models in high-wage, high-demand career and technical education pathways—competitive grant program.

The MADOE proposes to issue a competitive RFP to Perkins-eligible school districts and colleges to develop and provide workplace models in health, information technology and engineering program pathways. Program models must include intensive workplace projects, employer mentoring, academic and technical skill competency attainment related to course content, collaborative project development that includes industry employees and high school and college staff, and assessment of both product outcomes for industry and academic and technical skill gain by students.

(4) Increased participation in and completion of technical education programs that lead to nontraditional training and employment.

The MADOE is proposing a two-pronged study to alter current career and technical education enrollment patterns. A contractor will be selected through a competitive "request for response" (RFR) process to study the current nontraditional enrollment patterns in secondary career and technical education programs. The study will examine the underlying factors for selecting a career major and take into consideration any recent research done in the field. The study will also include actions that the MADOE and school districts can take to help alter current secondary career and technical education enrollment patterns.

(5) Web-based Perkins accountability system.

The MADOE proposes to develop a Web-based application for licensing vocational technical educators. This will be an enhancement to the State's

current "Educator Licensure and Recruitment" system, known as ELAR. The system will allow applicants to request waivers, search jobs and post resumes, and make fee payments online. It will be linked to the State's educator preparation education programs and its vocational educator testing center. The new system will include an on-line faculty register that will be used by MADOE staff to ensure that all current vocational technical education teachers employed by school districts and collaboratives have the appropriate credentials.

(6) High-wage, high-demand career and technical education—competitive grant program.

The MADOE will issue a competitive RFP for Perkins-eligible secondary and postsecondary institutions with career and technical programs. Grantees will use funds either to begin a new CTE program in high-wage, high-demand fields within the three cluster areas or to update existing programs in those clusters to align with national program standards or industry-recognized certifications. The MADOE believes that there is an inadequate number of technically skilled workers to fill the jobs being created in technology-driven services. As a result of rapid growth in this sector, demand for professional and technical workers, including in fields requiring less than a four-year degree for entry-level positions, is expected to expand the fastest and generate the most new jobs in the State. It is also expected that engineering and architectural services will grow by 13 percent and generate 4,300 new jobs. Of the 25 fastest growing occupations in the State, more than half are related to information technology and health care.

(7) Vocational technical education teachers' pre-service training.

The Massachusetts Board of Education recently approved a new set of vocational technical education regulations that became effective on September 1, 2003. The teacher credentialing portion of the regulations contains a new provision that requires vocational technical education teacher candidates to earn 21 college degree credits in professional education courses. These courses include a three credit college degree seminar specifically designed for new teachers. New teachers will be required to take these courses in their first year of teaching. As part of the State's effort to prepare first-year vocational technical education teachers better, a "new teachers tool kit" will be developed in consultation with the State's three vocational technical educator preparation programs. The tool kit will