Using the New Perkins Legislation to Advance High School Reform

The Federal Carl D. Perkins Career and Technical Education Improvement Act of 2006

The 109th Congress passed new career/technical legislation, the Carl D. Perkins Career and Technical Education Improvement Act of 2006, known as Perkins IV. Perkins IV provides more than $1.2 billion in federal support for career/technical education programs. The legislation is aimed at helping today’s students gain the academic and technical skills and knowledge necessary for high-demand, high-wage jobs. The legislation requires states to outline a logical sequence of high school and college courses leading to industry certification, while maintaining a strong academic focus that promotes instruction and accountability consistent with No Child Left Behind (NCLB).

Perkins IV has a number of new provisions that include:

- Requiring each agency eligible for funds to create at least one high school career/technical program that prepares students for high-demand, high-wage occupations and leads to recognized employer credentials, postsecondary certificates and associate’s and/or bachelor’s degrees. For example, the legislation encourages the use of funds to develop special science, technology, engineering and mathematics (STEM) programs of study to ensure that America remains competitive in this critical area;

- Holding states accountable for modifying existing courses and creating new courses designed to advance both academic and technical achievement;

- Requiring schools to link career/technical studies with a rigorous academic core curriculum, such as the one recommended by High Schools That Work¹, in order to add meaning and relevance to students’ academic studies;

- Encouraging the use of funds to link high-quality career/technical studies to comprehensive high school reform programs such as High Schools That Work;

- Exposing students — especially at-risk students — to career/technical education opportunities early in high school and providing effective guidance to ensure that students complete rigorous programs of study to meet postsecondary goals;

- Providing comprehensive professional preparation and staff development for career/technical education teachers that are not limited to one-day or short-term workshops and that have a positive and lasting impact on classroom instruction by:
  - integrating challenging academic content and skills into career/technical education courses; and
  - improving teaching skills based on research that includes promising practices.

¹ The HSTW-recommended academic core consists of four college-preparatory English/language arts courses; at least four credits in mathematics, including Algebra I, geometry, Algebra II and a fourth higher-level course; at least three college-preparatory, lab-based science courses; and at least three college-preparatory social studies courses.
Relationship of Perkins IV to SREB *Challenge to Lead* Goals

Perkins IV legislation speaks to four SREB *Challenge to Lead* Goals for Education:

**Challenge to Lead Goal:** All young adults have a high school diploma — or, if not, pass the GED tests. The 2006 Perkins legislation requires states to be more accountable for high school graduation rates as well as rates of earning a General Educational Development (GED) certificate (or other state-recognized high school credential) and a proficiency certificate that is awarded in conjunction with a diploma.

**Challenge to Lead Goal:** All recent high school graduates have solid academic preparation and are ready for postsecondary education and a career. The heart of Perkins IV is the requirement to provide students with the academic and career/technical skills (including mathematics and science) that propel students into successful postsecondary studies and into high-wage, high-demand jobs.

**Challenge to Lead Goal:** Adults who are not high school graduates participate in literacy and job-skills training and further education. Perkins IV allows funds to be used to target dropouts and other adults needing career/technical training.

**Challenge to Lead Goal:** Every student is taught by qualified teachers. Perkins allows the use of funds to strengthen pre-service and in-service education of career/technical education teachers.

The major purpose of Perkins IV is to more fully develop the academic and career/technical skills of secondary and postsecondary education students who enroll in career/technical education programs by:

- Building on the efforts of states and school districts to develop challenging academic and technical standards and to assist students in meeting such standards;
- Promoting the development of services and activities that integrate rigorous and challenging academic and career/technical instruction and that link secondary and postsecondary education for participating students;
- Providing technical assistance and professional development that improve the quality of career/technical education teachers, faculty administrators and counselors; and
- Supporting partnerships among secondary schools, postsecondary institutions, bachelor’s degree-granting institutions, career/technical education schools, local work force investment boards, business and industry and intermediaries.

Career/technical education means providing educational activities that:

- Give individuals coherent and rigorous content that is aligned with challenging academic standards and the relevant technical knowledge and skills needed to prepare them for further education and careers in current or emerging professions; and
- Include competency-based applied learning that contributes to students’ academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability, technical and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship.
Perkins IV accountability indicators for secondary students include the following:

- Student attainment of challenging academic content and achievement standards, as measured by the state-determined “proficient” levels;
- Student attainment of career/technical skill proficiencies on technical assessments that are aligned with industry-recognized standards;
- Student graduation rates and rates of earning a high school diploma, GED certificate and proficiency certificate; and
- Student placement in postsecondary education, advanced training, military service or employment.

Actions States Can Take to Use Perkins IV to Support High School Reform

States can take a number of actions to link Perkins IV with broader high school reforms to improve graduation rates and college and career readiness.

Make Career/Technical Education a Full Partner in High Schools with Low Achievement and Low Completion Rates

- Award incentive grants to districts to help one or more high schools with below-average graduation rates develop and implement a comprehensive school improvement design, such as SREB’s High Schools That Work, that links high-quality career/technical studies to high school reform. Districts should describe in their strategic plans how they will use Perkins IV, state, district and incentive grant funds to assist targeted schools with implementing a school improvement plan that will:
  - Expand students’ access over the next three years to challenging academic and career/technical programs of study in high-demand and high-wage fields;
  - Train career/technical teachers to use project- and problem-based instruction to enhance reading, mathematics, science and technical achievement;
  - Create a middle grades-to-high school transition program to reduce the ninth-grade failure rate and increase the percentage of students successfully passing college-preparatory English and Algebra I;
  - Require all students to complete four years of mathematics, including Algebra I, geometry, Algebra II and an additional mathematics course.
  - Create a guidance and advisement system in which all entering high school students have, at least by the end of grade nine: a) a high school program of study with career and postsecondary goals; b) an outline of academic and career/technical courses for achieving their goals; and c) an adult mentor who remains with them all four years of high school and annually involves students and parents/guardians in reviewing student’s progress;
• Provide a system of extra time and extra help to assist students meet end-of-grading-period standards, so they can pass courses and high-stakes exams;

• Emphasize literacy across the curriculum so that all students have to read and write in all courses to better understand the subject matter;

• Train principals and teacher-leader teams to: a) use data to create a culture of high expectations for all groups of students; b) align academic and career/technical curriculum to college and workplace standards and move those standards into the classroom by aligning assignments and classroom assessments with them; and c) assist all teachers with using research-based strategies in literacy and numeracy to help all students perform at grade level and to meet college- and career-readiness standards; and

• Create cooperative agreements with employers, postsecondary institutions and other high schools and entities to give students access to high-quality career/technical studies in high-demand fields leading to employer credentials or an associate’s or bachelor’s degree.

Create Career/Technical Programs in High-Demand, High-Wage Career Fields

- Establish priority career fields — critical to the state’s economic vitality and growth — for local school districts to use in developing new career/technical programs, such as health science; science, technology, engineering and mathematics; energy and environmental science; information and technology; logistics and transportation; manufacturing; teaching and learning, etc.

- Provide funding to districts to implement state-approved curricula in high-demand, high-wage career fields. For example, states could approve and fund high-quality national programs of study with well-developed course materials, training for teachers and end-of-course assessments. Examples are the National Academy Foundation — Academy of Finance and Academy of Information Technology; and Project Lead The Way — a high school pre-engineering and biomedical sciences program. These programs: a) require four years of college-preparatory mathematics; b) have a set course syllabi; c) require teachers to be trained in each course prior to teaching it; and d) provide common end-of-course assessments.

- Establish state panels for each priority career field, composed of higher education and two-year college faculty, employers from the field, high school teachers and district and school leaders. Ask each panel to take responsibility for developing a curriculum framework for a series of courses, blending academic and technical content with authentic problems and projects that would interest students. Ask the panel to develop syllabi and end-of-course performance and written assessments for each course.

- Develop new career/technical courses and modify existing ones in high-demand fields to advance both academic and technical achievement. Develop these courses to use projects that reflect the work students will be expected to complete in the workplace and embed challenging mathematics, science and literacy knowledge and skills in them. Develop a repository of planned projects/units of study, and train career/technical teachers and academic teachers to work together to field-test and implement the material.
Recognize Career/Technical Students Who Earn Employer Credentials and Meet College-Readiness Standards

- **Reimburse the cost** for career/technical students to take state-approved national employer certification exams, state board licensure exams, industry exams or other approved job exams if they have completed a state-approved career and technical program upon high school graduation (or through postsecondary studies) that is taught by a teacher who has also passed the exam.

- **Reimburse school districts’ costs** for career/technical teachers to take certification exams and one retest exam if needed.

- **Promote dual credit for career/technical courses** with the condition that high school students either meet college placement standards in language arts, reading and mathematics prior to enrolling in the dual-credit course or by the end of high school. Currently, a large number of high school students take career/technical courses and receive college credit from a post-secondary institution. Yet many have major deficiencies in key academic areas and spend much of their first year of college in remedial courses. Schools need to make greater use of the senior year of high school to address these academic deficiencies and to better prepare students for college and careers.

- **Provide state support for districts to give a state-approved exam to career/technical students in their senior year** to assess program quality and students’ academic readiness for college and careers. Currently, under Perkins IV, states can use NCLB measures to determine if they have challenging academic content and meet achievement standards. Yet students take most of these exams in the 10th grade, before beginning their career/technical courses. A senior exam in reading and mathematics, such as the National Association of Educational Progress-referenced High Schools That Work Assessment, would be a better measure for determining the progress made advancing career/technical students’ academic achievement and readiness for college and careers.

Develop State Capacity to Assist Local School Districts with Alignment of Career/Technical Courses to College- and Career-Readiness Standards

- Align the career/technical curriculum to industry and to essential college- and career-readiness standards in reading, mathematics and science in order to prepare students to enter their chosen career field and to continue to learn on the job and in formal postsecondary instruction.

- Assist career/technical teachers with aligning their assignments, student work and classroom assessment to industry and college- and career-readiness standards.

- Provide training for career/technical teachers on research-based instructional methods that make courses more intellectually demanding and reflect the modern workplace.
Have the Appropriate State Agency Look at Strengthening the Preparation and Certification Requirements for All Career/Technical Teachers.

Require career/technical teachers to:

- Have a bachelor’s degree or be on schedule to complete one within five years of employment;
- Meet the same academic performance requirements required of other teachers;
- Demonstrate teaching competence by passing an appropriate pedagogy exam and a series of performance assessments using a trained, external observer; and
- Demonstrate technical-content competence as a prerequisite to teaching by passing a state-approved external assessment, with scores at or above the national mean.

Create a System That Holds Districts and School Leaders Accountable for Improving Both High School Completion Rates and Student Achievement.

Reward districts that:

- Increase annually the percentage of students who complete a solid academic core and either an additional Advanced Placement or dual-credit course; or who have completed a sequence of planned career/technical courses in a high-demand career field and have passed graduation exams, have demonstrated readiness for postsecondary education and/or have passed an employer certification exam;
- Have students who graduate by completing the course requirements for a diploma, passing all parts of the graduation exam or passing at least the English/reading and mathematics exams and passing a state-approved employer certification exam;
- Award a high school diploma to over-age students who have passed the GED test, have completed a planned sequence of career/technical courses in a high-demand field and have passed a state-approved employer certification exam;
- Emphasize the importance of high school graduation rates by penalizing schools and districts for each student who drops out of school and for each year the student had remaining in high school;
- Collaborate with colleges, technical colleges and other entities to recover students, ages 16 to 19, who have left school without completing the requirements for graduation and assist them with preparing to earn a GED credential and passing an employer-certification exam; and
- Encourage schools to form agreements with colleges, technical colleges, employers and other entities to create programs of academic and technical studies aimed at preparing students to earn a high school diploma through one of the several options outlined above.