Federal and state policy makers face 11 issues in implementing the Carl Perkins Vocational Education Amendments of 1990. A preliminary issue is whether federal policy makers or the states should establish further definitions of and restrictions on what constitutes tech prep (articulated secondary-postsecondary technical preparation programs). Assuming substantial state participation in defining policies related to tech prep, the next issue is the relationship between the secondary and the postsecondary state agencies. Another issue is the types of approaches to or models of tech prep appropriate for federal funding. Still other issues include whether states should allocate funds for tech prep by a competitive process or by formula; the kind of process states should establish to set state policies and develop state plans; fields of study that should qualify for tech prep programs; and whether there should be limitations on the ages of postsecondary students supported by tech prep funds. Other issues are the practices federal and state officials should encourage to ensure that as many students as possible complete tech-prep programs; steps they can take to ensure that tech prep programs are well connected to other programs in both secondary and postsecondary institutions; requirements in local applications; and the type of relationship between tech prep programs and efforts to integrate academic and vocational education under basic state grants. (YLB)
TECH-PREP PROGRAMS:
ISSUES IN IMPLEMENTING THE
CARL PERKINS AMENDMENTS
OF 1990

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TECH-PREP PROGRAMS:
ISSUES IN IMPLEMENTING THE CARL PERKINS AMENDMENTS OF 1990

This document outlines several issues that federal and state policy-makers face in implementing the Carl Perkins Amendments of 1990. It is based on research sponsored by the National Center for Research in Vocational Education, the University of California, Berkeley. I present each issue with a brief comment outlining several alternatives, intended to serve as the basis for discussion. Since it is designed to stimulate discussion, this document does not present any recommendations.

1. Should federal policy-makers in OVAE establish further definitions of and restrictions on what constitutes tech-prep, or should these decisions be left to states?

Federal decision-making assumes that states left to their own devices may use federal funds for purposes inconsistent with federal intent or for on-going and unreformed programs. State decision-making assumes that the states should play an essential role in defining reforms and adapting them to local conditions.

2. Assuming substantial state participation in defining policies related to tech-prep, what should be the relationship between the secondary state agency and the postsecondary agency (or agencies)?

Tech-prep programs by their nature involve both secondary and postsecondary institutions, and therefore cooperation between the state agencies in charge of secondary and postsecondary education will be desirable. Although the Perkins Amendments do not require any special role for postsecondary agencies, even in those states where the state administrative agency is an elementary-secondary agency, these state entities will need to agree about a variety of issues including most of those presented below.

3. Given a variety of approaches to or models of tech-prep, what approaches are appropriate for federal funding?

The programs developed so far that call themselves tech-prep vary in their activities and scope. Among the existing approaches are the following:

a. Providing information about postsecondary alternatives to high school students. This approach might include additional information for high school counselors, intensified counseling services, visits to postsecondary campuses, and many other possibilities, but would not change either the secondary or the postsecondary curriculum.

b. Approving specific high school courses for credit or advanced standing in postsecondary institutions, so that students need not duplicate work they have already taken.
c. Allowing high school students to take postsecondary courses, either at a postsecondary campus or in classes offered at high school campuses, in order to provide secondary students a broader range of vocational options and to familiarize them with postsecondary education.

d. Modifying the curriculum in grades 11 and 12 to prepare students more appropriately for postsecondary vocational programs. Such revisions might include changes in academic prerequisites, more general and less skill-specific vocational courses, courses that integrate academic and vocational material, or the development of occupational cluster programs leading to postsecondary programs.

At one extreme, federal or state policy could allow any of these approaches. Alternatively, policy could disallow certain approaches (e.g., the conception of tech-prep only as information to high school students) or could specify one or two approaches to be used by all tech-prep programs.

Still another alternative is to view the establishment of tech-prep programs as a progress beginning with relatively simple efforts, and moving successively along a continuum of increasingly ambitious changes. From this dynamic perspective, it is important to allow local programs to start with modest reforms as the basis for subsequent, more substantial innovations.

4. Should states allocate funds for tech-prep by a competitive process or by formula?

If states have adopted a clear vision of what tech-prep should be, then a competitive process may be more appropriate, to make sure that local programs adhere to this vision. If states are more concerned with geographic equity in the allocation of funds for tech-prep, then a formula may be more appropriate.

If states use a competitive process, there may be a conflict between the desire to fund the best proposals — which might allocate funds to institutions which already have well-established programs — and the desire to stimulate new programs. One way to stimulate new programs without eliminating well-established or pioneering programs from funding is to allow "pioneers" to be members of tech-prep consortia in order to provide technical assistance to fledgling programs.

5. Given the complexity of establishing tech-prep programs, what kind of process should states establish to set state policies and develop state plans?

At one extreme, developing a state plan can be viewed as a burdensome and bureaucratic exercise in complying with federal requirements, with little participation of local institutions required. At the other extreme, states could use the process of establishing state policies as a vehicle for thorough statewide discussion of the issues, with the goal of enhancing the willingness and ability of local schools and postsecondary institutions to institute new programs.

6. Which fields of study should qualify for tech-prep programs?

On one hand, federal or state policy-makers might allow all fields of study to qualify for federal funding, under the assumption that the crucial element is the linking of secondary and postsecondary programs rather than the specific occupational areas included. On the other hand, the Perkins Amendments stress the problem of preparing workers for occupations with rapid technological change, and technical education with "a common core of required proficiency in mathematics, science, communications, and technologies." This suggests that certain fields of study linked to math, science, and emerging technologies — including such fields as electronics,
laser optics, robotics, computer-related programs, energy-related programs, medical technologies, CAD/CAM, computer-integrated manufacturing, and bio-technologies — be eligible for federal funding, but that others without important technical components — including such fields as business, marketing, occupational food preparation, child care, fashion design and interior design, horticulture, personal services like cosmetology, and the traditional crafts — be ineligible for funding under the tech-prep provisions. Another advantage of limiting tech-prep to fields with distinct technical content is that earnings in these fields are generally higher, making tech-prep programs more attractive to high school students.

7. Should there be limitations on the ages of postsecondary students supported with tech-prep funds?

If funds allocated for tech-prep programs are to support innovations linking high schools and postsecondary institutions, federal or state policy-makers may decide that only those postsecondary students who have entered relatively soon after completing high school — for example, those about 18-20 years old — should be the primary beneficiaries, rather than the older students (including displaced workers, re-entry students, and displaced homemakers) who have increasingly entered community colleges and technical institutes.

8. What practices should federal and state officials encourage to ensure that as many students as possible complete tech-prep programs?

The failure to complete high school has become an increasingly serious problem, and similarly many students in community colleges and technical institutes leave without completing credentials. Policy-makers may want to consider a variety of mechanisms (in addition to the counselors mentioned in the Perkins Amendments) to enhance completion rates, especially but not exclusively among special populations.

9. What steps can federal and state officials take to ensure that tech-prep programs are well-connected to other programs in both secondary and postsecondary institutions?

Policies that allow funding for a restricted set of occupations, or a limited age range of students at the postsecondary level, or only for special populations run the risk of encouraging separate programs, unconnected to other vocational programs at the post-secondary level or other courses and students at the secondary level. Federal and state policy-makers may want to consider both fiscal and programmatic policies that encourage integration with other programs.

10. What should states require in local applications?

The Perkins Amendments do not specify what should be contained in applications for tech-prep funds, and policy-makers need to prescribe what applications should contain. However, decisions about the nature of tech-prep activities will in most cases specify the requirements of local applications.

Like the process for establishing state policy, the process of developing local plans can either be viewed as a burdensome requirement of the Perkins Amendments, or it can be structured more positively as the first step in an on-going process which enhances the willingness of secondary and postsecondary teachers to collaborate.
11. What should the relationship be between tech-prep programs and efforts to integrate academic and vocational education under basic state grants?

The Perkins Amendments allows fund under basic state grants to be used for tech-prep. In other ways, state and federal policy-makers may want to encourage links between integration efforts and tech-prep programs. There are several possibilities:

a. Using funding from basic state grants to support related activities which may not be permitted under tech-prep funding — for example, activities for ninth and tenth graders leading to tech-prep programs, or articulation in occupational areas outside the technical areas covered by tech-prep.

b. Using funding from basic state grants to develop occupational clusters with coherent sequences of academic and vocational courses within the high school, and using tech-prep funds to support activities linking these clusters with postsecondary institutions and to support any postsecondary changes necessary.