

# Archived Information

## IV. COLLABORATION AND CONNECTING ACTIVITIES

School-to-work systems are intended to be stimulated and maintained by collaborations of secondary and postsecondary educational institutions, businesses, labor unions, and community-based and other organizations, with input and support from parents and students. Each of these groups brings its particular perspective, expertise, and resources to the partnership. The STWOA encourages partnerships to link the activities of members and to enhance the level of collaboration and integration of key school-to-work components. Such collaboration and “connecting activities” are already features of some Tech-Prep initiatives. Examining the extent to which Tech-Prep is implemented with these features can provide some indication of how STW partnerships might be constituted.

### A. TECH-PREP CONSORTIA AS SCHOOL-TO-WORK PARTNERSHIPS

The types of institutions and organizations required as partners in STWOA-funded initiatives are similar to those required in Tech-Prep consortia. The Tech-Prep legislation stipulates that Title III-E grants be awarded to consortia composed of educational agencies serving secondary students and postsecondary institutions; these agencies and institutions can include school districts, area vocational education schools, institutions offering registered apprenticeships, and some postsecondary proprietary schools. The Tech-Prep Education Act also instructs state administering agencies to give special consideration to grant applications from consortia that “are developed in consultation with business, industry, and labor unions.” Amendments to the act in July 1994 also encouraged consortium applications that involve “institutions of higher education that award baccalaureate degrees.” Thus, inclusive Tech-Prep consortia can provide a solid foundation for building school-to-work partnerships, if states and local leaders choose that approach.

The Tech-Prep surveys provide some information about the composition and resources of consortia and their readiness for school-to-work system development.<sup>1</sup> We can address the following four questions with the survey data:

1. To what extent are relationships among key school-to-work partners already established in Tech-Prep communities?
2. In what ways does the business community support education reform efforts such as Tech-Prep, and potentially school-to-work?
3. To what extent have Tech-Prep communities been formally drawn into STWOA-funded efforts?
4. Are Tech-Prep consortia that received early STWOA funds different from other consortia?

*Many Tech-Prep consortia include the broad membership the STWOA promotes*

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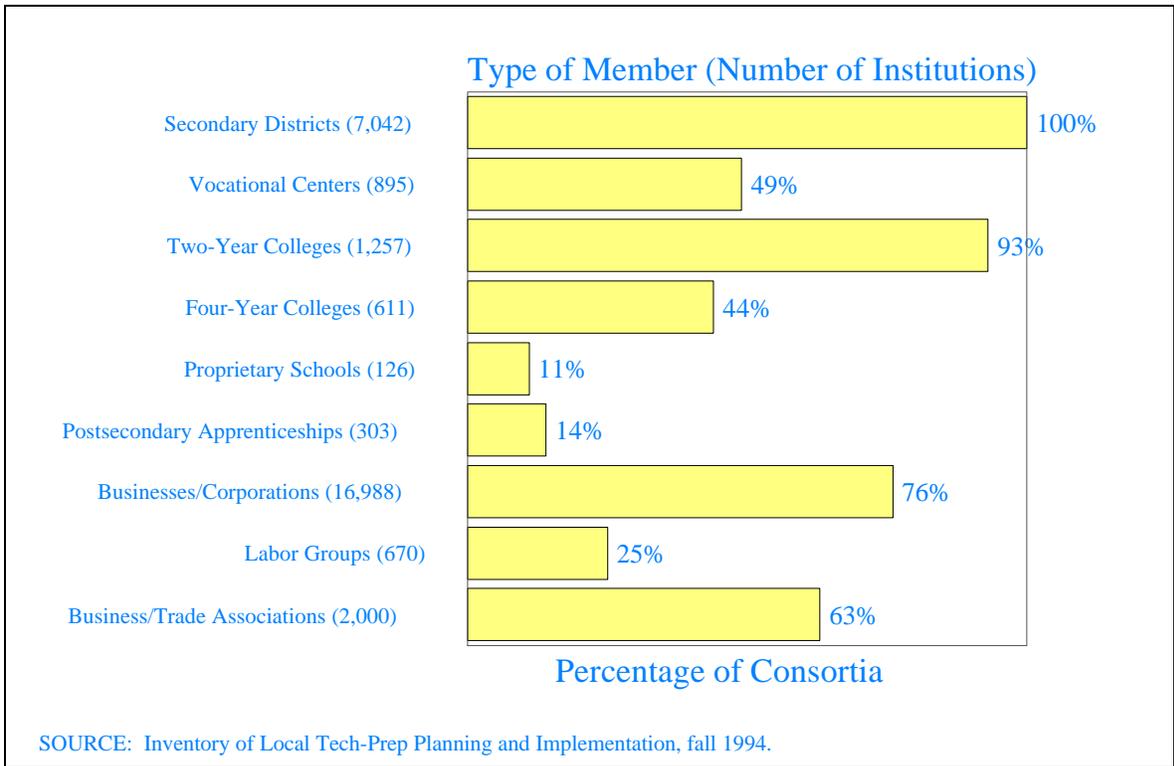
<sup>1</sup>MPR added a series of questions to the fall 1994 survey to help identify consortia that had received STWOA grants.

Tech-Prep consortia in some communities already include institutions and organizations that go beyond the narrow consortium definition in the legislation and approximate the broad coalitions the STWOA encourages. Although Tech-Prep consortia are only required to include secondary agencies and two-year degree- or certificate-granting postsecondary institutions, many include four-year colleges, businesses, trade associations, and labor groups (Figure IV.1). For example, nearly three-quarters of consortia included at least one employer as a member in 1994. Local business/industry associations or trade groups, including chambers of commerce, are reportedly members of close to two-thirds of all consortia. About one-quarter of consortia include labor groups (unions).

FIGURE IV.1

MEMBERSHIP IN TECH-PREP CONSORTIA, FALL 1994

These levels of participation in Tech-Prep consortia by entities the STWOA requires do not suggest



that all consortia could currently be considered school-to-work partnerships as defined in the STWOA. The reported growth of business, industry, and labor membership in Tech-Prep consortia does, however, suggest a response to the expectations of the STWOA. Between 1993 and 1994, both the percentage of consortia that included these groups as members and the total number of these groups participating increased. Although the proportion of consortia that reported including businesses as members rose only from 72 percent in 1993 to 76 percent in 1994, the number of participating firms rose by 40 percent (from 12,168 to 16,998). On average, consortia with business members included close to 26 firms in 1994. The reported participation of business associations and labor groups also rose substantially.

### ***Businesses in many communities provide some level of support for school-to-work-type activities***

“Membership” in a consortium or partnership can involve different levels of contribution and participation. Building school-to-work systems requires the active participation of business, industry, and labor, rather than a more passive commitment from these groups to sit on advisory boards. The extent to which the private sector is involved in Tech-Prep planning and implementation can provide a baseline measure of their expected support for school-to-work development.

Available data suggest that businesses, corporations, trade associations, and labor organizations already provide tangible assistance for school-to-work activities under the Tech-Prep banner, and this support is broadening to some extent (Table IV.1). Although the overall fraction of consortia that received support from these groups did not change appreciably between 1993 and 1994, consortia that received support obtained more types of assistance in 1994 than in the previous year. For example, 57 percent of consortia reported having business representatives as guest speakers in classrooms or assemblies in the 1993-1994 school year, compared with 49 percent a year earlier. Business, industry, and labor also reportedly increased their participation in Tech-Prep communities by providing more consortia with opportunities for students to tour work sites and other career awareness activities, as well as support for staff development activities for counselors and instructors through workplace visits and discussions. All of these activities are consistent with implementation of school-to-work components.

Although business, industry, and labor appear to be playing an increasing role in school-to-work-type efforts in Tech-Prep communities, the extent of their participation in consortium districts is unknown. Consortia were not asked to identify the number of districts in which the business community provided different types of assistance.

### ***Few Tech-Prep communities received STWOA grants for school-to-work system development in 1994***

STWOA funding is intended to assist states and localities in broadening earlier education reform efforts such as Tech-Prep into the comprehensive model outlined in the new legislation. At the local level, STWOA funding can be obtained in three ways: as a direct grant from the national School-to-Work Office, as a subgrant under a state implementation grant, or even as a planning grant under the original state development grants awarded in winter 1994. These local grants may be awarded to groups of institutions and organizations that are identical in composition to an established Tech-Prep consortium, include a subset of a consortium’s members, or encompass members of multiple Tech-Prep consortia.

Responses from local Tech-Prep coordinators suggest that some Tech-Prep consortia or subsets of their member school districts have received STWOA grants through each of the three possible funding vehicles in the 1994-1995 school year. A total of 191 consortia--22 percent of all consortia--reported receiving a STWOA grant by January 1995 that covered all or some of their member districts. Twenty-two of these consortia reported that their grants had come directly from the national School-to-Work Office; the districts served by these consortia are generally consistent with the communities covered by the STWOA direct local grants and urban/rural high-poverty grants awarded in summer and fall 1994. In the eight states with state implementation grants at that time--Kentucky, Massachusetts, Maine, Michigan, New Jersey, New York, Oregon, and Wisconsin--84 of the 191 Tech-Prep consortia reported receiving an STWOA grant. The remaining 85 consortia that reportedly received STWOA grants most likely were awarded funds under their state’s development grant.

TABLE IV.1 TYPES OF SUPPORT RECEIVED FROM BUSINESSES, CORPORATIONS, TRADE ASSOCIATIONS, AND LABOR ORGANIZATIONS

The Tech-Prep survey provides some evidence that states may have been awarding early STWOA funds cautiously in 1994. Some states had not even received a development grant by the time the Tech-Prep survey was administered in fall 1994, and only eight states had received the larger implementation grants. It is therefore not surprising that relatively few Tech-Prep consortia reported receiving STWOA grants, or that STWOA grants received were relatively small in many states. The average STWOA grant amounts for Tech-Prep consortia in the eight original implementation states (\$196,521) and for consortia with direct local grants (\$610,004) were far higher, on average, than those for other consortia (\$48,169).

***Most early STWOA grants went to school-to-work partnerships whose composition did not match that of their local Tech-Prep consortia***

Direct correspondence between school-to-work partnerships and Tech-Prep consortia appears to have been limited in the first year of STWOA funding, at least with regard to school district membership. Nearly 62 percent of the 191 consortia with STWOA funding in fall 1994 reported that school-to-work grants covered only a subset of their consortium districts. The remaining 38 percent reported that all of their consortium districts were included in a STWOA grant, but the survey question did not allow us to assess whether districts outside of the individual responding consortia were included in the STWOA grant as well--that is, whether the school-to-work grant went to an entity that included but was larger than the Tech-Prep consortium. Thus, 38 percent is an upper-bound estimate of the proportion of consortia that in 1994 were identical to STWOA-funded partnerships in terms of district membership. Overall, in the consortia that received STWOA grants, only about 20 percent of their districts (549 out of 2,568) were covered by those grants.

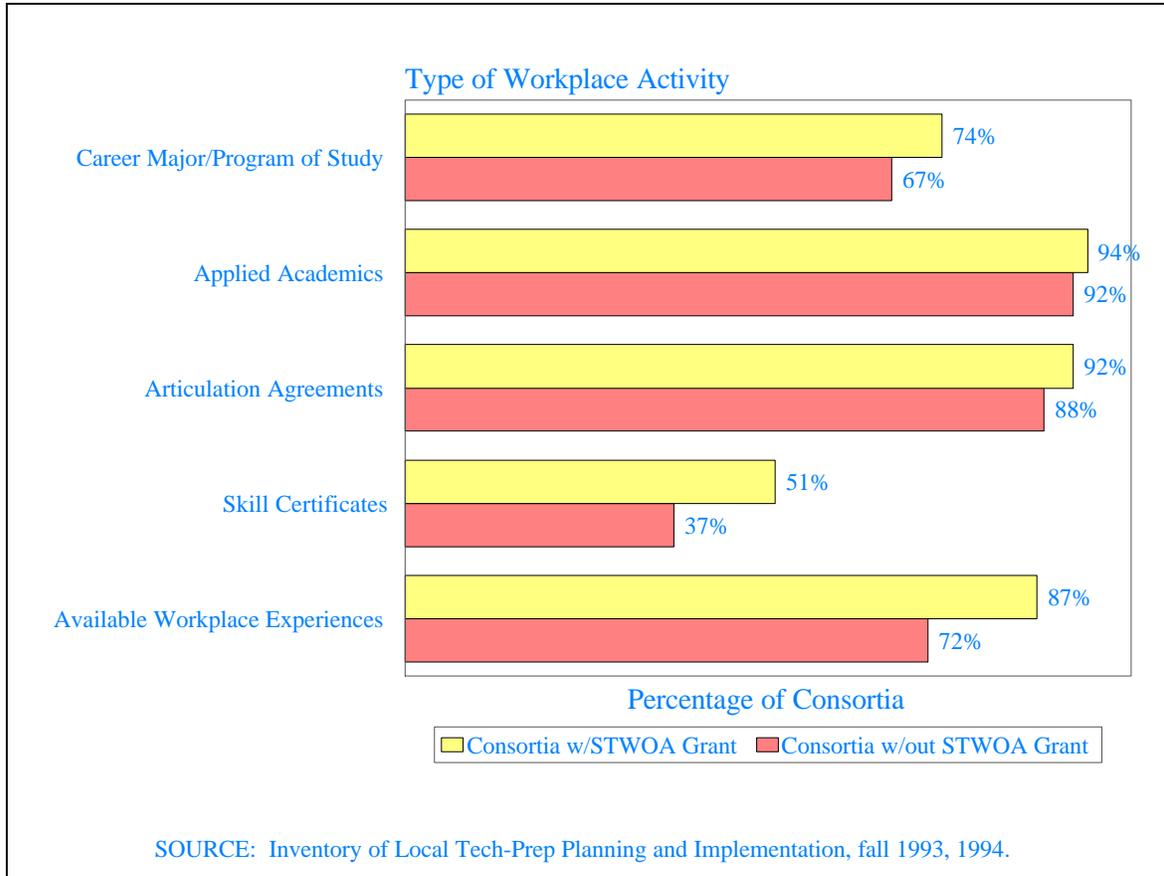
The lack of exact comparability in districts between funded school-to-work partnerships and Tech-Prep consortia in the same local areas is not unexpected. Many states have chosen to form school-to-work partnerships using boundaries other than Tech-Prep consortia. Some states, anticipating federal legislation establishing block grants for education and training, have created large school-to-work partnerships to serve a regional area and take on broadly defined workforce development functions. These larger organizational structures may include multiple Tech-Prep consortia in their entirety or straddle several consortia. On the other hand, many states used the early STWOA development grants to fund small entities--even a single district. In some states, the development grants were awarded to existing Tech-Prep consortia, but for piloting school-to-work initiatives in a subset of their consortium districts or schools.

***Consortia with first year STWOA funds were more likely to be implementing key school-to-work and Tech-Prep components than other consortia***

Consortia that received early STWOA grants covering at least some of their member districts were somewhat more advanced than other consortia. These 191 consortia were more likely to make available career-focused programs of study, academic curricula emphasizing applied learning, articulation agreements, and particularly skill certificate and workplace experiences (Figure IV.2). These data confirm that both the national School-to-Work Office and state agencies awarded STWOA grants competitively--that is, early funding was given to communities that had demonstrated some experience with important school-to-work elements. The data also suggest that an early start on Tech-Prep development may have been a factor in those awards; consortia with STWOA grants in 1994 were much more likely to have been funded by Title III-E beginning in FY 1992 than in later years.

FIGURE IV.2

IMPLEMENTATION OF KEY SCHOOL-TO-WORK FEATURES AMONG  
TECH-PREP CONSORTIA, BY WHETHER THEY RECEIVED  
A STWOA GRANT



Early STWOA-funded consortia had probably already implemented special work-based learning initiatives that caught the attention of agencies awarding those grants. Among all Tech-Prep consortia awarding skill certificates, those with school-to-work grants were far more likely to include program completion and time in the program as outcomes documented on the certificates. These two skill certificate topics are commonly associated with youth apprenticeship and other focused work-based learning programs. STWOA-funded consortia were also more likely to report including the approval of employers on skill certificates than other consortia. Moreover, consortia with STWOA grants included a disproportionate share of Tech-Prep students in workplace activities in the 1993-1994 school year; although the STWOA-funded consortia represent only 22 percent of all consortia, they accounted for nearly 50 percent of all reported Tech-Prep students in paid, extended school year jobs or internships.

## **B. STAFF DEVELOPMENT**

To implement the reforms and produce the institutional changes envisioned by the STWOA and the Tech-Prep Education Act, staff from member organizations must become knowledgeable about key program components. Staff must also be prepared to undertake new roles and responsibilities. Both laws explicitly acknowledge the importance of staff development to the success of the initiatives and encourage coordinating agencies to devote resources to these activities. In the Tech-Prep legislation, in-service training for teachers and counselors is one of seven essential elements. In the STWOA, training for school and workplace staff is an important connecting activity. Because school-to-work systems will be implemented in existing Tech-Prep communities, the extent of staff members' familiarity with school-to-work topics will be important for the development of the new initiatives.

The Tech-Prep surveys can provide information on two issues related to staff development:

1. Are key school-to-work concepts included in staff development activities in Tech-Prep communities?
2. To what extent and how are school staff exposed to the general or technical requirements of employer workplaces?

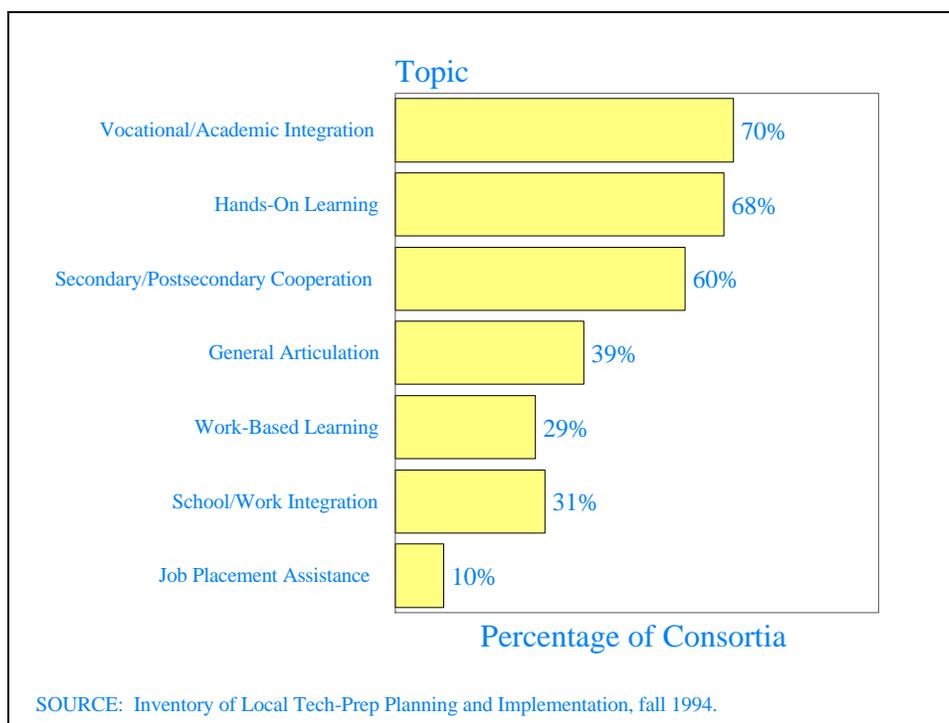
### ***Staff training on school-to-work topics is already under way***

School-to-work partnerships in many communities will reap the benefits of prior staff development under the auspices of Tech-Prep. In both 1993 and 1994, most Tech-Prep consortia involved school and work-site staff to some extent in activities designed to familiarize them with concepts vital to school-to-work. Staff training in Tech-Prep communities focused on curriculum approaches encouraged by STWOA. In 1994, for example, approximately 70 percent of consortia reported that hands-on learning and integration of academic and vocational education were the most highly emphasized topics in staff development activities that year (Figure IV.3). About 30 percent of all consortia concentrated staff development activities on work-based learning and/or integration of school and work.

All types of staff received training in school-to-work concepts. Consortia focused staff development activities on their own staff as well as secondary school staff. More than 95 percent of all consortia reported including their staff, secondary school administrators, teachers, and counselors in training activities. Postsecondary staff also participated in staff development at high rates in more than three-quarters of the consortia. It is important to note that nearly three-quarters of consortia included local representatives or staff of business, industry, or labor in staff training events in 1994.

FIGURE IV.3

MOST HIGHLY EMPHASIZED STAFF DEVELOPMENT TOPICS



***Most consortia report introducing school staff to employer workplace requirements***

Linking students' instruction and experiences in school and at a work site, and training staff to create these linkages, are important elements of the STWOA model. One approach to integrating school-based and work-based learning involves exposing school staff to the general or technical requirements of employer workplaces; the knowledge teachers, counselors, and administrators gain through these experiences may help them to implement integrated curricula or activities at school.

Schools in many consortia are already providing their staff with some opportunities to interact with employers and/or observe employer work sites. In 1994, more than 80 percent of consortia reported that the consortium or its member schools organized some type of interaction between school and employer staff. These interactions varied from joint participation on a vocational advisory panel to teacher and counselor internships at worksites. It is not known, however, how extensive these exchanges were; consortia were not asked to document the number of districts in which the activities took place, the number of staff involved, or the frequency of the activities.

### ***Work-site visits are a common way of exposing school staff to the business environment***

Communities can implement a variety of approaches to help teachers, counselors, and administrators become familiar with the expectations and environments of local firms. Some involve school staff in meetings with employers, held at school or elsewhere. Others allow school personnel to visit employer work sites. Employers in some communities are invited to be guest speakers in school classrooms or assemblies.

Consortia report that all of these methods have been used to some extent in participating schools (Table IV.2). Having school staff conduct an occasional visit to a local firm is one of the most common methods; in 1994, academic teachers, vocational teachers, and counselors participated in this type of staff development activity in 53 percent, 66 percent, and 48 percent of all consortia, respectively. Similar proportions of consortia reported that at least some member schools had brought employers into classrooms to teach, lecture, or demonstrate skills required in the workplace. Many consortia also used vocational-technical advisory committees as an opportunity to promote interaction between school and work-site staff.

Vocational teachers appear to be more involved than academic personnel in consortium efforts to expose school staff to the business environment. The objective of vocational education is to provide students with job skills, and this goal is best achieved when teachers stay up-to-date and knowledgeable about new technology and other changes in industry. Moreover, it is not unusual for vocational teachers to have established relationships with local firms, through job experience prior to teaching or through advisory committees in which employers participate. In contrast, interaction between academic teachers and employers has been less common (Table IV.2).

### **C. MATCHING STUDENTS WITH WORKPLACE OPPORTUNITIES**

An important task in any school-to-work system is coordinating the placement of students in work-based learning experiences. Some individuals or organizations must take responsibility for identifying and keeping track of available workplace opportunities, as well as for determining the best assignments for students with varying career interests, skills, and, perhaps, transportation constraints. This task is considered a key connecting activity in the STWOA.

Although work-based learning is not a required element of Tech-Prep, some consortia are placing students in work sites to enhance their overall educational experience, as described earlier. Information from the Tech-Prep survey illustrates how students are matched with workplace opportunities in Tech-Prep communities.

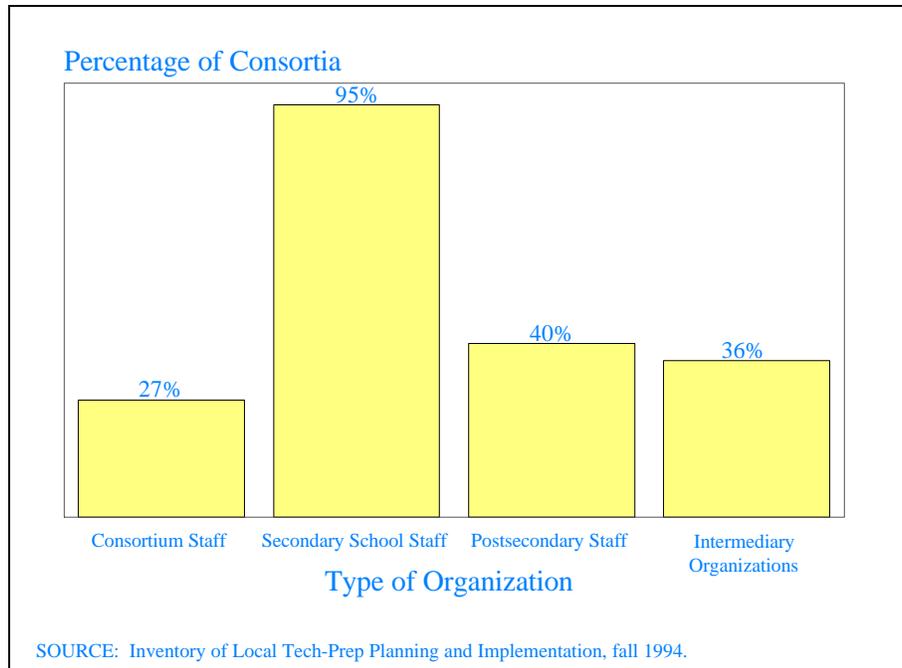
### ***Secondary school staff are the most involved in placing students in workplace experiences***

Several types of organizations and staff may match students with workplace opportunities. These include staff from secondary schools, postsecondary schools, intermediary organizations that work with schools and employers (for example, a chamber of commerce or private industry council), or employers themselves. Data from the survey indicate that, in most consortia, secondary school staff are most likely to play this role (Figure IV.4).

TABLE IV.2 METHODS USED TO FAMILIARIZE SCHOOL STAFF WITH EMPLOYERS AND WORKPLACES IN 1994, BY TYPE OF METHOD AND TYPE OF STAFF

FIGURE IV.4

TYPES OF ORGANIZATIONS INVOLVED IN PLACING STUDENTS IN WORKPLACE EXPERIENCES



This result, based on data for the 1993-1994 school year, is not surprising. Although the STWOA implicitly encourages intermediary organizations to assist in matching students with workplace opportunities, consortia had just begun to respond to the requirements of the new law when the survey was administered. Survey responses preceded the formation of formal school-to-work partnerships and STWOA awards in most Tech-Prep communities. The lead role of secondary school staff probably reflects the fact that many schools and districts employ cooperative education or work experience coordinators, whose primary role is to match interested students with appropriate workplace positions.

**D. DATA COLLECTION**

The STWOA requires partnerships to collect and analyze data on the participation and outcomes of students in school-to-work initiatives. Tech-Prep consortia operate under no such legislative mandate, but state administering agencies are required to report to ED annually on Tech-Prep participation. Thus, local consortia are under pressure to document the number of students participating in Tech-Prep and to track their progress. Some states now require consortia to provide them with counts of participating students as a condition of consortium grant awards. The national evaluation's annual Tech-Prep surveys, which ask for such data, also encourage such local data collection efforts.

School-to-work partnerships are likely to face the same challenges as Tech-Prep consortia in documenting student data. The surveys allow us to address two important issues:

1. To what extent do consortia and their schools collect information on student participation and outcomes?
2. Are systems in place to help document student data?

### ***Current student data collection is limited but improving***

Tech-Prep consortia still have a long way to go in reporting on student participants. In 1994, 83 percent of consortia were able to report a definition of Tech-Prep participation, but only 53 percent of consortia reported actual counts of Tech-Prep students. Reporting consortia were able to count Tech-Prep students in only 30 percent of their member districts. These figures represent a substantial improvement in reporting capacity over the previous year, however. In 1993, only 71 percent of consortia reported definitions of participation, and 36 percent reported counts of students for 17 percent of their districts.

In 1994, higher proportions of consortia could also document numbers of Tech-Prep students who graduated from high school, entered a postsecondary program, or took jobs after graduation. Twenty-seven percent of consortia provided counts of Tech-Prep high school graduates in 1994, compared with only 13 percent of consortia in 1993. Similarly, 17 percent reported on postsecondary enrollments in 1994, compared with 9 percent in 1993.

### ***Collecting information on student progress is likely to remain challenging***

Several factors affect Tech-Prep consortium capacity to measure participation and outcomes, and these factors will affect school-to-work partnerships as well. First, these initiatives were still quite new in fall 1994. Many Tech-Prep consortia were still in the early stage of development--planning and determining objectives, target populations, and program elements. Some of these had not yet developed a definition for identifying who is a Tech-Prep student, much less enrolled students who fit these definitions. School-to-work partnerships are likely to go through a similar process, although the pace of development and decision making may be accelerated because of the groundwork Tech-Prep programs have laid in their communities.

Second, some Tech-Prep consortia lack the resources or leverage to collect data from members. School-to-work partnerships are likely to face similar obstacles. Some districts and schools do not have computerized files that enable them to determine easily the number of students meeting a participation definition or to document the progress of identified participants. Some consortia and school-to-work partnerships may not operate as cohesive units; central staff requests for data from individual member schools or employers may be met with less than full cooperation.

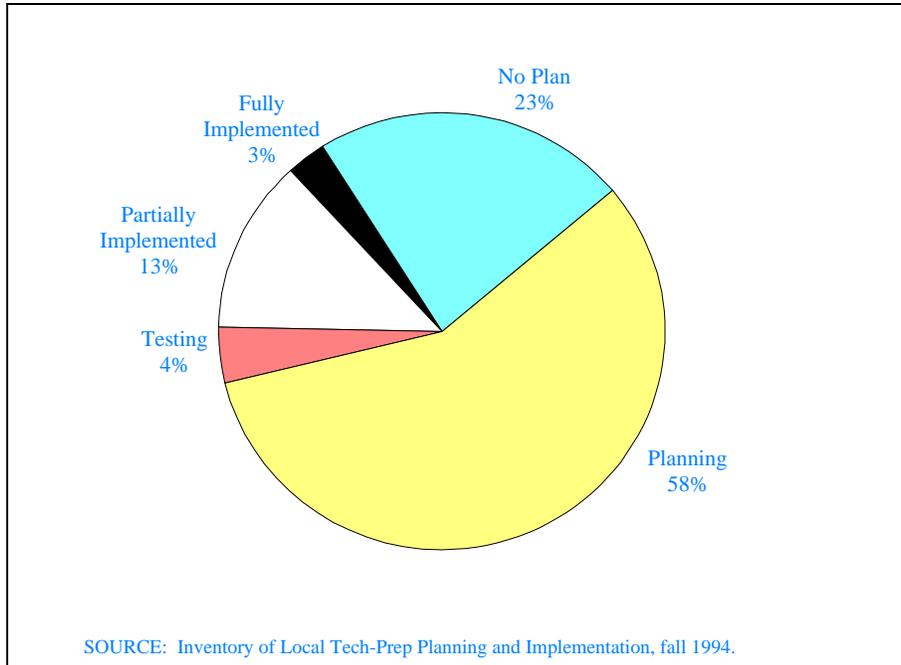
Finally, a systemwide approach to implementation may make data collection more difficult. When Tech-Prep or other reforms are implemented as a distinct program--with a set of required activities--and participants are defined by their choice of the program as a path, staff can count application forms, for example, to determine the number of participating students. In contrast, when components are broadly available to all students, and students can be involved to different degrees in each component, it is more challenging to determine which students are actually affected by the educational changes reform efforts promote. Who is a “participant” may therefore remain a difficult question for many partnerships to answer clearly.

*Plans to develop student databases are common, but implementation is not*

Consortia reported ambitious plans for creating and linking computer systems that will allow member schools to identify and track the progress of individual Tech-Prep participants. More than three-fourths of all consortia reported in 1993 or 1994 that they expected to develop or have already developed a computerized student database that allows them to access data on Tech-Prep students (Figure IV.5).<sup>2</sup> Very few consortia have implemented such a system, however. Almost 60 percent of consortia are still in the planning stages.

FIGURE IV.5

PERCENTAGE OF CONSORTIA WITH STUDENT DATABASES  
IN DIFFERENT STAGES OF DEVELOPMENT



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<sup>2</sup>Questions about plans for data collection systems were not included in the second annual survey completed by approximately three-fourths of fall 1994 respondents. Statistics about this component represent a composite of 1993 and 1994 responses.

*Most database designs focus primarily on documenting transcript information*

In order to collect and analyze the participation and outcome data required under the STWOA, school-to-work partnerships will need systems to help track a wide variety of information. Evidence from the Tech-Prep surveys suggests that data collection planned or under way in many communities is relatively limited.

Consortia that were testing or implementing student databases in late 1993 or 1994 track standard transcript data more often than any other type of student data. Academic and vocational courses taken or completed and grades attained were the most common items included in databases (Table IV.3). Program enrollment by course cluster or major was included almost as frequently; these data may also be based on transcript information, because clusters are often defined according to courses taken. Fewer than half of the consortia included or planned to include specific competencies in their databases.

The status of data systems in Tech-Prep communities suggests some challenges that lie ahead for school-to-work reporting. States and partnerships are required under the STWOA to track school-to-work participation and outcomes by demographic group. However, current student databases or plans for them may be inadequate for school-to-work partnership needs. In Tech-Prep communities, work-related information was not standard in databases close to completion. Only about a third of consortia that were testing or implementing databases recorded information about workplace experiences, postprogram job placements, or wages. It seems likely that most databases used to track Tech-Prep participation and outcomes are identical to or are enhanced versions of regular school data systems. These systems will require further enhancement or new systems will need to be developed to meet the more comprehensive reporting objectives of the STWOA.

TABLE IV.3 ELEMENTS INCLUDED IN TECH-PREP STUDENT DATABASES