Perkins IV Crosswalks Users Guide

This users’ guide describes the materials available from a 2007 project to develop a comprehensive and standardized mapping of CIP codes and O*NET/SOC occupational codes into career clusters and career pathways. The products being issued build upon the existing system mapping systems, but update, modify and expand as needed to meet several uses anticipated for Perkins IV implementation.

The four data sets listed below constitute the products issued in fall 2007, as recommended tools for a variety of uses as described. All tables are produced and issued as Excel spreadsheets to give users ability to sort and extract information as needed. Many of the tables have built-in sorts on separate workbooks to help users more quickly locate information. There are also pre-set print setups for viewing and printing.

These files are posted on the Peer Collaborative Resource Network (PCRN): www.edcountability.net. It is also anticipated that they will be posted on Web sites of States’ Career Clusters and the National Association of State Directors of Career and Technical Education Consortium (NASDCTEc).

### Instructional Programs by Clusters/Pathways

**Description:** The three tables in this set map instructional programs and their corresponding CIP codes into each of the career clusters and career pathways, assigning each program to only one pathway. One table also contains which programs have been designated as leading to non-traditional occupations for males and females (determined from BLS occupational data mapped in the next set and utilizing the NCES Occupation to CIP crosswalk).

**Table 1: CIPs in Pathways** contains a list of every CIP code organized by the one career pathway it best belongs in. There are some pathways that do not have any instructional programs assigned to them, as the assignment belongs more aptly in another pathway, given its description and the occupations it prepares for.

**Table 2: CIP-Pathway-Cluster** takes the information in Table 1 and presents it as a matrix with each CIP code as assigned to a career pathway, and consequently to a career cluster. Information is sorted by CIP in one workbook and by Pathway in another.

**Table 3: CIP-Nontrad-Cluster-Pathway** is a matrix that repeats the Table 2 assignments, and for each CIP also depicts whether it is an instructional program that has been designated as leading to a nontraditional occupation for males or for females. Information is sorted by CIP in one workbook and by Pathway in another.

---

**Disclaimer**

The documents contained here are provided to assist in producing and maintaining comparable and uniform information and data on Career and Technical Education. These data are intended to be useful for policymaking at the federal, state, and local levels and are the sole responsibility of the organizations that produced them. The information and opinions published here are the products of the organizations that published them and do not necessarily represent the policy or views of the U.S. Department of Education. The authors of the documents found here accept sole responsibility for the contents.
**Recommended Uses:** These tables should be used for present and future data reporting expected under Perkins IV, including student enrollment by career cluster and the designation of students for non-traditional participation and completion accountability indicators.

Table 2 was also used in conjunction with Table 5 in the next set to develop Table 7, which in turn serves as the underlying structure for the technical skill assessment inventory.

**Occupations by Clusters/Pathways**

**Description:** These two tables map O*NET and SOC occupations into each of the career clusters and career pathways, assigning each occupation to only one pathway. One table also contains which occupations have been designated as non-traditional for males and females using 2006 BLS data.

**Table 4: O*NETs in Pathways** contains a list of every CIP code organized by the one career pathway it best belongs in. There are some pathways that do not have any occupations assigned to them, as the assignment belongs more aptly in another pathway, given its description and the occupations it prepares for.

**Table 5: SOC-O*NET-Nontrad-Cluster-Pathway** is a matrix that takes the assignment of O*NET occupations to pathways and provides information on each occupation’s pathway, cluster, the Standard Occupational Classification it belongs in, and whether each occupation is considered non-traditional for males and for females, based on 2006 data collected using SOC coding. Information is sorted by O*NET in one workbook and by pathway in another.

**Recommended Uses:** Table 5 was used in conjunction with Table 2 in the previous set to develop Table 7, which in turn serves as the underlying structure for the technical skill assessment inventory.

These tables should also be used for planning and administrative purposes where double-counting of students or the jobs that employ them might lead to erroneous conclusions. This would include the prioritization of programs of study by pathway and/or cluster using labor market information (number of jobs, expected openings, high-skill/high-wage/high-demand occupations), and some economic development applications, such as determining the number of jobs that are likely to be available for those being trained in various pathways and clusters.

**Occupations and Instructional Programs by Clusters/Pathways**

This table maps O*NET and SOC occupations into each of the career clusters and career pathways, assigning each occupation and each instructional program to all career pathways to which they might apply, and hence all career clusters.

**Table 6: Cluster-Pathway-CIP-SOC-O*NET** is meant to replace previous versions of the Master Mapping Table which contained old CIP codes, out-dated assignment of CIP codes to career clusters, old career cluster names, no information on career pathways and several coding systems that are no longer used. The new table provides all career clusters, career pathways, O*NET occupations and SOC occupations for every CIP-coded instructional program, and similarly all clusters, pathways and instructional programs for every occupation. The matrix is sorted six different ways in separate workbooks.

This table maintains the specific codes and one-to-one crosswalks currently provided via the National Center on Education Statistics, the National Crosswalk Center and the U.S. Department of Labor. The value in this update is the addition of pathway information, and the bringing together of all the underlying, current codes in one place.
**Recommended Uses:** These sets of tables should be used for all other purposes -- where double-counting of students or the jobs that employ them is not a concern.

This would include most student-oriented uses, including career guidance and job placement. It is also suggested for the development of curriculum-planning guides that outline all of the jobs that might be obtained through various pathways and clusters, and for the more precise identification of the occupational-specific skills that are associated with each pathway and cluster, via detailed O*NET information.

Table 6 should not be used for Perkins IV reporting, as it often maps both instructional programs and occupations into more than one career cluster. The other tables were developed for this purpose.

**Primary Occupations and Instructional Programs by Clusters/Pathways**

One additional table was extracted from these underlying data sets in order to meet the needs of national Perkins projects that are anticipated as implementation gets underway. This might also be useful at the state and local level.

**Table 7: Cluster-Pathway-SOC-CIP** combines information from the first two data sets into one table. It uses SOC as the underlying occupational code so labor market information can be readily attached to pathways and clusters. It lists the CIP codes primarily assigned to each pathway but does not further assign them to particular occupations.

**Recommended Uses:** Table 7 serves as the primary underlying structure for the technical skill assessment inventory. It organizes 1) assessments that are related to an occupation, such as licenses, most industry certifications and national occupational tests, and 2) assessments related to an instructional program such as state-developed end-of-program assessments, end-of-course assessments that are part of a program of study designated by a CIP code, and industry certifications that do not lead to specific occupations. It should be used for reporting progress towards gold-level technical skill assessments by career cluster.

This table might be more convenient to use for planning and administrative purposes, when both instructional programs and occupations need to be considered and where double-counting of students or the jobs that employ them is a concern. One potential application is the prioritization of programs of study and/or technical skill assessment development according to which clusters or pathways have more students, lead to more jobs or lead to jobs that are high skill, high wage or high demand.

**For More Information**

This project is coordinated by DTI Associates, Inc, under contract with the U.S. Department of Education’s Office of Vocational and Adult Education (OVAE). Dick Dempsey, formerly with the U.S. Department of Labor, was retained to produce the materials, and state accountability, assessment and career resource network experts were asked to review the products as they were being developed. DTI Associates, Inc made additional formatting changes, sorts and extractions in preparation for posting/distribution and to align with instructions for the Perkins Consolidated Annual Report, which specifically references these crosswalks as a reporting tool. Questions can be directed to Don Hilber, Senior Research and Policy Associate, DTI Associates, Inc at dhilber@dtihq.com.