



Post Research Report

DACUM Research Chart on the

Work-Based Learning Teacher Coordinator

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Project Director

September, 2011

## **Summary**

A research and development effort was undertaken to provide definition and validate the emerging role of the Work-Based Learning Teacher Coordinator through the use of a DACUM process in cooperation with the Pennsylvania Cooperative Education Association with funding support provided by the Pennsylvania Department of Education, Bureau of Career and Technical Education. The DACUM process employs a group interactive activity to produce a sequenced chart of major duty categories and associated task elements of an occupation. A complete DACUM chart provides an occupational skill profile which can be used for instructional program planning, curriculum development, training materials development, career counseling, public relations, employer information, job description, and competency test development. Developed in Canada, the DACUM process has been used extensively throughout all of North American and in more than 40 countries worldwide. A panel of nine experienced certified cooperative education teacher coordinators from across Pennsylvania was assembled for a three day residential activity guided by an experienced DACUM facilitator and an assistant facilitator. The DACUM chart developed by this panel provided a definition of the role of the work-based learning teacher coordinator, identified ten duty categories with a total of 125 associated task areas, and an assortment of work related information. This chart later served as the content core for the development of a validation survey instrument to measure the level of importance, difficulty to achieve, and relative frequency of application of each of the 125 task elements identified through the DACUM activity. All survey ratings were provided through the use of a Likert type scale with a high of 5 and a low of 1. The survey instrument was distributed to a sample of 24 experienced certified cooperative education teacher coordinators, including the individuals involved in the initial DACUM Chart developmental activity, identified by the

Pennsylvania Cooperative Education Association. After one follow-up mailing, the validation survey yielded a return rate of 64%, (n=16). The ratings in the level of importance category ranged between a high of 5.0 and a low of 3.31. Several of the highest validation ratings in the level of importance category ranged between 5.00 and 4.94. These were associated with the task areas of: (a) complying with state and federal labor laws/child labor laws, (b) monitoring the safety of the workplace environment, (c) communicating program expectations and benefits with work-based partners, (d) evaluating the achievement of the student in the workplace, and (e) developing program operation policies and procedures. Ratings in the level of difficulty to achieve and level relative frequency of application categories were at lower levels than the ratings in the level of importance category. Knowledge gained from the development and validation of this DACUM chart were used to: (a) provide a standard for the functions of the work-based learning teacher coordinator, (b) revise the PA Cooperative Education Certification Program delivered by the Temple University College of Education, and (c) serve as a reference blueprint for the revision of the Educational Testing Services PRAXIS II Cooperative Education Cooperative Education Specialty Area Test 0810.

### **Background and Purpose**

Programs designed to use the workplace as an extension of the school have changed in recent years. In the past, programs involving cooperative learning experiences in the workplace were almost always the exclusive domain of secondary level career and technical education programs. Some traditional examples at the secondary level include capstone cooperative education for occupational subjects in trade and industrial education area, diversified occupations, marketing and distributive education, business education, and agricultural education. Also quite common, but typically without pay, are clinical experiences in the health occupations education area.

Although many variations exist in the application of cooperative education, certain core elements remain constant. Typically, the characteristics of cooperative education include the following:

- an interdependent combination of occupational instruction and paid employment related to that instruction.
- an instructional plan which combines learning experiences gained through regularly scheduled paid employment in the community and occupational-oriented instruction.
- a purposeful blending of occupational instruction and paid employment which meets job-prepared objectives.
- a school-initiated and school-supervised program which involves persons enrolled in or returned to a school setting.

Although the basic operating characteristics for cooperative education programs remain essentially the same, new programs with different operating characteristics have recently appeared. The workplace learning environment is no longer the exclusive domain of the secondary-level career and technical educator. The workplace learning environment is now shared with educators outside of career and technical education and includes programs across the K-12 system and beyond.

Due to changes in the context of work-based education programs in Pennsylvania, several questions arose regarding the similarities and differences of those involved in the delivery of career and Technical education cooperative education programs and those involved in the delivery of school-to-work programs. To explore this situation, the Temple University Center for Career Professional Personnel Development in Career and Technical Education undertook a research and development effort to define the role of the Work Based Learning Teacher

Coordinator. The DACUM process was selected to guide this activity.

### **The DACUM Process**

The word DACUM, (pronounced day-kum), is an acronym for Developing A Curriculum. As an occupational analysis method, the DACUM process employs a group interactive process to produce a sequenced chart of duties and tasks in a designated occupation. A complete DACUM chart provides an occupational skill profile which can be used for instructional program planning, curriculum development, training materials development, career counseling, public relations, employer information, job description, competency test development, and other purposes. Initially developed in Canada, the DACUM process has been used extensively throughout all of North American and in more than 40 world-wide.

The DACUM process is based on a set of principles which recognizes that:

- expert workers are better able than anyone else to describe their occupation,
- an occupation can be described effectively in terms of the tasks successful workers perform
- successful task performance is directly related to the knowledge and attitudes that workers must have in order to perform the tasks correctly

The DACUM process involves a panel of approximately 8-10 incumbent workers and 1-2 supervisors led by a qualified DACUM facilitator. Over a time span of three very full days, the panel is guided through an interactive process by their facilitator to develop a DACUM chart. The chart is a product of brainstorming and represents the collective expertise and consensus of the panel.

In operation, the process works like this. Members of the panel nominate, discuss, and reach consensus on duty and task statements which are written on file cards. These cards are mounted

on a wall in front of the panel. The process of nomination, discussion, and reaching consensus is repeated again and again until the entire occupational analysis has been completed. The cards are then re-arranged on the wall to form a chart of duty and task statements. The re-arranged content of the chart is a graphic representation of the occupation organized around a series of general duty categories, which are further defined through two or more task sub-categories in each duty.

After the chart has been completed, the panel moves on to identify auxiliary information about the occupation. This includes areas of general knowledge and skill required by successful workers, the tools, equipment supplies, and materials used, the worker behaviors considered important for success, and any future trends and concerns likely to influence job changes. All of this information is transformed into a paper copy which is later validated through a survey of the original panelist and a number of individuals with similar backgrounds. Also to be collected during the validation process is information on the perceived levels of importance, difficulty to achieve, and frequency of occurrence for each task listed in the chart. The DACUM chart is not finalized until the validation process has been completed.

### **Selection of DACUM Panelists**

The identification of individuals to serve of the DACUM panel required a collaborative process to ensure that the nomination of candidates met selection criteria and was representative of the entire state. To do this, requests were sent to the Pennsylvania Cooperative Education Association and to teacher educators at the three Pennsylvania Professional Development Centers (Temple University, Pennsylvania State University, and Indiana University of Pennsylvania) to identify qualified candidates in the following categories:

- Cooperative Education Teacher-Coordinator, (secondary level)

- Tech Prep Cooperative Education Teacher-Coordinator, (1 from the secondary level and 1 from the post-secondary level)
- Cooperative Education Teacher-Coordinator, (special populations)
- School-to-Work, Workplace Learning Teacher-Coordinator, (secondary or post-secondary)
- Career Technical Center Director or Supervisor of Cooperative Education Teacher-Coordinator, (secondary)
- At large members

As a result of this process, 24 candidates were identified. From this number, 9 were available and agreed to serve on the DACUM panel, while the remaining 15 agreed to serve as respondents in the follow-up validation survey. The panel of nine experienced certified cooperative education teacher coordinators from across Pennsylvania was assembled for a three day residential activity guided by an experienced DACUM facilitator and an assistant facilitator. The DACUM chart developed by this panel provided a definition of the role of the work-based learning teacher coordinator, identified ten duty categories with a total of 125 associated task areas, and an array of work related information. A copy of the DACUM chart developed is included in Appendix A.

### **The Validation Survey**

The DACUM chart later served as the content core for the development of a validation survey instrument to measure the level of importance, difficulty to achieve, and relative frequency of application of each of the 125 task elements identified through the DACUM activity. A copy of the transmittal letter and survey instrument is included in Appendix B.

All survey ratings were provided through the use of a Likert type scale with a high of 5 and a low

of 1. The survey instrument was distributed to a sample of 24 experienced certified cooperative education teacher coordinators, including the individuals involved in the initial development of the DACUM chart activity. After one follow-up mailing, the validation survey yielded a return rate of 64%, (n=16). The ratings in the level of importance category ranged between a high of 5.0 and a low of 3.31. Several of the highest validation ratings in the level of importance category ranged between 5.00 and 4.94. These were associated with the task areas of:

- complying with state and federal labor laws/child labor laws
- monitoring the safety of the workplace environment
- communicating program expectations and benefits with work- based partners
- evaluating the achievement of the student in the workplace
- developing program operation policies and procedures.

The vast majority of the ratings in the difficulty to achieve and relative frequency of application categories were at lower levels than the ratings in the importance category. A copy of all survey ratings is included in Appendix C.

### **Application of Results**

Over the last two years, the knowledge gained from the development DACUM chart on the work-based learning teacher coordinator and validation data were used to:

- provide a standard for the functions of the work-based learning teacher coordinator
- revise the PA Cooperative Education Certification Program delivered by the Temple University College of Education
- serve as a reference blueprint for the 2010 revision of the Educational Testing Services PRAXIS II Cooperative Education Cooperative Education Specialty Area Test 0810
- provide a job description for work-based learning teacher coordinators

## **APPENDIX A**

### **DACUM Research Chart on the Work-Based Learning Teacher Coordinator**

# DACUM\* Research Chart for the Work-Based Learning Teacher Coordinator

## DACUM\* Panel

Timothy Carr  
Columbia Montour AVTS  
Bloomsburg, PA

Sue Fox  
Hatboro-Horsham Senior High School  
Horsham, PA

Debby Helwig  
Deer Lakes High School  
Russleton, PA

Jan Klevis  
Lehigh Career & Technical Institute  
Schnecksville, PA

Kim T. Letourneau  
Eastern Area High School  
Easton, PA

Angela Morgan  
Twin Valley School District  
Elverson, PA

Richard Reichart  
Reading High School  
Reading, PA

Joseph P. Selgrade  
North Montco Technical Career Center  
Lansdale, PA

Cheryl Speakman  
State College Area School District  
State College, PA

## DACUM\* Facilitator

Chester P. Wichowski  
Temple University  
Philadelphia, PA

## DACUM\* Assistant Facilitator

Jill S. Tafoya  
Temple University  
Philadelphia, PA

## College of Education

TEMPLE UNIVERSITY®

Center for Professional Development in  
Career and Technical Education

Ritter Hall 372

1301 Cecil B. Moore Avenue

Philadelphia, PA 19122-6091

**NOTE:** The following definition of the Work-Based Learning Teacher-Coordinator was used as a guide during the conduct of this DACUM\* activity:

The Work-Based Learning Teacher-Coordinator has been defined as a PA Cooperative Education certified individual who plans, implements, teaches, and coordinates classroom instruction and related supervised experiential learning in business/industry, professional and community settings. This activity is utilized for career exploration and reinforcement, employment preparation, social/economic adjustment, personal development, or skill development, as it relates to students' learning, interests and needs. The work-based learning environment includes but is not limited to the following: Cooperative Education (Capstone and/or Diversified Occupations), Job Shadowing, Internships, Service Learning and Apprenticeships.

\* **DACUM (Developing A CUrriculuM)** is a group interactive process used to conduct an occupational analysis.

MAY 2-3, 2007

# DACUM Research Chart for the Work-Based Learning Teacher Coordinator

## DUTIES

## TASKS

**A**

**Develop And Maintain Work-Based Learning Programs**

<b>A-1</b> Perform or assist with needs assessment (Student & Industry)	<b>A-2</b> Research work-based learning programs	<b>A-3</b> Consult with other work-based teacher-coordinators	<b>A-4</b> Organize Occupational Advisory Committee
<b>A-12</b> Assist in determining program cost	<b>A-14</b> Assist with obtaining state and local program approval	<b>A-15</b> Develop student recruitment plan	<b>A-13</b> Establish partnerships and assist in development of articulation agreements with education, government, public and private agencies

**B**

**Promote Work-Based Learning Programs**

<b>B-1</b> Develop work-based public relations plan	<b>B-2</b> Develop and distribute promotional materials	<b>B-3</b> Inform administrators, counselors and teachers about programs	<b>B-4</b> Informs community about programs (*See below for examples)
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**C**

**Provide Individual Student Support Services**

<b>C-1</b> Orient students and parent/guardians to work-based learning programs	<b>C-2</b> Collect data to assess student needs and abilities	<b>C-3</b> Assist students in developing career objects	<b>C-4</b> Match and place student to appropriate work-based activity
<b>C-13</b> Serve as student advocate	<b>C-14</b> Provide career resources and information about post-secondary opportunities	<b>C-15</b> Assist students, parents/guardians and counselors with career options and course selections	

**D**

**Develop Work-Based Learning Partnerships**

<b>D-1</b> Communicate program expectations and benefits to potential partners	<b>D-2</b> Distribute informational material to potential partners	<b>D-3</b> Secure commitment from potential partners	<b>D-4</b> Develop work-based agreements
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**E**

**Facilitate Student Development of Work-Based Skills Conferences**

<b>E-1</b> Assist students in achieving and/or revising career objective	<b>E-2</b> Teach employability, retention, consumer and entrepreneurial skills	<b>E-3</b> Coordinate delivery of occupation-specified skills	<b>E-4</b> Ensure students meet legal requirements for participation in a work-based activity
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**F**

**Develop Work-Based Training Sites**

<b>F-1</b> Ensure safety conditions at work-based site	<b>F-2</b> Assess types and quality of training available	<b>F-3</b> Share work-based training requirements with mentor	<b>F-4</b> Arrange for mentor tour of program/school
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**G**

**Connect Work-Based Training Sites**

<b>G-1</b> Serve as a liaison between school and work-based site	<b>G-2</b> Monitor work-based site safety	<b>G-3</b> Monitor student performance and attendance	<b>G-4</b> Share work-based activities with school community
<b>G-11</b> Facilitate various types of job placements	<b>G-12</b> Participate in school to career activities	<b>G-13</b> Complete, evaluate and take action on student follow-up studies	<b>G-14</b> Complete, evaluate and take action on employer follow-up studies

**H**

**Manage Student Records**

<b>H-1</b> Maintain individual student files	<b>H-2</b> Obtain required recommendations for students	<b>H-3</b> Maintain copies of work permits, driver's license, and auto insurance information	<b>H-4</b> Maintain parent/guardian permission forms
<b>H-13</b> Maintain Career Objective form	<b>H-14</b> Assist with student portfolios and graduation project	<b>H-15</b> Organize or assist with administration of program completion assessments	

**I**

**Maintain Program Regulatory Compliance**

<b>I-1</b> Comply with state and federal child labor laws	<b>I-2</b> Comply with state and federal laws	<b>I-3</b> Verify employer worker compensation coverage is current	<b>I-4</b> Provide data for completing state reports
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**J**

**Continue Professional Development**

<b>J-1</b> Participate in in-service activities, workshops and conferences	<b>J-2</b> Review professional literature	<b>J-3</b> Enroll in further education and training	<b>J-4</b> Study local, state national and international occupational trends
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\*B-4 e.g., parent/guardians, employers, School Board, Chamber of Commerce, trade and service organizations, Workforce Investment Board and post-secondary institutions

<b>A-5</b> Align program with school philosophy and mission	<b>A-6</b> Develop program objectives to align with PA Academic Standards and PA recognized industry-based credentials or certifications		<b>A-7</b> Identify program competences	<b>A-8</b> Develop an integrated planned course of study	<b>A-9</b> Establish program timelines	<b>A-10</b> Establish guidelines for program evaluation	<b>A-11</b> Develop work-based policies and procedures
<b>A-16</b> Develop required documents and forms	<b>A-17</b> Develop work-based mentor training guidelines	<b>A-18</b> Pilot test work-based training program	<b>A-19</b> Collect formative evaluation data on pilot test	<b>A-20</b> Modify pilot program based on feedback	<b>A-21</b> Solicit employer, mentor and student feedback for program improvement	<b>A-22</b> Modify program based on feedback	
<b>B-5</b> Publicize programs	<b>B-6</b> Recruit students for work-based learning sites	<b>B-7</b> Recruit work-based learning sites	<b>B-8</b> Organize student recognition activities	<b>B-9</b> Organize employer appreciation activity	<b>B-10</b> Organize or assist with school-wide career awareness activities	<b>B-11</b> Organize or assist with exploration of post-secondary opportunities	
<b>C-5</b> Provide appropriate student information to work-based mentors	<b>C-6</b> Perform on-site work-based student observations	<b>C-7</b> Refer students for remedial or specialized services	<b>C-8</b> Obtain feedback from work-based mentor	<b>C-9</b> Share feedback on student performance with student	<b>C-10</b> Monitor compliance with agreement	<b>C-11</b> Monitor student attendance	<b>C-12</b> Conduct conferences with student, parent/guardians, and/or mentors
<b>D-5</b> Facilitated and document partnership meetings	<b>D-6</b> Document work-based partner contact	<b>D-7</b> Recognize partnership contributions	<b>D-8</b> Solicit student awards	<b>D-9</b> Develop and maintain database of work-based contacts			
<b>E-5</b> Evaluate student progress and address deficient areas	<b>E-6</b> Arrange for job-coaching	<b>E-7</b> Provide enrichment experiences	<b>E-8</b> Update work-based curriculum to meet PA Academic Standards, PA recognized industry-based credentials or certifications and address local employment needs		<b>E-9</b> Support student participation in CTSOs to develop leadership skills		
<b>F-5</b> Provide school information to employers/mentors	<b>F-6</b> Provide program guidelines to work-based	<b>F-7</b> Implement and monitor training agreement and training plan	<b>F-8</b> Monitor work-based training sites				
<b>G-5</b> Arrange work-based site tours for students	<b>G-6</b> Arrange work-based site visits for administrators, counselors and teachers	<b>G-7</b> Integrate school and work-based curriculum to meet PA Academic Standards and PA recognized industry-based credentials for certifications		<b>G-8</b> Participate in Occupational Advisory Committees	<b>G-9</b> Advise students of secondary and post-secondary articulation agreements and dual enrollment options		<b>G-10</b> Arrange job interviews
<b>G-15</b> Provide feedback on student performance to instructors and administrators		<b>G-16</b> Provide appropriate information regarding student performance to mentors/employers					
<b>H-5</b> Maintain student contracts as per school policy	<b>H-6</b> Maintain medical insurance and parent/guardian release forms	<b>H-7</b> Coordinate issuance of student parking permits	<b>H-8</b> Maintain training plans	<b>H-9</b> Maintain training agreements	<b>H-10</b> Facilitate student evaluations	<b>H-11</b> Maintain student time sheets and activity records	<b>H-12</b> Maintain student competency achievement records
<b>I-5</b> Abide by state and federal education laws	<b>I-6</b> Abide by confidentiality laws	<b>I-7</b> Participate in I.E.P. development	<b>I-8</b> Assist with program audits	<b>I-9</b> Provide written program status reports	<b>I-10</b> Document Occupational Advisory Committee meeting minutes		
<b>J-5</b> Participate in business and community organizations	<b>J-6</b> Participate in professional organizations	<b>J-7</b> Investigate innovative work-based learning programs	<b>J-8</b> Network with colleagues	<b>J-9</b> Solicit employer, mentor and student feedback for self-improvement		<b>J-10</b> Comply with PA requirements to maintain valid certification	

**GENERAL KNOWLEDGE**

Federal and state labor laws  
 Federal and state child labor laws  
 Contract law  
 Labor unions  
 Safety regulations  
 Occupational awareness  
 Curriculum development  
 Business, industry and community organizations  
 Community resources  
 Current events  
 Current market trends  
 Local economic development  
 Workforce Investment Board  
 Post-secondary career and educational opportunities  
 Pre-employment screening

**SKILLS SETS**

Human relations  
 Communications  
 Stress management  
 Problem-solving  
 Computer literacy  
 Information management  
 Organization  
 Counseling  
 Research and development  
 Marketing  
 Teaching  
 Evaluation  
 Time management  
 Driving  
 Observation  
 Documentation  
 Analytical  
 Coordination  
 Motivation  
 Management  
 Supervisory  
 Networking  
 Leadership  
 Interpersonal multi-media

**WORKING BEHAVIORS**

Persuasive  
 Creative  
 Self-motivated  
 Persistent  
 Tactful  
 Honest  
 Flexible  
 Loyal  
 Self-confident  
 Positive attitude  
 Supportive  
 Open-minded  
 Self-reliant  
 Punctual  
 Dependable  
 Reliable  
 Industrious  
 Sense of humor  
 Sociable  
 Discreet  
 Professional appearance  
 Non-partisan  
 Life-long learner  
 Resourceful  
 Proactive  
 Humble  
 Team player  
 Risk taker  
 Problem solver  
 Ethical  
 Accept criticism  
 Accept rejection  
 Competent

**TOOLS, EQUIPMENT, SUPPLIES & MATERIALS**

Transportation  
 Computer  
 Internet access  
 Fax machine  
 Telephone  
 Cellular Telephone  
 Voice mail or answering machine  
 Copier  
 Camera  
 Multi-media equipment  
 Office area  
 Basic office supplies  
 Business cards  
 Desk and chair  
 Filing cabinets  
 Calculator  
 Phone book  
 Book shelves  
 Classroom  
 Basic teaching supplies  
 Curriculum materials  
 Bulletin board  
 Career reference materials  
 Time clock

**TRENDS AND CONCERNS**

Local economic conditions  
 Funding  
 Substance abuse  
 Pre-employment and random substance testing  
 Employer participation  
 Technology changes  
 Internet use and abuse  
 Work ethics  
 Child labor laws  
 Minimum wage laws  
 Global market trends  
 Barriers to employer participation  
 English language learners  
 Gender bias  
 At-risk students  
 Diversity  
 Personal security  
 School safety

**Acronyms**

I.E.P. Individual Education Plan  
 C.T.S.O. Career and Technical Student Organization

**APPENDIX B**

Transmittal Letter

&

Survey Instrument



Dear XXX

Thank you for your willingness to participate in the validation survey on the recently revised DACUM Research Chart on the Role of the Work-Based Learning Teacher Coordinator.

As you may already know, the validation of an occupational analysis is necessary every several years. Since the original chart was developed ten years ago, the validation of the newly revised chart is long overdue. Your time and dedication in completing the attached survey is of great professional value to all teacher coordinators in the Commonwealth. A copy of the survey results will be sent to you when the analysis is completed. Further, the results of this validation will be reported on at the Annual PA Cooperative Education Conference in October, 2007.

Please return the completed survey in the enclosed postage paid, return addressed envelope.

Do not hesitate to contact me if you have any questions or comments. I can be reached at 215 204-6249 or [chet.w@temple.edu](mailto:chet.w@temple.edu)

Sincerely,

Chester P. Wichowski, D.Ed.  
Associate Center Director, and  
Coordinator of Research and development

Enc.

**WORK-BASED LEARNING TEACHER COORDINATOR SURVEY**  
**DIRECTIONS**  
(Please read carefully)

The following two part survey instrument has been developed to collect additional information on the role of the Work-Based Learning Teacher Coordinator in Pennsylvania.

Part 1 requests demographic information about the respondents to the survey. Follow the directions and answer the questions as they are stated.

Part 2 consists of a series of task statements organized around 10 duty categories developed during the DACUM activity. Each task statement is to be rated on the following three dimensions:

- A. The degree of importance you attach to each task.
- B. The degree of difficulty you associate with the achievement of each task.
- C. The relative frequency with which you typically perform each task.

All ratings will be done by using the following numerical scale:

**None   0   1   2   3   4   5   Great**

After reading each task statement, write the number that best describes your feelings about:

- A. The degree of importance you attach to that task in the space provided in column A.
- B. The degree of difficulty you associate with the achievement of that task in the space provided in column B.
- C. The relative frequency with which you typically perform that task in column C.

For example, if you read task statement A15 and felt it was of great importance, write in a "5" in the space provided in column A; if you felt that it was somewhat difficult to achieve, write in a "3" in the space provided in column B; and if you do that task on a relatively infrequent basis, write in a "2" in space provided in column C. See example below:

	A Level of Importance	B Difficulty to Achieve	C Relative Frequency
A15 Develop student recruitment plan	<u>5</u>	<u>3</u>	<u>2</u>

**NOTE:** You may add any task statements that you feel are missing. Further, you may modify any existing task statements that you feel are incorrect or need clarification. Please be sure to rate any new task statements

# WORK-BASED LEARNING TEACHER COORDINATOR SURVEY

## Part 1

**Directions:** Answer each question by placing a (  $\checkmark$  ) in the appropriate space or by writing in your response in the space provided.

1. Type of school or organization that best describes where you work:

- ( ) Secondary Vocational School    ( ) Comprehensive High School    ( ) Intermediate Unit  
( ) Community College            ( ) Adult Center            ( ) Other: \_\_\_\_\_

2. What is your current (and most frequently used) professional job title?

\_\_\_\_\_

3. How many years have you worked in your present position? \_\_\_\_\_

4. List any additional professional job titles that you currently use. (in addition to the one listed in question number 2)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. How many years experience do have as a professional educator? \_\_\_\_\_

6. Which education certificates do you hold? (check all that apply)

- a. ( ) Vocational 1            Occupational field \_\_\_\_\_  
b. ( ) Vocational 2            Occupational field \_\_\_\_\_  
c. ( ) Instructional 1            Area \_\_\_\_\_  
d. ( ) Instructional 2            Area \_\_\_\_\_  
e. ( ) Cooperative Education Teacher Coordinator \_\_\_\_\_  
f. ( ) Instructional Supervisor \_\_\_\_\_  
g. ( ) Administrative Director or Principal \_\_\_\_\_  
h. ( ) Other: \_\_\_\_\_

NONE	0	1	2	3	4	5	GREAT
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<b>A. DEVELOP AND MAINTAIN WORK-BASED LEARNING PROGRAMS</b>		<b>A Level of Importance</b>	<b>B Difficulty to Achieve</b>	<b>C Relative Frequency</b>
A1.	Perform or assist with needs assessment (Student & Industry)	_____	_____	_____
A2.	Research work-based learning programs	_____	_____	_____
A3.	Consult with other work-based teacher-coordinators	_____	_____	_____
A4.	Organize an Occupational Advisory Committee	_____	_____	_____
A5.	Align program with school philosophy and mission	_____	_____	_____
A6.	Develop program objectives to align with PA Academic Standards and PA recognized industry-based credentials or certifications	_____	_____	_____
A7.	Identify program competencies	_____	_____	_____
A8.	Develop an integrated planned course of study	_____	_____	_____
A9.	Establish program timelines	_____	_____	_____
A10.	Establish guidelines for program evaluation	_____	_____	_____
A11.	Develop work-based policies and procedures	_____	_____	_____
A12.	Assist in determining program cost	_____	_____	_____
A13.	Establish partnerships and assist in development of articulation agreements with education, government, public and private agencies	_____	_____	_____
A14.	Assist with obtaining state and local program approval	_____	_____	_____
A15.	Develop student recruitment plan	_____	_____	_____
A16.	Develop required documents and forms	_____	_____	_____
A17.	Develop work-based mentor training guidelines	_____	_____	_____
A18.	Pilot test work-based training program	_____	_____	_____
A19.	Collect formative evaluation data on pilot test program	_____	_____	_____
A20.	Modify pilot program based on feedback	_____	_____	_____
A21.	Solicit employer, mentor and student feedback for program improvement	_____	_____	_____
A22.	Modify program based on feedback	_____	_____	_____

NONE	0	1	2	3	4	5	GREAT
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<b>B. PROMOTE WORK-BASED LEARNING PROGRAMS</b>		<b>A Level of Importance</b>	<b>B Difficulty to Achieve</b>	<b>C Relative Frequency</b>
B 1.	Develop work-based public relations plan	_____	_____	_____
B2.	Develop and distribute promotional materials	_____	_____	_____
B3.	Inform administrators, counselors and teachers about programs	_____	_____	_____
B4.	Inform community about programs (e.g., parent/guardians, employers, School Board, Chamber of Commerce, trade and service organizations, Workforce Investment Board and post-secondary institutions)	_____	_____	_____
B5.	Publicize programs	_____	_____	_____
B6.	Recruit students for work-based learning programs	_____	_____	_____
B7.	Recruit work-based learning sites	_____	_____	_____
B8.	Organize student recognition activities	_____	_____	_____
B9.	Organize employer appreciation activity	_____	_____	_____
B10.	Organize or assist with school-wide career awareness activities	_____	_____	_____
B11.	Organize or assist with exploration of post-secondary opportunities	_____	_____	_____

NONE	0	1	2	3	4	5	GREAT
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<b>C. PROVIDE INDIVIDUAL STUDENT SUPPORT SERVICES</b>		<b>A Level of Importance</b>	<b>B Difficulty to Achieve</b>	<b>C Relative Frequency</b>
C1.	Orient students and parent/guardians to work-based learning programs	_____	_____	_____
C2.	Collect data to assess student needs and abilities	_____	_____	_____
C3.	Assist students in developing career objective	_____	_____	_____
C4.	Match and place student to appropriate work-based activity	_____	_____	_____
C5.	Provide appropriate student information to work-based mentors	_____	_____	_____
C6.	Perform on-site work-based student observations	_____	_____	_____
C7.	Refer students for remedial or specialized services	_____	_____	_____
C8.	Obtain feedback from work-based mentor	_____	_____	_____
C9.	Share feedback on student performance with student	_____	_____	_____
C10.	Monitor compliance with agreement	_____	_____	_____
C11.	Monitor student attendance	_____	_____	_____
C12.	Conduct conferences with student, parent/guardians, and/or mentors	_____	_____	_____
C13.	Serve as student advocate	_____	_____	_____
C14.	Provide career resources and information about post-secondary opportunities	_____	_____	_____
C15.	Assist students, parent/guardians and counselors with career options and course selections	_____	_____	_____

NONE	0	1	2	3	4	5	GREAT
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<b>D. DEVELOP WORK-BASED LEARNING PARTNERSHIPS</b>		<b>A Level of Importance</b>	<b>B Difficulty to Achieve</b>	<b>C Relative Frequency</b>
D1.	Communicate program expectations and benefits to potential partners	_____	_____	_____
D2.	Distribute informational material to potential partners	_____	_____	_____
D3.	Secure commitment from potential partners	_____	_____	_____
D4.	Develop work-based agreements	_____	_____	_____
D5.	Facilitate and document partnership meetings	_____	_____	_____
D6.	Document work-based partner contact	_____	_____	_____
D7.	Recognize partnership contributions	_____	_____	_____
D8.	Solicit student awards	_____	_____	_____
D9.	Develop and maintain database of work-based contacts	_____	_____	_____
<b>E. FACILITATE STUDENT DEVELOPMENT OF WORK-BASED SKILLS</b>				
E1.	Assist students in achieving and/or revising career objective	_____	_____	_____
E2.	Teach employability, retention, consumer and entrepreneurial skills	_____	_____	_____
E3.	Coordinate delivery of occupation-specific skills	_____	_____	_____
E4.	Ensure students meet legal requirements for participation in a work-based activity	_____	_____	_____
E5.	Evaluate student progress and address deficient areas	_____	_____	_____
E6.	Arrange for job-coaching	_____	_____	_____
E7.	Provide enrichment experiences	_____	_____	_____
E8.	Update work-based curriculum to meet PA Academic Standards, PA recognized industry-based credentials or certifications and address local employment needs	_____	_____	_____
E9.	Support student participation in CTSOs to develop leadership skills	_____	_____	_____

NONE	0	1	2	3	4	5	GREAT
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		A	B	C
		Level of Importance	Difficulty to Achieve	Relative Frequency
<b>F. DEVELOP WORK-BASED TRAINING SITES</b>				
F1.	Ensure safety conditions at work-based site	_____	_____	_____
F2.	Assess types and quality of training available	_____	_____	_____
F3.	Share work-based training requirements with mentor	_____	_____	_____
F4.	Arrange for mentor tour of program/school	_____	_____	_____
F5.	Provide school information to employers/mentors	_____	_____	_____
F6.	Provide program guidelines to work-based mentor	_____	_____	_____
F7.	Implement and monitor training agreement and training plan	_____	_____	_____
F8.	Monitor work-based training sites	_____	_____	_____
<b>G. CONNECT WORK-BASED LEARNING TO SCHOOL-BASED LEARNING</b>				
G1.	Serve as a liaison between school and work-based site	_____	_____	_____
G2.	Monitor work-based site safety	_____	_____	_____
G3.	Monitor student performance and attendance	_____	_____	_____
G4.	Share work-based activities with school community	_____	_____	_____
G5.	Arrange work-based site tours for students	_____	_____	_____
G6.	Arrange work-based site visits for administrators, counselors and teachers	_____	_____	_____
G7.	Integrate school and work-based curriculum to meet PA Academic Standards and PA recognized industry-based credentials or certifications	_____	_____	_____
G8.	Participate in Occupational Advisory Committees	_____	_____	_____
G9.	Advise students of secondary and post-secondary articulation agreements and dual enrollment options	_____	_____	_____
G10.	Arrange job interviews	_____	_____	_____
G11.	Facilitate various types of job placements	_____	_____	_____
G12.	Participate in school to career activities	_____	_____	_____
G13.	Complete, evaluate and take action on student follow-up studies	_____	_____	_____
G14.	Complete, evaluate and take action on employer follow-up studies	_____	_____	_____
G15.	Provide feedback on student performance to instructors and administrators	_____	_____	_____
G16.	Provide appropriate information regarding student performance to mentors/employers	_____	_____	_____

NONE	0	1	2	3	4	5	GREAT
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<b>H. MANAGE STUDENT RECORDS</b>		<b>A Level of Importance</b>	<b>B Difficulty to Achieve</b>	<b>C Relative Frequency</b>
H1.	Maintain individual student files	_____	_____	_____
H2.	Obtain required recommendations for students as per school policy	_____	_____	_____
H3.	Maintain copies of work permits, driver's license, and auto insurance information	_____	_____	_____
H4.	Maintain parent/guardian permission forms	_____	_____	_____
H5.	Maintain student contracts as per school policy	_____	_____	_____
H6.	Maintain medical insurance and parent/guardian release forms	_____	_____	_____
H7.	Coordinate issuance of student parking permits	_____	_____	_____
H8.	Maintain training plans	_____	_____	_____
H9.	Maintain training agreements	_____	_____	_____
H10.	Facilitate student evaluations	_____	_____	_____
H11.	Maintain student time sheets and activity records	_____	_____	_____
H12.	Maintain student competency achievement records	_____	_____	_____
H13.	Maintain Career Objective form	_____	_____	_____
H14.	Assist with student portfolios and graduation project	_____	_____	_____
H15.	Organize or assist with administration of program completion assessments	_____	_____	_____

NONE	0	1	2	3	4	5	GREAT
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		A Level of Importance	B Difficulty to Achieve	C Relative Frequency
<b>I. MAINTAIN PROGRAM REGULATORY COMPLIANCE</b>				
I1.	Comply with state and federal child labor laws	_____	_____	_____
I2.	Comply with state and federal labor laws	_____	_____	_____
I3.	Verify employer worker compensation coverage is current	_____	_____	_____
I4.	Provide data for completing state reports	_____	_____	_____
I5.	Abide by state and federal education laws	_____	_____	_____
I6.	Abide by confidentiality laws	_____	_____	_____
I7.	Participate in I.E.P. development	_____	_____	_____
I8.	Assist with program audits	_____	_____	_____
I9.	Provide written program status reports	_____	_____	_____
I10.	Document Occupational Advisory Committee meeting minutes	_____	_____	_____
<b>J. CONTINUE PROFESSIONAL DEVELOPMENT</b>				
J1.	Participate in in-service activities, workshops and conferences	_____	_____	_____
J2.	Review professional literature	_____	_____	_____
J3.	Enroll in further education and training	_____	_____	_____
J4.	Study local, state, national and international occupational trends	_____	_____	_____
J5.	Participate in business and community organizations	_____	_____	_____
J6.	Participate in professional organizations	_____	_____	_____
J7.	Investigate innovative work-based learning programs	_____	_____	_____
J8.	Network with colleagues	_____	_____	_____
J9.	Solicit employer, mentor and student feedback for self-improvement	_____	_____	_____
J10.	Comply with PA requirements to maintain valid certification	_____	_____	_____



November, 26, 2007

Dear: XXX

I am taking this opportunity to present you with a Certificate of Appreciation and thank you once again and for your active role in the development of the 2007 DACUM Research Chart on the Role of the Work-Based Learning Teacher Coordinator and its companion validation tables. The 2007 DACUM chart was done through a review and revision of the original DAUM chart developed in 1997. The revised chart and validation tables serve as a valuable asset to the work- based teacher coordinators in the Commonwealth.

This chart and the data in the validation tables will be used to revise the cooperative education certification program delivered by Temple University. Further, this chart may also serve as the basis of a table of specifications for the revision of the PRAXIS cooperative education specialty test.

In addition to the Certificate of Appreciation, a copy of the revised chart and validation tables are enclosed for your reference. Please note that pdf versions of the chart and validation tables are on the websites of the Pennsylvania Cooperative Education Association, as well as the Professional Development Centers at Temple University, Pennsylvania State University, and Indiana University of Pennsylvania.

Best wishes for continued success in the delivery of your work-based learning education programs.

Sincerely,

Chester P. Wichowski, D. Ed.  
Associate Center Director, and  
Coordinator of Research and Development

Enc. Certificate, Chart & Tables

## **APPENDIX C**

### **Survey Ratings**

**Table I**  
**Mean Ratings of Validation Data on the Role of the**  
**Work-Based Learning Teacher Coordinator**  
**2007 (N=16)**

<b>Duty Category and Tasks</b>	<b>Level of Importance (Mean)*</b>	<b>Difficulty to Achieve (Mean)*</b>	<b>Relative Frequency (Mean)*</b>
<b>A. DEVELOP AND MAINTAIN WORK-BASED LEARNING PROGRAMS</b>			
A1. Perform or assist with needs assessment (Student & Industry)	4.06	3.25	2.56
A2. Research work-based learning programs	3.19	2.44	2.00
A3. Consult with other work-based learning programs	4.69	2.00	2.88
A4. Organize an Occupational Advisory Committee	4.00	2.56	2.19
A5. Align program with school philosophy and mission	4.63	2.50	3.50
A6. Develop program objectives to align with PA Academic Standards and PA recognized industry-based credentials or certifications	4.69	2.88	3.19
A7. Identify program competencies	4.44	2.44	2.44
A8. Develop an integrated planned course of study	3.93	3.00	2.87
A9. Establish program timelines	4.13	2.38	3.00
A10. Establish guidelines for program evaluation	4.13	2.63	3.13
A11. Develop work-based policies and procedures	4.88	2.00	2.88
A12. Assist in determining program cost	2.38	1.53	1.50
A13. Establish partnerships and assist in development of articulation agreements with education, government, public and private agencies	4.25	2.75	2.38
A14. Assist with obtaining state and local program approval	4.07	2.53	1.87
A15. Develop student recruitment plan	4.20	2.47	2.80
A16. Develop required documents and forms	4.75	2.50	3.13
A17. Develop work-based mentor training guidelines	3.88	2.75	2.38
A18. Pilot test work-based training program	3.27	2.20	1.60
A19. Collect formative evaluation data on pilot test program	3.14	1.79	1.57
A20. Modify pilot program based on feedback	3.21	1.79	1.57
A21. Solicit employer, mentor and student feedback for program improvement	4.69	2.56	3.69
A22. Modify program based on feedback	4.75	2.19	3.19

\*Mean ratings based on a Likert-type scale with 0 = None, 5 = great

**Table i**  
**Mean Ratings of Validation Data on the Role of the**  
**Work-Based Learning Teacher Coordinator**  
**2007 (N=16)**

<b>Duty Category and Tasks</b>	<b>Level of Importance (Mean)*</b>	<b>Difficulty to Achieve (Mean)*</b>	<b>Relative Frequency (Mean)*</b>
<b>B. PROMOTE WORK-BASED LEARNING PROGRAMS</b>			
B1. Develop work-based public relations plan	4.06	2.31	2.44
B2. Develop and distribute promotional materials	4.25	1.81	2.88
B3. Inform administrators, counselors and teachers about programs	4.63	2.06	3.00
B4. Inform community about programs (e.g., parent/guardians, employers, School Board, Chamber of Commerce, trade and service organizations, Workforce Investment Boards and post-secondary institutions)	4.56	2.50	3.19
B5. Publicize programs	4.38	2.56	3.00
B6. Recruit students for work-based learning programs	4.80	2.27	3.40
B7. Recruit work-based learning sites	4.81	2.44	3.50
B8. Organize student recognition activities	4.07	2.40	2.53
B9. Organize employer appreciation activity	4.07	2.87	2.27
B10. Organize or assist with school-wide career awareness activities	3.87	2.80	2.87
B11. Organize or assist with exploration of post-secondary opportunities	3.87	2.80	2.80
<b>C. PROVIDE INDIVIDUAL STUDENT SUPPORT SERVICES</b>			
C1. Orient students and parent/guardians to work-based learning programs	4.69	2.31	3.00
C2. Collect data to assess student needs and abilities	4.13	2.25	2.88
C3. Assist students in developing career objective	4.33	2.07	2.93
C4. Match and place student to appropriate work-based activity	4.81	2.81	3.75
C5. Provide appropriate student information to work-based mentors	4.63	2.13	3.75
C6. Perform on-site work-based student observations	4.63	2.36	4.13
C7. Refer students for remedial or specialized services	4.13	2.25	2.25
C8. Obtain feedback from work-based mentor	5.00	2.13	3.94
C9. Share feedback on student performance with student	4.81	1.88	4.06
C10. Monitor compliance with agreement	4.75	2.31	3.94
C11. Monitor student attendance	4.88	2.13	4.06
C12. Conduct conferences with student, parent/guardians, and/or mentors	4.38	2.88	2.56
C13. Serve as student advocates	4.31	2.25	3.44
C14. Provide career resources and information about post-secondary opportunities	4.40	2.07	3.27
C15. Assist students, parents/guardians and counselors with career options and course selections	4.13	2.40	3.33

\*Mean ratings based on a Likert-type scale with 0 = None, 5 = great

**Table I**  
**Mean Ratings of Validation Data on the Role of the**  
**Work-Based Learning Teacher Coordinator**  
**2007 (N=16)**

Duty Category and Tasks	Level of Importance (Mean)*	Difficulty to Achieve (Mean)*	Relative Frequency (Mean)*
<b>D. DEVELOP WORK-BASED LEARNING PARTNERSHIPS</b>			
D1. Communicate program expectations and benefits to potential partners	4.94	1.94	3.94
D2. Distribute informational material to potential partners	4.63	1.63	3.88
D3. Secure commitment from potential partners	4.75	3.00	3.38
D4. Develop work-based agreements	4.75	2.00	3.75
D5. Facilitate and document partnership meetings	4.31	1.81	2.69
D6. Document work-based partner contact	4.44	1.63	3.38
D7. Recognize partnership contributions	4.38	2.31	2.44
D8. Solicit student awards	3.36	2.79	1.71
D9. Develop and maintain database of work-based contacts	4.75	2.00	3.94
<b>E. FACILITATE STUDENT DEVELOPMENT OF WORK-BASED SKILLS</b>			
E1. Assist students in achieving and/or revising career objective	4.13	2.19	2.56
E2. Teach employability, retention, consumer and entrepreneurial skills	4.67	2.27	4.27
E3. Coordinate delivery of occupation-specific skills	4.20	2.47	3.67
E4. Ensure students meet legal requirements for participation in a work-based activity	5.00	2.00	4.75
E5. Evaluate student progress and address deficient areas	4.88	2.25	4.06
E6. Arrange for job-coaching	3.75	2.63	1.38
E7. Provide enrichment experiences	3.69	3.13	1.63
E8. Update work-based curriculum to meet PA Academic Standards, PA recognized industry-based credentials or certifications and address local employment needs	4.38	2.69	3.00
E9. Support student participation in CTSOs to develop leadership skills	4.25	2.50	3.13

\*Mean ratings based on a Likert-type scale with 0 = None, 5 = great

**Table I**  
**Mean Ratings of Validation Data on the Role of the**  
**Work-Based Learning Teacher Coordinator**  
**2007 (N=16)**

<b>Duty Category and Tasks</b>	<b>Level of Importance (Mean)*</b>	<b>Difficulty to Achieve (Mean)*</b>	<b>Relative Frequency (Mean)*</b>
<b>F. DEVELOP WORK-BASED TRAINING SITES</b>			
F1. Ensure safety conditions at work-based site	5.00	2.31	4.50
F2. Assess types and quality of training available	4.56	2.63	3.69
F3. Share work-based training requirements with mentor	4.81	2.19	3.88
F4. Arrange for mentor tour of program/school	3.81	3.25	2.38
F5. Provide school information to employers/mentors	4.31	1.63	3.19
F6. Provide program guidelines to work-based mentor	4.63	1.69	3.75
F7. Implement and monitor training agreement and training plan	4.94	1.81	4.69
F8. Monitor work-based training sites	4.81	1.56	4.75
<b>G. CONNECT WORK-BASED LEARNING TO SCHOOL-BASED LEARNING</b>			
G1. Serve as a liaison between school and work-based site	4.93	1.25	4.44
G2. Monitor work-based site safety	4.86	2.38	4.31
G3. Monitor student performance and attendance	4.93	2.00	4.50
G4. Share work-based activities with school community	4.43	2.88	3.25
G5. Arrange work-based site tours for students	4.36	2.81	2.94
G6. Arrange work-based site visits for administrators, counselors and teachers	4.07	2.94	2.19
G7. Integrate school and work-based curriculum to meet PA Academic Standards and PA recognized industry-based credentials or certifications	4.46	2.67	3.33
G8. Participate in Occupational Advisory Committees	4.07	2.38	2.75
G9. Advise students of secondary and post-secondary articulation agreements and dual enrollment options	4.23	2.07	2.20
G10. Arrange job interviews	4.50	1.75	3.63
G11. Facilitate various types of job placements	4.64	2.31	3.50
G12. Participate in school to career activities	4.45	2.00	3.31
G13. Complete, evaluate and take action on student follow-up studies	3.79	3.44	2.44
G14. Complete, evaluate and take action on employer follow-up studies	3.93	3.38	2.56
G15. Provide feedback on student performance to instructors and administrators	4.79	2.31	3.63
G16. Provide appropriate information regarding student performance to mentors/employers	4.64	2.19	3.38

\*Mean ratings based on a Likert-type scale with 0 = None, 5 = great

**Table I**  
**Mean Ratings of Validation Data on the Role of the**  
**Work-Based Learning Teacher Coordinator**  
**2007 (N=16)**

<b>Duty Category and Tasks</b>	<b>Level of Importance (Mean)*</b>	<b>Difficulty to Achieve (Mean)*</b>	<b>Relative Frequency (Mean)*</b>
<b>H. MANAGE STUDENT RECORDS</b>			
H1. Maintain individual student files	4.94	1.56	4.81
H2. Obtain required recommendations for students as per school policy	4.79	1.57	4.64
H3. Maintain copies of work permits, driver's license and auto insurance information	4.38	1.94	4.13
H4. Maintain parent/guardian permission forms	4.94	1.19	4.81
H5. Maintain student contracts as per school policy	4.80	1.07	4.67
H6. Maintain medical insurance and parent/guardian release forms	4.67	1.27	4.20
H7. Coordinate issuance of student parking permits	3.20	1.20	2.87
H8. Maintain training plans	4.88	1.63	4.50
H9. Maintain training agreements	4.88	1.50	4.69
H10. Facilitate student evaluations	4.94	1.31	4.69
H11. Maintain student time sheets an activity records	4.75	1.94	4.56
H12. Maintain student competency achievement records	4.67	1.73	3.80
H13. Maintain Career Objective form	4.25	1.19	3.69
H14. Assist with student portfolios and graduation project	3.38	2.00	2.50
H15. Organize or assist with administration of program completion assessments	3.56	1.63	2.69

\*Mean ratings based on a Likert-type scale with 0 = None, 5 = great

**Table I**  
**Mean Ratings of Validation Data on the Role of the**  
**Work-Based Learning Teacher Coordinator**  
**2007 (N=16)**

<b>Duty Category and Tasks</b>	<b>Level of Importance (Mean)*</b>	<b>Difficulty to Achieve (Mean)*</b>	<b>Relative Frequency (Mean)*</b>
<b>I. MAINTAIN PROGRAM REGULATORY COMPLIANCE</b>			
I1. Comply with state and federal child labor laws	4.94	1.56	4.81
I2. Comply with state and federal labor laws	4.94	1.56	4.81
I3. Verify employer worker compensation coverage is current	4.94	1.88	4.19
I4. Provide data for completing state reports	4.27	2.13	2.87
I5. Abide by state and federal education laws	4.94	1.06	4.25
I6. Abide by confidentiality laws	4.88	1.13	4.13
I7. Participate in I.E.P. development	4.13	2.25	2.63
I8. Assist with program audits	3.38	2.31	2.13
I9. Provide written program status reports	4.00	2.19	3.19
I10. Document Occupational Advisory committee meeting minutes	4.14	1.71	2.93
<b>J. CONTINUE PROFESSIONAL DEVELOPMENT</b>			
J1. Participate in in-service activities, workshops and conferences	4.69	0.88	3.81
J2. Review professional literature	4.50	1.44	3.69
J3. Enroll in further education and training	4.00	1.69	3.00
J4. Study local, state, national and international occupational trends	4.06	1.69	2.88
J5. Participate in business and community organizations	4.19	1.88	3.38
J6. Participate in professional organizations	4.69	1.38	3.75
J7. Investigate innovative work-based learning programs	3.81	2.19	2.50
J8. Network with colleagues	4.63	1.69	3.88
J9. Solicit employer, mentor and student feedback for self-improvement	4.31	2.06	2.81
J10. Comply with PA requirements to maintain valid certification	4.69	0.94	3.88

\*Mean ratings based on a Likert-type scale with 0 = None, 5 = great