New Mexico Public Education Department
Career Technical and Workforce Education Division

OVERCOMING STATE AND LOCAL OBSTACLES TO COLLECTING QUALITY PERKINS DATA:

RECOMMENDATIONS FROM SECONDARY AND POSTSECONDARY ADMINISTRATORS ATTENDING THE PERKINS ACCOUNTABILITY TECHNICAL ASSISTANCE WORKSHOP, APRIL 5, 2005

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BACKGROUND

To support states in improving the quality of their Perkins accountability data, in March 2005 the Office of Vocational and Adult Education (OVAE), US Department of Education, invited State Directors of Vocational Education to submit requests for individualized technical assistance. In response, the New Mexico Public Education Department (NMPED), in association with the New Mexico Association for Community Colleges (NMACC), submitted an application for conference support to communicate federal and state accountability requirements to secondary and postsecondary Perkins sub-recipients. The state also requested help in reviewing its current state data collection systems and local performance data, and in establishing a plan of action for improving data quality and use.

Dr. Steven Klein, Associate Director of Policy Analysis and Development, and Ms. Rosio Bugarin, Senior Research Associate at MPR Associates, Inc. provided technical assistance services to the state. During project planning discussions with Lena Trujillo-Chavez, Bureau Chief for the Career Technical and Workforce Education Bureau, MPR researchers identified two activities to meet the state's technical assistance needs.

- ✓ Present at State Perkins Accountability Meeting

  State officials requested MPR researchers to provide an overview of federal reporting requirements and to facilitate breakout sessions at the state's *Perkins Accountability Technical Assistance Workshop*, held April 5, 2005 in Albuquerque, New Mexico. As an opening activity, MPR researchers summarized federal reporting requirements, reviewed state measures and performance targets, and arrayed state and local challenges in collecting quality data.

  Following the presentation, MPR researchers split the approximately 175 conference participants into secondary and postsecondary work groups and facilitated an hour-long session to identify systemic challenges to collecting accurate state and local data. During afternoon breakouts, participants' critiqued current state Perkins measures, proposed changes to improve data precision, and identified pressing local technical assistance needs.

- ✓ Summarize Meeting Notes

  MPR researchers were asked to synthesize meeting notes and provide NMPED administrators with a summary of locally-identified obstacles to collecting quality data and recommendations to improve the validity and reliability of reported information. Researchers were also asked to consult with state data analysts on system implementation and offer suggestions for improving future state measures and data collection tools.

This report summarizes facilitators' meeting notes and offers recommendations to support the NMPED in structuring technical assistance outreach to secondary and postsecondary career technical education (CTE) providers.

SYNTHESIS OF SECONDARY EDUCATORS' COMMENTS

Following a brief presentation on the key components of a quality data collection system, secondary and postsecondary educators attended a 1-hour, facilitated breakout session to consider crosscutting issues affecting data quality (see Appendix A for a meeting agenda and a copy of session handouts). Participants later reconvened for a 1-hour and 45 minute session to identify institutional challenges in collecting Perkins data for each core indicator, to recommend strategies for improving statewide reporting, and to identify local technical assistance needs. The following section summarizes participants' observations and offers recommendations for improving statewide reporting and technical assistance outreach services.

Challenge: Measurement definitions and data collection procedures are not clearly defined.

During both the morning and afternoon breakout sessions, participants reported that they do not always understand state definitions and measures or the accepted methodology for collecting and reporting outcome data. Participants believe that the absence of clear reporting instructions has undermined the quality and consistency of local data.

Recommendation

Participants asked that the NMPED review the state's Perkins definitions, populations, and measures, and issue more detailed guidance to assist local educators in collecting and reporting information. It was suggested that NMPED staff incorporate revised definitions into its Accountability Data System (ADS) manual, and that the state develop technical assistance materials that explain which students should be included in each measure and the timing and procedures for collecting and reporting outcome data.

To support states in constructing their Perkins measures, in 2001 OVAE developed and disseminated a core indicator handbook, which provides a description of measurement objectives for each core indicator, examples of measure construction, definitions of key terminology, a summary of data quality challenges, and answers to frequently asked questions. MPR recommends that the NMPED adapt the content of this technical assistance handbook to reflect current state measurement approaches, and that the state disseminate the handbook statewide to support educators in collecting local data. A copy of the OVAE measurement guidebook is included in Appendix B.

Challenge: Secondary educators have difficulty identifying CTE concentrators.

Participants reported that in the absence of objective criteria for identifying a CTE course or program sequence, they are identifying CTE concentrators using subjective criteria.

Recommendation

The NMPED is in the process of restructuring the state's vocational program organization around the 16 career clusters identified by the National Career Technical Education Foundation (www.careerclusters.org). As part of their 2005-06 Perkins basic grant application (Due April 29, 2005), district administrators are required to identify how their existing CTE coursework fits into the 16 career cluster areas, and the programs of study that will apply within each cluster. Specifically, for each program of study, the district application must include a description of the academic and CTE courses that must be completed, propose an advisory committee for the program of study; identify a CTE organization affiliated with the program of study; and summarize the funding provided for CTE by the eligible institution. A CTE student will include those completing three or more CTE courses in an identified program or coherent sequence of courses or instructional units.

MPR researchers believe that the NMPED has a unique opportunity to fully automate district identification of CTE concentrators—using approved CTE course and program sequence information included in districts' 2005-06 Perkins application—so that educators no longer would be required to enter Perkins data into the ADS system. To do so, state ADS programmers would incorporate districts' course codes and pathway sequences into its ADS system. Districts administrators would simply continue to enter into ADS the CTE course codes and identifiers of students enrolling in these courses. At year's end, ADS programmers would electronically identify all students who had completed a pathway of 3 or more courses in a cluster area—using current and historical district course enrollment data—to select a base of students for each district's Perkins measure.

While fully automating reporting would introduce some up-front programming costs, once entered, district course and program sequence codes would only need to be updated to reflect changes in district CTE offerings. One caveat is that, since student identifiers were only recently incorporated into the ADS system, the NMPED would only be able to track students from the 120th day of the 2004-05 academic year forward. This would likely require that the state develop transitional measures to track short-term student outcomes.

Challenge: District administrators do not understand how Perkins outcomes are calculated.

Participants reported that they do not understand how the information they enter into ADS is used by the state to calculate their performance outcomes. Many reported that their first exposure to their Perkins performance data occurs when it is posted on the state website. Based on participant comments, it also appears that few local education agencies are using their Perkins data to undertake program improvement efforts, in part because they do not have easy or timely access to their data.

Recommendation

Participants requested that the NMPED develop a more immediate feedback mechanism that would allow them to review state compilations of their data prior to its posting on the Department website. It may be possible, for example, for the NMPED to provide local administrators with summary data on their program performance once ADS data are 'frozen' in August of each academic year. State staff could then work with district administrators to review information, which would require that NMPED staff manually fix errors in the ADS system prior to calculating final state outcomes for posting on the state education website.

MPR also recommends that the NMPED communicate to district administrators how their data are used in ADS to assess student performance on each measure. Demystifying the reporting process can contribute to data quality by encouraging local educators to review important data fields for accuracy prior to its submission to the state. The NMPED may also wish to encourage district administrators to improve the dissemination of CTE concentrators' academic test results to school staff. Although the state routinely provides districts with copies of their academic performance data—disaggregated by school site and individual students—participants reported that they do not always have access to this information.

Given participants' interest in using data for continuous improvement purposes, NMPED may also wish to make available resource materials that assist district staff in using their Perkins data to institute local reforms. In particular, MPR recommends that NMPED consider distributing the OVAE guidebook *"Improving Performance: A Five Step Process.*" This guide was developed by OVAE to help secondary and postsecondary educators use their data to improve their performance on the Perkins core indicators. It describes a generic five-step process that can be applied in its existing form or modified to address state conditions. A copy of the Quick Reference Guide, outlining the five-step process, is included in Appendix C of this report. A copy of the complete publication may be downloaded from the Resource Library section of OVAE's *Peer Collaborative Resource Network* website (www.edcountability.net).

PERKINS MEASURE 1S1: ACADEMIC ATTAINMENT

Challenge: The New Mexico High School Competency Examination does not provide valid information on CTE concentrators' academic achievement.

Current state reporting requirements for 1S1 stipulate that students self-identify their CTE status at the time they take the New Mexico High School Competency Examination in grade 10. Since there is some question whether it is possible for a student to complete a meaningful sequence of three vocational courses by the 10th grade, or whether a student can accurately identify himself or herself as a CTE concentrator, participants suggested that the current measure does not provide useful information for policymaking purposes.

Recommendation

The NMPED is in the process of adopting the New Mexico Standards Based Assessment (NMSBA) as its new measure of academic performance for indicator 1S1. The NMSBA is a criterion-referenced test, administered in grades 4, 8, and 11, that is currently used by the state to assess whether school districts and schools are making Adequate Yearly Progress in reading and math, as called for in the federal *No Child Left Behind* Act. The state is currently reviewing 11th grade performance results from the 2003-04 school year, the first year in which it was administered at the secondary level, prior to its statewide adoption as a replacement measure for Perkins.

Perhaps the simplest way of collecting data on CTE concentrators would be to have students self-report their CTE status at the time of NMSBA administration. This would likely undermine the quality of state data, however, because students do not always know if they qualify as a CTE concentrator and because many students may not have completed three courses in a CTE pathway at the time of test administration. Instead, MPR recommends that the state develop procedures for collecting retrospective data on the academic achievement of vocational concentrators, either at the time they complete the third course in a vocational sequence or at a fixed point in time, such as when they become eligible to enter the base of measure 2S1 (i.e., when they begin their enrollment in the 12th grade).

To avoid imposing a data burden on districts, the NMPED could use current and historical course taking data contained within ADS to automatically identify CTE concentrators, as described above. The state could then forward a list of student identifiers to the state-testing agency, which would identify the number of students who met or exceeded state performance targets. Although this measurement strategy would not provide information on the contribution that CTE concentration has on students' academic skill development, outcomes could be used to assess whether students who complete a CTE concentration are as likely as other students to pass the NMSBA.

PERKINS MEASURE 1S2: VOCATIONAL SKILL ATTAINMENT

Challenge: Measure construction is not clearly defined.

The current state measure requires local education agencies to report on the total number of students enrolled in CTE courses or programs who passed with a grade of "C" or better. Participants reported difficulty in determining whether they should be reporting outcomes for a specific course, or averaging across a series of courses within a program area. Since the terms "course" and "program" are used interchangeably, participants do not understand the measure as it is currently constructed. Moreover, the measure appears to include all students enrolled in CTE coursework, irrespective of whether they are CTE concentrators.

Recommendation

In the short term, the NMPED may wish to clarify the construction of its CTE skill attainment measure and the population of students included in its base. Since it appears that Congress will no longer permit states to report student grades as a measure of CTE skill attainment, many of the issues surrounding the state's use of GPA will disappear with the upcoming reauthorization.

According to NMPED administrators, the state is currently working with the National Occupational Competency Testing Institute (NOCTI) to develop CTE assessments corresponding to the 16 career clusters identified by the state. The state is also piloting the use of NOCTI assessments in a number of sites, with the expectation of transitioning to these assessments in time to comply with new Perkins accountability provisions.

To ensure the CTE educators are prepared for the new measurement approach, MPR recommends that NMPED provide local agencies with sample exams and, where possible, detailed descriptions of the standards associated with each cluster area. This can help educators align their CTE course curricula with state assessment instruments, a critical first step in ensuring that testing outcomes reflect the knowledge and skills that students are taught.

Challenge: Educators are unable to track outcomes of students who are concurrently enrolled.

Students in some districts have the option of enrolling in a nearby postsecondary institution to obtain advanced CTE training. Participants reported that they are not currently including students who are concurrently enrolled in their current measures, since it is not clear whether the secondary or postsecondary institution has ownership of these students. Accordingly, participants requested that the state clarify whether high school students concurrently enrolled in postsecondary CTE coursework should be reported by the high school or postsecondary institution.

Recommendation

According to NMPED administrators, current state policy dictates that students enrolled in Dual Credit coursework—those providing both high school and college credit—should be reported only by the secondary institution. Under new rules issued by the NMPED, secondary students enrolled in Early Admission programs—where no high school credit is offered—should be reported as a postsecondary student. To assist secondary and postsecondary administrators in classifying students, MPR recommends that the NMPE release a memo detailing current and new state policies, and that it add documentation to the ADS data manual explaining how student information should be entered.

PERKINS MEASURE 2S1: COMPLETION

Challenge: CTE concentrators who complete their schooling prior to or subsequent to their projected graduation date are not counted as completers.

The construction of the current state measure restricts reporting to 12th grade CTE concentrators who were enrolled at the beginning of the school year. This means that juniors who graduate early and seniors who graduate late (i.e., during the summer months) are not counted in the existing measure.

Recommendation

To obtain a more accurate count of the number of students who graduate, participants asked that the NMPED consider expanding its definition of a CTE completer to include CTE concentrators who graduated during their junior year or in the summer following their senior year. To simplify reporting, participants suggested that juniors who graduated early be included in the current year's 12th grade measurement totals, while seniors graduating late be included in the following year's totals.

MPR recommends that the state review how ADS data are collected to determine whether there are technical constraints that would affect district reporting on this measure. If the timing of district data submissions to ADS restricts reporting on some students (e.g., seniors graduating in the summer months), then MPR recommends that the state survey a sample of district administrators to assess the scope of this problem. If numbers warrant, MPR recommends that the state convene a working group of district CTE administrators to consider participant proposed options, a well as other measurement possibilities. For example, it may be possible for districts to provide student identifiers to the state of students graduating during the summer months, which ADS programmers could use to identify CTE concentrators who might otherwise not be counted.

It is worth noting that under the current system, while juniors graduating early are not included as a district success, they also do not enter the denominator for the following year, meaning that districts are not penalized for their early departure. Conversely, including seniors in subsequent year reporting totals will lead to double-counting these students: students will be counted in the denominator in the current year, and then reappear in both the numerator and denominator of the measure in the following year. Here the state has three options: it can either (1) count the student in the current year as an unsuccessful outcome and exclude them from subsequent counts; (2) count the student as unsuccessful in the current year and a success in the subsequent year, or (3) develop follow-up procedures to account for those who complete during the summer months.

PERKINS MEASURE 2S2: DIPLOMA WITH A CREDENTIAL

Challenge: District administrators cannot obtain accurate counts of students obtaining certification.
Participants reported that CTE concentrators are often too young to test for certain types of certification while enrolled in high school, and are consequently not counted in this measure. Moreover, the current reporting system does not take into account a student's efforts towards certification; for example, a senior who is 17 may be making good progress towards earning a certification in welding, but since testing occurs at age 18, he or she is not counted even though he or she may have obtain the requisite skills in his or her secondary studies.

Recommendation

Proposed Perkins legislation requires that secondary administrators report on students who attain an industry-recognized credential or certificate. Given that most students do not receive these awards while enrolled at the secondary level, it may be impossible for local education agencies to be held accountable for reporting on these students. Participants suggested that the state consider developing a reporting category for CTE students who earned a diploma and who are "working towards" an industry recognized credential or certification.

The NMPED is also working to develop standardized state procedures for reporting on students earning a CTE skill certificate. As part of the 2005-06 Perkins application process, local educators must submit a list of industry certificates that a CTE instructor will either seek or maintain in order to certify the program and appropriately prepare students for a credential. As a consequence, all districts should be able to report on students who earn a high school diploma in conjunction with a career cluster credential, although in some cases these credentials will focus on broad, crosscutting industry content (e.g., computer literacy).

The state is also planning to supply administrators attending its upcoming career clusters meeting with technical assistance materials developed by the National Career Technical Education Foundation. All participants will receive information on the career clusters effort, along with a CD listing each of the known industry-recognized credentials within the 16 career cluster areas. While it is recognized that not every credential or certification that exists in New Mexico may be identified on these lists, it is anticipated that the state-provided technical assistance materials and training will allow for greater consistency and accuracy of reporting across schools.

MPR recommends that the NMPED develop technical assistance materials that detail how local agencies should collect and report data on students earning CTE credentials, as well as incorporate these instructions in the ADS data manual. It is anticipated that NMPED career cluster specialists will also work with school superintendents, principals, and teachers to assist them in tailoring their program and course materials to reflect the new career cluster frameworks.

Perkins Measure 3: Transition to Postsecondary/Employment or the military

Challenge: The state does not currently have a measure to assess secondary placement.

The state is currently unable to collect data on students who transition from secondary education to advanced training, employment, or the military. Although the NMPED is working to develop a parental release form to permit the collection of student social security numbers (SSN), many participants reported that they were unsure of state policy on the collection of SSN, and as a consequence, were not attempting to collect this information because they believed to do so would be illegal.

Recommendation

The NMPED may wish to draft policy guidance and examples of data collection instruments to assist school district administrators in understanding what is and is not permissible with respect to collecting student SSN. Representatives of the NMPED may also wish to consult with staff at the Florida Department of Education, Office of K-20 Education Information and Accountability to identify strategies that the state has developed to collect SSN of secondary students. Contact Jay Pfeiffer, Director, at 850-245-0429.

Perkins Measure 4: Non-Traditional Participation and Completion

Challenge: District administrators do not understand how to enter data into the ADS system.

Participants reported that ADS contains two fields for entering data on nontraditional students, but provides no explanation on how district staff should calculate numbers for these measures.

Recommendation

MPR recommends that the NMPED develop technical assistance materials to assist district administrators in identifying students enrolling in and completing non-traditional programs. For example, the Florida Department of Education has compiled a list of non-traditional program areas and their associated CIP codes that is posted on the state website. Local administrators use this list to identify programs that are associated with occupations that are out of gender balance. A copy of this list can be downloaded at: http://www.firn.edu/doe/arm/cctcmis/pubs/codes/code_main.htm The state should also provide directions in the ADS data manual to assist local Perkins staff in entering information into the database.

If the NMPED were to seek to fully automate its data collection, ADS programmers could work with district administrators to identify course code numbers associated with non-traditional program areas. Once this information was coded into state programming codes, the state could automatically calculate student participations and completion in identified courses, assuming that the state also had a field corresponding to student sex in the ADS database.

SYNTHESIS OF POSTSECONDARY EDUCATORS' COMMENTS

Community colleges and 4-year colleges and universities in New Mexico maintain sophisticated management information systems to administer program data and student records, and employ institutional researchers to analyze and disseminate this information. As a consequence, most postsecondary institutions have the capacity and technical expertise necessary to collect and report detailed information on students participating in CTE programs.

Participants believed that state postsecondary Perkins data are generally reliable across most institutions, in part because colleges worked together at the start of the current act to develop a common set of statewide indicators. Accountability system development was coordinated by the NMACC, in association with NMPED, which convened a group of institutional researchers (a.k.a. the Performance Indicators People, or PIP), to develop a consensus reporting system.

Although postsecondary institutions compile annual data for each Perkins indicator, few actually use this information to evaluate campus performance or to initiate program improvement efforts. One reason is that postsecondary Perkins data are considered by some to be too highly aggregated to provide policy-relevant information. Rather than use information reported to the NMPED, participants reported that they conduct their own, institutionally focused analyses of CTE program outcomes, using data contained within campus databases to control for program and student characteristics.

Participants also reported that Perkins accountability data often have little utility because the measures used to track student outcomes for some indicators are meaningless. When asked to explain, participants reported that existing state measures were designed to accommodate the reporting capacity of all postsecondary institutions in the state, including those that do not maintain certain types of data in electronic form. In seeking to develop consensus measures, it was felt that the state adopted a reporting system that—though effective for federal reporting purposes—is of limited use for local program improvement efforts.

Challenge: Institutional reporting is not comparable across postsecondary sectors.

Participants reported that not all higher education institutions shared in the development of the state's Perkins measures or reporting methodologies. While institutional researchers from nearly all community college institutions participated in measure development, researchers from 2-year branch campuses associated with Eastern New Mexico University, New Mexico State University, and the University of New Mexico were not involved throughout the entire development process. As a consequence, Perkins measures and data collection methodologies are reasonably aligned across campuses within sectors, but less comparable across 2-year and 4-year institutions.

Recommendation

As the state transitions the new Perkins reporting requirements, the NMPED may wish to convene representatives of community college and 4-year college and university branch systems to ensure that all agencies and sectors are represented in the development of new measures and reporting methodologies. The state may also wish to produce better documentation of postsecondary measures and reporting methodologies so that institutions unable to participate receive the guidance they need to improve the validity and reliability of their data. See the discussion on page 3 of this memo and the materials included in Appendix B for MPR's recommendations for improving state communications regarding Perkins.

Challenge: Institutions are using different methodologies to collect Perkins data.

In an effort to standardize Perkins reporting, postsecondary institutional researchers have attempted to develop common definitions and reporting methodologies for CTE populations and program coursework. For example, to standardize the identification of vocational coursework, the New Mexico Commission on Higher Education (NMCHE) convened a Technical Advisory Group to create a standardized list of vocational courses, designated by CIP code, for institutions to use for Perkins accountability purposes. Participants in the PIP also identified common data collection methodologies to guide institutional reporting.

Although common reporting frameworks exist, not all institutions appear to be using them to structure their reporting. In some cases institutions are unable to apply consensus approaches because the organization of facility databases do not conform to suggested guidelines. In particular, some 2-year branch campuses are unable to collect some types of data because their databases are modeled on their 4-year college or university's information system, which is structurally different than that of community colleges. It also appears that not all campus administrators are using suggested guidelines to collect Perkins data.

Recommendation

While differences in institutional data systems may make it impossible to align inter-sector measures, it may be possible for postsecondary data administrators to qualify where differences exist and, to the extent possible, reduce data error so that all institutions are providing more consistent data. Although it may be too late to rectify inter-institutional differences for the current year, the state may wish to work with the NMCHE and the NMACC to anticipate and resolve these reporting inconsistencies prior to the introduction of new Perkins legislation. The state may also wish to develop a postsecondary measurement guidebook, similar to that described in the secondary recommendations, to instruct institutional staff on the procedures for collecting and reporting Perkins data.

Challenge: On-line reporting instruments are not sufficiently documented or updated.

To support postsecondary educators in reporting Perkins performance data, in 2003 the state introduced a web-based reporting template that allows institutional staff to key enter data directly into state Perkins reporting instruments Participants observed that new data entry instructions in the on-line reporting template were less detailed than those contained in a previous e-mail version, leading some to suggest that postsecondary administrators without prior year experience might encounter difficulty using the template. Participants also noted that the data entry template has not been regularly updated to account for academic year changes (e.g., 2003 cohort should be changed to the 2004 cohort)

Recommendation

The state may wish to consider reviewing existing reporting templates and, where necessary, adding more detailed instructions to assist local providers in entering student and program data. One suggestion was that the state incorporate instructions from the e-mailed data collection form into the web-based template, and that these instructions should be field-tested prior to statewide distribution. State administrators should also ensure that data entry instructions are reviewed and updated on an annual basis.

Challenge: Postsecondary institutions cannot collect accurate data on special population students

Due to privacy issues, postsecondary administrators are hesitant to collect data for many categories of special population students, including displaced homemakers, single parents, and economically disadvantaged individuals. As a consequence, administrators either report on individuals for whom they are able to infer a special population status or enter a zero in the reporting field. Since entering a zero suggests that institutions are not serving these students, administrators requested that NMPED change the reporting requirements to permit administrators to enter non-numeric information, such as “Unable to Report.”

Respondents also requested that the state agency communicate to the US Department of Education the challenges that the state faces in collecting data on postsecondary special population students.

Recommendation

Although the NMPED has attempted to lobby both the state’s congressional delegation and OVAE administrators, it appears likely that Congress will reauthorize Perkins without changing the requirement that state and local education agencies report on the performance of special population students. As such, the state may wish to take steps to standardize reporting across higher education institutions so that it does not appear that some agencies are failing to provide equitable services to some categories of students.

MPR also recommends that the NMPED convene a working group of representatives from the state higher education system—following adoption of new Perkins legislation—to draft standardized procedures for

identifying and reporting data on special population students. This may include defining accepted proxies for students for whom institutions are currently unable to collect data. The NMPED may also wish to clarify state guidelines for identifying students in special population groups; according to conference participants, some postsecondary administrators are refusing to collect information in the mistaken belief that it is against state law to request certain types of information.

To improve the validity and reliability of institutional data, NMPED may also wish to consider developing a voluntary, standardized, institutionally administered special populations survey that all entering students would be asked to complete as part of their application process. Assuming such a survey was legally permissible, the use of a standardized data collection instrument would remove the subjectivity associated with current student classifications methods, while ensuring some degree of consistency across institutions. An example of a student survey used by Lewis and Clark Community College in Illinois is included in Appendix D of this memo.

Challenge: Postsecondary Institutions are not receiving credit for all vocational concentrators who complete their intended program of studies

The state's current definition of a postsecondary vocational concentrator is a student who completes nine or more CTE credit hours in a vocational program area and who declares a CTE major. This definition penalizes institutions because many students who meet the course-taking threshold subsequently declare a CTE major to qualify for financial aid, even if they have no plans to complete a degree or credential. This means that students can enter the denominator of many of the state's postsecondary measures even though they have plans that prevent them from entering the numerator. Moreover, students who complete certain types of coursework (e.g., skill upgrading for career advancement) may not be counted as a success even though they have fulfilled their enrollment objective.

Recommendation

It is likely that new 2005 Perkins accountability provisions will require that states report on students who attain an industry-recognized credential, certificate, or degree, as well as who transfer to a baccalaureate degree-granting program. While this expanded definition will enable institutions to receive credit for students completing certificate or credential programs, institutions will still face challenges counting students who complete a program or series of courses that fulfill their enrollment objective (e.g., skill upgrading), but who have no intention of graduating.

To improve reporting accuracy, the state may wish to work with postsecondary educators to develop criteria for differentiating students who are actively pursuing a degree, credential, certificate, or transfer from those attending for other reasons (e.g., skill upgrading or personal development). One participant also suggested

that the state consider making available a state licensing databases to permit institutions to conduct matches on completers who earn a state recognized license after exiting a program.

Since institutions may also face difficulties differentiating students who "stop out" from those who transfer to an out-of-state 4-year college, the state may wish to develop postsecondary data sharing agreements with neighboring states (see below) or consider joining the National Student Clearinghouse, located in Herndon, Virginia. Clearinghouse data are used to verify enrollments of student loan recipients who defer pay back obligations, and the database includes information on approximately 85% of the nation's postsecondary enrollments. Since this is a fee-based service, MPR recommends that the NMPED consult with the NMCHE to assess the scope of out-of-state transfer at the postsecondary level, as well as other potential benefits of tracking students—extending beyond Perkins—before subscribing to this service.

Challenge: Postsecondary institutional researchers have difficulty tracking students into employment or advanced education

Some participants noted that they are prohibited from gaining access to student social security numbers because institutional administrators do not always understand Federal Education Rights and Privacy Act (FERPA) requirements. Operating under the mistaken belief that they cannot release personally identifiable information, a small number of institutional administrators are undermining institutional capacity to participate in post-program follow-up using UI wage record data.

Recommendation

The NMPED may wish to produce a memorandum to secondary and postsecondary administrators clarifying what types of student information are and are not permissible to be released under FERPA and state regulations.

Challenge: Postsecondary institutional researchers are unable to track placement and employment outcomes for students who leave the state or enter the military or federal employment

Community colleges located near state borders often serve students who are likely to find out-of-state employment, reducing institutional placement counts. Moreover, all institutions within the state are hampered in tracking students who enter federal employment or the military.

Recommendation

The New Mexico Department of Labor (NMDOL) has been working to negotiate UI wage record sharing agreements with neighboring states to improve the tracking of students across state lines. Accordingly, MPR recommends that the NMPED follow-up with NMDOL staff to assess the status of state negotiations and their implications for Perkins. In the event this effort is not moving forward, NMPED might wish to

consult with other states that have developed these types of record-sharing agreements. For example, Ohio has a multi-state agreement with several bordering states governing the exchange of UI wage record data. Contact Douglas Holmes, Department of Job and Family Service at 614-644-9178 to obtain a copy of the Memorandum of Understanding and contractual agreements underlying this exchange effort.

It was also suggested that the state explore the potential for conducting administrative record matching with federal employment and military databases to capture outcomes for students who are employed but not reported in state UI wage records databases. See Appendix E for an example of a data sharing agreement between the Illinois State Board of Education and the U.S. Office of Personnel Management. The NMPED may also wish to consider establishing a data sharing agreement with the U.S. military to identify students who enlist. Contact Mike Dove of the Defense Manpower Data Center, DOD Center Monterey Bay, 400 Gigling Road, Seaside CA 93955-6771 or e-mail the center at: webmaster@osd.pentagon.mil

Challenge: Postsecondary institutions are often unable to identify Tech Prep students

Participants reported difficulty distinguishing Tech Prep students from non-Tech Prep students who are participating in postsecondary CTE courses articulated with secondary vocational programs. Moreover, since secondary students do not always know that they are classified as a Tech Prep student, matriculates are generally not able to self-identify themselves upon entering a community college.

Recommendation

The state has a number of options to improve the identification of Tech Prep students.

Option 1: Maintain a Centralized Tech Prep Database

Secondary institutions could forward identifiers of students participating in secondary Tech Prep programs to the state or the NMCHE, which would maintain a Tech Prep database. These identifiers could include students' SSN or unique identifying characteristics, such as students' first name, last name, birth date, and school of attendance. (Note: see Appendix F for a memo on the legality of transferring student identifiers from the Illinois Board of Education). Postsecondary institutions could then either receive a file containing this information, against which they would conduct their own administrative record matches, or forward a file to the state (or NMCHE) containing identifiers of students participating in postsecondary Tech Prep programs. This would support tracking students who transition from a secondary to a postsecondary Tech Prep program for which a specific pathway exists, as well as for students who enroll in Tech Prep coursework at a non-affiliated community college. One drawback of this approach is that it requires the state or the NMCHE to maintain and administer a Tech Prep database, which may be resource intensive.

Option 2: Conduct Retrospective Matching

The state may wish to work with secondary and/or postsecondary educators to standardize procedures for tracking Tech Prep students as they transition across sectors. One approach, currently used in California, would be for postsecondary institutional researchers to identify students participating in postsecondary CTE programs who were graduates of a high school with an affiliated Tech Prep pathway. Students enrolled in these postsecondary programs—either one or two years after graduating from their feeder high school—would automatically be classified as a Tech Prep student.

To reduce the probability of reporting false positives (i.e., students who attended a feeder high school but who were not enrolled in a Tech Prep pathway), postsecondary institutions could share a list of their identified Tech Prep students with their feeder high schools, who would confirm or deny student participation. See Appendix G for a copy of California's State Plan for Vocational and Technical Education, which details the state's tracking approach.

Option 3: Coordinate Secondary and Postsecondary Reporting

A third option would be to require secondary educators to forward the identifiers of secondary Tech Prep students to their affiliated postsecondary institutions. Postsecondary institutional researchers would then attempt to match secondary student identifiers with those of postsecondary students enrolled in a recognized Tech Prep pathway, either using students' SSN or by performing probabilistic matching using a combination of student identifiers (e.g., name, birthday, school).

Option 4: Provide Tech Prep Students with a Portable Transcript

Rather than rely on secondary or postsecondary administrators to identify Tech Prep students, Nevada relies on students to identify themselves by attaching fiscal incentives to completion of a secondary Tech Prep program. Nevada high school students who complete an approved Tech Prep sequence with a grade of an "A" or "B" can apply for a specialized high school transcript that, when presented at a participating community college, automatically provides them with college credit. Colleges use these transcripts as a way of identifying Tech Prep students for postsecondary Perkins follow-up. While the system is not perfect—it is estimated that only 50 percent of eligible students in Nevada apply for a Tech Prep transcript—some postsecondary schools report that as many as 90 percent of students entering eligible coursework present a secondary transcript. For more information on the Nevada model, contact John Bearce of the Community College of Southern Nevada by phone at 702-651-7454 or by e-mail: john_bearce@ccsn.edu

State administrators may also wish to access the Tech Prep Compendium maintained on the website of the Office of Community College Research and Leadership, affiliated with the College of Education at the University of Illinois at Urbana-Champaign, for additional resources on identifying and tracking Tech Prep students across secondary and postsecondary sectors: http://occrl.ed.uiuc.edu/

APPENDIX A

New Mexico Public Education Department
Perkins Accountability Technical Assistance Workshop

Tuesday, April 5, 2005

9:00 am	**Welcome and Introductions**
9:15 – 10:15 am	**Overview of Federal Perkins Accountability System** Summary of federal reporting requirements and the challenges that state and local education agencies face in collecting data.
10:15 – 10:30 am	**Break**
10:30 – 11:30 am	**Collecting and Reporting Accurate Data** Overview of the key components of a quality data collection system, followed by secondary and postsecondary breakout discussions to identify issues affecting data quality.
11:30 – 1:00 pm	**Lunch**
1:00 – 2:30 pm	**Brainstorming Future Directions** Participants will meet in secondary and postsecondary breakouts to identify challenges, recommendations, and technical assistance needs for each Perkins indicator. Group members will compile the challenges they face in reporting quality data and prioritize their most pressing technical assistance needs.
2:45–3:00 pm	**Where Do We Go From Here?** Discussion of how meeting results will be used to support future state initiatives and directions.
3:00 pm	**Adjourn**

Core Indicator Work Session:
Improving Perkins Data Quality

1:00 – 1:10 pm **Overview of the Exercise**

Facilitators will review the purpose of the exercise and work with groups to select recorders.

1:10 – 1:40 pm **Review First Indicator**

Group members will answer the following questions about their assigned indicator, using the following suggested timetable:

- 10 minutes – What are the challenges your education agency faces in collecting data for this indicator?
- 10 minutes – How would you improve the collection of data for this measure, or if necessary the measure itself, to improve its accuracy and utility?
- 10 minutes – What kinds of state technical assistance would you need to collect quality data on this measure?

Each group will write their responses on flip charts, recognizing that these charts will be collected and used by the state to support system development.

1:40 – 2:10 pm **Report-Out**

Group members will report-out on the challenges, recommendations, and technical assistance needs identified for each indicator and collect feedback from the larger group. Group recorders will provide copies of written charts to their secondary or postsecondary facilitator.

2:10 – 2:30 pm **Brainstorming Future Directions**

Group members will compile the challenges they face in reporting quality data and prioritize their most pressing technical assistance needs.

2:30–2:45 pm **Break and Reconvene**

APPENDIX B

Core Indicator 1: Student Attainment

MEASUREMENT OBJECTIVE

Academic Attainment

All students who reach a state-defined threshold level of vocational education should also achieve mastery of academic knowledge and skills that meet state academic standards. To assess attainment of academic knowledge, Congress requires state and local education agencies to report on the academic outcomes of students who have concentrated in vocational education and left secondary education or stopped program participation at the postsecondary level.

Vocational and Technical Skill Attainment

All students who reach a state-defined threshold level of vocational education should master knowledge and skills that meet state-defined and industry-validated career and technical skill standards. To assess whether vocational concentrators have attained vocational and technical skills, state and local education agencies should report on the vocational outcomes of students who have left secondary education or stopped program participation at the postsecondary level.

MEASURE CONSTRUCTION

Academic and vocational attainment rates are based on the number of vocational education concentrators who have left secondary education or stopped postsecondary program participation and mastered state-established academic knowledge and skills and mastered career and technical skills. Rates are calculated using the following formulas:

Secondary Academic Attainment

> **Numerator**: Number of students reaching a state-defined threshold level of vocational education who have met state academic standards and have left secondary education in the reporting year.

Denominator: Number of students reaching a state-defined threshold level of vocational education and who have left secondary education in the reporting year.

Secondary Vocational and Technical Skill Attainment

Numerator: Number of students reaching a state-defined threshold level of vocational education who have met state-established, industry-validated career and technical skill standards and have left secondary education in the reporting year.

Denominator: Number of students reaching a state-defined threshold level of vocational education and who have left secondary education in the reporting year.

Postsecondary Academic Attainment

Numerator: Number of students reaching a state-defined threshold level of vocational education who complete a postsecondary program and who have met program-defined academic standards and have stopped program participation in the reporting year.

Denominator: Number of students reaching a state-defined threshold level of vocational education who complete a postsecondary program and who have stopped program participation in the reporting year.

Postsecondary Vocational and Technical Skill Attainment

Numerator: Number of students reaching a state-defined threshold level of vocational education who complete a postsecondary program and who have met program-defined and industry-validated career and technical skill standards and have stopped program participation in the reporting year.

Denominator: Number of students reaching a state-defined threshold level of vocational education who complete a postsecondary program and who have stopped program participation in the reporting year.

DEFINITIONS

Vocational Concentrator

A student who enrolled in a threshold level of vocational education.

Threshold Level of Vocational Education

A program/sequence of courses or instructional units that provides an individual with the academic and technical knowledge/skills/proficiencies to prepare the individual for employment and/or further or advanced education.

Left Secondary Education

Either graduating from high school or withdrawing from or ceasing to attend high school for a state-defined period of time.

Stopped Program Participation

Completing a program, withdrawing from a program, or not enrolling in program courses for a state-defined period of time.

DATA COLLECTION STRATEGIES

States are required to report academic attainment outcomes and career and technical skill attainment outcomes on all vocational concentrators who leave high school/stop participation in a postsecondary program. States typically use state or national academic assessments, grade-point average, or course or program completion as approaches to collecting data on these students.

STRATEGIES FOR IMPROVING DATA QUALITY

***Challenge**: State-level assessments are used to measure academic performance in my state, but we are not getting back test scores for many of the students whom we expect to take the exams. What can be done to collect this data?*

Solutions:

- Track and keep a record of the vocational concentrator students whom you expect to take the assessment and compare your list to the list of data scores that you get back.
- Establish a follow-up procedure to pinpoint reasons for non-matches. For example, is there a problem with the identifiers and name fields that can be corrected? Did students who were expected to take the exam not take it for reasons of illness or refusal? Once the source of the non-match is established, it may be clearer what steps need to be taken to gather the test scores.
- Evaluate whether the proportion of vocational concentrators who took the assessment in your school or college is significantly different from that in other schools. This process might help in establishing whether there is a system-wide problem or whether it may be unique to your school.

***Challenge:** My state uses assessments to measure academic attainment, but a large number of students in my LEA are exempt from testing. How should I collect data on these students?*

Solutions:

- Identify vocational concentrators not taking assessments to evaluate the extent to which the full population is not being included in the measurement. You should be reporting on at least 80 percent of vocational concentrators.

- Make sure that exempt students have an Individual Education Plan in place that includes alternative assessments of skills that measure academic attainment that will meet state standards.

Challenge: *My state uses national/state assessments to measure vocational attainment. However, some of the programs offered by my college are unique to my area and not listed under state assessments. What can I do to collect data for students in these programs?*

Solutions:

- Work with your state to determine the best way to develop local assessments for these programs that the state would recognize and count as meeting state-established criteria.

Challenge: *What is the standard for determining completion in a course or program?*

Solutions:

- Review your state's requirements for which courses are included in academic attainment and which courses are included in technical skill attainment and the associated standards for "passing" (i.e., the grade threshold).
- Only those vocational concentrators who complete the state-required program courses should be counted in the numerator.

Challenge: *How do I know which courses to include in the calculation of GPA?*

Solutions:

- To identify the courses in your LEA that should be considered as academic requirements and the courses that should be considered as vocational requirements, review your state plan for the criteria that has been agreed upon statewide.

Challenge: *Our attainment data suggests that our vocational concentrators' performance is not as high as others in our LEA and across the state. How can we ensure that our data are accurate?*

Solutions:

- Review the data to make sure that only vocational concentrators are included in the numerator and denominator and that you have adequate coverage of your vocational concentrators (at least 80 percent). It could be that some students have been improperly identified as vocational concentrators and are lowering outcomes. Check for missing data.
- Check to make sure that the data are being accurately compiled, entered, and tabulated. Provide staff training on the correct procedures for entering and extracting the data and on the appropriate fields to include in calculations.
- Compare your timing for data collection with other LEAs. If you are collecting data at different times or inconsistently, your results may differ from other schools over time and across populations.

Challenge: *My state is using program completion for both postsecondary attainment measures. The state sent back my numbers to verify their accuracy, but the number of students being counted appears low to me. What can I do?*

Solutions:

- Check on whether your interpretation of the student population in the denominator agrees with the population that the state measure specifies. Make sure that the student population that you are counting matches with the state.
- Verify that the degree and certificate programs that you are counting for the population correspond with the programs that the state is counting. The state may not be counting all of the programs that you are including.

- It is important to make sure that the time period for which you are reporting is correct. Check that you and the state are reporting on students over the same period of time.
- Re-run your numbers and compare them to the state's to see if changing any of your interpretations of the measure has an impact.

Challenge: *Our state is using course completion/program completion to measure vocational skill attainment. I am concerned that we are not accurately measuring the skills that matter to our employers. How can we ensure that completion equates with competency and the attainment of skills?*

Solutions:

- Check to make sure that all programs and courses reporting under this measure have identified skills. It is important that all educators are aware of the skills that must be attained to count as completing a course.
- Establish common practice in a vocational area. For example, achievement of 80 percent of identified course competencies equates with completion.
- Build educators' capacity to conduct course testing and assessments to improve the validity and reliability of the assessments. Be sure that vocational competencies being measured in classroom assessments and tests align with course content.
- Structured response assessments may face problems of validity, while alternative assessments can be unreliable. Mixing assessment modes may improve the measurement of competency in a vocational area.

FREQUENTLY ASKED QUESTIONS

Q: What can I do to improve on my performance for attainment?

A: Differentiate between data quality and program improvement. Verify that the data are accurately reflecting student attainment and implement strategies to improve data quality. Evaluate patterns and trends in the data and identify root causes for performance: are poor performers all in one program area? Do lower-performing students share characteristics or barriers that can be addressed? Are high-performing students enrolling in different courses than the general population? After identifying possible causes for performance, work with educators to help them understand the data and develop ways to improve programs so student competency and achievement rises. Technical assistance, professional development, and capacity-building efforts will promote buy-in and eventual improvement in performance.

Q: How should a vocational concentrator who transfers from another system be reported?

A: LEAs should take responsibility only for students who are enrolled in their institution. Students transferring into your LEA become a part of your system and should be included in your measurement systems. Students transferring out of your system should be subtracted from the numerator and denominator of all applicable measures. Note that postsecondary students who transfer out of your LEA to a 4-year institution may be counted as a placement, depending how your state has structured its measure.

Q: How should academic outcomes be reported if the state exam contains multiple assessments in different content areas?

A: States should have developed a combined measure—the percentage of concentrators who meet standards (i.e. pass exams) in all content areas. If states cannot develop a combined measure, then OVAE will work with them to negotiate performance levels for each content area. Work with your state to discuss reporting for a combined measure if it has been developed or reporting on the different content areas if a combined measure has not been developed.

Q: How should I count students who take an assessment prior to becoming a vocational concentrator?

A: If your state chooses to use a standardized state exam administered early in a student's secondary program, it may be deemed the best measure available to the state. In this case, a state should consider setting performance targets that are similar to those for all students, with the intent of showing that students concentrating in vocational programs enter programs at or above the academic skill level of other students.

Q: Students in my state have the opportunity to take the state assessment over several years. How do I know when to collect data on students?

A: Consult with your state vocational administrative team to determine the best measure for assessing student performance.

Core Indicator 2: Completion

MEASUREMENT OBJECTIVE

All students who reach a threshold level of vocational coursework should go on to complete their academic and vocational studies and graduate. To assess student success in attaining their educational goals, Congress requires state and local education agencies to report completion rates for secondary and postsecondary students who have achieved a minimum level of vocational coursework. States offering proficiency credentials in conjunction with a secondary school diploma are also expected to report student-credentialing rates for years 3–5 of the Perkins Act.

MEASURE CONSTRUCTION

Completion rates are based on the number of students who enroll in or complete a state-defined threshold level of vocational studies. Rates are calculated using the following formula:

Secondary Completion

Numerator: Number of students reaching the state-defined threshold level of vocational education who have attained a high school diploma or its recognized state equivalent and who have left secondary education in the reporting year.

Denominator: Number of students reaching the state-defined threshold level of vocational education and who have left secondary education in the reporting year

Secondary Proficiency Credential With Secondary Diploma

Numerator: Number of students reaching the state-defined threshold level of vocational education who have attained a proficiency credential in conjunction with a high school diploma or its recognized state equivalent and who have left secondary education in the reporting year.

Denominator: Number of students reaching the state-defined threshold level of vocational education who have received a high school diploma or its recognized state equivalent and who have left secondary education in the reporting year

Postsecondary Completion

Numerator: Number of students reaching the state-defined threshold level of vocational education who receive or were eligible to receive a postsecondary degree, certificate, or credential and who stopped program participation in the reporting year.

Denominator: Number of students reaching the state-defined threshold level of vocational education who are not yet eligible to complete plus those students who received or were eligible to receive a postsecondary degree, certificate, or credential, and who stopped program participation in the reporting year.

DEFINITIONS

Equivalency Certificate

A state-recognized award that signals that the recipient has completed an approved program of studies at the secondary level. These awards may include a Certificate of Competence, Certificate of Completion or GED certification. Due to the difficulties of counting GED students who are eligible to graduate, most states are choosing not to include GED students in their measure.

Proficiency Credential

A state-developed credential that certifies that its recipient has attained a set of recognized knowledge and skills associated with a vocational program or career area. Proficiency credentials are typically awarded in conjunction with a secondary school diploma.

DATA COLLECTION STRATEGIES

States are required to report counts of the number of students who complete a threshold level of vocational coursework and who go on to graduate from their secondary school or postsecondary institution. Data are typically collected using student transcripts, with collection occurring as of a state-specified cutoff date or time period that may differ for secondary and postsecondary institutions.

STRATEGIES FOR IMPROVING DATA QUALITY

Challenge: *Completion rates for vocational concentrators in my LEA are much lower than the state average; however, my LEA graduation rate is actually quite high. Why the difference?*

Solutions:

- Assess whether vocational concentrators are actually more likely than other students to drop out or stop out prior to graduation. It may be that higher completion rates of other students are masking lower performance among vocational concentrators. If so, develop intervention strategies to improve completion rates for vocational concentrators.

- Determine whether you are using the state-recognized definition for vocational concentrators and completers. It may be that you are collecting data on a different student population than other sites.
- Check whether you are missing completion data on students who, once classified as vocational concentrators, are overlooked for graduation. This may occur for a variety of reasons, including data entry errors, early or late graduation (e.g., following summer school), or outstanding fines or debts that must be cleared prior to diploma or degree award.
- Completion rates may vary with program type or size. Check to see if the mix of program offerings at your LEA is similar to those in other sites.
- Assess whether the base population of students has changed over time. Students classified as vocational concentrators who subsequently transfer to other schools or institutions should be subtracted from the base of students to ensure that only students who are eligible to complete are included in the denominator.
- At the postsecondary level, assess whether low rates can be traced to students who shift from full-time to part-time status or who stop out late in their program. It may be efficient to target resources on students who are relatively advanced in their program but who are at high risk of changing their enrollment status.

Challenge: *Completion data reported by different sites in my LEA, or within a single site, vary over time. What can I do to improve the reliability of reporting?*

Solutions:

- Determine whether school or institutional staff responsible for collecting the data fully understand reporting parameters and the procedures required to locate information in student files. Check to see if other fields may contain information that will help determine student outcomes.

- Schedule annual training sessions with staff from your LEA who are responsible for collecting completion data to ensure all follow similar data collection procedures.
- Consider developing written, step-by-step instructions, tailored to the data systems used in your state, to assist LEA staff in collecting information.
- Check to ensure that all LEAs and sites within your LEA are collecting data according to the state-defined period. Sites that put off data collection until the end of the summer may report higher completion rates than those that record data at the end of the academic year (i.e., June versus August collection).

Challenge: *LEA staff do not take the reporting requirements seriously. How can I encourage individuals to collect accurate data?*

Solutions:

- Create a statewide working group of influential educators and management information specialists to identify the obstacles to the collection of high quality, easily accessed data. Based on feedback, develop procedures to simplify data collection.
- Educate LEA staff on the potential uses of accurate student completion data and develop training materials that will enable them to use the data they collect to improve program provision.
- Remind LEA staff that sites failing to make progress toward state performance levels may be required to develop local program improvement plans.
- Publicize completion rates to allow students, parents, and the community to see the results that are being reported to state and federal policymakers.

Challenge: *The measure for completion in my state has changed and/or state policymakers are unable or unwilling to designate a specific measurement strategy. What should I do?*

Solutions:

- Consistency is the most important part of any measurement system. If measures change over time, consider collecting data using early measurement strategies to assess changes over time. Alternatively, review prior year data to identify baseline performance levels using the new measurement strategy.
- Consult with state vocational administrators to identify a consistent measurement strategy that will allow local agencies to report useful information.
- Educate state policymakers and LEA staff on the importance of collecting stable completion measures. Work with key stakeholders to develop a consistent approach that will produce useful information for federal accountability and local program improvement efforts.

FREQUENTLY ASKED QUESTIONS

Q: At what date should data on secondary student completion be collected?

A: Many states are using the end of June of a secondary vocational concentrator's senior year as the cutoff date for recording completion. Others are using August of the senior year to allow students who enroll in summer school additional time to graduate. Consult with your state vocational administrative staff to identify the cutoff date that the LEA should use when calculating student completion rates.

Q: My state does not offer a proficiency credential. Must I report on this measure?

A: Local secondary agencies in states that do not award proficiency credentials are not required to report on this measure. State vocational administrators will inform OVAE about the type of diplomas and degrees offered—states not awarding this type of credential are exempt from this measure. Secondary educators in states offering proficiency credentials are required to collect data on student attainment of these credentials; consult your state vocational administrative staff or state reporting guidelines to clarify the manner in which these data should be collected. Note that postsecondary agencies are expected to report on students attaining a postsecondary degree or credential awarded by the institution.

Q: What constitutes postsecondary completion? That is, must a student graduate to be counted as having completed?

A: States are using a variety of approaches to document postsecondary completion. Some states are basing their calculation on only those students who receive a certificate, credential, or Associate's degree, while others are also including students who are eligible to receive a certificate or degree, irrespective of whether they actually receive the document. A small number of states are also including students who transfer to advanced postsecondary education, so long as these students complete a rigorous, state-approved

program that specifies a predefined completion point. Consult with your state administrative staff to identify the proper procedure for calculating completion rates.

Q: When should postsecondary institutions assess completion rates, since students may enroll indefinitely or stop out prior to returning and completing their degree?

A: States have been encouraged to report on vocational concentrators who complete their postsecondary program or stop out within a given time period designated by the state. In some cases, states are using 1 1/2 normative time as the cutoff for assessing students who attain the vocational concentrator threshold and subsequently complete or stop out from a program. In other cases, states may track all vocational concentrators for as long as they remain enrolled, meaning that students may be counted in multiple reporting years. Consult your state vocational administrative staff to determine the proper procedure for calculating completion rates.

Q: How can postsecondary institutions report on completion when, in many cases, it is not possible to identify a program exiter until one year following program participation?

A: Institutions will need to report annual data on student completion rates irrespective of the manner in which students are identified. In the event a state identifies program exiters using retrospective data, institutions will likely report on students who have completed in the prior year, as well as those who have not reenrolled during a state-defined period of time. This may mean that institutional reporting is lagged one year.

Core Indicator 3: Placement

MEASUREMENT OBJECTIVE

All students who complete a secondary vocational education program should obtain skills that will prepare them for successful transition to postsecondary education or advanced training, employment, and/or military service. To assess the quality of student preparation, Congress requires state and local education agencies to report on the postsecondary outcomes of students who complete a secondary vocational program and graduate from high school, and at the postsecondary level, who complete a postsecondary program in the reporting year.

MEASURE CONSTRUCTION

Placement rates are based on the number of high school graduates or postsecondary students who successfully transition within a state-defined time period, typically between six months and one year of school completion. Rates are calculated using the following formula:

Secondary

Numerator: Number of students who completed secondary vocational programs, received a high school diploma or its recognized state equivalent, left secondary education in the reporting year, and who were placed in postsecondary education or advanced training, employment, and/or military service within an designated time period.

Denominator: Number of students who completed secondary vocational education programs and who received a high school diploma or its recognized state equivalent and left secondary education in the reporting year.

Postsecondary

Numerator: Number of students who completed a postsecondary program in the reporting year and who were placed in further postsecondary education or advanced training, employment, and/or military service within a designated time period after stopping participation in the postsecondary program.

Denominator: Number of students who completed a postsecondary program in the reporting year.

DEFINITIONS

Postsecondary Education or Advanced Training

A secondary student is considered pursuing higher education or advanced job training if he or she enrolls in a public or private postsecondary institution, proprietary school, or adult education program during the reference period. At the postsecondary level, a student is considered pursuing high education or advanced job training if he or she makes a vertical transfer from a 2-year to 4-year college or university, proprietary school, or adult education program during the reference period. Students transferring among institutions at the same level (e.g., among 2-year institutions) should not be counted for the purposes of this measure.

Employment

A student is considered employed if he or she reports working for pay at any point during the reporting period. Employment may include part-time or full-time work, and need not be related to a student's field of vocational study. Individuals should be counted as employed irrespective of whether they were continuously working throughout the time period or whether they were employed, in the same or different job, prior to high school graduation.

Military Enlistment

Military service may include any branch of the armed forces.

DATA COLLECTION STRATEGIES

States are required to report placement outcomes on all vocational program completers who graduate from high school. Accordingly, states typically employ one of two approaches to data collection:

Mail or Telephone Survey: State, district, or school staff administer mail or telephone follow-up surveys of all vocational program completers at the end of the state-designated placement period.

Administrative Record Matching: State education agencies use a unique student identifier, typically the social security number, to electronically track secondary graduates as they transition into further education, employment, or the military. Data sources include state postsecondary education record, Unemployment Wage Record Information, and federal Department of Defense records.

OVERCOMING OBSTACLES TO MAIL AND TELEPHONE SURVEYING

Low response rates are perhaps the single greatest challenge to conducting follow-up information on students. Initial response rates of less than 40 percent are not uncommon for the first round of a follow-up survey effort. Consider taking a number of steps to increase responses, such as:

Mail Survey

- Mailing a postcard two weeks prior to the survey to check for invalid addresses and prepare students
- Providing a postage-paid, addressed response envelope along with the survey
- Offering a sweepstakes prize eligible to all students responding by a given date
- Including a coupon for free or reduced merchandise redeemable at a local business
- Sending a reminder postcard to nonrespondents a week following the deadline
- Calling nonrespondents
- Mailing a second survey, along with a letter explaining its importance

Phone Survey

- Asking if there is a good time to call back in the event the person is not there
- Requesting forwarding information from the person answering the phone
- Using state or national databases to track students who may have moved within or outside the state

OVERCOMING OBSTACLES TO ADMINISTRATIVE RECORD MATCHING

While administrative record matching can reduce some of the effort required in collecting data, electronic matching systems are not perfect, meaning that placement outcomes may be missing for a sizeable percentage of the eligible student population. As such, states performing administrative record matching should plan on conducting follow-up mail or telephone surveys to collect information on missing students who have bad SSNs, who do not show up in match files, or who have information that is clearly inaccurate or invalid.

To reduce the likelihood of mismatches, states should consider the following steps:

a. Develop a system of edits.

To ensure that data are consistently reported, develop a data review system that will provide "alerts" to potential problems (e.g., duplicate or incorrect SSNs; placements exceeding completers, etc.).

b. Conduct information audits.

Conduct periodic audits of record systems of selected agencies with whom one has data-sharing arrangements to assess whether electronically reported data align with agency records. As an alternative, review internal information audits, or financial audits of state inspector or auditor-general functions. Regularly compare results over time to note any apparent discrepancies in magnitude that suggests a problem.

c. Report performances to locals.

Share aggregate and individual agency data with locals so that they can monitor their own progress as well as understand the value of the information they report.

d. Establish institutional response thresholds.

Establish minimum reporting levels that each institution must meet or exceed. Provide technical assistance and/or sanctions to institutions that fail to meet the minimum reporting rate.

e. Administer supplemental surveys.

Develop mail or telephone surveys to supplement electronic matching. Survey administration may focus on students who have bad SSNs, who do not show up in match files, or who have information that is clearly inaccurate or invalid.

f. Develop data-sharing agreements to cover employment in neighboring states.

This can take the form of interstate administrative record matches with states that share markets with your state or that attract a large number of state students. It could also take the form of working through the Wage Record Interchange System (WRIS) or the National Student Loan Cooperative.

g. Link with other administrative record systems.

Arrange for record sharing with other federal and state agencies, including the Department of Defense, United States Postal Service, Railroad Retirement Systems, and the Office of Personnel Management. Also, consider using the Enrollment Verification Service of the National Student Clearinghouse. You can learn more about the Clearinghouse by logging onto the following website: *http://www.nslc.org/*

CAUTION:

On January 18, 2001, OVAE released program memorandum 2001-2, entitled "The Family Educational Rights and Privacy Act and the Use of State Unemployment Insurance Wage Records to Report on Performance." This memo, which offered guidance on states' responsibilities under the Family Educational and Privacy Rights Act (FERPA), is presently under review by the new Administration. Accordingly, states should consult with OVAE staff prior to exchanging student record data to ensure the protection of student privacy. OVAE will provide information to states as soon as it becomes available.

HOT TIP!

Consider using the Internet as a way of increasing student survey responses. Survey development can often be performed in-house—for example, by offering students credit for designing a survey web site. Publicizing the site prior to student graduation and offering some form of perk—for example, providing students with an alumni page to update their friends on their activities—can serve as an alternative to traditional mail and phone survey efforts. For an example, try logging onto the following sites:

Secondary: *http://www.hemethigh.com/forms/gradsurvey.html*

Postsecondary: *http://www.csp.msu.edu/services/followup.htm*

FREQUENTLY ASKED QUESTIONS

Q: Is sampling permitted? That is, can agencies collect data on a subset of high school graduates completing vocational programs rather than all students?

A: No, sampling is not permitted. State and local education agencies must collect data on all students who complete a vocational program and who graduate in the state-designated reporting period.

Q: Can agencies use student intent questionnaires distributed at graduation or base reporting using other strategies (e.g., teacher-reported outcomes) to measure student placement?

A: State and local agencies may not use statements of student intent to assess placement; measurement must reflect actual student outcomes collected at the end of the state-designated time period. States may consider using other strategies for collecting data, such as teacher-reported outcomes, so long as these measurements are defensible and reflect actual student outcomes.

Tips for Conducting the Survey Process

	Issues for Consideration
Plan Survey Effort ✓ Identify who will lead survey effort ✓ Determine cost of survey options ✓ Develop survey timetable ✓ Identify objectives of survey	• Can the survey effort be organized and staffed by volunteers? • What is the size of the graduating population? Cost is directly related to the survey scale. • What types of information will you need to improve program provision or planning? Use the survey to your advantage. • Don't forget to budget for follow-up of non-respondents
Create Survey Instrument ✓ Review other surveys for ideas ✓ Develop questions that elicit a range of student responses (e.g., ratings, open-ended, multiple choice) ✓ Pilot test the draft instrument to see if the instructions are clear	• What type of survey instrument are other LEAs in your state using? • What types of information do you need to drive your own program improvement efforts? • Does the survey meet the state guidelines for federal reporting? • Are the instructions clear and written at a level that students can understand? Check by having a group of students complete the survey. • Is there a need to translate the survey into different languages? • How long does it take to complete? The shorter the survey the higher the response rate. Try and keep the survey to 15 minutes or less.
Prepare for Administration ✓ Explain purpose of survey to students before they graduate ✓ Collect contact information on all eligible students (phone numbers/addresses) ✓ Train phone interviewers	• Do the students understand why they are being surveyed? Explain the importance of the effort and how the information will be used. • Collect contact information, including home telephone numbers and addresses, to ensure students or a family member can be contacted. • Consider collecting contact information on grandparents or other family members who are likely to know where the student is residing. Alumni associations and school administrative or teaching staff are also good sources of information. • Translate the survey into appropriate languages for your target population. • How accurate are responses? Train interviewers in how to administer the survey.
Collect the Data ✓ Distribute surveys or contact students based on the state-defined time period ✓ Provide incentives for people to return their survey ✓ Follow up among nonrespondents	• When are surveys and/or phone contacts made? Try to time your collection as close to the end of the state-defined time period so that student recollections are fresh. • When using surveys, give students an incentive to respond in a timely manner. • Develop phone survey scripts to provide interviewers with consistent direction. • Plan to contact nonrespondents within two weeks of survey due-dates. • Conduct follow-up contacts for all nonrespondents: BE PERSISTENT!

Core Indicator 4: Nontraditional

MEASUREMENT OBJECTIVE

All secondary students should have the opportunity to pursue studies in a vocational education program area of their choice, including those that are nontraditional for their gender. To ensure all students have access to vocational programs, Congress requires state and local education agencies to track student participation in and completion of career and technical education programs that lead to nontraditional training and employment.

MEASURE CONSTRUCTION

Participation and completion rates are based on the number of high school students who enroll in or complete a state-identified program associated with nontraditional employment in the field. Rates are calculated using the following formula:

Participation

Numerator: Number of students in underrepresented gender groups who participated in a nontraditional secondary program in the reporting year.

Denominator: Number of students (male and female) who participated in a nontraditional secondary program in the reporting year.

Completion

Numerator: Number of students in underrepresented gender groups who completed a nontraditional secondary program in the reporting year.

Denominator: Number of students (male and female) who completed a nontraditional secondary program in the reporting year.

DEFINITIONS

Nontraditional Training and Employment

Occupations or fields of work, including careers in the computer science, technology, and other emerging high skill occupations, for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work.

Nontraditional Vocational Program

A vocational program area that addresses occupational areas in which underrepresented gender groups comprise less than 25 percent of employed persons.

Crosswalk of Occupations and Vocational Programs

A list that associates occupations or fields of work that are identified as nontraditional in the labor market with the vocational program areas that prepare students for entry into these fields.

DATA COLLECTION STRATEGIES

States are required to report counts of the number of students participating in, and completing nontraditional vocational program areas. To assist LEAs in identifying students, states often provide LEAs with a crosswalk that relates occupations that are nontraditional for each gender with the vocational program areas, courses, or clusters that prepare students for entry into these occupations.

STRATEGIES FOR IMPROVING DATA QUALITY

Challenge: *What should I do if my state has not identified a set of nontraditional occupations and/or provided LEAs with a consistent crosswalk of occupations and vocational educational programs?*

Solutions:

- Consult with state vocational administrators to identify national or state data sources that can be used to identify occupations that are out-of-balance in the workplace, and develop a consistent set of guidelines to assist LEA in identifying vocational courses and program areas that are nontraditional. Use the handout "Strategies for Identifying Nontraditional Vocational Programs" at the end of this unit to assist in developing state criteria.

- Develop a list of vocational course or program numbers, coded using a standardized state instructional classification system, which LEAs can use to identify instructional programs that are nontraditional.

- If no standardized state instructional classification system exists, consider developing descriptions of the skills associated with state-identified, nontraditional occupations. This will assist LEA staff in associating their instructional coursework with nontraditional occupations. Consult the Occupational Information Network (O*NET) developed by the U.S. Department of Labor for a description of job skills associated with specific occupations. The complete list can be found at the following website: *http://www.doleta.gov/programs/onet/*

Challenge: *It appears that some LEAs have difficulty identifying students participating in vocational coursework or program areas associated with occupations that are out-of-balance. How can I improve reporting?*

Solutions:

- Provide LEAs with definitions of key state terms, including *vocational participant, vocational completer,* and *nontraditional vocational program area,* as well as clear descriptions of vocational program areas that prepare students for nontraditional occupations or careers.
- Encourage LEAs to use individual student record data, harvested from student transcripts, to identify individuals participating in nontraditional vocational studies.
- Develop clear, written instructions that LEA staff—including administrators or teachers of vocational programs—can consult when counting the numbers of students participating in or concentrating in nontraditional instructional programs.

Challenge: *How can I ensure that each LEA accurately classifies nontraditional students over time?*

Solutions:

- Encourage LEAs to compare state crosswalks against their own course offerings each year to ensure that state-identified instructional programs correlate with local record systems and account for any changes over time.
- Ask LEAs to compare their annual counts of student participation and completion against prior year data to see if there are any differences that are difficult to explain.
- Suggest that LEAs assign a single individual to collect and enter data each year to lower the likelihood of mistakes and to routinize reporting.

- Hold annual state trainings geared toward new LEA staff who are responsible for collecting Perkins data.
- Develop clear written instructions that stipulate procedures for collecting and reporting data.

Challenge: *Staff at many LEAs view reporting as a bureaucratic exercise and do not take the time or effort to collect quality data or improve student access to nontraditional programs. What can I do to promote buy-in?*

Solutions:

- Provide LEAs with summary state data that will enable them to evaluate their own success in improving student access to nontraditional vocational program areas.
- Share state data with parents, legislators, and the press.
- Consult with associations, such as the National Alliance for Partnerships in Equity, to identify strategies and materials that will support teachers and administrators in reforming instructional strategies.
- Provide technical assistance workshops at the LEA level to communicate the importance of equity and to help institution staff understand why they are collecting data.

FREQUENTLY ASKED QUESTIONS

Q: May I use course enrollments to identify nontraditional areas of study in lieu of state-identified ones?

A: No, Perkins is quite specific in requiring that nontraditional programs be identified based on the composition of the workforce. As such, LEAs must use state-identified crosswalks or program lists to identify vocational instructional areas that are associated with occupations that are out-of-balance in the workplace. This may mean that, in some instances, enrollments in local programs may not appear out-of-balance.

Q: What should I do if my state does not provide me with a list of program areas or courses that are nontraditional, but only a list of occupations that are out-of-balance in the workplace?

A: In the event that your state does not provide clear guidelines for identifying nontraditional instructional areas you will need to develop some means of relating occupations with vocational programs offered in your agency. The preferred approach is to use the Classification of Instructional Programs, a guide developed by the U.S. Department of Education that describes the vocational coursework that corresponds to a range of occupations in a given field. Electronic copies of the report are available on the U.S. Department of Education website at the following address: *http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=91396*

To assist your state in interpreting your data, you should include a copy of your classification scheme with the data you submit and use the same methodology over time. Irrespective of the approach you use to identify vocational programs, you should be consistent in your measurement over time to ensure data are comparable across years.

Q: What constitutes participation in a nontraditional program area?

A: A vocational participant describes a student who enrolls in a vocational program area or course that prepares individuals for entry into a nontraditional occupation, as identified by your state.

Q: What constitutes completion of a nontraditional program area?

A: A vocational completer describes a student who fulfills a set of state-defined criteria that signifies that he or she has mastered a set of academic and/or technical skills to prepare him or her for future education and career success. Consult the definitions developed by your state to determine what constitutes completion in your state.

Q: Which students should be included in the denominator for this measure?

A: The denominator of this measure should include all students, male or female, who participate in or complete a vocational program area or course designated as nontraditional by your state.

A GUIDE TO CROSSWALKING NONTRADITIONAL OCCUPATIONS AND PROGRAMS

Step 1: Identify Occupations That Are Nontraditional in the Workforce

In collaboration with state vocational education administrators, identify a set of occupations—based on state or national data—that are nontraditional for either sex. State-specific occupational data can typically be obtained from your state's department of economic development or other employment agency. To assist states, OVAE has identified nontraditional occupations based on national data collected by the U.S. Department of Labor, Bureau of Labor Statistics, a copy of which is included in this handout.

Step 2: Identify Work Skills Associated With Nontraditional Occupations

Begin by identifying the skills associated with each nontraditional occupation. Skill lists can be obtained by reviewing O*NET, developed by the U.S. Department of Labor. Access the site by entering the following URL on your Internet browser: *http://www.doleta.gov/programs/onet/*

Next, search for the occupation you've identified as nontraditional and identify the skills that are required for workers in this field. Alternatively, you may consult with industry associations or educators in your state to identify the skills required for success in a given nontraditional occupation.

Step 3: Crosswalk Nontraditional Occupations with Vocational Education Programs

Identify vocational education programs within your state that prepare students for entry into the nontraditional occupations you identified above. Depending upon your state, you may have a number of options to use to associate occupations with vocational programs in your state.

1: State Classification Systems

If your state maintains a standardized classification system for vocational education that all LEAs use to code courses, then you may want to base your crosswalk on this system. For each nontraditional occupation, link the occupational skills you identified with a vocational program area code identified by your state. Ideally, each occupation will correspond to a single course sequence; however, don't be surprised if one vocational education program area prepares students for multiple occupations. Consult with state vocational education curriculum experts if you are not sure of the skills taught within a given vocational sequence.

2: National Classification Systems

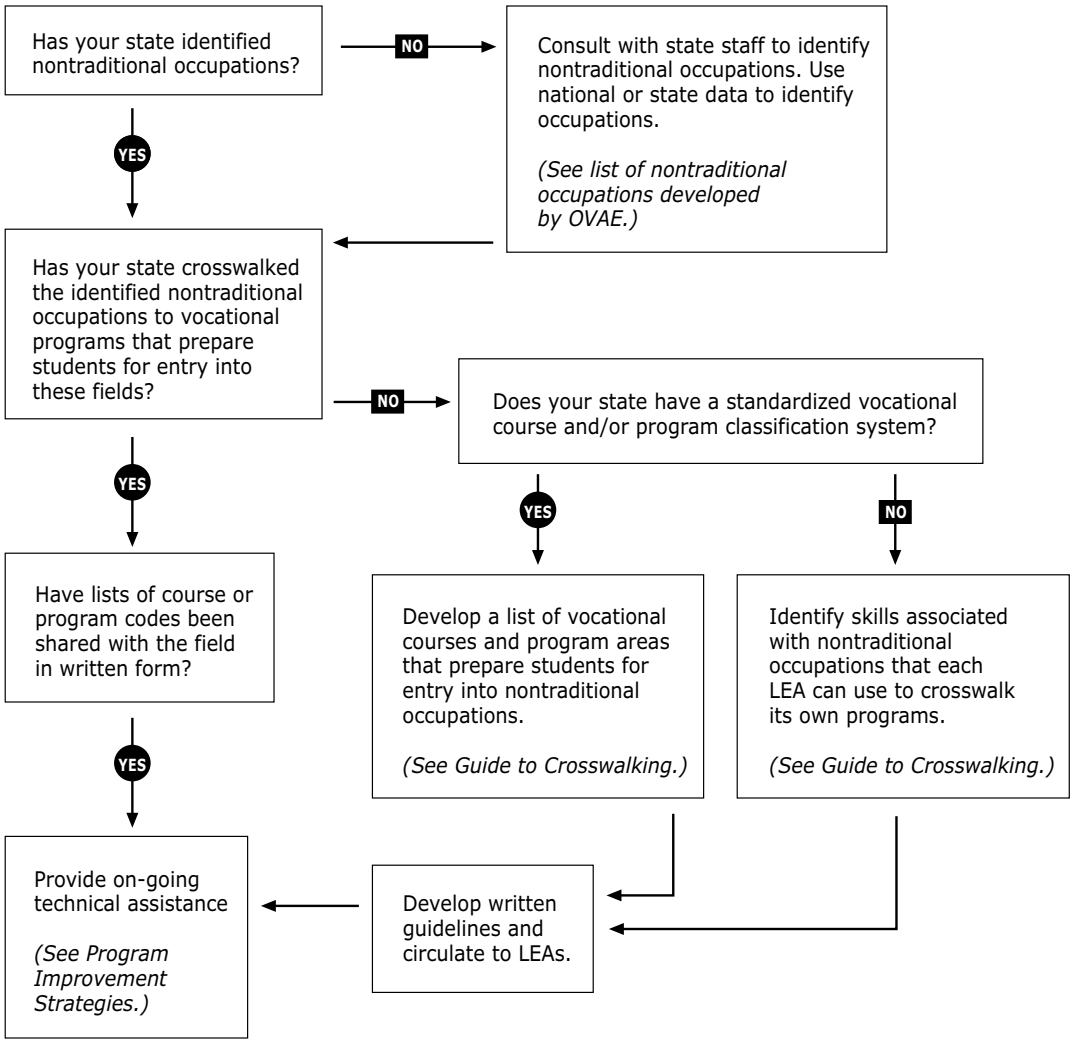
If your state relies on local agencies to develop their own course and program codes, you may want to consider using the Classification of Instructional Programs (CIP) codes developed by the US Department of Education to crosswalk occupations with vocational education programs. You may access the most current CIP by entering the following URL on your Internet browser: *http://nces.ed.gov/npec/papers/cipPreface.html*

For each occupational skill, search the CIP for the vocational program area that provides students with the skills required for success in the nontraditional occupations you have identified.

Step 4: Develop and Circulate Instructions to LEAs

Using the list of vocational programs you identified above, develop written guidelines to assist LEAs in identifying nontraditional programs. Ideally, these instructions will contain a list of course codes or descriptions of vocational programs that will enable all LEAs in the state to report on students participating in similar courses, irrespective of the program classification system used locally.

Strategies for Identifying Nontraditional Vocational Programs



APPENDIX C

PROGRAM

QUALITY

IMPROVING PERFORMANCE: A FIVE-STEP PROCESS

A QUICK REFERENCE GUIDE

U. S. DEPARTMENT OF EDUCATION
DIVISION OF VOCATIONAL AND TECHNICAL EDUCATION

STEP 1: DOCUMENT PERFORMANCE RESULTS

Why document student performance? The first step in improving educational programs and student success is to find out how students performed and continue to perform in school and college, and how performance varies for different groups of students. In this way, student performance data can help educators and stakeholders (a) understand what drives students' success, (b) assess the quality of education provided by the public system, and (c) identify improvement priorities and strategies. But documenting performance is not enough: it is equally important to collect information from different sources to not only arrive at a complete and accurate picture of student performance, but to also identify gaps in performance and areas for improvement. This section helps you with the following steps:

- What to document and how to document state performance results,
- Simple and effective tools to display and describe student performance,
- How to evaluate the quality of your performance data, and
- How to use your performance documentation to establish program improvement priorities.

What to Document

Let us assume that you have acquired the performance data you need for the core and sub-indicators. To derive the greatest benefit from the data you have collected you need to go further than simply reporting your performance. A good starting point is to group your data in the following different ways:

- *Make comparisons within groups.* Comparing subgroups will allow you to further examine differences within the group and to hypothesize reasons for, and solutions to, those differences.
- *Make use of benchmarks.* Benchmarks provide a point of reference to assess performance relative to similar groups.
- *Trends over time*. Strive to pinpoint trends by documenting how groups and subgroups are performing over time.

How to Document: Methods and Tools

There are many ways in which to present performance data. The following suggested methods and tools range from fairly simple tables to more sophisticated statistics and graphs:

- *Tables*: Although tables are a nice way to capture a lot of information, they may not always be the most effective way to portray the meaning of your data.
- *Graphical displays*: Figures accompanied by summary statistics often provide a more expressive representation of patterns in your performance data and convey a clearer picture of performance outcomes and gaps. Further, graphics and summary statistics are good supplements

to tables. Graphical displays typically include histograms, pie charts, line graphs, and bar charts. Summary statistics include the average, median, range, percentile ranking, and standard deviation.

How Do I Know I Can Trust my Data?

Since all data are limited in some respects, it is important that you consider the quality of your data when performing your analyses to ensure that what you say is happening is a true reflection of student performance and not simply a problem of limited data quality. According to the criteria established by the Office of Vocational and Adult Education to determine data quality, states should do two things when looking at data quality: 1) identify major limitations, and 2) assess the implication for interpreting results.

Please remember that data quality limitations should not keep you from using the data. Simply recognize that there may be flaws in the documented data and be cognizant of how you characterize and present the data. The data quality improvement process should occur alongside program improvement efforts, and each of these processes should influence the other. Also, working with the data will assist you in discovering areas on which to focus data quality improvement efforts. And, the better the data quality is, the stronger the argument to use data for decision-making.

Criteria for Establishing Improvement Priorities

Now that you have documented and analyzed your performance data, a logical next step is to use the following criteria to draw up a list of where gaps exist for each core indicator and to identify improvement priorities.

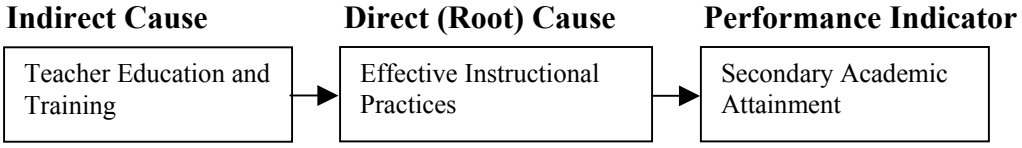
Criteria	Tips
Size of Gaps	Identify where performance differences are the largest for each core indicator.
Trends in Performance Gaps	Over time, are gaps getting larger or smaller? Are changes over time explained by unusual events or do gaps reflect an ongoing performance result?
Concentration of Gaps	Identify whether a particular program, population, or school/college disproportionately impacts state performance for each core indicator, either positively or negatively. Are there gaps that cut across measures? Can you identify performance pertaining to certain core indicators that is unique to particular areas or populations?
State Improvement Priorities	Determine whether performance areas that you have been targeting for improvement in the past continue to be problematic or have shown improvement. Also take into consideration what key stakeholders in the state have identified as priorities.

STEP 2: IDENTIFY ROOT CAUSES

Your analysis in Step 1 uncovered which students are attaining the desired outcomes and which students are not, but it did not tell you why. Step 2 is designed to address the why questions—why do these performance problems and student differences exist? What are the major root causes that determine performance and explain student differences in performance? Which of these causes are within your control and outside your control? Which of these causes should we address first in our improvement efforts? This section will assist you in identifying and evaluating the root causes of performance to help guide your search for solutions.

Why Search for Root Causes?

Program improvement is, in part, a search for answers to a very basic question: what causes poor performance? Root causes are those conditions or factors that directly cause or permit a performance gap to occur. Rarely are performance problems caused by a single factor; rather, they are caused by a combination of root causes and indirect causes, some of which are beyond the immediate control of schools and colleges. For example, effective instructional practices are a direct cause of student academic achievement because they have a direct impact on academic achievement. In contrast, teacher training is an "indirect" cause because it has an effect on student achievement only to the extent that the training results in improved instructional practices in the classroom, which, in turn, affect academic achievement.



How to Identify Root Causes

The search for root causes is a search for the most direct and highest impact causes of performance gaps on core indicators that are within the control of schools and colleges. Your search should draw on current research and evaluation, and use multiple methods and data sources to test specific hypotheses. There are many different approaches to identifying root causes, but most approaches involve three basic phases: (1) identify potential causes, (2) analyze and evaluate potential causes, and (3) select a few critical root causes to address.

STEP 3: SELECT BEST SOLUTIONS

Once you have identified the most critical root causes to address in your improvement effort, the next step is to identify and select the solutions that seem most promising for testing and evaluation. This section will assist you in reviewing and selecting potential solutions for testing in Step 4.

Why Take the Time to Search for and Evaluate Alternative Solutions?

How do you identify the best solutions? First, identify or develop a full range of potential solutions. Selecting a full range of choices stretches your thinking and helps develop more creative solutions. Next, select the most promising of these potential solutions. Any systematic analysis of alternative solutions has two parts:

1. *Reviewing the underlying logic of the solution*—is it based on a sound theory of root causes (Step 2) and how does the solution address these causes, and
2. *Reviewing the empirical evidence*—has the solution worked under similar or comparable circumstances to yours, and is the evidence strong and compelling?

How to Develop Solutions: Improvement Strategies and Models

In developing solutions, begin by identifying the potential improvement strategies that can impact the root and indirect causes in your cause-effect model from Step 2. Next, identify specific school or college model practices that are based on these strategies. This can be illustrated by the example below for the Secondary Academic Attainment indicator.

Root Cause	Improvement Strategy	Model (Model Practices)
Time on Task	School Class Scheduling	Block Scheduling Model 1 Block Scheduling Model 2

Identifying Potential Strategies and Models: Three Methods

For best results, use multiple methods to identify potential improvement strategies and models. Below are three methods that you should utilize:

1. Review what others propose
2. Benchmark peers and leading performers
3. Develop your own solutions

Narrowing the Choices: Assessing and Comparing Alternative Strategies and Models

Since not all solutions you have identified will work for you, narrow the choices by assessing and analyzing their rationale or underlying logic and the evidence that supports them. Use the following criteria in your assessment.

- *Sound Theory and Logic:* The best solutions are ones based on clearly understood and sound theory that explains how the improvement strategy and model works and why.
- *Strong Evidence:* The best solutions also are supported by strong evidence indicating they have worked under conditions similar to yours, especially in schools and colleges that have similar "causes outside your control" identified in Step 2.

Improvement strategies and models with sound theory and compelling evidence rarely come ready made for your situation. You generally have to choose between imperfect alternatives that have some limitations in theory and evidence. Therefore, it is necessary to fully compare and contrast the trade-offs among alternative improvement strategies and models before choosing which solution or combination of solutions to test and evaluate yourself.

STEP 4: PILOT TEST AND EVALUATE SOLUTIONS

Now that you have identified a set of promising solutions—improvement strategies and models—on which to base initial improvement efforts, the next step is to create an evaluation approach that will allow you to assess how well the improvement strategies and models are working. This section will assist you in selecting practical evaluation designs and analysis tools that you can use to gauge the success of your improvement efforts.

Why Evaluate?

Even though findings from the literature or your own common sense may suggest you have found a winning formula, it is important to pilot test improvement strategies and models to see if they produce desired outcomes. Additionally, testing and evaluating improvement strategies provides an evidence-based method for justifying your educational improvement efforts and goes beyond theorizing about what works—an evaluation will supply you proof of whether the strategy works.

How to Test Solutions: Designing an Evaluation Strategy

Conducting an evaluation can seem a daunting task, particularly given that you will simultaneously be working to introduce and run a program improvement effort. To lessen the burden, identify in advance a research methodology that you can use to collect the necessary information. The following are some steps to follow in designing and conducting an evaluation:

- **Choose a study design.** Listed below are three study designs you might consider when structuring your evaluation.
    1. Option A: Random Assignment with Control Groups
    2. Option B: Comparisons with Similar Populations
    3. Option C: Comparing Individuals Against Themselves
- **Select pilot sites.** While it is tempting to implement your program improvement strategy statewide, it is advisable to select a subset of sites in which to pilot-test ideas.
- **Select outcome measures.** To help track performance changes, develop both *short-* and *long-term measures* to provide some indication of the success of your improvement efforts.
- **Identify data sources.** After selecting short and longer-term outcome measures, it is important to identify data sources and collection instruments that will allow assessment of whether the improvement strategy is affecting student or program outcomes. The following are some examples of data sources: student transcript records, interviews or focus group discussions, state standardized test scores, classroom visits or observations, and state or locally administered surveys.

- **Train pilot site staff.** Since the outcomes of the improvement effort will hinge on the work of participating administrators and school staff, communicate the purposes and activities related to the improvement effort to ensure that pilot sites are faithful to the planned intervention.

Analyzing Initial Results

Whenever possible, employ basic descriptive or summary statistics—such as the ones described in Step 1—to assess outcomes. Keep in mind the importance of looking at the data from different angles to find out whether gains are realized equally across all groups. If outcomes differ, consider whether variations are due to the manner in which your solutions have been implemented or due to characteristics of the subgroup itself. As you near the end of your pilot project timeline, determine whether you are ready to move to full implementation of your program improvement model.

STEP 5: IMPLEMENT SOLUTIONS

If you have come this far, you have likely identified a set of solutions—improvement strategies and models—that increase student performance in pilot sites. As you prepare to expand the pool of participants, it is a good idea to come up with a monitoring process that will allow you to obtain ongoing feedback on the improvement strategy. This section will help you to develop implementation plans to monitor outcomes across the full range of implementation sites.

Moving from Pilot Testing to Statewide Implementation

Full implementation will require flexibility and a willingness to revise strategies as new sites join the effort. You should expect to modify solutions and evaluation approaches to accommodate unique site characteristics or unexpected situations that arise in mid-stream. Just as with the pilot, monitor site performance on a number of dimensions to ensure you're achieving the intended results. Plan to evaluate both the desired outcomes as well as the process you are using to roll out the implementation across agencies.

Monitoring Ongoing Implementation

Expanding your improvement efforts requires the development of a comprehensive strategy that will enable you to monitor how well the implementation is progressing. Plan to enlist the support of pilot site staff to help explain the importance of monitoring to new participants and to serve as field-based mentors, for example by having educators from new sites visit pilot sites to speak directly with experienced staff. Steps to consider taking for monitoring on-going implementation may include:

- Preparing a "Process Evaluation Plan" to help assess the manner in which you are implementing new improvement strategies,
- Establishing short-term outcome measures (e.g., changes in attendance or student grades) that can be used to assess on-going efforts,
- Identifying process indicators that capture how well improvement activities are being implemented,
- Calling or visiting school and district staff to observe whether they are correctly applying proposed solutions,
- Requiring local faculty and staff to attend technical assistance workshops to discuss their observations and challenges, and
- Conducting focus groups with students and faculty to assess changes in beliefs or practices.

Sustaining Improvement Efforts

Continuous improvement is a never-ending process that requires that you constantly review and critique the outcomes of improvement efforts. To sustain your effort, schedule time—much as you did in Step 4—to revisit your strategy.

APPENDIX D

To: Lewis and Clark -Community College Career Program Students
From: Jane Fleming, Perkins Special Populations Project Manager

Subject: Carl D. Perkins III Grant: Special Populations

As a student enrolled in a career program at Lewis and Clark Community College, you may be eligible for services and assistance under the Carl D. Perkins III Grant. Grant funds are used, in part, to assist career students at risk of not succeeding in their educational pursuits. The federal govenunent has identified certain traits that have prevented students from being successful in meeting their educational goals. Through no fault of their own, students are often unable to complete their course of study and must drop out of school, are unable to attend school, or are not able to do as well in their programs as they might be capable of doing because of these traits. The traits that prevent students from succeeding are: economic disadvantage, academic disadvantage, disability/disabilities, single parent, displaced homemaker, nontraditional, and limited English proficiency (LEP). (Please see the attached page for the definitions of each trait.) Students with one or more of these traits are referred to as **Perkins Special Populations Students.**

While Perkins Special Populations Students are eligible for services available to all students at LCCC, Perkins can provide additional services to eligible career students. For students with needs beyond what Perkins can provide, Perkins has been able to assist those students in finding and working with other on- and off-campus agencies in providing help.

The Illinois State Board off Education and various agencies of the United States require educational institutions to maintain information on students pertaining to factors such as disability, sex, marital/parental status, etc. and the type of aid for which a student applies. The first step in providing assistance and services is identifying students as Perkins Special Populations Students. Please take a few minutes to complete the attached survey. Should you choose to complete the survey, please return 9AIA the survey to your instructor. Please keep this letter, the Special Populations category definitions, and program list for your records. All surveys and information will be kept in strictest confidence. ***Students are not reauired to complete*** **the survey;** ***participation is strictly voluntary.***

If you would like to know if you are eligible for assistance/services or if you are in need of assistance/services at anytime during the semester, please do not hesitate to contact me. To respect your privacy, I shall not contact you except in response to your inquiries. I can be reached at my office in Caldwell 4326. My phone number is: (618)468-4020; if I am not available, please leave a message on my voice mail and I shall return your call as soon as possible. My e-mail address is: jfleming@lc.ce.il.us I look forward to working with you during your time at LCCC.

Source: Jane Fleming, Special Populations Coordinator, Lewis & Clark Community College.

Sample Survey

Perkins Special Populations Survey

The Illinois State Board of Education and various agencies of the United States Government require educational institutions to maintain information on students pertaining to factors such as disability, sex, marital/parental status, etc. and the type of aid for which an individual applies. The information requested on this sheet is for compliance with certain record keeping requirements and *voluntary disclosure is the student's choice.* The College believes all persons are entitled to equal educational opportunities and does not discriminate against its students in their education because of race, color, sex, religion, national origin, disability, veteran status, age, marital status or any other protected group.

Lewis and Clark Community College is committed to the most fundamental principles of human dignity, equality of opportunity, and academic freedom. This commitment requires that decisions involving students and employees be based on individual merit and be free from discrimination or harassment in all its forms. Programs services, and employment opportunities are administered by Lewis and Clark Community College without regard to sex, race, ethnicity, color, creed or religion, national origin, disability, age, marital status, military status, sexual orientation, and other protected categories. The College abides by affirmative action principles, makes reasonable efforts to accommodate qualified individuals with special needs, and complies with all federal and state nondiscrimination, equal opportunity and affirmative action laws, orders, and regulations. These include, but are not limited to: (a) Title VI of the Civil Rights Act of 1964- (b) Title IX of the Education Amendments of 1972; (c) Section 504 of the Rehabilitation Act of 1972 and the Americans with Disabilities Act of 1990; (d) the Age Discrimination Act of 1975; and (e) the Illinois Human Rights Act.

Complaints of discrimination prohibited by College policy are to be resolved within the existing College procedures. For additional information or assistance on the equal opportunity, affirmative action and harassment policies and procedures of Lewis and Clark Community College, please contact: George C. Terry, Dean of Student Life and Director of Affirmative Action Programs (Title IX, ADA, and 504 Coordinator), River Bend Arena, Room 1 1 2, Lewis and Clark Community College, Godfrey, IL 62035 618-466-341 1.

It is the policy of the college that sexual harassment of employees or students on campus is unacceptable shall not be tolerated. Any employee or student of the college who feels that he/she has been a victim of a sexual harassment should notify the college's Personnel Office and the complaint will be investigated.

Perkins Special Populations Survey

As a student enrolled in a career program at Lewis and Clark Community College, you may be eligible for services and assistance under the Carl D. Perkins III Grant. In order to determine eligibility for Perkins Grant assistance, please complete the following, printing your responses clearly. All answers and surveys will be kept in strictest confidence. **Participation in this survey is strictly voluntaky.**

NAME:

SOCIAL SECURITYNUMBER:

PHONE:

ADDRESS:

GENDER: Male Female

PROGRAM MAJOR NUMBER (see attached list for major numbers):
If declaring any of the following Allied Health programs (5202A, 5202j, 5205A, 5208A, 5208J, 5230A), have you been formally accepted into that program? **Yes No**

Do you receive any type of financial aid based on need? **Yes No**
If yes, please indicate the type. (check all that apply)

- ❑ Federal Pell Grant
- ❑ Public Aid
- ❑ WIA Opportunities
- ❑ Department of Human Services
- ❑ Office of Rehabilitative Services
- ❑ FSEOG
- ❑ ISAC MAP
- ❑ ISAC IIA
- ❑ Other

Are you a single parent with dependent children/child? **Yes No**
Dependent child must reside with you.
Women who are now pregnant and single should answer "yes".

Are you a displaced homemaker? **Yes No**
(see definitions on previous page)

Do you have any type of physical, learning, or mental disability? **Yes No**
If you have a disability, please indicate the type below. (check all that apply)

- ❑ Learning Disability
- ❑ Hearing Impaired
- ❑ Developmentally Disabled
- ❑ Emotionally Disabled
- ❑ Mobility Impairment
- ❑ Paraplegic
- ❑ Neurological Impairment
- ❑ Cognitive Impairment
- ❑ Vsually Impaired (beyond simply wearing corrective lenses)
- ❑ Other (please specify)

Is English your native/primary language? **Yes** **No**
Did you grow up speaking primarily English?

In high school, were you enrolled in a tech-prep program? Yes No
If yes, what was the tech-prep program? (i.e. business, computers,office procedures, agriculture, etc.)

Perkins Special Populations Survey

The Illinois State Board of Education and the United States Department of Education require educational institutions to maintain information on students pertaining to factors such as disability, sex, marital/parental status, etc. and the type of aid for which an individual applies. The information requested on this sheet is for compliance with certain record keeping requirements.

Lewis and Clark Community College is committed to the most fundamental principles of human dignity, equality of opportunity, and academic freedom. This commitment requires that decisions involving students and employees be based on individual merit and be free from discrimination or harassment in all its forms. Programs, services, and employment opportunities are administered by Lewis and Clark Community College without regard to sex, race, ethnicity, color, creed or religion, national origin, disability, age, marital status, military status, sexual orientation, and other protected categories. The College abides by affirmative action principles, makes reasonable efforts to accommodate qualified individuals with special needs, and complies with all federal and state nondiscrimination, equal opportunity and affirmative action laws, orders, and regulations. These include, but are not limited to: (a) Title VI of the Civil Rights Act of 1964; (b) Title IX of the Education Amendments of 1972; (c) Section 504 of the Rehabilitation Act of 1972 and the Americans with Disabilities Act of 1990; (d) the Age Discrimination Act of 1975; and (e) the Illinois Human Rights Act.

Complaints of discrimination prohibited by College policy are to be resolved within the existing College procedures. For additional information or assistance on the equal opportunity, affirmative action and harassment policies and procedures of Lewis and Clark Community College, please contact: George C. Terry, Dean of Student Life and Coordinator of Affirmative Action Programs (Title IX, ADA, and 504), River Bend Arena, Room 1 1 2, Lewis and Clark Community College, Godfrey, IL 62035 618-466-341 1.

Who is Perkins Special Population Student?

A Perkins Special Populations Student is a student enrolled in a career-technical education program and possesses one or more of the following traits:

1. ECONOMICALLY DISADVANTAGED: An economically disadvantaged student is one who receives financial aid based on need. Financial aid based on need includes: Federal Pell Grant, Public Aid, WIA, and Opportunities.

2. ACADEMICALLY DISADVANTAGED: An academically disadvantaged student is at risk academically. This characteristic can be identified by low placement scores, academic suspension or probation, instructor referral, and/or has received academic assistance in the Math Lab, Communications Center, Biology Tutoring, OTEC/Com'puter Sciences Lab Assistance, Nursing Lab, and/or Dental Assisting Lab Assistance. Placement test scores can be taken from two academic years ('99-'00, '00-'01).

3. DISABLED: A disabled student is one who is physically, mentally, emotionally, leaming, andd/or developmentally disabled/impaired. A disabled student may be identified by the student himself on the Perkins Special Populations Survey, the Department of Human Resources-Office of Rehabilitative Services, and/or campus service providers.

4. NONTRADITIONAL: A nontraditional student is enrolled in a program in which 25% or less of that program's enrollment is of the same gender as the student.

5. LIMITED ENGLISH PROFICIENCY (LEP): A LEP student is one who was not born in the United States, comes from an environment where a language other than English is dominant, is American Indian or Alaskan Native and comes from an environment where a language other than English has had a significant impact on the level of English language proficiency; and by reason thereof, has sufficient difficulty speaking, reading, writing, or understanding the English language as to deny such individual the opportunity to learn successfully in a classroom where the language of instruction is English or to participate fully in our society.

6. SINGLE PARENT: This student is a single parent with dependent children who reside with that student. Single pregnant women are included in this category.

7. DISPLACED HOMEMAKER: This is a student who:

1. A. has worked primarily without remuneration to care for a home and family, for that reason has diminished marketable skills;
   B. has been dependent on the income of another family member but is no longer supported by that income; or
   C. is a parent whose youngest dependent will become ineligible to receive assistance under Part A of Title IV of the Social Security Act (42 U.S.C. 601 et seq.) not later than 2 years after the date on which the parent applies for assistance under this title; and

2. A. is unemployed or underemployed and is experiencing difficulty in obtaining or upgrading employment.

APPENDIX E

November 20, 2001

Bill Anderson
U.S. Office of Personnel Management
Office of Workforce Information Room 7439
1900 E. Street NW
Washington, DC 20415

Dear Mr. Anderson:

This letter is a request for your assistance. In order to satisfy the requirements of the Carl D. Perkins III federal legislation, the Illinois State Board of Education (ISBE) needs to report post-program outcomes to the U.S. Dept. of Education regarding former students. Many of these students obtain Federal employment following their graduation from Illinois schools. The ISBE requests to arrange a data match between the student records from Illinois and employment records from the U.S. Office of Personnel Management (OPM) to identify former students now in Federal employment. Enclosed is a Memorandum of Understanding for your review. Please inform us as to your requirements for this match to occur.

If the requested data match is approved, the preferred method of file transfer is over the internet using a password-protected ISBE FTP site. Alternatively, computer diskettes can be sent via postal mail or Federal Express. At this time, there are two student record files for which matching is sought. One contains approximately 84,000 secondary records, and the other approximately 43,000 post secondary records. The format of the files is fixed length ASCII.

- Columns 1-9 are SSN
- Columns 10-14 are School ID
- Columns 15-24 are filler
- Column 25 is cohort level (“P” or “S”)
- Columns 26-27 are Cohort year (00)

The data fields that the ISBE seeks in return are the following:

Field	Columns
• orig file	1-27
• ssn	28-37
• agency code	38-41
• agency name	42-93
• pay plan	94-95
• grade level	96-97
• occ'l code	98-101
• code translation	102-153
• basic pay	154-159
• work sched code	160
• State code	161-162
• State name	163-180
• date of hire	181-186
• date of exit	187-192

Following the match, the files on would be returned using one of the above mentioned methods with an explanation of the new file layout. Thank you for your help and attention in this matter. If there are any questions or matters to resolve, feel free to contact Barry Pedersen at 217/782-4620.

Sincerely,

Fran Beauman, Division Administrator
Workforce Preparation Partnerships

Memorandum Of Agreement Between The
Illinois State Board Of Education And The
Office of Personnel Management

This agreement, made the _____ day of _____ 2001, between the Illinois State Board of Education (ISBE) and the Office of Personnel Management (OPM). The purpose of this agreement is to designate the OPM as an "authorized agent" of the ISBE for purposes of obtaining and reporting information concerning the placement and retention of students in employment as required by section 113 of the Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III).

RECITALS:

1. The ISBE maintains education records on enrollees that include information on student demographics, programs of study, achievement, attainment and social security numbers. Such records also include information on students participating in vocational education programs. The OPM maintains employment wage records for federal workers.
2. Perkins III (P. L. 105-332) creates a State performance accountability system for vocational education programs. States must report annually to the U.S. Department of Education (USDE) on the progress of the state in reaching agreed upon levels of performance on core indicators specified in the law. These core indicators include placement and retention in employment.
3. In order to determine employment outcomes for those vocational education students included in Illinois' Perkins III accountability system, the ISBE will supply the OPM with a list of the social security numbers of these students. The OPM will access its wage records using these social security numbers and determine employment outcomes for any of these students present in its database. The OPM will report the results of this analysis to the ISBE.
4. The Family Educational Rights and Privacy Act (FERPA) generally prohibits the disclosure of education records without the consent of the parent for children under the age of 18 or from students attending postsecondary educational institutions. Under FERPA, education records are defined as records directly related to a student and maintained by an educational agency or institution. The records accessed by the OPM to meet Perkins III performance reporting requirements are education records, and subject to FERPA.
5. FERPA contains several exceptions to the general rule that education records may not be disclosed without prior, written parental consent. One exception allows for disclosures to authorized representatives of the Secretary of Education, the Comptroller General, the Attorney General, and state and local educational authorities. Such a disclosure must be made in connection with an audit or evaluation of a Federal of State supported education program. The disclosure may also be made for the enforcement of or compliance with Federal legal requirements related to the Federal or State education program.

6. The disclosure of personally identifiable student information by local education agencies and educational institutions to the OPM is for the purpose of complying with the performance reporting requirements of Perkins III, and is permissible under FERPA. The USDE has concluded that the OPM can be designated an authorized representative for purposes of compiling and reporting information as required by Perkins III.
7. Without access to these records, the state of Illinois will not have the most complete and accurate performance information possible for compliance with Perkins III reporting requirements.

AGREEMENT

1. The ISBE designates the OPM as its "authorized representative" under FERPA for the limited purpose of analyzing student information provided by ISBE in order to comply with the performance reporting requirements of Perkins III. This authorization is limited to data obtained from the education records (as defined by FERPA) of secondary and postsecondary education students in Illinois. It is understood and acknowledged by the parties that the OPM will not redisclose any personally identifiable information to other than the ISBE.
2. The ISBE will deliver to the OPM electronic data files containing student records for analysis to determine their possible post-program employment status in the OPM database.
3. The OPM agrees to destroy all personally identifiable information, such as social security numbers, obtained from the above-referenced education records as soon as the results of the analyses performed have been delivered to the ISBE, or when the information is no longer needed, whichever comes first. All versions of such information and data, electronic, paper, or otherwise, must be destroyed.

This agreement shall be in effect for ____ years from the date of the last signature.

_____ _____

ISBE Date

_____ _____

OPM Date

APPENDIX F

Illinois State Board of Education

100 West Randolph Street, Suite 14-300 • Chicago, Illinois 60601-3289 3160
www.isbe.state.il.us

Ronald J. Gidwitz
Chairman

Glenn W. McGee
State Superintendent of Education

December 17, 1999

Ms. Diana Robinson
Associate Superintendent
Business, Community and
Family Partnerships
Illinois State Board of Education
100 North First Street
Springfield, Illinois 62777-0001

RE: Tech Prep Student Data

Dear Ms. Robinson:

Our office is in receipt of your letter of December 1, 1999, wherein you inquire about the transfer of student information from secondary schools to community colleges. Specifically you ask whether high schools with Tech Prep programs can transfer student-specific educational records to post-secondary institutions for educational purposes?

- **The brief answer to your questions is yes, but only with the written consent of the parent or eligible student and consistent with the parameters outlined below.**

The release of student information is governed by State and federal statutes, namely, the Illinois School Student Records Act (105 ILCS 10/6) and the Family Educational Rights and Privacy Act (20 U.S.C.A. 1232g). The protection of individuals' rights to privacy cautions restraint and reserve in the disclosure of student records. On the other hand, the concern for enhanced access to student records by students, parents and other parties, heralds a sharing of information. In an effort to harmonize these two policy interests Illinois and federal law allow for access to school student records pursuant to an express release by the parent and/or parental designee [105 ILCS 10/5(a)], yet generally prohibit the transfer, release, disclosure, or dissemination of school student records except under limited circumstances. Outlined below is the release language contained in Section 5 and the relevant exceptions embodied in Section 6 of the Illinois School Student Records Act:

> Sec. 5 (a) A parent or any person specifically designated as a representative by a parent shall have the right to inspect and copy all school student permanent and temporary records of that parent's child.
>
> Sec.6. (a) No school student records or information contained therein may be released, transferred, disclosed or otherwise disseminated, except as follows:

(2) To an employee or official of the school or school district or State board with current demonstrable educational or administrative interest in the student, in furtherance of such interest;

(3) To the official records custodian of another school within Illinois or an official with similar responsibilities of a school outside Illinois, in which the student has enrolled, or intends to enroll, upon the request of such official or student;

(8) To any person, with the prior specific dated written consent of the parent designating the person to whom the records may be released, provided that at the time any such consent is requested or obtained, the parent shall be advised in writing that he has the right to inspect and copy such records in accordance with Section 5, to challenge their contents in accordance with Section 7 and to limit any such consent to designated records or designated portions of the information contained therein.

Note that Section 10/6 closes with two caveats.

(b) No information may be released pursuant to [subparagraph (3) above] ... unless the parent receives prior written notice of the nature and substance of the information proposed to be released, and an opportunity to inspect and copy such records in accordance with Section 5 and to challenge their contents in accordance with Section 7.

(d) Except for the student and his parents, no person to whom information is released pursuant to this Section and no person designated as a representative by a parent may permit any other person to have access to such information without a prior consent of the parent obtained in accordance with the requirements of subparagraph (8) of paragraph (a) of this Section.

The Federal Family Educational Rights and Privacy Act (FERPA) (20 U.S.C.A. 1232g) contains parallel provisions with regard to the release of school student records. FERPA provides for a general parental consent/release accompanied by exceptions for school officials at the school(s) of current and prospective enrollment.

The 12th grade student specific data you request to be transferred is statutorily defined as "school student record" or "any writing or other recorded information concerning a student and by which a student my be individually identified..." [105 ILCS 10/2(s).] As such, it is accessible in either of two ways: 1) via an express release or consent from parent, or as appropriate, student or 2) pursuant to a relevant exception, if applicable. Implementation of option one entails having parent(s) and/or Tech Prep student, as appropriate, sign a form authorizing the release or transfer of the student data to community colleges which in turn, may create an early identification system to assist Tech Prep students with their transition to post-secondary study.

Note that the underpinnings of Student Records law provide that rights of access are initially enjoyed by the parent of the student and terminate when a student is emancipated

at eighteen years of age or graduates from secondary school, embarks upon marriage or military service, whichever occurs first. Thereafter, the statutory rights are exclusively the student's [105 ILCS 10/2 (g)]. Thus, parental consent will be required to release the student records of those 16 or17 year old Tech Prep students who have not yet finished their high school coursework. Parental release is not required, however, for emancipated students who have been accorded all statutory rights and privileges.

Regarding option two, a perusal of potentially relevant exceptions reveals that exception two cited above is in fact inapposite because the information is not being transferred to an official or employee of the school or school district where the Tech Prep student is currently enrolled. Instead, the transfer to be effectuated is to another school; under such circumstances exception three has potential applicability.

Upon scrutiny, however, it is apparent that the facts of the instant case do not conform to this exception either, because as we understand, Tech Prep students have not yet enrolled nor expressed intent to matriculate at a specific post-secondary institution. In light of the foregoing, it appears that the most viable way for Tech Prep high schools to transfer student-specific data is by obtaining a release from the parent, or student, as applicable.

Thank you for sharing your concerns and questions with the Illinois State Board of Education. Please contact me or Ms. Georgiana Theoharis, Assistant Legal Advisor, at (312) 814-2236.

Sincerely,

Michael J. Hernandez
General Counsel

FERPA (Family Educational Privacy Rights Act)

Questions: Can students identified as Tech Prep in high school be identified to community colleges before those students enroll at the college? If they can, how much information on that student can be given to the college?

Answer: Maybe. If the student is planning or seeking to enroll at the institution, the Tech Prep student can be identified to authorized representatives or state educational authorities in connection with the audit and evaluation of Federally-supported education programs, or in connection with the enforcement of the Federal legal requirements which relate to such programs.

If the Tech Prep identification is part of the high school directory information, such as name, address, programs, interests, awards, extracurricular activities, the high school can give the information to the community college without consent. The high school would determine what is directory information.

If Tech Prep identification is not part of the directory information, written consent may be given by the parent for the student under 18 years old or by the student himself/herself who is 18 years or older. The consent must list the specific information that can be released as part of directory information. The designated directory information must be posted or advertised so those individuals not wishing to release the information can have the option.

The other option is for high schools to give information of all students to authorized representatives or state educational authorities at the community college as long as the information collected shall be protected in a manner which will not permit the personal identification of student and their parents. The community college would have to identify Tech Prep students from the list.

Source: Personal Communication, Kathy Wolen from Family Policy Compliance Office, U. S. Department of Education. Telephone (202) 260-3887

APPENDIX G

Chapter Six

Tech-Prep Education

Tech-Prep programs in California will be accountable, integrated and articulated curricular pathways among secondary and postsecondary programs that result in students earning advanced technical degrees and certification. These pathways will be academically rigorous, and provide students with not only the fundamental skills that are required for postsecondary admission, but also the technical skills that will enable them to have successful careers in California's new, highly technical economy.

California's future Tech-Prep delivery system will build upon the infrastructure and programs that have already been developed in the state (i.e. elements of the School to Career system; the current Tech-Prep Local Consortia and centers; etc.). To ensure that Tech-Prep is successful in creating accountable Tech-Prep programs that are linked to careers in the new economy, the Tech-Prep delivery system will have two major components: 1) State Administration and Leadership, and 2) Tech-Prep Local Consortia. The organization around these components will ensure:

- Linkage of programs with the local, state and regional economies.
- Collaboration and systematic articulation of programs among high schools and community colleges.
- Development of comprehensive strategies among multiple state and federal programs to encourage joint planning and avoid unnecessary duplication of service delivery.
- Funding and programmatic decisions directed toward industry priorities.
- Focus on accountability, and an infrastructure for monitoring effectiveness.
- Capacity for researching and identifying effective programs and practices linked to academic and industry standards.
- Focus on new and emerging technical occupational areas.

State Administration and Leadership

The California State Department of Education and the Chancellor's Office of the California Community Colleges will jointly administer Tech-Prep. The leadership and staff of the two agencies will convene a Joint Management Team to draft a Memorandum Of Understanding (MOU) including the principles, decision-making processes, and operational parameters to guide its operations. The MOU will be broad in scope, including the relationships and operational parameters between the

two agencies regarding the overall operations related to the Carl D. Perkins Vocational and Technical Education Act (VTEA).

The Chancellor's Office, California Community Colleges, and the California Department of Education will collaboratively have administrative responsibility for the distribution of funding to the Tech-Prep Local Consortia. Technical assistance and monitoring will be conducted collaboratively by the two agencies, and coordinated through the Joint Management Team. The Joint Management Team will be responsible to:

- Devise a transition plan to re-align the Tech-Prep program with the particulars of the approved VTEA State Plan.

- Establish state performance measures and indicators, in collaboration with field representatives, and approved by the Joint Advisory Committee (JAC) of the governing boards.

- Review and certify funding awards for Tech-Prep Local Consortia and distribute funds to the administrative fiscal agents.

- Develop articulation guidelines that ensure systematic coordination with segmental and statewide standards.

- Provide policy guidance to the Tech-Prep Local Consortia in developing strategic plans, accountability, funding, and other administrative and programmatic issues as necessary.

- Regularly meet and confer with representatives of Tech-Prep Local Consortia.

- Review and summarize annual accountability reports submitted by the Tech-Prep Local Consortia.

- Periodically monitor Tech-Prep Local Consortia for fiscal and programmatic compliance.

- Recommend annually to the JAC whether or not to continue funding of Tech-Prep Local Consortia, based on fiscal and performance reports and monitoring findings. Where the JAC determines that performance is deficient, it may elect to require improvement plans and monitoring and/or technical assistance.

- Produce required state and federal reports and conduct other functions as determined necessary by the state agencies.

- Tech-Prep Local Consortia shall be composed of secondary and postsecondary institutions, industry and labor representatives, and other key stakeholders within the region.

- Assist the state agencies in their periodic monitoring of Tech-Prep Local Consortia for fiscal and programmatic compliance.

- Collaborate with the state agencies on determining performance indicators, measures, and levels of performance.

- Provide technical assistance to Tech-Prep Programs to ensure that Tech-Prep Program course sequences integrate academic and vocational and technical curricula, programs are articulated among the secondary and postsecondary segments, and students are completing Tech-Prep Programs.

- Coordinate Tech-Prep with other Carl D. Perkins funded programs and other Education and Workforce preparation efforts, such as Partnership Academies and other allied initiatives.

Tech-Prep Local Consortia

Tech-Prep Local Consortia need to be the heart and soul of the vision for Tech-Prep in California – the locus of the teaching and learning that all the other resources are directed to support. Currently, 80 Tech-Prep Local Consortia operate in California, and they provide an infrastructure upon which to improve and expand Tech-Prep Programs. To achieve accountable outcomes, Tech-Prep Local Consortia must develop programs that are more systematically articulated. Program – to – program articulation, rather than simple course – to – course articulation, will create educational pathways that ensure Tech-Prep students experience integrated academic and vocational technical learning, seamlessly connected through secondary and postsecondary institutions, so they are prepared for real careers in the California economy.

The record of past accountability of the existing consortia – with respect to both student performance outcomes and organizational viability and effectiveness – lacks consistency. During the period July, 2000 through June, 2002, the funded consortia will be monitored with respect to their attainment of the accountability standards stated elsewhere in this Plan, and with respect to their ability to provide sufficient scope of career paths to compare favorably with their regional counterparts. Tech-Prep Local Consortia found to be deficient in either respect will be given incentives to consolidate with other Tech-Prep Local Consortia in their regions.

Funding for Tech-Prep Local Consortia will be determined based on the following criteria:

1. Successful past performance.
2. Comprehensive inclusion of high schools and community colleges within the consortium's geographic boundaries.
3. Attainment of performance targets set by the state.
4. Articulation agreements in place, functioning, and reviewed annually that include at least two years of secondary school preceding graduation, and two years or more of higher education, or an apprenticeship program of at least two years.

5. Submission of a Tech-Prep Local Consortium strategic plan meeting established state and regional priorities.
6. Programs linked to identified current and future needs of business and industry, that are reviewed and validated annually.
7. Evidence of integrated academic and vocational and technical curricula throughout secondary and postsecondary levels.
8. Evidence of a system to track student performance and programmatic data through the secondary and postsecondary levels.
9. Evidence of strategies to ensure equal access for all student populations.

The Tech-Prep Local Consortia will be responsible for the following functions:

- Improve existing Tech-Prep Programs to ensure curriculum integration, trained staff, functional articulation agreements, and student completion, including at risk students and those with special needs.

- Develop new Tech-Prep Programs to address the new and emerging employment needs and opportunities locally and throughout the state.

- Provide regular opportunities for secondary and postsecondary faculty to meet and confer regarding all aspects of the instructional program.

- Provide and participate in on-going staff development to ensure understanding of curriculum development, instructional strategies, proven practices and innovative approaches, and technology, business and industry conditions, and future trends.

- Provide incentives for innovative initiatives including new program concepts, new technologies, alternative assessment strategies, distance learning, and learning partnerships with business and industries.

- Assure attainment of established state performance indicators and measures.

- Submit annual reports on the performance of Tech-Prep Local Consortia.

- Develop and update programmatic articulation agreements that foster student transition and achievement, from secondary through postsecondary, including baccalaureate degree programs, as appropriate.

- Coordinate Tech-Prep with other Carl D. Perkins funded programs, and other education and workforce preparation efforts within the consortium and region.

Industry-based Career Paths

The recent, fundamental shift of the California economy to a foundation in technology and service has radically re-defined the skills sets required of the workforce. To the extent that the public schools and colleges are the primary providers of workforce preparation, it is imperative they direct their resources

toward ensuring their curricula do indeed prepare students for real jobs in the real industries that comprise the economy.

Acting on that common imperative in separate ways, the California Department of Education has identified the most dynamic industries in the new economy that are high employing and those that have high employing potential.

(a) Agriculture and Natural Resources
(b) Arts, Media and Entertainment
(c) Building Trades and Construction
(d) Energy and Utilities
(e) Engineering and Design
(f) Fashion and Interiors
(g) Finance and Business
(h) Health and Human Services
(i) Hospitality, Tourism and Recreation
(j) Information Technology
(k) Manufacturing and Product Development
(l) Public and Private Education Services
(m) Public Services
(n) Retail and Wholesale Trade
(o) Transportation

The California Community Colleges have identified new and emerging technologies to which they are allocating resources. They are:

1. Advanced Transportation Technologies
2. Applied Competitive Technologies
3. Biotechnologies
4. Business and Workforce Performance Improvement
5. Environmental Technologies
6. Health Care Delivery
7. Information Technologies
8. International Trade Development
9. New Media/Multimedia/Entertainment
10. Small Business Development
11. Engineering/Industrial Technologies (Proposed)

During the period July, 2000 through June, 2002, the Chancellor's Office and the California Department of Education, with assistance from intersegmental faculty and staff already involved with the Career Majors initiative, will use these two lists as a mechanism for refining articulation policies and processes and, as appropriate, will identify other growth sections of the economy.

- Tech-Prep Local Consortia, as described in the Act, will be invited to develop articulated curriculum models, multi-measure assessment, and staff development for the various industry-based career paths.

- Tech-Prep Local Consortia, as described in the Act, will be eligible to apply for supplemental funds for innovative practices and programs.

- Tech-Prep Local Consortia, as described in the Act, may apply for supplemental funding to accomplish this work.[1]

[1] Details for applying are in the Local Consortia Application.