This research suggests specific actions federal policymakers should take to improve the implementation of Perkins II measures and standards. Although our case studies were limited to four states, both our informal conversations with other vocational educators and previous research on the implementation of Perkins II measures and standards suggest that these concerns are widespread enough to warrant such actions. Potential responses include changes in regulations, investments in the solution of common problems, and new capacity-building initiatives at the state and local levels. These recommendations follow directly from the factors identified as being subject to federal influence in the previous chapter.

**CLARIFY THE INTERRELATIONSHIPS AMONG PERKINS II MANDATES AND THE COORDINATION OF PERKINS II INITIATIVES**

Perkins II requires that states emphasize systems of measures and standards, the integration of academic and vocational education, tech-prep education, and service to special populations, but it does not tell states how these activities should be interrelated, nor does it suggest how states should coordinate their efforts. As a result, states implement activities in isolation and assign them different priorities. For example, some put tech-prep education on hold while focusing on measures and standards; others assign their most talented staff to tech-prep education while delegating measures and standards to one individual.
Perkins II gives little direction to states about how to coordinate their efforts on measures and standards, tech-prep education, integration of academic and vocational education, and special populations. The omission of models for coordination decreases the potential effectiveness of the act, particularly the effectiveness of the systems of measures and standards. States need guidance regarding how to make their systems of measures and standards support their efforts to integrate academic and vocational education, create tech-prep education programs, and promote service to special populations. For example, performance measures and standards could be seen as a mechanism for evaluating all the Perkins II priorities. At present, states do not always see how the required elements can be interrelated, e.g., how needs assessment fits into the state plan, how the state plan fits with the local application process, and how the local application process fits into the annual review cycle. Neither do they see how these are all elements of an evaluation system that applies to all the Perkins II initiatives. Instead, there is wide variation in the relative priority assigned to these four critical initiatives and little coordination. Changes in the language of the legislation could clarify these relationships.

**CREATE MODELS FOR OUTCOME-BASED PROGRAM IMPROVEMENT**

To date, states have emphasized the “nuts and bolts” of creating systems of measures and standards. Over time, they need to build on this foundation and focus on using these systems for program improvement. At present, most state action is still driven by the mandate to develop a structure for accountability, i.e., a system of measures and standards. The law says little about how that structure is supposed to be used to make programs better. Sites must develop program improvement plans, but nothing suggests how one translates outcome deficiencies into action plans either at the local level or at the state level if the joint planning provision comes into effect. We talked to one state administrator who had begun to tackle this question by developing a set of specific questions linked to the state’s measures and standards for use at a site to organize its search for improvement. However, such thought about the use of measures and standards was rare.
One way to encourage states to build toward program improvement is to require them to develop models for using outcome-based information for program reform. Certainly, it is time for states to think seriously about this phase of accountability. Yet, some states might find any additional requirements distasteful, and many would argue that additional paperwork is counterproductive. The alternative we prefer would be to commission another agency to collect examples of effective practices and disseminate them widely for states and local programs to use.

**PROVIDE FOCUSED TECHNICAL ASSISTANCE REGARDING CHOICES AND RESOURCES**

Perkins II gives states far greater programmatic discretion while limiting the resources they can devote to administration. This places greater demands on state administrators, but limits their capacity to act. Under these circumstances, federal actions that helped states respond to their choices and make better use of resources might significantly improve implementation of the act.

The "flexible mandates" contained in Perkins II placed demands on states and local agencies but offered no guidance in how to meet those demands. States were required to create systems of measures and standards with certain properties but were allowed considerable discretion in the design of these systems, including the choice of outcomes, the selection of measurement tools, and the setting of standards. Many lacked the expertise to make these decisions wisely. Furthermore, some states delegated many of these choices to local agencies.¹ This cascade of delegated decisionmaking placed new and unfamiliar demands on state and local staff. Few had any previous experience implementing outcome-based accountability systems in vocational education.

As a result, states looked to the U.S. Department of Education for assistance in clarifying the meaning of the regulations and providing expertise in solving problems of measurement, assessment development, and standard setting. Unfortunately, little help was offered.

¹This led to considerable variation of measures and standards between states as well as large within-state variation in selected states.
The federal agency focused its resources on compliance monitoring (for all the provisions of Perkins II) rather than on providing guidance about measurement problems or acting energetically to increase a state’s capacity to respond through training. Other agencies stepped in to try to address the most pressing problems (e.g., NCRVE workshops on selecting measures and setting standards). This support was helpful, but it did not satisfy the demand. Furthermore, the demand for technical assistance still exists, as many states lag behind the four we visited in implementing their systems, and some of the more difficult measurement issues remain unresolved.

A further demand for technical assistance arose within those states that delegated the choice of measures to the local level. Those with ultimate responsibility for deciding on measurement tools and procedures lacked the expertise to make these decisions and looked to the state as well as to their colleagues in other districts for assistance. The states’ record in responding is mixed. Piedmont provided adequate technical assistance by training district vocational education administrators, who then trained program instructors. Erie did not.

Furthermore, we predict that a new set of technical assistance needs is on the horizon in the area of program improvement. Statewide systems will be operational on a large scale in the 1994–95 school year, and local programs will begin to compare their performance to state standards. Few at the local level have any experience using outcome data for creative program planning, so programs that do not make the grade will look to their states for guidance with program improvement. States, in turn, will turn to the federal government for assistance, for they too lack expertise in using performance measures as program-improvement tools.

The federal government should act now to address these needs by creating a mechanism for providing relevant technical assistance to states. In the long run, the goal should be to build capacity at the state level for using the standards framework as a program improvement tool. One approach might be to press for greater integration of vocational education measures and standards with existing state program review procedures. Because many states have the same questions, we believe the most efficient way to provide these services is centralized, but we would not preclude other options. Whatever the form, resources should be devoted to solving measures-and-
standards problems and increasing the capacity of states to make their systems work. One state coordinator described his experience with statewide measures and standards as “trying to build a 747 in flight.” Trying to do this without appropriate technical assistance and support is a prescription for failure, and much more could be done to promote success.

Resource constraints exacerbate the problem. Perkins II places greater demands on state agencies than its predecessor, but restricts the use of funds for state-level services. This comes at a time when many state administrative budgets are also being reduced. State administrators believe they lack the resources necessary to respond to Perkins II mandates effectively. These limitations are particularly severe at the postsecondary level, where some states allocate very small proportions of their Perkins II funds. Some efficiencies are possible through better coordination of efforts on measures and standards, tech-prep, integration, and special populations, and federal efforts to solve difficult measurement problems will also lessen the demands on state agencies. Furthermore, states could be encouraged to increase local participation in the technical assistance process over time, substituting regional networks and collegial assistance for some of the centralized expertise required initially.

Other resource problems might be addressed by increasing administrative allocations for certain activities. We are not advocating a return to the previous model, which many felt diverted too many dollars from students to central bureaucracies. As we see it, the need for supplemental resources and for technical assistance is not constant and can be fulfilled in many ways. Therefore, the response can be flexible. State departments of education need additional resources during times of initial development. We suggest increasing the funds available for state administration during the start-up phase, so states can meet initial demands and develop some of the expertise they will need to operate reformed vocational education systems.

ADDRESS COMMON MEASUREMENT PROBLEMS

One reason the implementation of Perkins II has been so challenging to states is that the vision embodied in the guidelines exceeds the capacity of existing measurement tools. In particular, the technology to measure learning and occupational performance in reliable, valid,
and efficient ways is not widely available. For example, although much work is being done to develop performance measures of occupational skills, this is an emerging assessment area with few operational systems. The situation is worse in some areas, e.g., measuring gains in advanced academic skills appropriate for the postsecondary level, where none of the four states found existing measurement tools or had the expertise to develop their own direct measures.

Most states are not equipped to develop tools for measuring learning and occupational outcomes, and it is unfair to drop this difficult task in the lap of state vocational educators. The federal government needs to take responsibility for addressing these problems, since they are largely the result of the provisions of Perkins II.

At the same time, the federal government is supporting a variety of new assessment initiatives whose relationships to Perkins II measures and standards are unclear. These range from the development of more than 20 sets of industry skill standards to the establishment of national goals and curriculum standards for academic education. There should be some connection between the assessment demands of Perkins II and the assessment development efforts being funded separately. At a minimum, states need guidance about how the skill standards should relate to their statewide systems. Other assessment development projects to meet the specific needs of Perkins II should also be considered.

**CONCLUSIONS**

The 1990 amendments to the Carl D. Perkins Vocational and Applied Technology Education Act entailed major changes in federal vocational education priorities and practices. Among the most visible innovations in Perkins II is the creation of statewide systems of measures and standards of performance. The purpose of these systems is to create an objective, outcome-based framework for program evaluation that can be used as the cornerstone of local program improvement efforts. We found that states had made much progress creating the structure of measures and standards but had devoted much less attention to creating a process for using standards as program-improvement tools. We also identified a number of factors that affected state actions on measures and standards, many of which reduced the likelihood that state systems would function as envisioned in the law.
Some of these factors are subject to federal intervention, and we identified steps the federal government could take to ameliorate the situation. Incorporating these changes into the reauthorization of federal vocational education will increase the efficacy of statewide systems of measures and standards. Legislators also should anticipate difficulties and conflicts that may be created by pending reforms of education, training, and workforce preparedness programs, and they should work to coordinate the accountability requirements of all these initiatives.