

Connecting Department of Labor Resources to Science, Technology, Engineering and Math (STEM) Skill Acquisition

The following programs and initiatives administered by the Department of Labor's Employment and Training Administration are potential resources for furthering the acquisition of Science, Technology, Engineering and Math skills (STEM) among adult and youth learners:

The High Growth Job Training Initiative Funding is Variable

The High Growth Job Training Initiative targets investments to support the development and implementation of workforce solutions in the context of strategic public/private partnerships to ensure that workers have the skills and competencies in high-growth, high-demand occupations. The workforce solutions funded under the High Growth Job Training Grants address critical workforce challenges identified by strategic partnerships, which include business and industry, education and training providers, and the workforce investment system. These investments provide job training and related activities for workers to assist them in obtaining or upgrading employment in the 14 high-growth industries of Advanced Manufacturing, Aerospace, Automotive, Biotechnology, Construction, Energy, Financial Services, Geospatial Technology, Health Care, Homeland Security, Hospitality, Information Technology, Retail, and Transportation.

These funds may be used in several ways that benefit STEM training, including:

- Developing curricula to build core competencies and train workers;
- Identifying and disseminating career and skill information;
- Building the capacity of the education system to train in high-growth, high-demand industries; and
- Increasing the integration of community and technical college activities with industry and the public workforce investment system.

Many of these 14 industries identified through the High Growth Job Training Initiative have described a critical shortage of workers with STEM competencies and a number of HGJTI grants are currently supporting projects that address this need. In addition, ETA is currently developing a summary of competencies for STEM-related occupations. This competency model framework will serve as the basis for a formal solicitation for grant applications focused on training in STEM-related occupations in high-growth industries.

For more information, see: <http://www.doleta.gov/BRG/JobTrainInitiative/>

Community Based Job Training Grants

PY06 Funding: \$125,000,000

In 2005, ETA implemented the Community-Based Job Training Grants to strengthen the role of community colleges in promoting the U.S. workforce's full potential. This competitive grant program builds on the High Growth Job Training Initiative by building the capacity of community colleges to train workers for the skills required to succeed in high-growth, high-demand industries. Businesses in these industries face increasing difficulties in finding workers with the right skills.

Funds available under this initiative may be used to benefit STEM training by:

- Developing training curricula with local industries in the STEM fields, hiring qualified faculty, arranging on-the-job experiences with industry, and using up-to-date equipment; and
- Training new and experienced workers in identified high-growth, high-demand industries, with the aim of employing and/or increasing the retention and earnings of trained workers, while meeting the skill needs of businesses within targeted industries.

Under the Community Based Job Training Grants initiative, publicly-funded community and technical colleges were asked to submit proposals that identified workforce challenges and implemented workforce solutions for locally identified high-growth, high-demand occupations, including proposals to address critical STEM competencies identified by high-growth, high-demand occupations.

For more information, see: <http://www.doleta.gov/business/Community-BasedJobTrainingGrants.cfm>

Trade Adjustment Assistance Funds

There is approximately \$220 million available each year to provide training to workers laid-off due to the effects of foreign trade.

Funds may be used to pay the costs of individual training programs in science, technology, engineering or math (STEM) fields through:

- Classroom training, including remedial education;
- On-the-job training; and
- Customized training designed to meet the needs of a specific employer or group of employers.

Additional funds (trade readjustment allowances) are available to help individuals attend full-time training by providing income support while they are in school.

For more information, see: <http://www.doleta.gov/tradeact/>

Workforce Investment Act Rapid Response Funds

Up to \$250 million is available to states each year to respond to mass layoffs and plant closings. These funds are comprised of 25% of each state's WIA dislocated worker formula funds.

Based upon state or local policy, Rapid Response funds may be used to support activities and strategies that could include STEM education and training opportunities, such as:

- Informing individuals about available career and training opportunities related to STEM;
- Connecting Rapid Response strategies and activities to economic development and providing information to employers to help promote employment in STEM-related industries or occupations;
- Providing information on individual training programs in STEM fields; and
- Assisting with the design and implementation of customized training plans or working with employers in STEM areas to design training programs that provide STEM-related employers with skilled workers as part of a lay-off aversion strategy.

For more information or to discuss potential strategies and linkages, contact your state or local Rapid Response team or see: <http://www.doleta.gov/layoff/rapid.cfm>.

Workforce Investment Act National Emergency Grant Funds

Approximately \$150 million was available in PY 2006 for National Emergency Grants (NEG). These funds are used to temporarily expand service capacity at the state and local levels in response to significant dislocation events.

These funds may be used for several activities that could support STEM, including:

- Conducting career assessments and informing eligible individuals about available career and training opportunities related to STEM;
- Helping eligible individuals develop Individual Employment Plans in STEM-related fields;
- Paying the costs of individual training programs for participants in STEM fields; and
- Making available needs related payments to help eligible individuals attend full-time training.

For more information, see: <http://www.doleta.gov/NEG/>

Workforce Investment Act Youth Formula Grant

Currently, \$940 million (2006 Budget) is allotted to states for youth programming and services through the Workforce Investment Act (WIA). States use these resources in various ways to support workforce training and development of young people who are both “in-school” and “out-of-school.”

The following are opportunities where WIA can leverage STEM activities/training for youth:

- WIA funds are being used to connect those young people who leave traditional educational institutions to alternative education programs. These various opportunities to link youth to the workforce can be focused around linking them to high-demand STEM careers and educational pathways.
- WIA resources also support the operation of after-school programs that engage young people during critical out-of-school hours. This provides an opportunity for strategic partnerships to provide activities focused on experiential, hands-on, applied learning strategies that engage young in-school youth and make STEM careers and educational pathways fun and exciting.
- Pre-apprenticeship programs, funded by WIA, are designed to offer individuals basic skills, job readiness, and trade-specific training that can significantly increase a youth’s likelihood of entering and succeeding in formal apprenticeships. The workforce system can encourage pre-apprenticeships that will assist youth in gaining the necessary skills for successful career pathways and advancement in high-growth, high-demand STEM industries.
- In-school youth who are served by the workforce system can access, and be encouraged to take, math and science Advanced Placement (AP) and International Baccalaureate (IB) courses designed to give them college credit for successfully passing the exam and prepare them for higher education.

For more information, see: <http://www.doleta.gov/youth%5Fservices/Formula-Funded.cfm>

WIA Adults & Dislocated Worker Formula Grants

Approximately \$2.5 billion in funding was available in PY 2006 for adult and dislocated worker services. Adult and dislocated worker funds may be used to carry out core, intensive and training services. These services are available to eligible adults and dislocated workers and may be used to provide STEM training in many ways, including:

- Providing comprehensive and specialized assessments of skill levels and service needs such as diagnostic testing and use of other assessment tools and in-depth interviewing and evaluation to identify employment barriers and appropriate employment goals;
- Providing occupational skills training in STEM-related fields;
- Providing on-the-job training in relevant STEM fields; and
- Training that focuses on skill upgrading and retraining and entrepreneurial skills; adult education and literacy activities; and customized training.

For more information, see: http://www.doleta.gov/programs/general_info.cfm

Wagner-Peyser Act Funds

The Wagner-Peyser Act provides formula funding to states to assist job seekers in finding jobs and employers in finding qualified workers and, in some areas, to provide job training and related services. The Act was amended in 1998 to require that employer services be provided through the One-Stop service delivery system. These funds can be used to inform the workforce about STEM through the following activities:

- Providing job search and placement services to job seekers including counseling, testing, occupational and labor market information, assessment, and referral to employers;
- Partnering with employers to provide appropriate recruitment services and special technical services;
- Targeting services for workers who have received notice of permanent layoff or impending layoff, or workers in occupations which are experiencing limited demand due to technological change, impact of imports, or plant closures; and
- Developing and providing labor market and occupational information.

For more information, see: http://www.doleta.gov/programs/Wagner_Peyser.cfm