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ABSTRACT
        This document presents skill standards that aim to be
portable to address the need for instructors to adapt to workplace and
student diversity in their classrooms and labs and to provide learners with
the best workplace skills possible. Introductory materials include background
of the skill standards project and definition of terms. Section 1 provides a
list of the 10 critical functions and the 56 key activities for
professional-technical college instructors that were identified and validated
by 78 instructors from Washington's 34 two-year colleges. Charts of the key
activities contain these components for each key activity: performance
indicators, technical knowledge (skills, abilities, tools), and employability
skills (SCANS skills and foundational abilities). Section 2 describes and
charts employability skills. Section 3 consists of local perspectives from
the Boeing Company, labor unions, higher education, a college administrator,
and participants. Section 4 provides the national context for skill standards
and discusses their benefits and uses, process of building skill standards,
and a continuous development process of skill standards to curriculum.
Section 5 consists of a summary of critical work functions and key
activities; skill standards for customized trainers; validation survey
results; reflections on a customized trainer focus group; customized
training, Microsoft style; and perspective of an industrial skills trainer.
(Contains 14 references and 6 Web sources.) (YLB)

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Skill Standards for Professional-Technical College Instructors and Customized Trainers

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Professional-technical instructors from around the state work intensely together at Renton Technical College to draft the standards.

DEDICATION

This book is dedicated to the memory of Larry Tarrer and Jon Krug.

*Your wisdom & vision
are missed.*

**LARRY TARRER, Spokane Community College
Dean of Professional Technical Education 1993-1997**

In 1996, Vocational Technical Council President Larry Tarrer suggested that we could improve the quality of vocational education throughout the state if we could solve the problem of delivering vocational instructor certification courses to new faculty at colleges not able to offer these courses. He recommended that we use technologies such as the Internet, interactive video or video courses. This forward thinking leadership resulted in the VTC Executive Committee allocating State Leadership Funds to support the improvement and standardization of the three instructor certification courses required in the State Personnel Standards WAC 131-16. As a first step, the Professional Technical Instructor Skill Standards project was funded to develop a solid foundation on which to build the curriculum for the three courses. We anticipate continued support of this project to assure Larry's dream of more accessible, quality training for new faculty.

**JON KRUG, Grays Harbor College
Dean of Instruction and Vocational Director 1979-1999**

Serving three terms as president of the Vocational Technical Council, Jon Krug worked as the Dean of Instruction and Vocational Director at Grays Harbor College for over 20 years. During his time at Grays Harbor, he personally developed and implemented more than 30 programs/program options. He was always very quick to respond to the declining layoffs and training needs for dislocated workers. Well known as a perfectionist, he had a sincere dedication to students. His desire was to see the students succeed, and he was genuinely pleased when they did. He was a founding member of the Washington Association of Occupational Educators. On the steering committee for this skills standard project, Jon V. Krug served tirelessly as a strong leader in vocational education both within the Twin Harbor's community and for the State of Washington.

**Vocational Technical Council
Executive Committee**

Dr. James M. Walton, President 1999-2000
Mike Kelly, President-elect
Dr. Darlene Miller, Secretary
Tom Hopkins, Treasurer
Ron Langrell
Shirley Harris-Lee
Dr. Holly Moore, Past President 1998-1999

CONTEXT

INTRODUCTION

How This Skill Standards Project Began

The concept for a skill standards project for vocational instructors developed out of frustration for a process that had not changed in thirty years and did not reflect our contemporary college workplace. The Vocational/Technical Council (VTC) struggled with modifying the existing documents and realized we needed to establish a process that was consistent with the statewide skill standards projects. We believed that the only way to achieve creditable vocational certification would be to enlist the industry (community and technical colleges) in setting the standards/competencies for instructors.

The VTC saw an opportunity to take on the daunting task of examining ourselves in light of the workplace. The council hoped this effort would be a model for the certification of professional-technical faculty in public and private colleges and for individual teaching for businesses and corporations. The VTC vision were led by many on the Executive Council, but at the helm were Larry Tarrer from Spokane Community College, Jon Krug from Grays Harbor College and Paul Greco from Renton Technical College. Their leadership helped get the project funded and supported by the entire VTC.

Dr. Holly Moore
Vice President Workforce
and Economic Development
Shoreline Community College
President, VTC 1998-1999

Purpose of Skill Standards for Professional-Technical College Instructors

The successful professional- technical instructor in the twenty-first century is one who is prepared to manage and deliver instruction in a positive learning-based environment. Challenges that were not present in the past provide opportunities to supply America with a workforce with the skills and knowledge in a strong knowledge-based economy. Some of these challenges include a multicultural student body, prospective students with little educational foundation, students that expect to learn by way of instructional technology, and those who have plans that will lead them through a baccalaureate degree.

Toward the end of the nineteenth century, Dr. Charles A. Prosser said, "Vocational education will be effective in proportion as the instructor has had successful experience in the application of skills and knowledge to the operations and processes he undertakes to teach." This is still true; however, the command of technical subject matter is only a part of the skill set needed to be a successful instructor. The person who accepts a position to teach is no longer a practitioner of his or her previous occupation. He or she needs a new set of skills, those that are required to be successful in the endeavor. The objective of this skill standards project is to define comprehensive sets of those skills.

Paul Greco
Vice President for Instruction
Renton Technical College

State Board Support of Skill Standards

The State Board is pleased to have supported the development of Skill Standards for professional-technical instructors for two-year community and technical colleges. This important work supports the efforts of the community and technical college system to establish and implement competency-based workforce education programs that meet the educational and career needs of students and that are responsive to the skill requirements of industry partners.

The State Board commends the efforts of the Vocational Technical Council, individual college representatives, professional-technical faculty, faculty union representatives and industry partners who have worked together to provide the necessary vision, leadership and commitment to the completion of this project.

Alan Hardcastle
Policy Associate
of Workforce Education
Washington State Board
for Community and Technical Colleges

Developing standards for two-year college professional-technical instructors not only reinforces our collective commitment to high quality workforce education programs for students, but also demonstrates a vested interest by our faculty and colleges in adopting high standards for the profession of teaching.

Vision in the State of Washington

The development of these Skills Standards plays a critical role in the community and technical colleges' efforts to ensure that professional-technical faculty are well-skilled to teach the curriculum necessary to train our students for jobs in our ever-changing technical world. This project is cutting edge.

Darlene G. Miller, Ed.D.
Dean of Instruction,
Professional and Technical Programs
Executive Director for
WorkForce Development
Green River Community College

To my knowledge, no other state has taken on an endeavor of this magnitude. Developing curriculum to prepare professional-technical faculty based on standards developed by master teachers just highlights the leadership and vision of faculty and administrators in the State of Washington.

Subjects of Our Own Study

Skill Standards are a framework that connect an identified industry to the world of academia. Skill Standards inform an instructor's artistic development of curricula, learning activities, and assessment by providing industry voice to the process, expectations for skill development, and standards of skill performance.

Michelle Andreas
Dean, Workforce Development
Olympic College

In this particular project, we are the subjects of our own study. These Skill Standards will help us hire full and part-time faculty, build seminars and classes on the art of professional technical-instruction, establish concrete criteria to assist faculty in the tenure process, assess our own individual development, and guide our quest for excellence.

EXECUTIVE SUMMARY

A transitional period for educators, for the workplace

Business Technology instructor Patci Serrano points out key features of software to an enthusiastic Office Technology student at Renton Technical College.

We are in a time of transition, not only for a new United States president to usher in the 21st century, but also a transitional period for teaching and learning. Our expectations have changed at all levels of education, notably at community and technical colleges. They offer vocational training programs for graduates who will be directly responsible for the new technological and social backbones of the workplace. Technology and the current demands of 21st century employers with their increasingly diverse workforce have initiated this change.

This transitional period shows itself in all arenas in education. In the last decade, professional-technical college faculty and staff found it necessary to become computer literate, software smart, and people sensitive. It wasn't just Microsoft's donation in the mid-1990s of computers and Windows 95 to the Washington State Board college system that spurred faculty on to technology. It was natural to bring high tech camcorders, projection screens, digital cameras, and job-specific software into the classroom and laboratory. Instructors were using these gadgets at home and at work when they returned to industry. In addition to industry's cry for better prepared employees, the push for technology and change in the classroom came because educators knew they could not be dinosaurs in the Information Age.

However, technology is not the only driver. Learners and learning have changed. Our society, our students, our faculty are more diverse, and with such diversity comes the need for intercultural competence and improved communication skills. Curriculum is mobile and ever-changing. Textbooks are now on CD Rom with connection to the Internet. These skill standards aim to be portable to address the need for instructors to style-flex in their classrooms and labs and to provide learners with the best workplace skills possible.

Differences in expectations at different campuses

In some cases, the 78 professional-technical instructors who identified and validated these skill standards agonized over specifying what they actually do. As teachers, it was fairly easy for them to specify how they manage learning environments, provide student instruction, and provide support and guidance to students. As professional-technical college faculty, however, they also itemized ways that they work with industry, creating and maintaining a professional environment and promoting their programs.

In addition, when instructors started listing their documentation, record keeping, budget duties, and committee activities, they identified such responsibilities into two separate critical functions: *performing administrative functions* and *program management functions*. It is important to note that there was a great deal of difference among the instructors from the different institutions about such responsibilities.

For the Customized Trainer, the differences were extensive. Most corporate trainers from outside their companies did not have the accountability issues and assessments as did the college instructors.

The Federal Agenda for America's Community Colleges (Campaign 2000 and America's Community Colleges) recognizes that community colleges are the nation's leaders in workforce and economic development. These standards should help with understanding the breadth and depth of what professional-technical teachers are actually doing in their instructional roles on Washington's State's college campuses as they prepare learners for the 21st century workforce in a variety of fields.

With technological change have come more demands on our institutions. With transition comes expectation. We are hoping that these standards can clarify the expectations of professional-technical college faculty and customized trainers who teach in businesses and industry. These skill standards should clarify their role of creating a new generation of classroom learners and workers.

Vision Care instructor Cheryl Bruce from Spokane Falls Community College and Computer Technology instructor Dean Sutton from Wenatchee Valley College validate the key activities.

Complexity of Roles of Professional-Technical Faculty

As the reader will see from this document, the roles of the professional-technical college instructors in Washington State are complex. Ten critical functions and 56 key activities were identified and validated by 78 instructors from the state's 34 two-year colleges. While not all teachers performed all of the functions and tasks listed, there was consensus in all six focus groups that some teachers did perform most of these activities. Certainly, there were differences about what was expected from a *new* professional-technical college instructor.

While the sequence of the standards as presented is not ordered by priority, the Steering Committee and participants wanted to make a strong statement that the professional-technical instructor's focus needs to be on student instruction. The question was raised that teachers are doing a lot of things, but are they doing the right things?

Norma W. Goldstein, Ph.D.
Project Director and Editor
Assistant Dean for Instructional
Improvement
Renton Technical College

It is expected that these standards will foster serious discussion and review of the complexity of what vocational instructors at the college level do as they set up, develop, and manage their technical courses and programs. It is hoped that more support will be generated to help new professional-technical faculty to focus on their primary role: to provide student instruction in optimal learning environments.

> **"The future will NOT be an extrapolation of the past. Technological change will not slow down in the foreseeable future."**
> -David Thornburg,
> What Will It Mean to be Educated in the 21st Century?

BACKGROUND OF THIS SKILL STANDARDS PROJECT

Voluntary skill standards were developed using specific research-based processes. This project followed the process required by the Washington State Board for Community and Technical Colleges (SBCTC)as prescribed in *Skill Standards Guidebook I,* RoseAnn Stevenson, Washington State Board for Community and Technical Colleges, 1996 and through policies and procedures provided by the SBCTC.

The Steering Committee was formed in Fall 1998 and further developed in 1999 in response to the desire of educational administrators to define community and technical college vocational instructor competencies. Effort was made for a committee comprised of business and industry, labor, all 34 colleges in the SBCTC system and university representatives. Funds were granted this project by the State Board for Community and Technical Colleges through federal School-to-Work funding to conduct a skill standards study.

The Vocational Technical Council requested that Dr. Norma Goldstein write the proposal and direct the project. Funds were awarded to Renton Technical College for project management, and the committee began development of standards for the professional-technical instructor. Out of this process, business observers asked for a corollary study for customized trainers (corporate trainers), many of whom are vocational instructors with similar competencies.

Initial Focus Groups
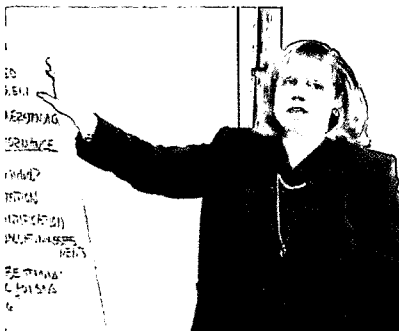
Terryll Bailey facilitates the discussion with the focus group participants.

Led by Terryll Bailey, the initial focus group, consisting of a variety of educators representing different disciplines, met for a two-day focus group process at Renton Technical College. The 13 participants were selected from business, technical, health, human services, and trade and industry fields. In addition, there was diversity in terms of the amount of teaching experience and experience in industry as well as with gender, age, and race. While the majority were full-time instructors, some part-time instructors also participated.

The first step in the focus group process is to identify the primary functions and key activities that constitute the work of a competent entry-level vocational college instructor. Working with a draft of sample functions that were prepared from existing skill standards information and research of instructor job descriptions and oral interviews, the group revised and adapted functions and tasks to meets the needs of professional-technical college instructors, programs and two-year college institutions throughout Washington State. Participants freely made changes and recommendations and crafted 10 basic critical functions with corollary key activities. (These were later modified but generally validated as written.)

Scenarios

The second step was to identify the performance indicators for each key activity, answering the question: "How do you know when this is performed well?" They also identified the tools, knowledge and foundation skills required to meet performance criteria. Finally, scenarios giving context to the skill standards were developed. The scenarios represent real-work situations where workers need to exercise skills from various functions and tasks. For each scenario, relevant functions and tasks were identified. The draft skill standards generated through the focus group process were reviewed by members of the Steering Committee with respect to current industry trends and requirements.

Validation

Thirdly, four validation focus groups were held throughout Washington State to validate the work produced by the initial group. Forty-four instructors involved in this stage of the process approved and refined much of the work that was produced initially. However, it became more evident that these same standards might address the needs of those professional-technical instructors who were involved in customized training or in distance learning. After three validation groups were held, the Steering Committee decided that standards should also be developed for customized trainers. Two more validation groups were held after that, and the skill standards for customized trainers were developed and validated through surveys and reviews by groups that worked independently. Developing standards for instructors who use distance learning was tabled for another project.

In addition, a survey of SCANS skills and personal qualities for teaching careers was conducted. SCANS (**S**ecretary's **C**ommission on **A**chieving **N**ecessary **S**kills) are foundation employability abilities required of workers in all occupations at varying levels specific to their jobs. Surveys were returned from 190 participants, and answers were compiled and averaged. These results are found on pages 45 and 46.

Finally, a survey of critical work functions and key activities was sent to 65 professional-technical instructors in Washington State. All critical work functions and key activities were validated, and each key activity was rated for its level of importance. Response data were compiled and averaged to find the level of importance of each critical function. Results are on page 47.

**Susie Navone,
Project Coordinator
Renton Technical College**

The results of all the focus groups, surveys and feedback were compiled, and a draft of the document was reviewed by the Steering Committee.

Automotive instructor Dan Beeson from Bellingham Technical College and Project Coordinator Susie Navone finish up the day at North Seattle Community College.

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DEFINITION OF TERMS

Each chart contains the following components:

Critical Work Functions

Critical work functions represent the general areas that a first-year, fully competent, professional-technical instructor or customized trainer would perform.

Key Activities

Key activities are the tasks related to the critical work functions. They are made up of work activities which are measurable and observable and which result in a decision, product or service.

Level of Importance

Professionals who are actively working in this occupation rated the level of importance for each critical work function and key activity, ranging from not important to critical. All critical work functions were rated as important, very important or critical. Results are on page 47.

Performance Indicators

Performance indicators are specific behavioral evidence of a worker's achievement of skills, knowledge and tasks. The question answered is: "How do we know when this key activity is performed well?" Performance indicators provide the standard of performance required to produce the necessary outcomes of key activities.

Technical Skills, Knowledge, Abilities and Tools

Technical skills, knowledge and abilities are those areas of expertise which workers must have in order to perform a given occupational task with excellence. A collection of skills, knowledge, abilities and tools make up competencies.

Skills refer to proficiency in an applied activity. This activity could be physical, mental or interpersonal in nature.

Knowledge is a particular set of information.

Abilities are broad human characteristics that result from natural talent, training, or experience.

Tools are materials, equipment and implements a worker must be able to use competently to meet the requirements of the job.

Employability Skills

Employability skills are basic academic and personal skills that are needed to build more advanced competencies. They are competencies required by all workers in order to obtain meaningful work and participate in the modern workforce. They are described more fully on pages 43 to 44 and charted on pages 45 to 46.

Following National Skill Standards Board guidelines, teaching and training practitioners themselves drafted these standards which describe the complex work they do. All standards do not apply to all college vocational instructors.

-Editor's Note

RESULTS: PROFESSIONAL-TECHNICAL COLLEGE INSTRUCTORS

- Summary of Critical Work Functions & Key Activities
- Skill Standards for Professional-Technical College Instructors
- Administrative and Program Management Functions
- Scenarios
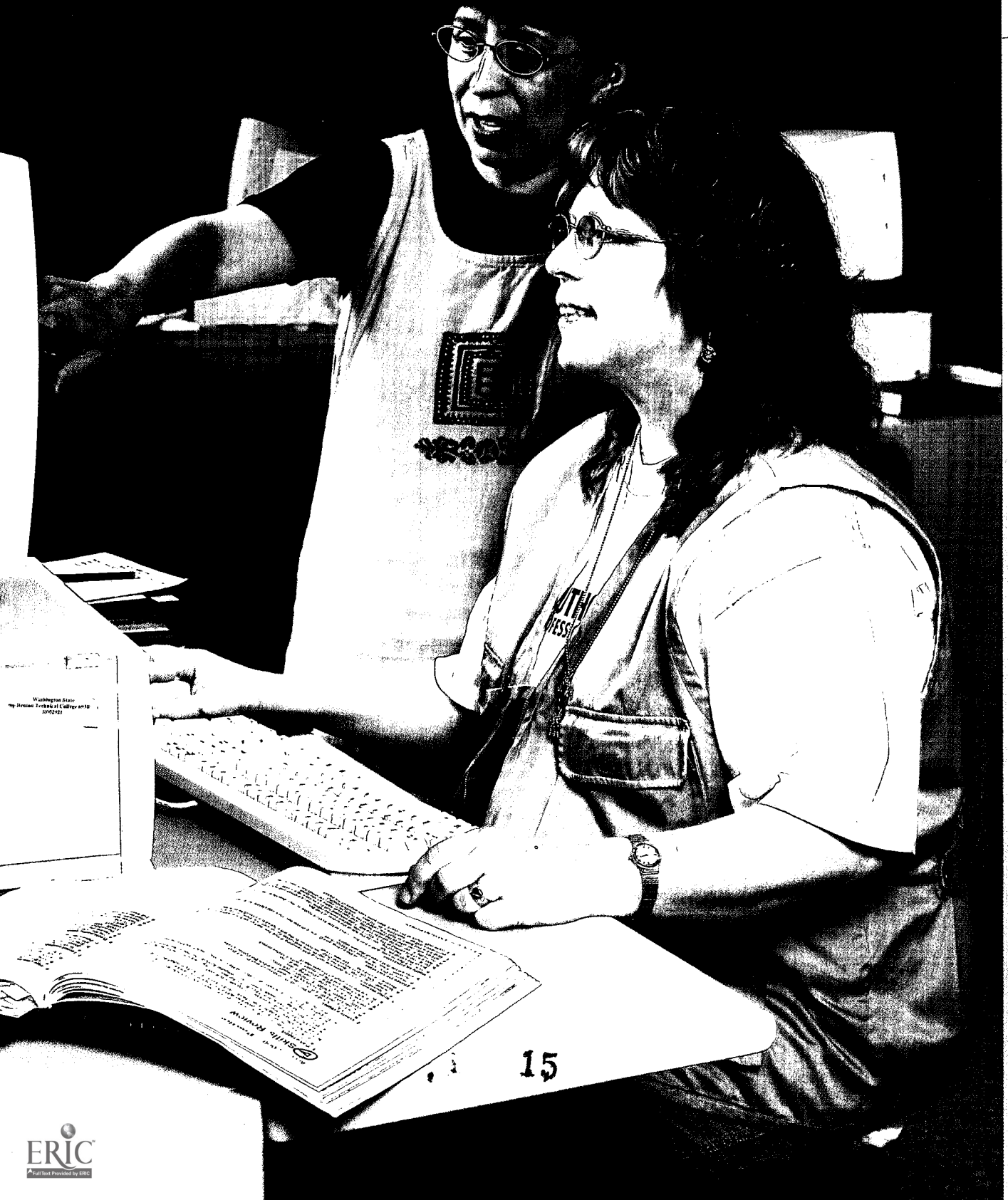
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SUMMARY OF CRITICAL WORK FUNCTIONS AND KEY ACTIVITIES FOR PROFESSIONAL-TECHNICAL COLLEGE INSTRUCTORS

Shoshana Porter, Katey Burns and Charlotte Brock work through lunch at South Puget Sound Community College.

A. Manage learning environments
- A1. Obtain required equipment, systems, tools, supplies, and materials
- A2. Set up instructional systems, equipment and/or tools
- A3. Maintain instructional systems, equipment and/or tools
- A4. Develop a growth and replacement plan for systems, equipment and/or tools
- A5. Supervise learning environments
- A6. Research, select, and evaluate off-campus learning environments
- A7. Evaluate and monitor the safety of the instructional areas and practices

B. Develop outcomes, assessments, and curricula
- B1. Identify, evaluate, and modify current outcomes
- B2. Create, evaluate, and modify curriculum
- B3. Create, evaluate, and modify assessments
- B4. Implement curriculum, outcomes, and assessments
- B5. Integrate curriculum with other faculty in the department and in other instructional areas/institutions

C. Develop and review programs
- C1. Develop, review, and update program course plan
- C2. Recruit and work with advisory committee and employers to meet changing needs of the program and industry
- C3. Identify, evaluate, and modify program outcomes and assessments
- C4. Identify and develop core and support courses
- C5. Maintain (or obtain) program accreditation
- C6. Research, identify, evaluate, and implement current industry standards and trends
- C7. Coordinate program development with other college programs and institutions

D. Provide student instruction
- D1. Prepare and/or gather current instructional materials and equipment
- D2. Provide individual and group instruction
- D3. Initiate, develop, and implement student assessments
- D4. Modify instructional material and methods based on student and industry assessments and feedback

E. Provide support and guidance to students
- E1. Respond to student needs
- E2. Provide information or referrals to meet student needs
- E3. Assist students with job placement
- E4. Provide academic advising
- E5. Provide career advising
- E6. Serve as student activity advisor as applicable

F. Perform administrative functions
    F1.   Perform documentation and record keeping duties
    F2.   Record and submit student grades
    F3.   Serve on departmental and college committees
    F4.   Provide input for program, schedules, and college publications
    F5.   Develop and manage budgets
    F6.   Research and assist with writing and implementing grants and targeting financial resources

G. Create and maintain a professional environment
    G1.   Collaborate with college staff, faculty, and students
    G2.   Work with program advisory committee
    G3.   Serve on departmental and college committees
    G4.   Maintain current knowledge of the field
    G5.   Participate in professional networking
    G6.   Develop a professional development plan
    G7.   Promote a professional instructional environment

H. Promote the program and recruit students
    H1.   Participate in campus and community events
    H2.   Serve on high school advisory committees, Tech Prep consortia, and/or other community organizations
    H3.   Develop promotional plan
    H4.   Provide information for prospective students
    H5.   Develop and manage public relations information
    H6.   Perform recruiting activities

I. Learn and adapt new technologies
    I1.   Obtain and maintain certification on program-specific technology
    I2.   Maintain current knowledge of technology in the field
    I3.   Identify, evaluate and implement emerging technologies according to industry needs
    I4.   Identify, evaluate, and implement new instructional technologies

J. Perform program management functions
    J1.   Perform documentation and record keeping duties
    J2.   Mentor, orient, and support new and part-time faculty
    J3.   Develop criteria, recruit, and make recommendations regarding hiring of faculty
    J4.   Manage instructional and program assistants
    J5.   Develop and manage budgets
    J6.   Research and assist with writing and implementing grants and targeting financial resources

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: A. Manage learning environments

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
A1 **Obtain required equipment, systems, tools, supplies, and materials**	• Requisitions, budgets and/or grant requests are submitted in a timely manner and in accordance with college policies and procedures. • Recommendations from advisory committee are accurately documented and considered. • The system, equipment and tool options are thoroughly researched and ergonomic requirements are properly considered as appropriate. • Alternative sources of funds and systems/equipment are actively pursued as appropriate. • Equipment and/or system's impact on student learning is accurately documented in accordance with college policies and procedures. • Adequate supplies and materials are maintained. • Equipment, systems, tools, supplies and materials are properly identified and justified.	• Knowledge of equipment requisitions procedures. • Knowledge of advisory committee protocols. • Knowledge of procedures for submitting budget and/or grant requests. • Knowledge of equipment and tool options and the ability to access relevant sources of information. • Ability to access alternative sources of funds and equipment/systems. • Knowledge of student learning and the ability to determine the impact of equipment/systems. • Knowledge of ergonomics. • Knowledge of college policies and procedures.	• *Identifies appropriate technology and understands requirements of the task and technological results.* • *Recognizes accuracy of information and analyzes information.* • *Understands decision-making process, gathers information, evaluates alternative solutions, and formulates a plan of action.* • *Acquires supplies and equipment and monitors safe and efficient utilization of materials.* • *Understands the organizational system/hierarchy, follows processes/procedures.*
A2 **Set up instructional systems, equipment and/or tools**	• Systems and equipment setup is completed in accordance with manufacturer's specifications. • All safety procedures are completely followed. • Systems and equipment are set up to ensure access by students. • New systems and equipment are set up to be compatible with existing equipment/systems and learning environment as appropriate. • Technical support is accessed when appropriate.	• Knowledge of sources of information regarding manufacturer's specifications. • Knowledge of safety procedures. • Knowledge of student access issues regarding systems and equipment. • Knowledge of compatibility issues between new and existing equipment/systems. • Knowledge of existing technical support capabilities.	• *Understands system principles and follows procedures.* • *Understands/interprets data.* • *Monitors/troubleshoots system performance.* • *Translates blueprints/ drawings/diagrams, utilizes previous training/experience to predict outcomes.* • *Manipulates technology for desired results, analyzes output and examines task/ technology relationship.*
A3 **Maintain instructional systems, equipment and/or tools**	• Maintenance schedules are properly followed. • All maintenance records and warranty requirements are maintained in an organized manner and kept current. • Equipment and tools are properly secured and safety standards are met. • Equipment, tools, and systems malfunctions and repair needs are promptly diagnosed and repaired as appropriate and/or departments or personnel are informed. • Equipment, tools, and systems are kept clean and properly maintained. • Repair and support personnel are accurately identified.	• Knowledge of maintenance schedules and procedures and the use of tools required for maintenance of equipment and systems. • Knowledge of warranty and maintenance records requirements. • Ability to clean and secure tools. • Ability to diagnose and repair systems, equipment and tools. • Knowledge of roles and responsibilities of campus personnel and departments.	• *Follows specified maintenance, identifies/corrects malfunctions and evaluates technology performance.* • *Follows procedures, prioritizes assigned tasks and adjusts task sequence.* • *Monitors/troubleshoots system performance/malfunctions.* • *Analyzes system operation and recommends timeline adjustments.* • *Identifies problems, appropriately refers complaint, analyzes causes and devises plan of action.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: A. Manage learning environments

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
A4 **Develop a growth and replacement plan for systems, equipment and/or tools**	• Student, program and industry needs are correctly identified, and present inventory is accurately assessed. • Funding sources and timelines are correctly identified. • Safety issues are carefully considered. • Technology changes and industry compatibility are accurately assessed. • Facilities, technological support and equipment maintenance schedules are accurately assessed. • Cost effective recommendations are included in the plan. • Plan includes implementation schedule, personnel training and responsibilities and assessment mechanism and process.	• Ability to access information on funding sources and availability. • Knowledge of current industry, student, program and safety requirements. • Ability to access equipment maintenance information and technical support. • Knowledge of system or program requirements and facility and system capabilities. • Knowledge of assessment tools.	• *Probes/researches to gain knowledge/information and proposes options/solutions based on research.* • *Maintains job specific supplies and equipment, orders/maintains inventory, develops a replacement plan and monitors safe, efficient utilization of materials.* • *Identifies and analyzes data/information, contrasts conflicting data and creates data gathering processes.* • *Understands system principles/terminology, responds to system demand, analyzes system configuration/stability and recognizes system strengths/limitations.* • *Knows/identifies appropriate available technology*
A5 **Supervise learning environments**	• All safety procedures are properly followed and requirements are completely met. • Students and all classroom personnel are thoroughly informed of safety procedures regarding all equipment. • Work ethics and mutual respect are modeled. • Environmental distractions are minimized. • Learning is supported and facilitated by the appropriate use of instructional media and equipment. • Facilities needs and requests are submitted in a timely manner in accordance with college policies and procedures. • Adequate assignments and schedules are established for lab/shop activities. • Off-campus sites and activities are assessed for appropriate management and supervision of students.	• Knowledge of safety requirements and procedures and all OSHA/WISHA* and hazardous materials procedures. • Ability to model work ethics and mutual respect. • Knowledge of all applicable laws and regulations regarding the learning environment. • Knowledge of and ability to utilize instructional media and equipment. • Knowledge of facilities and equipment requisition procedures and timelines. • Ability to minimize environmental distractions. • Knowledge of appropriate management and supervision of students for off-campus sites and activities.	• *Analyzes/responds to customer's concerns, demonstrates commitment to customer, obtains additional resources to meet customer's needs and resolves conflict to customer's satisfaction.* • *Demonstrates commitment to excellence, leads by example, motivates others to extend their capabilities and displays positive views incorporating majority/ minority views.* • *Modifies behavior to environment, shows understanding for others and encourages cooperation.* • *Analyzes possible causes, generates solutions and devises/implements plan of action.* • *Understands legal aspects of discrimination, respects the rights of others, recognizes the value of diversity and supports individuality.*

* OSHA (Occupational Safety and Health Administration)
WISHA (Washington Industrial Safety & Health Administration)

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: A. Manage learning environments

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
A6 Research, select, and evaluate off-campus learning environments	• Off-campus learning sites are identified and properly recruited in accordance with the established course outcomes. • Off-campus sites are regularly visited to determine suitability for student learning. • Off-campus learning environments and their site supervisors meet established criteria. • Meetings are held with site supervisors to inform them of their roles and responsibilities and the roles and responsibilities of students and instructors. • Work-based learning environments are correctly evaluated in an ongoing manner in accordance with program specification. • Off-campus sites are researched and evaluated for distinctive needs.	• Knowledge of off-campus sites and site supervisors criteria. • Ability to recruit off-campus sites which meet established criteria. • Knowledge of roles and responsibilities of site supervisors, instructors and students. • Knowledge of work-based learning environment evaluation procedures and criteria.	• *Selects/obtains relevant information, analyzes data, researches additional information sources and predicts outcomes.* • *Interprets/applies processes to new information.* • *Transfers data between formats and interprets/communicates/analyzes information.* • *Understands and applies computer operations and locates/retrieves/interprets data.* • *Organizes information and prepares basic summaries/reports.* • *Applies rules/principles, analyzes situation/information, considers implications/risk, formulates a plan of action and predicts outcomes based on experience.*
A7 Evaluate and monitor the safety of the instructional areas and practices * OSHA (Occupational Safety and Health Administration) WISHA (Washington Industrial Safety & Health Administration)	• Students and staff are oriented to safety procedures per college policies and federal and state guidelines. • Safety rules and regulations are followed. • Incidents are appropriately reported and documented in a timely fashion. • Staff and students have current CPR and First Aid credentials, as required. • Safety procedures are posted per Labor and Industry guidelines. • College safety departments/personnel are notified to ensure that safety supplies are readily accessible. • Safety hazards are reported immediately. • MSDS (Material Safety Data Sheets) are available as required in instructional areas. • OSHA/WISHA* requirements and hazardous materials procedures are completely followed. • The learning environment is maintained in compliance with all applicable laws and regulations.	• Knowledge of safety requirements and procedures and all OSHA/WISHA* and hazardous materials procedures. • Ability to read, interpret, and apply MSDS data. • Knowledge of emergency telephone numbers and procedures. • Knowledge of college and state safety policies and procedures. • Ability to operate safety equipment within instructional program.	• *Follows policies/procedures, employs a level of concentration and pays attention to details.* • *Monitors performance standards.* • *Recognizes ethical issues, demonstrates honesty/trustworthiness, accepts responsibility for own behavior, recommends ethical courses of action and challenges unethical practices/decisions.* • *Analyzes system operation, monitors performance and troubleshoots system malfunction/failure.* • *Safely uses equipment and monitors safe, efficient use of materials.* • *Provides accurate communication and interprets/analyzes information.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: B: Develop outcomes, assessments and curricula

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
B1 Identify, evaluate, and modify current outcomes	• Outcomes are properly documented in accordance with college and accrediting body policies and procedures. • Industry standards are thoroughly researched in order to identify outcomes and competencies. • Outcomes are reviewed by the advisory committee. • Outcomes and competencies are continuously evaluated and modified as necessary based on advisory committee recommendations and/or changing industry standards/accrediting bodies. • Outcomes are written for learner comprehension. • All necessary skills are included in the outcomes.	• Knowledge of documentation procedures to record outcomes. • Ability to access accrediting bodies, industry and college sources of information regarding outcomes, competencies, and standards. • Knowledge of advisory committee protocols. • Knowledge of technical and non-technical skills required for success in the workplace and the ability to translate those into outcomes. • Understanding of the requirements of diverse learners. • Knowledge of outcomes definitions and competencies and requirements.	• *Completes forms/surveys/etc, synthesizes information and creates detailed supporting documents.* • *Identifies relevant details, facts, specifications and interprets, synthesizes and summarizes information.* • *Makes connections between old and new, recognizes patterns/relationships, formulates new ideas/plans/approaches, organizes new processes/procedures and selects appropriate/categories.* • *Analyzes organization of information and transfers information between formats.*
B2 Create, evaluate, and modify curriculum	• Curriculum sequence supports student success at achieving outcomes and competencies. • Appropriate learning activities are selected for the curriculum. • Curriculum properly aligns with accrediting bodies, college mission, and program goals and is driven by workforce needs. • Curriculum includes course description, learning outcomes, competencies, course content, objectives, assessment tools, content assessment, and ADA* accommodations. • Course requirements and grading requirements are included. • Proper prerequisites are established if necessary. • Curriculum is regularly reviewed by advisory committee and/or accrediting bodies as required and meets all legal requirements. • Flexibility is built into the curriculum to address multiple learning styles and individual student needs. • Curriculum is tailored to individual needs when appropriate. • Opportunities for team teaching with other disciplines are actively explored.	• Knowledge of course description, learning outcomes, course content, content objectives, assessment tools, content assessment and the ability to apply them to curriculum. • Knowledge of curriculum sequencing and prerequisites. • Ability to write competencies and performance objectives. • Knowledge of a variety of teaching and learning strategies appropriate to diverse learners. • Ability to access employers and advisory committee to determine workforce needs. • Knowledge of requirements for ADA* accommodation. • Knowledge of curriculum review requirements and procedures and legal issues regarding curriculum. • Knowledge of program adaptation. • Ability to team teach among/across disciplines.	• *Follows rules/policies/procedures, works with minimal supervision, monitors performance standards and follows up on assigned tasks.* • *Completes forms/surveys, summarizes/paraphrases information and creates detailed supporting documents.* • *Understands continuous improvement process, determines system components to be modified or improved, analyzes goals/constraints and examines proposed modifications/improvements.* • *Interprets and applies new knowledge and experience, investigates/formulates/adapts new learning strategies and synthesizes multiple learning techniques.* • *Analyzes situation/information, generates/evaluates alternative solutions, formulates plan of action and predicts outcome/result based on experience/prior knowledge.*

*ADA (Americans with Disabilities Act)

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: B: Develop outcomes, assessments and curricula

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
B3 **Create, evaluate, and modify assessments**	• Outcomes are assessed by a variety of measurements. • Assessments include a variety of activities including performance-based or theory-based assessments. • Assessment criteria are established in accordance with industry standards and accrediting bodies. • Assessments accurately measure student performance of specified outcomes/competencies. • Assessments are evaluated and modified based on changes in the industry, advisory committee input, and student needs. • Assessment tools and criteria provide relevant feedback for learner self-assessment and improvement.	• Knowledge of test construction. • Knowledge of theory-based and performance-based assessments. • Knowledge of assessment measurements. • Knowledge of industry and accrediting body standards. • Ability to modify assessments. • Knowledge of feedback strategies appropriate to diverse learners.	• *Models proper performance/attitudes.* • *Identifies proper performance levels and creates/modifies assessments.* • *Understands learning process and conducts task-specific training.* • *Interprets/applies new knowledge and experience.* • *Selects/applies/analyzes/modifies learning tools.* • *Collects/records/synthesizes data accurately.* • *Monitors system performance and diagnoses deviations.* • *Creates data gathering processes and analyzes data.*
B4 **Implement curriculum, outcomes, and assessments**	• Outcomes assessments are performed to evaluate student performance according to appropriate criteria. • Student performance is evaluated in relation to published student outcomes and/or competencies. • Industry standards are integrated within the curriculum where appropriate. • Implementation and assessment occur in an ongoing manner to keep current with technology and trends. • Post-completion student and industry assessments are conducted and used to improve curricula and instructional practice.	• Knowledge of campus resources for student follow-up questionnaires. • Knowledge of local employer contacts. • Knowledge of and ability to implement curriculum improvements. • Knowledge of current technology and trends. • Knowledge of published student outcomes and competencies. • Knowledge of industry standards.	• *Performs assigned tasks and monitors performance standards.* • *Understands the learning process and materials, and applies multiple learning tools and techniques.* • *Develops and conducts appropriate training, provides constructive feedback, and encourages learner independence.* • *Identifies problems and analyzes information/data for accuracy/relevance.* • *Processes information and organizes reports.*
B5 **Integrate curriculum with other faculty in the department and in other instructional areas/institutions**	• Knowledge of course content and outcomes in related departments is shared. • Competencies are consistent in multi-sectioned courses and overlapping course content areas. • Cross-discipline team teaching is implemented as possible. • Instructional resources are shared across departmental and institutional areas. • Cross-discipline courses are integrated when pertinent. • Tech Prep policies are followed as applicable.	• Knowledge of program and degree requirements of other programs. • Ability to access program and degree requirements of other programs. • Knowledge of and ability to access instructional resources across departments and institutions. • Knowledge of intra-departmental resources. • Ability to integrate cross-discipline courses. • Knowledge of standardization of competencies for multi-section courses. • Knowledge of Tech Prep policies and procedures.	• *Encourages cooperation with co-workers/customers.* • *Presents complex ideas, analyzes group/individual response and presents organized/extemporaneous speech.* • *Actively supports team members and activities, demonstrates commitment, and assumes responsibility for team goals.* • *Analyzes group dynamics and detects underlying issues.* • *Understands system principles/strengths/limitations, responds to system demand and analyzes system configuration.*

Occupation Cluster: Professional-Technical College Instructors

Critical Work Function: C: Develop and review programs

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
C1 **Develop, review, and update program/course plan**	• Course sequence supports student success at achieving outcomes. • Program aligns with accrediting bodies and college mission. • Program meets all legal requirements. • Program meets workforce needs. • Program plan includes learning outcomes, competencies, and program assessment tools in both core and industry-specific courses. • Proper prerequisites are established if necessary. • Program is regularly reviewed by advisory committee and/or accrediting bodies as required. • Advising and accrediting bodies are notified of proposed changes and appropriate approvals are obtained. • Flexibility is built in to the program to address multiple learning styles and individual student needs.	• Knowledge of learning process. • Knowledge of accreditation requirements and college mission. • Ability to access sources of information regarding workforce needs and the ability to apply workforce needs to program plan. • Knowledge of definition and requirements of learning outcomes, competencies program assessment tools, core support and prerequisite courses. • Knowledge of advisory committee and/or accrediting bodies review and approval procedures and legal requirements regarding program plan. • Knowledge of alternate instructional strategies to accommodate multiple learning styles.	• *Interprets/analyzes/qualifies/organizes information.* • *Monitors system performance and diagnoses performance deviations.* • *Relates to customers fears/concerns, analyzes customer needs and obtains additional resources to meet customer needs.* • *Applies rules/principles to situation, generates alternative solutions and formulates a plan of action.* • *Identifies relevant details, facts, specifications and proposes options/solutions based on research.*
C2 **Recruit and work with advisory committee and employers to meet changing needs of the program and industry**	• New advisory committee members are regularly recruited. • Advisory committee membership accurately reflects industry diversity. • Committee member participation is actively encouraged and acknowledged. • Advisory committee meetings are held on a regular basis. • Instructors attend advisory committee meetings on a regular basis. • Advisory committee recommendations are solicited and are recorded in the minutes. • Employers are contacted on a regular basis to determine current changes in the industry. • Meeting minutes are filed and maintained in accordance with college policies and procedures.	• Knowledge of advisory committee member recruitment procedures. • Knowledge of college policy and procedures related to recording of advisory committee recommendations. • Knowledge of the employer base and the ability to access it. • Knowledge of community diversity.	• *Confirms information, relates intent to desired results and analyzes communication.* • *Completes tasks, encourages/supports team members and assumes responsibility for accomplishing team goals.* • *Delegates responsibilities and monitors performance.* • *Moderates discussion, distinguishes between facts and inferences.* • *Adheres to standards, leads by example and develops minority/majority views.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: C: Develop and review programs

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
C3 **Identify, evaluate, and modify program outcomes and assessments**	• Program outcomes are assessed by a variety of measurements. • Program assessment criteria are established per industry standards and accrediting bodies and accurately measure performance of specified outcomes. • Program assessments are correctly evaluated and modified based on changes industry, advisory committee input, and community/student needs. • Program outcomes are properly documented in accordance with college and accrediting body policy. • Industry standards are thoroughly researched and program outcomes are reviewed by the advisory committee. • Outcomes are continuously evaluated and modified based on advisory committee recommendations, community needs, government and/or transfer requirements and changing industry standards. • Technical and non-technical skills are included in the outcomes.	• Knowledge of outcomes and assessment activities and criteria and relevant industry and accrediting body standards. • Knowledge of advisory committee protocols. • Knowledge of technical and non-technical skills and the ability to integrate them into outcomes/competencies. • Ability to write assessments that accurately measure program outcomes/competencies and to evaluate and modify program assessments. • Ability to write program outcomes/competencies • Knowledge of documentation procedures for program outcomes/competencies.	• *Monitors system performance, analyzes system operation and diagnoses performance deviations.* • *Creates original/detailed supporting documents.* • *Provides/selects methods of accurate communication and summarizes/integrates information.* • *Recognizes ethical issues and recommends ethical course of action.* • *Utilizes brainstorming techniques, formulates new ideas/plans/approaches and organizes new processes/ procedures.*
C4 **Identify and develop core and support courses**	• Core and support courses are reviewed by advisory committee and industry and approved when appropriate. • Articulation models in the state, advisory committees, the private/ government sectors, and accreditation and/or legal requirements are used to identify core and support courses. • Core courses and related instruction meet the requirements of the State Board for Community and Technical Colleges. • Core and support courses meet degree and certificate requirements. • All required approvals are obtained in a timely manner.	• Knowledge of advisory committee protocols. • Knowledge of articulation models and the ability to access sources of information regarding articulation. • Knowledge of SBCTC and degree and certificate requirements. • Knowledge of state and college approval procedures and timelines. • Ability to identify and access a variety of information resources.	• *Performs assigned tasks, follows rules/policies/pro- cedures and monitors performance standards.* • *Identifies needed systemic improvement, determines components to be modified or improved and examines proposed modifications/ improvements.* • *Applies rules/principles to process/procedure.* • *Examines information/data for relevance and accuracy.* • *Adapts rules/principles to new applications and applies appropriate principles/laws / theories to situations.* • *Generates course and program outlines and mentally pictures familiar activities/outcomes.* • *Understands computer operation, interprets data, organizes information/reports, and converts information formats.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: C: Develop and review programs

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
C5 Maintain (or obtain) program accreditation	• Accrediting bodies are notified of all proposed changes as required and appropriate approvals are obtained. • Self-study is completed as required. • Program performance data is accurately and properly collected, analyzed, and documented in accordance with the accreditation standards. • Programs are modified to meet standards and recommendations of the accrediting bodies. • Site reviews are conducted in accordance with the requirements of the accrediting bodies.	• Knowledge of approval procedures and the ability to notify accrediting bodies. • Knowledge of the components of a self-study. • Ability to complete a self-study. • Knowledge of performance data collection, analysis and documentation procedures. • Ability to modify programs to meet standards. • Ability to constructively participate in site reviews.	• *Follows rules/policies/ procedures and pays attention to details and monitors performance standards.* • *Records information accurately and creates original/detailed supporting documents.* • *Interprets/analyzes organization of information and transfers information between systems.* • *Recognizes ethical issues, analyzes personal/societal implications of decisions and responsibly challenges unethical practices/decisions.* • *Follows schedule, monitors/ adjusts task sequence and manages timelines and recommends adjustments.*
C6 Research, identify, evaluate and implement current industry standards and trends	• Advisory committees are regularly consulted on industry standards. • Industry trends and changes are identified, evaluated and incorporated with advisory committee approval. • Employers/Industries are consulted and/or surveyed on an ongoing basis. • Retraining and Back-to-Industry are included in the professional improvement plan. • Research through trade journals, industry visits and networking are conducted on a regular basis including attending professional meetings. • Licensing and standard-setting bodies are consulted on an ongoing basis.	• Knowledge of advisory committee protocols. • Knowledge of current practices and issues in industry. • Ability to demonstrate the applicable and relevant skills required to implement current industry standards. • Knowledge of research theory and design. • Knowledge of applicable laws and industry standards. • Knowledge of appropriate trade journals.	• *Understands continuous improvement process, determines system components to be modified and examines proposed improvements.* • *Selects/obtains relevant data, analyzes data and researches additional information sources.* • *Analyzes/applies principles to situation/information, considers risks/implications and generates alternative solutions.* • *Applies rules/principles to process/procedure, examines data for relevance and accuracy and adapts rules/principles to new applications.* • *Presents basic ideas/ information, poses critical questions and actively participates in discussion.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: C: Develop and review programs

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
C7 Coordinate program development with other college programs and institutions	• All Instructional policies and guidelines are thoroughly researched and followed. • Articulation and/or transfer agreements are established. • Graduation data from transfer institutions is procured. • Knowledge of related course content and outcomes in similar institutions is shared. • Competencies are consistent in multi-sectioned courses and overlapping course content areas. • Cross-discipline team teaching is implemented when possible. • Instructional resources are shared across departmental and institutional areas. • Cross-discipline courses are integrated when pertinent. • Similar outcomes are developed with other institutions. • Similar programs at other colleges are visited regularly.	• Knowledge of articulation and/or transfer agreements. • Knowledge of program and degree requirements and outcomes of other programs and institutions. • Ability to access program and degree requirements of other programs and institutions. • Knowledge of and ability to access instructional resources across departments and institutions. • Knowledge of industrial outcomes/competencies.	•·Demonstrates commitment to social improvement and encourages cooperation/ negotiation. • Recognizes organizational, social and technological systems, follows processes/ procedures and recognizes system strengths/limitations. • Obeys team rules and encourages/supports team members. • Understands strengths/ limitations and the negotiations process. • Distinguishes between facts and inferences, listens attentively, clarifies communication and relates intent to desired results.

Health Education instructor Beth Clark from Everett Community College confers with Waste Water Management instructor Mary Jo Adams from Green River Community College over wording of the standards during a validation group.

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: D: Provide student instruction

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
D1 Prepare and/or gather current instructional materials and equipment	• Instructional materials are clearly identified, support curriculum outcomes, and are completely reviewed on a regular basis. • Instructional materials are selected and approved in accordance with college policies and procedures. • All appropriate options are thoroughly researched to ensure quality and currency of instructional materials. • Instructional materials appeal to multiple learning styles and diverse learners. • Instructional materials comply with state/federal requirements or guidelines as necessary. • Instructional materials are customized to meet student needs and program outcomes. • Other campus resources are consulted to ensure availability of instructional materials.	• Knowledge of instructional materials include, but are not limited to: textbooks, reference materials, audio-visuals, websites, handouts, software and simulations. • Knowledge of curriculum outcomes. • Knowledge of sources of information regarding instructional materials and the ability to access them. • Knowledge of learning styles and diverse teaching methodologies and the ability to implement them. • Knowledge of state/federal requirements or guidelines regarding instructional materials. • Ability to customize instructional materials to meet student needs and program outcomes. • Knowledge of campus resources.	• *Identifies appropriate technology and understands requirements of the task/ technological results.* • *Draws upon experiences and prior knowledge to select/ apply learning tools, interprets and applies new knowledge and experience and formulates/adapts learning strategy.* • *Understands material being taught and identifies training needs and develops appropriate training procedures.* • *Selects/interprets/summarizes appropriate information and proposes options/solutions based on research.* • *Applies appropriate principles/laws/theories to situations, uses imagination to visualize events/activities, generates operation plan/ building plan and creates a comprehensive model/ situation.*

Electronics instructor Ted Rodriquez gives a lesson in Fiber Optics to two students at Skagit Valley College.

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: D: Provide student instruction

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
D2 Provide individual and group instruction	• Students and all classroom personnel are thoroughly informed of safety and operating procedures in the learning environment. • Group and individual instruction accurately and effectively model and teach industry standards and workplace requirements. • Students are effectively oriented to the learning task, including outcomes, assessments, syllabus and prior and related skills and abilities. • Learning is facilitated with clear and effective presentations, demonstrations and active learner involvement. • Regular opportunities are provided for students to practice, perform, and receive feedback on all required skills, knowledge, competencies, and abilities. • Instruction promotes the application, transfer and retention of learning. • Student behavior standards (code of conduct, students' rights and responsibilities) are consistently and constructively reinforced. • Student questions and discussions are effectively acknowledged, guided and integrated into the learning process in a positive way. • Learning and curriculum are directed towards program and student outcomes/competencies. • Students are encouraged to mentor other students when appropriate.	• Knowledge of safety and operating procedures as related to individual circumstances. • Knowledge of group and individual instruction models, adult learning principles and the ability to adapt strategies to diverse learners. • Knowledge of industry standards and workplace requirements and competencies and the ability to adapt them to instruction. • Knowledge of learning tasks, outcomes, assessments and prior and related skills and abilities and the ability to orient students. • Ability to develop opportunities for students to practice, perform and receive feedback on skills. • Ability to include the retention, application and transfer of learning in instruction. • Knowledge of student behavior standards and the ability to constructively reinforce them. • Ability to integrate questions from students into the learning process. • Knowledge of the subject matter and the ability to demonstrate competency in the field. • Ability to prepare a syllabus.	• *Explains/presents basic ideas/information/concepts and composes/presents well organized speech.* • *Listens attentively, poses critical questions and confirms/clarifies/analyzes communication.* • *Responds appropriately to and establishes rapport with co-workers and customers and encourages cooperation/ negotiation.* • *Draws upon experiences and prior knowledge, interprets and applies new knowledge and experience and investigates new learning techniques and formulates / adapts learning strategy.* • *Understands material being taught, identifies training needs, provides constructive feedback/reinforcement and develops appropriate training procedures and adheres to standards.* • *Demonstrates commitment to excellence and leads by example and motivates others to extend their capabilities.* • *Recognizes differences/ biases, respects the rights of others and the value of diversity and responsibly challenges discriminatory practices/procedures.*

Occupation Cluster: **Professional-Technical College Instructors**
Critical Work Function: **D: Provide student instruction**

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
D3 Initiate, develop, and implement student assessments	• Students effectively demonstrate proper safety and operating procedures. • Accurate records of student assessments, progress and performance are managed. • Instructors are regularly available to discuss student progress as needed. • Self-assessment and peer assessment methods are taught and encouraged in an effective manner. • Assessment feedback is provided in a timely manner, is guided by assessment criteria, and is clearly supportive of student learning and success. • Assessment criteria are accurately provided to the students prior to the assessment, and grading policies are provided to the students in writing in accordance to college policy. • Confidentiality and ethical guidelines are completely followed. • Assessment of student learning is on-going. • Assessment tools that are directly related to industry requirements are developed and implemented.	• Knowledge of proper safety and operating procedures. • Knowledge of how to accurately record student assessments. • Knowledge of self- and peer assessment as methods of evaluation. • Knowledge of methods of constructive feedback to students. • Knowledge of assessment tools and techniques, grading policies, methodologies, and criteria and the ability to apply them. • Knowledge of confidentiality and ethical guidelines.	• *Performs basic computations and measurements and interprets numerical data.* • *Determines system components to be modified or improved and examines proposed modifications/ improvements.* • *Models proper performance/ attitudes, identifies training needs, develops appropriate training procedures and provides constructive feedback/reinforcement.* • *Recognizes ethical issues, formulates ethical course of action, analyzes personal/ societal implications of decisions and responsibly challenges unethical practices/decisions.* • *Identifies facts and principles, applies rules/principles to process/procedure and adapts rules/principles to new applications.*
D4 Modify instructional material and methods based on student and industry assessments and feedback	• Student feedback is appropriately solicited, acknowledged and applied to the improvement of instruction. • Instruction is adapted to meet diverse learner and motivational needs. • A variety of instructional strategies is applied. • Diverse resources are consulted to identify and access alternative instructional methods and materials.	• Knowledge of and ability to solicit appropriate student feedback. • Ability to apply motivational techniques and diverse learning styles. • Knowledge of a variety of instructional strategies. • Knowledge of diverse resources for alternative instructional methods and materials. • Ability to modify instructional materials and methods based on student feedback.	• *Recognizes differences/biases, respects rights of others and demonstrates awareness of diversity and responsibly challenges discriminatory practices/procedures.* • *Listens attentively, responds to verbal/nonverbal communication and clarifies/ analyzes communication.* • *Identifies needed systemic improvement and determines system components to be modified or improved.* • *Examines proposed modifications/improvements, identifies the problem, analyzes possible cause/ reasons and recommends/ devises/implements plan of action.* • *Identifies training need, develops appropriate training procedures and provides constructive feedback/ reinforcement.*

Occupation Cluster: Professional-Technical College Instructors

Critical Work Function: E: Provide support and guidance to students

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
E1 **Respond to student needs**	• Student requests for assistance are responded to in a courteous, respectful, and timely manner. • Multiple modes of communication are used. • Instructor time is properly allocated for the purpose of receiving and responding to group and individual student requests for assistance. • Instructors are regularly accessible, within professional boundaries, to students in accordance with college policies and procedures. • Instructor contact and access information is provided in writing to students in a clear manner.	• Knowledge and ability to use voicemail, email and online technologies. • Knowledge of the required and contracted office hours. • Knowledge of professional boundaries and college policies and procedures regarding student contact.	• *Responds to and communicates appropriate verbal/nonverbal messages, presents basic ideas/information and analyzes group/individual response.* • *Demonstrates sensitivity to student concerns and resolves conflict to student's satisfaction.* • *Follows schedule, efficiently manages time, and adjusts task sequence.* • *Responds to and willingly helps others.*
E2 **Provide information or referrals to meet student needs** ** FERPA (Family Educational Rights and Privacy Act, 1974).*	• Current files or resources of available student services and referral procedures are maintained and readily available to students. • Referrals are conducted in a respectful manner and in compliance with ethical guidelines. • Applicable procedures and guidelines for documentation and follow-up of referrals are followed. • Appropriate recommendations from a service referral are accommodated. • FERPA* laws are consistently followed. • Ongoing communication with student services professionals is maintained.	• Knowledge of available student services and proper procedures. • Knowledge of confidentiality / ethics (FERPA*). • Knowledge of documentation procedures and the ability to follow-up on the referral. • Ability to accommodate the recommendations of the service referral or agency.	• *Recognizes organizational, social and technological systems, follows procedures and recognizes system strengths/limitations.* • *Listens attentively, clarifies communication and relates intent to desired results.* • *Respects rights of others.* • *Encourages a correct course of action and responsibly challenges discriminatory practices.* • *Interprets/analyzes organization of information.*
E3 **Assist students with job placement**	• Students are made aware of the job search process. • Advisory members and employers are contacted when necessary concerning employment opportunities. • Students are accurately informed of known job opportunities and the jobs for which they currently qualify. • References and recommendations are provided on behalf of students when requested and applicable.	• Knowledge of the job search process for that field. • Knowledge of the advisory members and employers and the ability to contact them. • Knowledge of job opportunities and job qualifications. • Knowledge of content of references and recommendations.	• *Analyzes/relates to student needs/concerns and obtains additional resources to meet student needs.* • *Responds appropriately to and willingly helps others.* • *Examines information and generates solutions.* • *Recognizes job tasks, devises/implements action plans, assesses individual knowledge/skills and matches talent to positions.* • *Displays enthusiasm and motivates others.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: E: Provide support and guidance to students

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
E4 **Provide academic advising**	• Student goals, experiences, and needs are identified. • Student is informed of academic options to meet goals. • Information about college resources to support student success is completely provided. • An accurate checklist of current college registration procedures is provided.	• Knowledge of academic options. • Knowledge of college resources. • Knowledge of college registration procedures. • Ability to convert student goals, experiences, and needs into appropriate program and course selection. • Knowledge of course sequencing.	• *Listens attentively, relates intent to desired results and analyzes communication.* • *Examines data, generates solutions and devises/ implements action plans.* • *Locates/interprets information.* • *Analyzes customer needs and obtains additional resources.* • *Demonstrates creative thinking process while problem solving and formulates new plans.*
E5 **Provide career advising**	• Current career information and opportunities are maintained in an organized manner. • Employers/advisory committees are contacted to determine current career options. • Students are made aware of on- and off-campus career services and training opportunities. • Students are completely informed of the career opportunities and qualifications. • Students are given training in accessing career and employer information from multiple sources (trade journals, Internet sites, etc.).	• Knowledge of current career information opportunities and the ability to access that information. • Ability to instruct students in computer search methodology or refer appropriately. • Knowledge of employers and advisory committee members in industry and the ability to access them. • Knowledge of on- and off- campus career services. • Knowledge of the qualifications for specific positions within the field.	• *Recognizes job tasks, assesses individual knowledge/skills and matches talent to positions.* • *Responds to student concerns and obtains additional resources to meet student needs.* • *Actively leads/participates in discussion, presents complex ideas and analyzes group/ individual response.* • *Utilizes brainstorming, develops creative solutions and formulates new ideas.* • *Integrates relevant information and researches additional resources.*
E6 **Serve as student activity advisor, as applicable**	• Students are adequately advised of available activities and resources. • Information, guidance and resources are provided. • Student club goals and objectives are identified, stated, and implemented. • Assistance in facilitating meetings and activities is provided. • Established state and college policies and procedures are followed. • Student leaders are effectively guided in conducting the business of the organization and/or activity.	• Knowledge of Robert's Rules of Order and/or Parliamentary Procedures and the ability to apply them in a learning environment. • Knowledge of student activity advisor responsibilities and limitations per college policies and procedures. • Ability to work within the existing advisory system to accomplish stated goals. • Knowledge of constitutional by-laws of the particular activity or organization.	• *Listens attentively, responds to verbal/nonverbal communication and compares multiple viewpoints.* • *Analyzes group/individual response and actively participates in discussion.* • *Speaks extemporaneously and demonstrates sensitivity to student concerns.* • *Analyzes and demonstrates commitment to student needs.* • *Motivates others to extend their capabilities, leads by example and displays enthusiasm/positive attitudes.* • *Respects rights of others and recognizes/supports diversity and individuality.*

ADMINISTRATIVE AND PROGRAM MANAGEMENT FUNCTIONS

Paperwork Demands

One of the most difficult aspects to identifying their standards focused on the paperwork or *administrivia* (my word) that was expected of *new* professional-technical instructors. The initial focus group identified *Perform administrative functions* as one of their job functions to encompass most of the office work and documentation that was typically required by all instructors: recording and submitting grades, serving on college committees, developing program budgets, etc. As the list of activities grew in this function, those professional-technical instructors validating the document insisted on breaking it into another critical function: *Perform program management functions*. Follow-up validation groups approved this as well.

New Instructors Hit the Ground Running

However, as the list of key activities grew in these two functions, much discussion centered on responsibilities of *new* (six months to a year) faculty members. It was determined by the instructors themselves that while not all instructors had to manage their program budgets, for example, some of them did, especially those who taught in single-instructor programs and are required to perform these functions.

A misunderstanding may have occurred around what was really expected of newly hired instructors. Only a few of the professional-technical instructors developing these standards were fairly new to their profession. Most participants were seasoned veterans; however, as representatives of their colleges, they cited situations where some new faculty did have both administrative and program management duties. "Many people are having to hit the ground running and this is not so uncommon," stated a participant. "I'm not alone," added an instructor in the focus group who was in her first year of teaching.

At the end of a validation session, one seasoned instructor mentioned, "I'm reminded why new instructors say, 'I was hired to teach. Everything else is getting in the way of being an instructor and with the students.'" Another noted, "It brings to mind all of the tasks that an instructor uses to make it work. It's very involved."

NOTE FROM A SEASONED MEDICAL ASSISTING INSTRUCTOR/COORDINATOR

Administrative functions

I see my administrative functions as being things like attending staff meetings, serving on college committees, keeping my department up-to-date on legal requirements (OSHA, WISHA, L&I, CAAHEP), writing

and coordinating the department's newsletter, and compiling a data-base of information (potential students, advisory committee members, former graduates, supplies/suppliers). I plan new courses and write curriculum (for non-program classes), attend seminars to earn continuing education credits, update my department's website, develop training for the division staff, propose more cost-effective ways to order supplies between the various departments in our division, represent the college in community activities, serve on tenure committees and faculty-hiring committees that are not for my program, and more.

Program Management

Program management includes things like: planning staffing for courses that I do not teach (in my program), ordering textbooks and supplies, requesting funding for needed equipment, revising curricula based on input, planning class schedules one year in advance, and responding to requests for information on my program as well as many other policies. It includes developing and implementing publicity ideas, updating program policies and procedures, and utilizing faculty and student feedback to revise courses and/or the program. Program management includes tasks to assess potential students for approval into a program, review student transcripts, assign students to and manage extern experiences, schedule classrooms and equipment, maintain accreditations, and monitor safety and compliance in the lab classrooms.

Debbie Bedford
Medical Assisting Instructor/Coordinator
North Seattle Community College

Electronics instructor Ted Rodriquez from Skagit Valley College and Nursing instructor Tommie Schwent from Peninsula College read and review the standards.

"The success of the student depends most of all on the quality of the teacher. There is an opportunity to transform the quality of teachers in American schools with the hiring of at least 2.5 million teachers in the next decade."

An Action Agenda for College and University Presidents,
To Touch the Future, Transforming the Way Teachers
Are Taught, American Council on Education (1999).

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: F: Perform administrative functions

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
F1 **Perform** **documentation** **and** **record keeping** **duties**	• Attendance records are documented and submitted. • Accurate committee files are kept. • Current curriculum materials are organized and accessible. • Records are kept in accordance with departmental and college policies and procedures. • Budget records are maintained in accordance with college policies and procedures. • Assistance is provided with writing and implementing grants as applicable.	• Knowledge of record keeping procedures. • Knowledge of college policies and procedures regarding record-keeping. • Knowledge of grant writing.	• *Performs assigned tasks, pays attention to details and follows procedures.* • *Records data accurately and writes detailed supporting documents.* • *Performs basic data entry, integrates multiple platforms and organizes·information and reports.* • *Analyzes organization of data and transfers information between formats.* • *Performs tasks and manages/ adjusts timelines.*
F2 **Record and** **submit student** **grades**	• Grades are accurately calculated according to published grading policy and assessment criteria. • Grades are submitted in accordance with college policies and procedures. • Records of student grades are maintained in accordance with all college procedures, state and federal laws and regulations including FERPA (Family Educational Rights and Privacy Act, 1974) and college procedures. • All information regarding student grades is treated in an ethical and confidential manner.	• Knowledge of grading policies and assessment criteria. • Knowledge of college policies and procedures. • Knowledge of Family Educational Rights and Privacy Act, 1974. • Ability to apply FERPA regulations/standards. • Knowledge of ethical standards regarding student grades.	• *Utilizes mathematical formulas and processes.* • *Summarizes, interprets and records results.* • *Performs assigned tasks and pays attention to details.* • *Follows rules and responds to system demand.* • *Performs basic computations and records/interprets numerical data.* • *Recognizes ethical issues, demonstrates honesty and accepts responsibility for own behavior.*
F3 **Serve on** **departmental** **and college** **committees**	• College committee meetings are attended in accordance with college policy. • Departmental committees are actively participated in as applicable. • Records of committee activities are kept current and organized. • Accurate information is distributed to colleagues as appropriate.	• Ability to access college policies and procedures regarding committees and committee participation. • Knowledge of college and departmental committees. • Knowledge of appropriate information to distribute to other faculty and departments. • Knowledge of appropriate routing for information and documentation. • Knowledge of roles and responsibilities of committee participants.	• *Actively participates in team activities, demonstrates commitment to team members and assumes responsibility for team goals.* • *Follows/manages schedule and performs/prioritizes tasks.* • *Adheres to standards, shows commitment to excellence and displays positive attitudes.* • *Identifies own strengths/ limitations/skills/abilities, accepts constructive criticism and responsibility for own behavior, and sets well-defined goals.* • *Demonstrates confidence, self-reliance and self-discipline.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: F: Perform administrative functions

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
F4 **Provide input for program, schedules, and college publications**	• Schedules are coordinated between program core and support courses. • Schedules and publications regarding the program are kept current and comply with all legal requirements. • Accurate program information is provided to college departments responsible for publication. • Accuracy of information in college schedules and publications is monitored and modified as necessary. • All printed materials about programs are consistent. • Input includes times, room, and teaching assignments.	• Knowledge of program requirements and courses. • Ability to schedule courses and competencies within a program. • Knowledge of legal requirements regarding college publications. • Knowledge of program information. • Knowledge of publication modification procedures. • Knowledge of publication timelines.	• *Identifies/diagnoses system discrepancies/deviations.* • *Collects data and records information accurately.* • *Composes/edits original correspondence/documents.* • *Follows schedule, monitors/ adjusts task sequence and manages timelines.* • *Recalls basic rules/principles and distinguishes facts/ inferences.* • *Selects/obtains relevant information and integrates multiple items of data.*
F5 **Develop and manage budgets**	• Needs are annually identified and prioritized in accordance with college policies and procedures. • Adequate resources are determined to meet the program needs. • Resources are expended in a timely manner following college policies and procedures to support the program. • Equipment replacement plan is developed and reviewed annually. • Budgetary restrictions are followed and calculations are accurately formulated. • Appropriate documentation is maintained according to college policies and procedures.	• Knowledge of budgets and the budgeting process. • Knowledge of budget and college constraints.	• *Accurately disburses/receives money and reconciles daily receipts/ payments/accounts.* • *Understands decision-making process, identifies goals/ constraints, analyzes information and evaluates alternative solutions.* • *Acquires/maintains job specific supplies/equipment and monitors safe, efficient use of materials.* • *Utilizes mathematical formulas/processes.* • *Interprets/records results and analyzes organization of information.*
F6 **Research and assist with writing and implementing grants and targeting financial resources*** * Please note: many new instructors are not involved with writing grants.	• Appropriate campus personnel are contacted to investigate grant opportunities. • Necessary data is procured or provided as requested. • Necessary forms and/or documents and reports are completed within established guidelines. • Funds are expended in accordance with grant proposal restrictions. • Grant proposal presentations to appropriate personnel are made as necessary. • Grant follow-up and evaluations are completed in a timely manner.	• Ability to research information and write proposals in accordance with grant guidelines. • Ability to manage grant funds. • Ability to assess progress and effectiveness of the grant.	• *Analyzes organization of data and transfers information between formats.* • *Writes complex documents based on research and assessment activities, synthesizes information and helps formulate viable action plans.* • *Completes assigned tasks and exhibits commitment to the project and the institution.* • *Analyzes/integrates/ summarizes/presents information relevant to proposal requirements.* • *Demonstrates creative thinking/problem solving and formulates new ideas through grant projects.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: G: Create and maintain a professional environment

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
G1 **Collaborate with** **college staff,** **faculty, and** **students**	• Curriculum and course materials and resources are provided as required. • When applicable, performance is properly assessed, feedback is provided and recommendations are made as appropriate. • College staff and faculty questions are answered. • Assistance is provided as necessary in a courteous and respectful manner. • Colleagues and staff are responded to in a timely manner. • Institution wide and inter-disciplinary student learning activities and initiatives are fully supported. • Professional growth is promoted among staff and faculty. • College departments and services are accurately informed of needs in a professional and collaborative manner.	• Knowledge of locations to file or post curriculum and course materials and resources. • Knowledge of procedures to request resources from library, instructional software and adoption procedures and ordering processes. • Knowledge of college depart-ments and services available. • Knowledge of professional growth opportunities. • Knowledge of program requirements and outcomes. • Knowledge of performance assessment, feedback and recommendation procedures.	• *Willingly helps/establishes rapport with colleagues/ employers, shows empathy for students and encourages cooperation with staff/ students.* • *Adjusts schedule as required by students/administration, monitors task sequence and prepares multiple schedules.* • *Recognizes program strengths/limitations, follows procedures, and understands organizational, social, technological systems.* • *Identifies with team, actively participates in team activities and demonstrates commit-ment to group/class/program/ students.* • *Identifies own strengths/ limitations, accepts responsi-bility for own behavior, applies self-management skills and pursues program/ course goal attainment.*
G2 **Work with** **program advisory** **committee**	• Instructor-attended advisory committee meetings are held on a regular basis in accordance with college policies and procedures. • Instructors participate in advisory committee meetings. • Advisory committee recommenda-tions are considered and imple-mented as appropriate. • New advisory committee members are recruited on an ongoing basis. • Advisory committee members reflect the diversity of the community and industry. • Full participation of Advisory Board members is encouraged. • Advisory board productivity is actively encouraged.	• Knowledge of college policies and procedures regarding advisory committee recommen-dations. • Knowledge of faculty role regarding advisory committee and committee protocols. • Knowledge of industry and committee. • Ability to utilize advisory board in industry trades for students. • Knowledge of the relevant field of study, program requirements and accreditation requirements. • Ability to implement committee recommendations into program. • Ability to recruit new members to the committee.	• *Accepts constructive criticism, applies self-management and appropriately modifies goals.* • *Identifies with advisory board for a level of professionalism, actively participates in team activities and volunteers for special tasks.* • *Recognizes differences/biases, demonstrates sensitivity to diversity in and out of the classroom, recognizes the value of diversity, supports individuality and responsibly challenges existing policies.* • *Understands materials/subject matter, identifies student needs, and recommends specific improvement strategies.* • *Understands curriculum standards, demonstrates enthusiasm and commitment to excellence, and leads by example.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: G: Create and maintain a professional environment

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
G3 **Serve on departmental and college committees**	• College committees are attended with full participation in accordance with college policy. • Departmental committees are attended with full participation as applicable. • Records of committee activities are kept current and organized in accordance with college and program accreditation requirements. • Accurate information is distributed to colleagues as appropriate. • Confidentiality and ethical guidelines are followed according to college policy. • Student, faculty, program, department, division or college perspectives are effectively advocated. • Assignments are completed in a thorough and timely manner. • Participation supports the purpose and goals of the committee.	• Knowledge of policies as they relate to participation on committees. • Knowledge of employment contract provisions in regards to participation on the committee. • Knowledge of departmental and college committee policies. • Knowledge of college and program accreditation standards for committee record keeping. • Knowledge of policies and procedures as they relate to committee record keeping. • Knowledge of confidentiality and ethical guidelines. • Ability to advocate student, faculty and program perspectives. • Knowledge of purposes and goals of the committee.	• *Prepares schedule/agenda, prioritizes agenda items, and efficiently manages time.* • *Identifies own strengths/ limitations as related to committees, sets realistic goals, and maintains self-control.* • *Follows committee protocols, encourages new ideas, demonstrates commitment to excellence for student learning and develops minority/majority views.* • *Identifies key processes, analyzes organization of data and transfers information between formats.* • *Demonstrates punctuality, performs assigned tasks, actively participates in team activities, supports committee members, and assumes responsibility for achieving group goals.* • *Understands negotiations process, identifies conflicts/ underlying issues, analyzes group dynamics and responsibly challenges existing policies.*
G4 **Maintain current knowledge of the field**	• Working relationships with students, college staff, faculty, administrators, employers, and advisory committees are professionally maintained. • Memberships in appropriate professional organizations are obtained and maintained. • Subscriptions to professional publications are maintained and properly utilized. • Local regional and national seminars and workshops and meetings are attended as appropriate. • College procedures are followed regarding attendance at professional functions. • A variety of resources is utilized to network with people working and/or teaching within the field.	• Knowledge of methods for fostering professional relationships. • Knowledge of appropriate organizations in the field and their application processes. • Knowledge of roles and responsibilities of membership in a professional organization. • Ability to access relevant sources of information regarding subscriptions and publications and professional development opportunities. • Knowledge of travel request procedures and professional development reimbursement procedures.	• *Identifies need for self-improvement, accepts responsibility for own behavior, sets specific goals and applies self-management.* • *Identifies/analyzes/integrates multiple items of data.* • *Identifies with colleagues, actively participates in industry-related activities, demonstrates commitment and works to improve skills.* • *Identifies own level of skills/ abilities, actively seeks improvement, responds assertively and accepts responsibility for own knowledge.* • *Selects/identifies relevant details/facts, researches to gain knowledge and proposes solutions based on research.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: G: Create and maintain a professional environment

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
G5 **Participate in professional networking**	• Working relationships with students, college staff, faculty, administrators, employers, and advisory committees are maintained in an effective manner. • Memberships in appropriate professional organizations are obtained and maintained in an effective manner. • Subscriptions to professional list-serves and publications are maintained and properly utilized. • Seminars, workshops and local, regional, and national meetings are attended as appropriate. • All college procedures are completely followed regarding attendance at professional functions. • A variety of resources is utilized to interact with people teaching and working in the related field.	• Knowledge of methods for fostering professional relationships. • Knowledge of appropriate organizations in the field and their application processes. • Knowledge of roles and responsibilities of membership in a professional organization. • Ability to access relevant sources of information regarding subscriptions and publications and professional development opportunities. • Knowledge of travel request procedures and professional development reimbursement procedures.	• *Understands computer operation, utilizes integrated/ multiple software and manipulates information.* • *Identifies with /actively participates in co-worker activities, demonstrates commitment and resolves conflicts.* • *Composes multimedia presentations.* • *Identifies need for self-improvement, takes responsibility for own behavior, sets well defined/ realistic goals and actively pursues goal attainment.* • *Understands learning process, interprets and applies new knowledge and experience and formulates/adapts learning strategy.* • *Communicates appropriate verbal/nonverbal messages.* • *Presents basic and complex ideas/information and poses critical questions.*
G6 **Develop a professional development plan**	• Files and resources for all applicable certification and professional development requirements are maintained in an orderly and effective manner. • Appropriate activities are thoroughly researched and properly identified and completed. • Documentation is accurately maintained in accordance with college policy and procedures. • Plan includes activities to address areas for improvement and professional growth. • All approvals are obtained as required. • Tenure-track faculty complete all assessments and professional development activities required by their campus and tenure committee.	• Knowledge of sources of information for applicable certification and professional development activities and requirements. • Knowledge of college policies and procedures regarding professional development and required elements of a professional improvement plan. • Ability to develop a plan that addresses areas for improvement and professional growth. • Knowledge of documentation and approval procedures. • Ability to fulfill the requirements of certification, including all required activities. • Knowledge of campus tenure track evaluation and development requirements.	• *Identifies need for self improvement, accepts responsibility for own professional needs, sets well defined/realistic goals and applies self management skills.* • *Identifies the needs, examines information/data, recommends action plan and devises/implements plan of action.* • *Interprets/analyzes organization of information.* • *Records information accurately, completes written plan and summarizes/ paraphrases/ synthesizes information.* • *Understands system principles/concepts, follows processes/procedures/policies, responds and accommodates to system demand and recognizes system strengths.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: G: Create and maintain a professional environment

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
G7 Promote a professional instructional environment	• Professional teaching standards are identified and implemented. • Learning is cooperatively accomplished between the teacher and the student. • A positive role model is provided for the students. • Ethical and professional relationships with students are understood and maintained. • Professional boundaries with students are established, modeled, and maintained. • Classroom and other instructional areas are maintained in a safe, inviting manner.	• Knowledge of and ability to implement professional teaching standards. • Knowledge of state and college policies and procedures of professional boundaries. • Knowledge of content-specific code of ethics.	• *Promotes and recognizes ethical issues, demonstrates honesty/sincerity, demonstrates commitment to personal/social improvement and recommends ethical course of action.* • *Willingly helps students and takes active interest in students, shows understanding/empathy for others and encourages cooperation/ negotiation.* • *Recognizes poor/good performance/attitudes, identifies/selects training needs, develops appropriate training procedures and encourages learner independence.* • *Understands/adheres to standards/societal values and demonstrates commitment to excellence.* • *Displays enthusiasm/positive attitudes/sensitivity to diversity, recognizes differences/biases/prejudices, demonstrates sensitivity to fears/concerns of diversity in the institutional setting and responsibly challenges discriminatory practices/ procedures/policies.*

Massage Therapy Practitioner instructor Ginger Lewis-Castle works with students in the massage laboratory/clinic at Renton Technical College.

> **The most significant influence on the evolution of distance education will not be the technical development of more powerful devices, but the professional development of wise designers, educators, and learners.**
> Transforming Distance Education to Distributed Learning - www.gsu.edu/~wwwitr/docs/distlearn/index.html, p.1.

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: H: Promote the program and recruit students

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
H1 **Participate in campus and community events**	• Community and campus event offerings are researched. • Events determined to promote the program, recruitment of students, and/or enhance student learning are identified. • Promotional information is made available. • The event is properly set up and organized. • College policies and procedures regarding off-campus events are met.	• Knowledge of relevant campus and community events. • Ability to select appropriate events to enhance student learning. • Knowledge of college policies and procedures regarding campus and community events. • Knowledge of setup and organization procedures for campus and community events.	• *Actively participates in college activities, volunteers, and supports college members.* • *Actively participates in discussion, speaks extemporaneously, composes/presents complex ideas/information and well-organized speech.* • *Establishes rapport with students and the community, encourages cooperation, and demonstrates commitment to social improvement.* • *Compares multiple viewpoints and analyzes communication.*
H2 **Serve on high school advisory committees, Tech Prep consortia, and/or other community organizations**	• Appropriate high school advisory committees are effectively participated in. • Information gained at high school advisory committee meetings is reported to program faculty. • Accurate and complete program information is provided at the high school advisory committee meetings. • Related Tech Prep activities are effectively participated in. • Articulation agreements are properly created and maintained.	• Knowledge of contacts for high school advisory committees and Tech Prep consortia members. • Ability to create and maintain articulation agreements. • Knowledge of the program and its requirements. • Ability to implement articulation agreements.	• *Responds to system demands/ limitations, obtains resources to meet committee needs and recognizes organizational and social systems.* • *Actively participates in college activities and supports college members and goals.* • *Establishes rapport with colleagues/consortia/ organizations, encourages cooperation, demonstrates commitment to social improvement and works to remove social barriers.*
H3 **Develop promotional plan**	• The appropriate college entities are effectively worked with to develop an effective marketing strategy. • Potential students are correctly identified. • The advisory committee is effectively coordinated with to identify potential students. • Feeder programs are effectively coordinated with to identify perspective students. • Plan includes how to market, what marketing tools to use, schedule of marketing events, and the target population. • Marketing budget is accurately and completely developed. • All appropriate approvals are obtained in accordance with college policies and procedures.	• Knowledge of contacts for high school advisory committees and Tech Prep consortia members and advisory committee protocols. • Ability to identify potential students. • Knowledge of college policies and procedures. • Ability to develop a marketing plan and budget. • Knowledge of the college entities that must be coordinated with regarding the marketing plan. • Ability to access marketing strategies, tools, scheduling and the target population. • Ability to access information on feeder programs and the ability to coordinate with them.	• *Adjusts schedules as required by events, monitors/adjusts task sequence and manages timelines.* • *Uses imagination to visualize events/activities, utilizes previous training/experience to predict outcomes, generates operational plan and mentally pictures familiar activities/outcomes.* • *Utilizes brainstorming techniques and develops/ applies creative solutions to new situations.* • *Demonstrates awareness of diversity, encourages/supports individuality and encourages/ supports a correct course of action.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: H: Promote the program and recruit students

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
H4 **Provide information for prospective students**	• Group information sessions are properly scheduled, advertised, and conducted on a regular basis. • Individual informational meetings are properly scheduled as needed. • Accurate information packets are developed and disseminated to prospective students. • Faculty member is reachable by telephone and promptly returns calls. • Faculty member may be contacted through a variety of methods ie: mail, phone, email. • Prompt responses are made to contacts through a variety of channels (email, phone, etc.).	• Knowledge of program options. • Knowledge of the contents, scheduling, advertising and conducting of group information sessions. • Knowledge of procedures and content for individual information meetings. • Knowledge of contents of information packets.	• Compares multiple viewpoints and analyzes communication. • Demonstrates sensitivity to student concerns and responds to student needs. • Adjusts schedule and manages timelines. • Selects appropriate categories, analyzes data and transfers data formats. • Sets/analyzes/modifies well-defined goals and applies self-management skills. • Demonstrates sensitivity to diversity, supports individuality and a correct course of action.
H5 **Develop and manage public relations information**	• Accurate information is provided to appropriate college entities for creation and modification of published materials regarding programs. • Information in published materials is continuously monitored for currency and accuracy. • Public Information Office is accurately advised regarding misinformation about the college/programs in a timely manner, and an effective course of action is recommended. • All timelines are met as required by the Public Relations Department or equivalent college entity.	• Knowledge of procedures and schedules of the college Public Information Office. • Knowledge of media used by the college. • Knowledge of programs and target markets	• Adjusts schedule/task sequence and manages timelines. • Understands continuous improvement process, suggests system modifications and analyzes goals/constraints. • Identifies need for data, selects/obtains relevant information and integrates multiple items of data. • Identifies relevant facts/specifications, interprets/analyzes/summarizes information and researches to gain knowledge. • Performs assigned tasks and follows rules/procedures.
H6 **Perform recruiting activities**	• Accurate records of student, program, and placement success stories and data are properly maintained. • Presentations to high school students, teachers, parents and community organizations are provided on a regular basis. • Program information is compiled and given to appropriate college recruiter on a regular basis.	• Knowledge of students who have completed the programs successfully. • Knowledge of contacts in the high schools and in community organizations. • Knowledge of media to be used in promotional activities. • Ability to prepare materials for presentation.	• Compares multiple viewpoints and interprets communication. • Recognizes differences/biases, demonstrates sensitivity to diversity and supports individuality. • Demonstrates sensitivity to student concerns and responds to student needs. • Identifies process, interprets information, communicates appropriate verbal/ nonverbal messages, • Explains concepts, speaks extemporaneously, debates, and poses critical questions.

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: I: Learn and adapt new technologies

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
I1 Obtain and maintain certification on program-specific technology	• All applicable certification requirements are kept in an organized and accessible fashion. • Appropriate activities for certification are accurately and effectively identified and completed. • Documentation is accurately maintained and properly submitted according to requirements of certifying bodies. • Certification reviews are scheduled to ensure compliance and assist in planning for anticipated changes.	• Ability to access sources of information related to the activities needed for certification. • Knowledge of the requirements of the certifying bodies. • Knowledge of certification training programs and their availability and cost. • Knowledge of documentation submittal and filing procedures. • Ability to successfully complete certification requirements.	• *Outlines maintenance procedures, follows specified maintenance, identifies symptoms and evaluates performance of technology.* • *Understands technology applications/operations/ interactions and manipulates technology for desired learning outcomes/results.* • *Identifies appropriate technology and proposes simple technological solutions.* • *Compiles multiple viewpoints and formulates plan of action.* • *Selects/applies and analyzes application of learning tools and synthesizes multiple learning techniques.* • *Prepares requisitions and summarizes technological information and needs.*
I2 Maintain current knowledge of technology in the field	• Seminars workshops and courses in technology are attended with full participation. • Current professional literature about the application of emerging technology is selected and read on a regular basis. • Return-to-industry opportunities are pursued and followed up in an effective manner. • Advisory committees and employers are thoroughly consulted regarding emerging technologies.	• Knowledge of seminars and workshops offered that relate to technology. • Knowledge of professional literature related to emerging technology. • Knowledge of return-to-industry opportunities and application procedures. • Ability to access all information related to seminars, courses, and workshops on the Internet and on list-serves. • Ability to access advisory committees. • Ability to create opportunities to apply current technical knowledge and skills.	• *Actively seeks self-improvement opportunities* • *Maintains positive self-image and demonstrates self-confidence, self-reliance, and self-discipline.* • *Identifies need for data/ information to build curriculum and learning resources and researches additional information sources in industry, business and the workplace.* • *Researches to gain knowledge/information about current technologies.* • *Analyzes and adjusts self-improvement goals.* • *Assumes responsibility for achieving current technical/ content knowledge.*

> **"Training faculty in the use of information technology will be an essential part of staff development."**
> Survey Results: What do CEO's Want to Know about ... Key Trends in the Community College, Memorandum, March 15, 2000 from the League for Innovation in the Community College.

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: I: Learn and adapt new technologies

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
I3 **Identify, evaluate, and implement emerging technologies according to industry needs**	• Relevant information related to emerging technologies is thoroughly researched on an ongoing basis. • Advisory committee and professional affiliations/organizations are consulted with on a regular basis. • Technologies are accurately and thoroughly assessed for appropriateness and currency. • New technologies are incorporated into existing curriculum, outcomes and assessments effectively and in a timely manner. • Continual assessment of student progress with new curriculum and outcomes is performed and maintained in an effective manner. • Current research and development on relevant technologies are continually reviewed and communicated to appropriate parties.	• Ability to research and access information related to emerging technologies. • Ability to relate emerging technologies to outcomes and assessments. • Ability to modify curriculum and adapt emerging technology into instruction. • Ability to assess and interpret student progress as related to curriculum and instructional modification. • Knowledge of industry leaders and technology suppliers related to emerging technology. • Ability to evaluate new technology in regards to its usefulness, effectiveness and long-range implications. • Ability to research funding of new equipment and material.	• *Understands technological applications for learning, manipulates and analyzes technological innovations for the learning environment and analyzes task/technology relationship.* • *Proposes new technology applications to enhance student learning.* • *Organizes new processes and procedures utilizing changing technologies.* • *Demonstrates the creative thinking/problem solving processes.*
I4 **Identify, evaluate, and implement new instructional technologies**	• New instructional technologies are researched by fully participating in professional conferences and consulting with advisory committees. • Industry and technology suppliers are properly consulted to stay current on new instructional technologies. • List-serves and professional organizations are actively pursued and effectively utilized. • New methodologies related to instructional technologies are properly evaluated. • New technologies are implemented in accordance with college policies and procedures • Online clearinghouse for enhanced syllabi is properly utilized as needed.	• Knowledge of sources of information regarding professional conferences. • Ability to access industry suppliers and knowledge of how to network with them. • Knowledge of list-serves and professional organizations. • Ability to evaluate new methodologies related to instructional technologies. • Ability to implement new instructional technologies. • Knowledge of college policies and procedures.	• *Identifies appropriate technology for the learning environment and manipulates technology for desired educational results.* • *Applies complex processes to new information.* • *Understands technological results.* • *Analyzes information/ organization of information/ presentation of information and transfers information between formats.* • *Performs basic data entry and other computer operations and utilizes integrated/ multiple software and hardware components.* • *Develops creative solutions to new situations and formulates new ideas/plans/approaches to learning and teaching.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: J: Perform program management functions

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
J1 **Perform documentation and record keeping duties**	• Attendance records are documented and submitted. • Accurate committee files are kept. • Current curriculum materials are organized and accessible. • Records are kept in accordance with departmental and college policies and procedures. • Budget records are maintained in accordance with college policies and procedures. • Assistance is provided with writing and implementing grants.	• Knowledge of record keeping procedures. • Knowledge of college policies and procedures regarding record keeping. • Knowledge of grant writing, as applicable.	• *Completes forms/surveys/etc, creates original grading forms for students and synthesizes information and creates detailed supporting documents.* • *Identifies process and applies processes to new information.* • *Selects/identifies appropriate categories and analyzes organization of information.* • *Understands computer operation and utilizes integrated software.*
J2 **Mentor, orient, and support new and part-time faculty**	• Curriculum and course materials and resources are accurately provided as required/appropriate. • When applicable, orientation and paperwork needs are met. • Employment regulations are followed in accordance with college policies. • All applicable laws, regulations, college policies are communicated and followed. • When applicable, performance of part-time faculty is properly assessed, feedback provided and recommendations made as appropriate. • When applicable, appropriate staffing needs are accurately identified, assessed and prioritized. • Part-time faculty questions are answered and assistance is provided as necessary in an expedient, courteous and respectful manner. • Clear lines of communication are identified and established.	• Knowledge of curriculum, course materials, and resources. • Knowledge of employment regulations, laws and college policies. • Knowledge of student assessment and feedback techniques. • Knowledge of staffing needs and the ability to assess and prioritize them to meet program or department needs. • Knowledge of orientation procedures.	• *Recognizes job tasks, delegates responsibilities, and monitors performance.* • *Listens attentively, responds to verbal/nonverbal communication, influences communication and compares multiple viewpoints.* • *Recognizes poor performance/attitudes and models proper performance/attitudes, understands material being taught, identifies training needs and coaches learners to apply related concepts, provides constructive feedback/reinforcement/ assessment and encourages learner independence.* • *Recognizes accuracy of information and accurate communication and selects methods of communication.* • *Understands/adheres to standards, demonstrates commitment to excellence, leads by example and motivates others to extend their capabilities.* • *Identifies the problem, understands the complaint/ discrepancy and appropriately refers complaint/discrepancy.* • *Analyzes possible causes/ reasons and recommends action plan.*

Vice President of the Technical College Council of the Washington Federation of Teachers, Paul Axtell, participated in this project as part of a focus group and as member of the Steering Committee. He is a Transportation Technology instructor at Lake Washington Technical College.

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: J: Perform program management functions

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
J3 **Develop criteria, recruit, and make recommendations regarding hiring of faculty**	• Job descriptions and qualifications for faculty positions are properly identified. • Resumes and applications are thoroughly reviewed as received. • Interviews are conducted and recommendations are made in accordance with college policies and procedures. • Adequate sources of information are used to determine job qualifications. • Recruiting, screening, interviewing, and selection are performed in accordance with college policies and procedures.	• Knowledge of specific job qualifications. • Ability to create job descriptions. • Ability to review applications. • Ability to access college policy and procedures regarding interview.procedures. • Knowledge of interview procedures.	• *Understands legal aspects of discrimination, promotes awareness of the benefits of diversity for the workplace, encourages/supports a correct course of action and responsibly challenges discriminatory practices/ procedures.* • *Listens attentively, responds to verbal/nonverbal communication and confirms/ influences communication.* • *Identifies facts/principles/ problems, uses logic to draw conclusions and adapts rules/ principles to new applica- tions.* • *Responds appropriately to and willingly helps others, establishes rapport with co- workers and customers and shows understanding/ empathy for others.*
J4 **Manage instructional and program assistants**	• A list of current job responsibilities is accurately provided and clarified. • An effective process is in place to clarify ongoing task assignments. • Orientation to policies, procedures, and the physical work environment is provided in an effective manner as needed. • Information about ongoing profes- sional development opportunities is accurately provided and supported. • Job performance is properly assessed according to college policies and procedures. • Information about safety practices is adequately relayed.	• Knowledge of management techniques and current job responsibilities. • Knowledge of updated information of college policies and procedures. • Ability to orient new assistants. • Knowledge of professional development opportunities. • Ability to conduct perfor- mance appraisals for instructional and program assistants. • Knowledge of safety practices in the learning environment.	• *Recognizes job tasks, analyzes work assignments, assesses individual knowl- edge/skills and monitors performance.* • *Identifies with college and obeys college rules, encourages/supports college members and resolves conflicts.* • *Understands and adheres to standards, demonstrates commitment to excellence, motivates others to extend their capabilities and displays enthusiasm/positive attitudes.* • *Recognizes poor performance/ attitudes, models proper performance/attitudes, understands materials being taught and identifies training needs.* • *Attends regularly, demon- strates punctuality, employs level of concentration, pays attention to details and works with minimal supervision and follows up on assigned tasks.*

Occupation Cluster: Professional-Technical College Instructors
Critical Work Function: J: Perform program management functions

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
J5 **Develop and manage budgets**	• Needs are annually identified and prioritized in accordance with college policies and procedures. • Adequate resources are determined to meet the program needs. • Resources are expended in a timely manner following college policies and procedures to support the program. • Equipment replacement plan is developed and reviewed annually. • Budgetary restrictions are followed. • Appropriate documentation is maintained according to college policies and procedures.	• Knowledge of budgets and the process. • Awareness of budget and college constraints. • Knowledge of financial personnel.	• *Accurately disburses and receives money, and reconciles daily receipts and payments and maintains balanced accounts.* • *Understands decision-making process, recalls basic rules/principles, gathers information, and compiles multiple viewpoints.* • *Acquires/maintains job specific supplies/equipment/inventory and monitors safe and efficient utilization of materials.* • *Utilizes mathematical techniques/formulas/processes and translates/interprets mathematical data.* • *Identifies process, selects appropriate categories, analyzes organization of information and transfers information between formats.*
J6 **Research and assist with writing and implementing grants and targeting financial resources*** ** Please note: Not all new instructors perform this function.*	• Appropriate campus personnel are contacted to investigate grant opportunities. • Necessary data is procured or provided as requested. • Necessary forms and/or documents and reports are completed within established guidelines. • Funds are expended in accordance with grant proposal restrictions. • Grant proposal presentations to appropriate personnel are made as necessary. • Grant follow-up and evaluations are completed in a timely manner.	• Ability to research information and write proposals in accordance with grant guidelines. • Ability to manage grant funds. • Ability to assess effectiveness of the grant.	• *Identifies process, interprets information, analyzes organization of data, and transfers information between formats.* • *Records information accurately, completes forms/surveys/etc, writes/creates simple and original documents.* • *Attends regularly, demonstrates punctuality, employs level of concentration, works with minimal supervision, pays attention to details and follows up on assigned tasks.* • *Understands/recognizes accuracy of information, provides accurate communication, and interprets information.* • *Makes connections between old and new, recognizes patterns/relationships, demonstrates creative thinking/problem solving processes, applies creative solutions to new situations, and organizes new processes.*

Office Technology instructor Shairose Gulamani from Bellevue Community College listens intently to the discussion with Electronics instructor Linda Wilkinson from North Seattle Community College.

SCENARIOS

CRISIS:
Helping an under-prepared learner succeed

An unemployed workforce training student with no recent work history is in the classroom and is not performing well. The student has a GED that took a significant amount of work to obtain. The student has significant academic challenges including poor writing skills, poor test-taking skills, and weak interpersonal and professional communication skills. The student just flunked a major test.

It's four weeks into the quarter and the student has performed poorly, averaging 60% on the work so far. Mid-term exams and projects are approaching, and the instructor feels compelled to talk with the student privately. The goal for this discussion is to encourage and to help the student succeed. The instructor decides that study skills and test-taking strategies are the two most important issues to explore.

The instructor schedules a time to meet with the student who seems extremely stressed. The student makes no eye contact, and the verbal and non-verbal communication demonstrate apprehension. The instructor attempts to help the student feel comfortable and tries to engage the student in conversation about his/her progress. The instructor validates the student's successes and progress and in a supportive manner addresses the opportunities for improvement.

The instructor informs the student about available campus resources, including the tutoring center, library support, and other available strategies such as working with a study partner, making use of the instructor's office hours, or taking a study skills assessment for further insight. The instructor and the student agree to work on one or more strategies and schedule a follow-up meeting.

Primary Tasks and Functions Involved in this Scenario

D. Provide student instruction
- D2   Provide individual and group instruction
- D4   Modify instructional material and methods based on student and industry assessments and feedback

E. Provide support and guidance to students
- E1   Respond to student needs
- E2   Provide information or referrals to meet student needs
- E4   Provide academic advising

ROUTINE:
Developing curriculum

In compliance with the curriculum and course objectives outlined by the curriculum committee, an instructor needs to teach about diversity in the workplace. The instructor developed a syllabus that states that diversity is the topic of discussion for tomorrow, and the students have already completed the required exercises and readings. The instructor decides to provide the students with current information from the Internet as a lead into the initial group discussion.

The instructor logs onto the Internet the night before and discovers an article on cultural diversity, downloads it, and prepares it for distribution. Uncertain about copyright laws, the instructor provides the URL so that the students can visit the website during the first 15 minutes of class. The instructor makes a mental note to check the computers to ensure they are operational before class. On PowerPoint, the instructor prepares questions and provides scenarios related to the article. The students will share their viewpoints through small group discussion in the first half hour of class. The instructor plans an article summary and for possible questions.

**Primary Tasks and Functions
Involved in this Scenario:**

A. Manage learning environments
   A3   Maintain instructional systems, equipment and/or tools
   A5   Supervise learning environments

D. Provide student instruction
   D1   Prepare and/or gather current instructional materials and equipment
   D2   Provide individual and group instruction

I. Learn and adapt new technologies
   I4   Identify, evaluate, and implement new instructional technologies.

**LONG TERM:
Developing
a program proposal**

The advisory committee requested to the dean that a new program be developed. A teacher is approached to develop and write the new program. The project is estimated to take six months to two years to complete. To develop the program, the instructor takes the following steps:

1. <u>Contact industry representatives to assess the needs for the program and to identify the key skills that would be required.</u> Information from this research is reported to the dean, and discussion about the parameters of the program begins. The instructor and dean determine program length, the target population, funding sources, anticipated size of the program, and facilities. Supplies, equipment, personnel, and off-campus support are also determined.

2. <u>Write a two-page summary report to clarify the purpose of the program and submit it to the appropriate parties on campus and to industry for feasibility.</u> Upon authorization, the instructor begins formal writing such as a topical outline, student outcomes, course objectives, assessment strategies, credit issues, competencies, key skills and lab/lecture hours into a formal proposal. The advisory committee is involved in every step of this process.

3. The proposal is submitted to the appropriate parties for final approval by the state, district, college, advisory committee/board, and curriculum committee. Once the final proposal is approved, the development of the course curriculum and procurement of equipment and all related activities could begin.

Primary Tasks and Functions Involved in this Scenario

A. Manage learning environments
- A1   Obtain required equipment, systems, tools, supplies, and materials
- A6   Research, select, and evaluate off-campus learning environments

B. Develop outcomes, assessments, and curricula
- B1   Identify, evaluate, and modify current outcomes
- B2   Create, evaluate, and modify curriculum
- B3   Create, evaluate, and modify assessments

C. Develop and review programs
- C1   Develop, review, and update program plan
- C2   Recruit and work with advisory committee and employers to meet changing needs of the program and industry
- C3   Identify, evaluate, and modify program outcomes and assessments
- C4   Identify and develop core and support courses
- C6   Research, identify, evaluate, and implement current industry standards and trends
- C7   Coordinate program development with other college programs and institutions

F. Perform administrative functions
- F3   Serve on departmental and college committees
- F5   Develop and manage budgets
- F6   Research and assist with writing and implementing grants and targeting financial resources

G. Create and maintain a professional environment
- G1   Collaborate with college staff, faculty, and students
- G2   Work with program advisory committee

J. Perform program management functions
- J3   Develop criteria, recruit and make recommendations regarding hiring of faculty
- J5   Develop and mange budgets
- J6   Research and assist with writing and implementing grants and targeting financial resources

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EMPLOYABILITY SKILLS:
SCANS PROFILE

During the data-gathering process of this project, employability skills for teaching careers were identified. Employability or workplace skills are basic academic and foundation skills needed to build more advanced competencies. The foundation skills are based on broad workplace categories, known as SCANS (Secretary's Commission on Achieving Necessary Skills, U.S. Department of Labor). This federal report issued in 1991 identifies 37 foundation and workplace competencies required for work readiness.

SCANS is comprised of a three-part foundation of skills and personal qualities and five workplace competencies needed for successful job performance in today's workforce. Professionals currently working in the field were asked to identify the level of difficulty for each of the 37 SCAN skills which is most required for successful workplace performance in each cluster.

The information in the charts on the following pages was compiled by taking a weighted average of the responses across the cluster. This summary information provides a general view of the key workplace skills deemed relevant and necessary for the front line college professional-technical instructor as well as providing the foundation for the employability skills within the skill standards. Examples of the clusters and work skills are listed below.

Basic skills	**Personal qualities**
Reading	Responsibility
Writing	Self-Worth
Arithmetic	Sociability
Mathematics	Self-management
Listening	Integrity / Honesty
Speaking	

Thinking skills	**Workplace competencies**
Creative Thinking	Utilizing Resources
Decision Making	Interpersonal Skills
Problem Solving	Utilizing Information
Visualization	Using Systems
Knows / Learns	Using Technology
Reasoning	

The ADVANCE™ Workplace Standards Skill Inventory from Advance Educational Spectrums, Inc., was used to capture industry views on foundation skills for professional-technical college instructors. Industry professionals ranked the SCANS skill levels required for college instruction. The information in the chart on the following pages was created by taking the average of the profiles across the clusters. This summary information provides a general view of the key foundation skills deemed relevant and necessary for the entry-level but fully competent professional-technical college instructor.

Sample survey questions Adapted from the Advance Educational Spectrums Job Profiler

Applies creative thinking	Level I ☐ • Makes connections between old and new • Recognizes patterns/ relationships	Level II ☐ • Paraphrases/summarizes / generalizes existing ideas • Demonstrates creative thinking process while problem solving • Utilizes brainstorming techniques	Level III ☑ • Develops creative solutions • Applies creative solutions to new situations	Level IV ☐ • Generates unique solutions • Formulates new ideas/ plans/approaches • Organizes new processes/procedures	Level V ☐ • Judges/validates creativit • Actively pursues creative expression
Applies decision making strategies	Level I ☐ • Understands decision making process • Recalls basic rules/ principles • Identifies goals and constraints	Level II ☐ • Applies rules/principles to situation • Gathers information	Level III ☑ • Analyzes situation/ information • Considers risks/ implications • Compiles multiple viewpoints	Level IV ☐ • Generates alternative solutions • Evaluates alternative solutions • Formulates plan of action	Level V ☐ • Judges consistency/ precedence • Justifies purpose/result • Sets decision making parameters
Recognizes and solves problems	Level I ☐ • Identifies the problem	Level II ☐ • Understands the complaint/discrepancy • Appropriately refers complaint/discrepancy	Level III ☑ • Examines information/ data • Analyzes possible causes/ reasons • Recommends action plan	Level IV ☐ • Generates/evaluates solutions • Devises/implements plan of action	Level V ☐ • Evaluates/adjusts plan o action • Judges effectiveness/ efficiency of solution

SCANS SURVEY RESULTS FOR PROFESSIONAL-TECHNICAL INSTRUCTORS

Foundation Skills and Personal Qualities	0 1 2 3 4 5	Critical Competencies
Basic Skills Demonstrates Effective Reading Strategies		Selects and identifies information and follows a set of instructions
Demonstrates Effective Writing Strategies		Writes simple documents for appropriate audience and purpose
Applies Arithmetic Processes		Performs measurements and interprets numerical data
Applies Mathematics Processes		Summarizes and translates mathematical data
Demonstrates Effective Listening Skills		Responds to verbal/nonverbal communication and interprets and confirms information
Demonstrates Effective Speaking Skills		Presents basic ideas, explains concepts and actively participates in discussion
Thinking Skills Applies CreativeThinking/Generates Ideas		Demonstrates creative thinking process while problem solving
Applies Decision Making Strategies		Applies rules/principles to situation, gathers information and analyzes situation/information
Recognizes and Solves Problems		Understands and appropriately refers the problem and examines information/data
Demonstrates Visualization		Uses imagination to visualize events/activities and uses previous training/experience to predict outcomes
Knows How to Learn		Interprets symbols, diagrams and schematics and applies new knowledge and experience
Applies Reasoning Skills		Applies rules/principles to process and uses logic to draw conclusions
Personal Qualities Demonstrates Responsibility		Works with minimal supervision, pays attention to detail and follows through on assigned tasks
Demonstrates Belief in Self Worth		Values own individuality and accepts constructive criticism
Demonstrates Sociability in Groups		Responds appropriately to others, modifies behavior to environment and shows empathy for others
Demonstrates Self Management		Sets and adjusts goals, demonstrates commitment to self improvement and maintains self control
Demonstrates Integrity/Honesty		Analyzes personal/societal implications of actions and recommends ethical course of action

Foundation Skills and Personal Qualities	0	1	2	3	4	5	Critical Competencies
Management of Time & Resources Manages Time							Efficiently manages time, adjusts schedule as required by supervisor and prioritizes daily tasks
Manages Money							Maintains balances and reconciles program budgets
Manages Materials/Facilities							Acquires/distributes supplies and equipment
Manages Human Resources							Analyzes work assignments and delegates responsibilities
Management & Use of Information Acquires/Evaluates Information							Identifies data and predicts outcomes
Organizes/Maintains Information							Interprets information and applies processes to new information
Interprets/Communicates Information							Interprets information, prepares basic summaries and reports and selects methods of communication
Uses Computers to Process Information							Understands computer operation, uses integrated/multiple software, locates information and retrieves stored information/data
Interpersonal Skills Participates as Team Member							Actively participates in team activities, volunteers for special tasks, assists team members and demonstrates commitment
Teaches Others							Conducts task-specific training and coaches others to apply related concepts
Serves Customers							Responds to customer needs, demonstrates sensitivity to customer concerns and analyzes customer needs
Exhibits Leadership							Leads by example and demonstrates commitment to excellence
Negotiates Agreements							Moderates discussion, demonstrates composure, interprets concerns and analyzes group dynamics
Works with Diversity							Demonstrates awareness of diversity and recognizes its value
Understanding & Management of Systems Understands System							Understands the system/organization hierarchy and follows processes and procedures
Monitors/Corrects System Performance							Identifies system discrepancies and adjusts system operation
Improves/Designs Systems							Understands continuous improvement process and suggests system modifications and improvements
Use of Technology Selects Appropriate Technology							Understands the requirements of the task and technological results
Applies Technology to Task							Follows proper procedures and understands operation/interaction
Maintains/Troubleshoots Technology							Follows specified maintenance, identifies and troubleshoots malfunctions and failures

VALIDATION
SURVEY RESULTS

The job functions and tasks identified during the focus group must be validated by a statistically significant number of vocational teaching professionals. A survey instrument was developed that asked respondents to rate the level of importance for performing each job function and key work activity.

Level of Importance
0 = not important
1 = somewhat important
2 = important
3 = very important
4 = critical

The similarity in responses from the diverse types of professional - technical instructors is significant, and all critical work functions were validated as being important, very important or critical.

Survey responses to the critical work functions were averaged and are presented below.

Level of Importance of the Functions for Professional-Technical College Instructors

	Not Important	Somewhat Important	Important	Very Important	Critical
A. Manage learning environments					
B. Develop outcomes, assessments, and curricula					
C. Develop and review programs					
D. Provide student instruction					
E. Provide support and guidance to students					
F. Perform administrative functions					
G. Create and maintain a professional environment					
H. Promote the program and recruit students					
I. Learn and adapt new technologies					
J. Perform program management functions					

"Challenges that were not present in the past provide
opportunities to supply America with a workforce with
the skills and knowledge in a strong knowledge-based economy."

Paul Greco
Vice President for Instruction

LOCAL PERSPECTIVES

THE BOEING COMPANY RESPONDS: A LARGE COMPANY'S VIEW OF THE CHANGES IN THE WORKPLACE FOR THE NEXT CENTURY.

What does Boeing see as the major changes in the workplace for the next century?

The corporate learning organization must remain in a position of strategic importance, so it has a positive impact on managing the company and the its growth. Corporate learning organizations are also beginning to understand and capitalize on new opportunities outside of the enterprise. These opportunities are available in the form of training collaboration with other learning organizations (businesses, corporations, or educational institutions). The cutting edge corporate learning organization is becoming part of the growing network, infrastructure and services being offered in the changing marketplace.

The focus/vision for the future corporate learning organization must understand the performance requirements of the company and develop/modify the delivery processes to support those requirements. The successful corporate learning organization in the future will have qualities more closely aligned to a highly trained project management team more so than the classic training organization we are accustomed to seeing.

What are the skills that trainers or instructors of these workers need to have to help workers be successful in the 21st century?

We envision there will be fewer trainers and instructors on the staff of the future corporate learning organization. Staff will have the ability to solicit services from independent providers and education and training professionals. Their role will be to consult with the internal client to develop a needs assessment and then assist the internal client in working with the independent provider to satisfy those needs. The role will then change to that of project manager assuring the successful completion of the project.

Those trainers and instructors who are permanent staff members supporting tasks unique to the industry must cultivate non-traditional training skills that can provide knowledge exchange in the most effective, fastest, and most economical manner possible. Training events held in the classic instructor-led environment to fulfill "training requirements" is no longer acceptable. The key will be to effectively combine unlinked training activities and delivery platforms that link to business goals and individual learning outcomes.

How does Boeing view the purpose of skill standards and projects like this?

Our company views skill standards as a necessary part of doing business. As technology and processes change, we may be able to use skill standards to identify what skills individuals already have and for what job areas they are best suited. We can also use them to determine the skills an individual lacks and to have that employee obtain the training necessary to continue to perform as required or to move into another area of employment.

Individuals can use the skill assessment information for personal growth as well. If individuals want to move to a new job, skill standards can help them identify the skills they must acquire in order to move to the new job area or for a possible promotion.

Teaching and learning have changed in the last few decades. What are the skills and knowledge that industry values for the success of the company and of workers in the 21st century?

The role of instructors has certainly been changing from one of a delivery of information to one of a facilitator, coach and mentor with our learners. New skills are going to be required for future industry instructors. More emphasis will be on determining specific requirements or knowledge that is needed for each learner to be productive in the workplace. The instructor will need to determine what is necessary for effective learning and leave out the nice-to-know information. Instructors will need to analyze learning using solid assessment tools, conduct front-end analysis, perform cost analysis benefits, evaluate learning based upon "Make/Buy" decisions, specify appropriate learning strategies and measure the effectiveness of learning.

Basically the future instructor will be a generalist in order to meet the fast changing needs of today's workplace. Learning will take place in many modes in the future business environment. Because of

geographic diversity, instructors will have computer skills and the ability to use effective distance learning methodologies. We see learning happening "just-in-time" while occurring at different times and places. Learners will need to be held more accountable for their learning, but instructors have the challenge to be sure that the right tools and means will be available to accommodate our future learners.

New tools, methods and platforms will be utilized to deliver cost-effective but learner-centered information. Learning could be more modularized and developed and delivered in smaller bits of information. Methods of delivery such as distance learning, self-paced instruction, performance support systems and job aids may be some of the modes that could be incorporated into the business environment for future learners.

Future instructors in a school setting need to be coaches, facilitators, mentors and brokers of learning. Instructors should present expectations in regard to levels of performance and work ethic. S/he can present information in short segments and then become the coach and/facilitator who observes and supports students as they apply their new found knowledge to real-world projects.

During the planning, research and development of the projects, the students will need mentors. If the instructor is not the subject matter expert, s/he should become a broker to find a mentor for the students completing the project. For a corporation, coaching, mentoring and brokering are done by instructors going to the work site and working directly with employees.

Boeing has been a partner in attending both the focus groups and being on the Steering Committee for this project. How can these standards be helpful to a company such as yours?

If college instructors meet the standards, the company can use the standards as part of its criteria for determining if a college is performing the type of training the company needs for its employees.

Boeing Shared Services Group
Learning, Education And Development [LEAD]
The Boeing Company
Seattle, WA

LABOR UNIONS APPLAUD SKILL STANDARDS

The 21st millennium has begun with employers crying out for trained employees. They are having an increasingly difficult time finding workers who have the skills needed to sustain and grow their businesses. Why should this be so? Why wasn't this true in the past? It's largely because of rapid technological changes and economic shifts: changes that require new individuals coming into the workforce to be prepared for work in different ways than their predecessors.

The traditional ways of training people seem to be falling short. Although there are many reasons for this, a large part could be the disconnect between the workplace and the training institutions. Be they elementary, secondary, or college, some schools do not have their fingers on the pulse of the changing economy and world of work.

Unions offer their training model

It is ironic, therefore, that perhaps the oldest form of training is largely immune from the problems being felt by other training institutions. That's because apprenticeships (earning while learning, hands-on combined with book learning) has as its basic premise the partnership of employers and representatives of employee groups (labor unions). Together they plan, fund, and administer the apprenticeship. Instructors are union members who come from the workplace and possess up-to-the-minute skills and applied knowledge. There is no disconnect between the workplace and the training institution. It is in the best interests of both the employers and the unions to turn out the best-trained employees possible.

Apprenticeships have long accepted the idea of standardized curriculum. Many apprenticeships are based on nationally recognized skill standards. As workers entering today's workforce are being asked to master more technically and sophisticated, complex skills, skill standards provide a framework to which needed updates and changes can be easily incorporated.

Standards-based portability

There are many strong arguments for apprenticeship as the best training model, but portability and transferability are some of the most compelling. Because apprenticeship training is based on accepted national skill standards, what any student learns in one part of the country, a student in a far-distant part of the country will learn also. This standardization of curriculum content allows an electrician, for example, to be able to work successfully anywhere in the country. Electricians are happy for the flexibility their apprenticeship training affords them; employers can have a level of confidence when hiring any electrician trained in an apprenticeship.

For the worker in the new century, the confidence that comes from knowing that she or he possesses the best training possible for the job is assured when that training is skill standard-based. More and more employers in an expanding number of industries are recognizing and embracing both skill standards and apprenticeship. Unions that have long been proponents of skill standards and apprenticeship are glad to see that more workers and now their instructors will be receiving the best training possible.

Kathleen Bander
Labor Liaison, Community and Technical Colleges of King County
Worker Center, King County Labor Council, AFL-CIO
Seattle, WA

A NOTE FROM HIGHER EDUCATION

Changes have been made to better prepare teachers for their roles and responsiblities in the classroom and in the colleges. The changes made address needs identified by experienced professional-technical teachers, by colleges, and by communities.

Thank you for including me in reviewing your Skill Standards for Professional-Technical College Instructors. I have facilitated similar work for secondary vocational teacher preparation standards and appreciate the depth and scope of your project.

"What new thing is CWU putting into our teacher preparation process?" In our teacher preparation programs the newest additions to our programs include:

- The constructivist theory of teaching and learning
- Service learning as a teaching pedagogy
- Civility and ethics outcomes for all learners in all content areas
- Conducting and facilitating research
- Grant writing
- Public relations and marketing

Technology preparation is also an important part of our program, but it is not "new." We have been emphasizing it for several years. School to career is another area that has been introduced in the past five years. It is no longer "new," but is still being covered.

Jan Bowers, Ph.d.
Department Chair of Family and Consumer Sciences
Central Washington University
Ellensberg, WA

A COLLEGE ADMINISTRATOR'S POINT OF VIEW

Role change in the next five years

The role of technical faculty and the skill requirements for them will change radically in the next five years, as the direction and context of technical education shifts radically—especially technical education within community and technical colleges. Faculty will be curriculum designers and will have to possess a working and theoretical knowledge of learning theory, diversity, technology and curriculum design/short-term and long-term curriculum design. This means not just putting together a syllabus, but developing a comprehensive system of outcomes, teaching and learning methods, ways technology should be integrated, teaching content and context, and doing appropriate assessment and evaluation.

Instructors will have to develop facilitation skills and strong team skills, since much of technical education in the future will be conducted this way. They will have to have strong skills in use of software for simulation, monitoring the course (i.e., computerized grading/evaluation), linking with students via email as opposed to the old standby—the green grading book. They will need a high degree of computer literacy and the ability to communicate electronically and via the Internet. Teachers will have to have strong assessment and research skills and know how to collect data, interpret it, and use it to make changes in their classrooms.

Professional-technical instructors will have to return constantly to a learning modality, not just back in industry, but for reviewing and changing theoretical foundations for the subjects they teach in order to keep updated. This means that they will have to be able to access information in a variety of ways, including global information, process it quickly, and use it in teaching and learning situations.

Faculty will need very strong and effective communication skills—written, graphic, as well as verbal—because instruction will use all of these modalities, sometimes in an integrated format in the "classroom" which may be online or distant from the student.

Concerns about a standardized set of skills

Possibly, the skill standards process as it is currently designed may not be able to keep up with this change. I also don't think that one document can easily capture skill standards comprehensively for all categories/levels of technical instructors because of the high level of variability in the requisite skills for them. Eg.: There is a lot of difference between the skill sets I look for in a technical faculty person in Allied Health and those I look for in Information Technology.

Further, the core set of skills I look for in technical faculty include contextual-cognitive/contextual-psychomotor curriculum development and design, critical thinking and utilization of inductive teaching-learning approaches, and qualitative/quantitative assessment skill and techniques. I wonder if I will refer to a set of standardized skill standards to assist me in hiring these individuals.

Myrtle Mitchell
Dean, Professional Technical Education
Seattle Central Community College

"Unquestionably, teachers must be at the center of any effort to improve education."
Using Professional Development to Meet Teachers' Changing Needs: What We Have
Learned, Centerpoint, NCRVE, Number 2, February (1999)

PERSPECTIVE OF AN AUTOMOTIVE INSTRUCTOR

The importance and usefulness of the standards

I see this as a critical document for the faculty, the system, and the students and industry who use the system. Faculty can use it to help themselves recognize and prioritize their complex workload, and they can use it to help renegotiate appropriate faculty load and support issues. The system can use it to attract potential faculty well-suited to the position and to develop appropriate assessments, rewards, and professional development activities for those already hired. This document can help students and the industry recognize the complexity of the task of professional-technical education, acknowledge the critical resource and liaison roles of these faculty, and recognize relevant ways they can themselves participate in the continuing evolution, refinement, and support of this dynamic occupation.

How teaching has changed

Two patterns are clear to me. First, teaching is becoming more "front-loaded," relying more and more on pre-teaching development of learning outcomes, projects, assessments, instructional resources, and support networks. Teachers cannot rely on making it up as they go along or trust in their experience or knowledge to keep them ahead of the students' and industry's needs. Front-loaded activities are both extensive and intensive and must rank as equally important to student success as instructional method and process.

Second, professional-technical teachers, more than ever, cannot pretend to teach it all. This puts an ever greater emphasis on their skills in the editing, selection, and sequencing of instruction and information, and makes them increasingly shapers, rather than followers, of industry.

Needed support

Because of the front-loaded nature of teaching these days, I'd like us to explore mechanisms for increasing support of meaningful collaboration and resource-sharing. I also think we need to put greater emphasis on giving thanks and acknowledgement. The work is complex, nebulous, ever-changing, and often done remarkably well.

My perspective as a participant:

I was impressed throughout with the energy, dedication, and professionalism of all participants, and with the deliberation and passion with which professional-technical instructors approach their work.

Steve Quinn
Automotive instructor
Olympic College
[Editor's note: Steve was part of the first focus group that drafted the original document.]
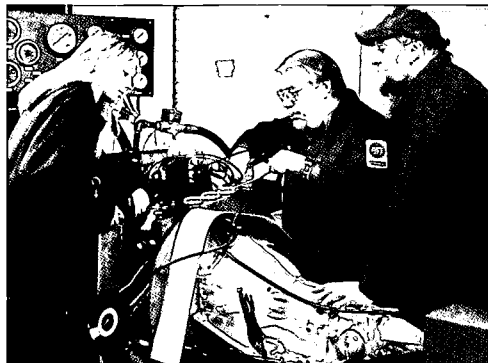
Automotive Technician instructor Luther Taylor demonstrates
engine repair to students at Clover Park Technical College.

PERSPECTIVE FROM A BUSINESS INSTRUCTOR

Skill standards build a strong foundation for the hiring and development of faculty who perform on many levels to include the design, maintenance, and delivery of quality courses and programs; essential advising and tutoring services; an increased program awareness, preparation of students for workforce success; the request and utilization of resources for equipment and faculty training; and the participation in a work environment that fosters teamwork, innovation, respect for conflicting ideas/philosophies, and evidence-based decision making.

We are the custodians of professional-technical education. The establishment and utilization of the faculty skill standards will effectively support our educational quality and accountability efforts.

Patti Serrano
Business Division Chair
Clark College

PERSPECTIVE FROM A HEALTH OCCUPATIONS INSTRUCTOR

I feel professional-technical instructors are vital and have great expertise in their field. Since often they are not trained in instruction, there must be a set of standards which they must meet to insure quality training and education of the students. The many focus groups involved in this project will provide a wide base of knowledge and opinion from which to determine appropriate standards. Including many vocational instructors is vital since they perform the instruction. I volunteered to be one of those voices in a focus group because I believe strongly in the project, both for the quality of instruction and instructors and also for the future students of vocational education.

A Participant's Hopes for these Standards

I feel fortunate to have been able to participate in this workshop and play a role in developing skills standards for vocational college instructors. There is such an incredible variation in what we all do that it is fascinating to come together and hear the scope of what is required of professional-technical teachers around the state. This process is sorely needed. I am eager to see how it will serve in the future to improve and uphold the quality of instruction in vocational education.

I hope this will not lead to standards that will eliminate good instructors but will become a great tool to help new instructors learn how to teach (since they already know their subjects well!) and to help educational institutions assist and support the instructors.

I hope that vocational instructors will still be required to have experience in their field and not be required to hold a master's degree. I would not like to see a lot of barriers to becoming an instructor of vocational education but a good set of skills that would help insure a more consistent level of quality. I also hope this set of skills will be broad enough to include all the variety of what we do and will be able to be adapted to each individual college and each individual technical program.

Deborah J. Bedford, CMA
Medical Assisting Program
North Seattle Community College

[Editor's note: Patti and Deborah participated in two different focus groups that reviewed, modified and validated the original document.]

NATIONAL CONTEXT
• A National Context for Skill Standards
• The Benefits and Uses of Skill Standards
• The Process of Building Skill Standards
• Pyramid of Competencies
• Skill Standards to Curriculum

A NATIONAL CONTEXT FOR SKILL STANDARDS

The National Skill Standards Board was established by Congress in 1994 to encourage the creation and adoption of a national system of voluntary skill standards that would enhance the ability of the United States to compete effectively in a global economy. Several voluntary skill standards projects have been developed by various industries in full partnership with education, labor and community-based organizations. The intent is to have voluntary skill standards that are flexible, portable and continuously updated and improved.

What Are Skill Standards?

Skill standards are performance specifications that identify the knowledge, skills and abilities an individual needs to succeed in the workplace. They are critical to improving workforce skills, raising living standards and improving the competitiveness of the U.S. economy.

Skill standards provide measurable benchmarks of skill and performance achievement. They answer two critical questions: What do workers need to know and be able to do to succeed in today's workplace? And, how do we know when workers are performing well? Without this fundamental information, employers do not know whom to hire or where to focus their limited training dollars; employees and new entrants to the workforce do not know what they need to do to improve their performance; and educators do not know how to prepare students for the challenge of the workplace.

Where do Skill Standards come from?

Western European economies that have maintained their competitiveness are characterized by a well-established skill standards system that guides each nation's workforce development strategy. The increased competitiveness of the global economy, and the declining power of the U.S. economy have prompted government, business, labor and education leaders in the US to reevaluate existing approaches and to develop new strategies for workforce development. One of these responses of the *Goals 2000: Educate America Act*, signed by President Clinton in March 1994, which established the National Skill Standards Board (NSSB) to encourage the development of a national system of voluntary skill standards for different occupations. Another was the School-to-Work Opportunities Act of 1994 that encourages states to develop skill standards and link them to national efforts.

Why are Skill Standards Important?

In today's workplaces, the only constant is change. Jobs that once were relatively simple now require high performance work processes and enhanced skills. Because skill standards are changing workplace realities, they become a tool which can be used by applicants and employees to access greater career opportunities.

National recognition of skill standards in career fields provides a common basis for certifying achievement against those standards, thereby allowing for the portability of skills across geographic areas, companies and careers. Updating skills and knowledge is now a lifelong endeavor, causing many employers and employees to spend more effort, time and money on education and training. Skill standards provide benchmarks for making education and training decisions, shaping curricula, and directing funds towards highest value education and training investments.

Who will use the Skill Standards?

Businesses use skill standards to maximize efficiency in recruiting, hiring, training and promoting employees. Firms developing high performance work organizations can use skill standards to identify baseline high performance skills.

Unions use the standards to ensure that workers have a greater voice at the workplace, and benefit from enhanced career and job opportunities.

Educators use the skill standards to develop new and revise existing curricula and programs based upon industry requirements.

Students and job seekers use the standards to understand and acquire the skills needed to attain high wage jobs and successful careers.

Workers use the standards to advance their own careers and enhance their ability to reenter the workforce.

Government uses the skill standards to link other national efforts such as School-to-Work, workforce training and economic development by supporting collaborative efforts among education, business, and labor.

Voluntary, industry-based skill standards should be:

- Responsive to changing work organizations, technologies and market structure.
- Benchmarked to world-class levels of industry performance and free from gender, racial or other forms of bias.
- Tied to measurable, competency-based outcomes that can be readily assessed.
- Inclusive of basic reading, writing and critical thinking skills.
- Useful for qualifying new hires and continuously upgrading employees' skills.
- Applicable to a wide variety of education and training providers, both work and school-based.
- Based on a relatively simple structure to make the system user-friendly.
- A cooperative effort among all stakeholders.
- Developed independently of any single training/education provider or type of education/training provider.

National Alliance of Business

THE BENEFITS AND USES OF SKILL STANDARDS

Skill standards benefit all the stakeholders — business, labor, educators, government and the community. The success of a skill standards development project and its usefulness to the community is dependent on the full participation and commitment of all stakeholders. These benefits can be used as a benchmark for evaluating the effectiveness of collaborative efforts.

How Skill Standards Benefit Employers

Employers can use skill standards to establish personnel qualification requirements. Interviews, performance reviews, and productivity can be evaluated and assessed to a higher degree of accuracy and efficacy. Employers are also able to identify core competencies, workers' abilities to demonstrate competencies and to match competencies to critical work functions and key activities to significantly improve efficiencies and productivity. Performance-based skill standards also provide a vehicle for varying degrees of job certification and the ability to structure competency-based pay scales. In addition, employers use skill standards to:

- Align personnel qualification requirements with nationally adopted certificates of competence.
- Modify employee training.
- Simplify measurement of employee training effectiveness.
- Assess employee skill levels based on industry standards.
- Match employee skills to the work needed.
- More easily document employee skills, training needs, and perfor- mance criteria.
- Improve consumer satisfaction and confidence through better developed evaluation skills of customer contact personnel.
- Improve employee satisfaction and morale by clarifying expecta- tions.
- Improve quality, productivity, time to market and competitiveness.
- Achieve their business goals.
- Partner with education and labor in developing school-to-work initiatives.

How Skill Standards Benefit Labor Unions

Labor unions can use skill standards to gain support for company-sponsored worker training programs and to identify career paths for workers within companies and industries. Unions can provide this information to union members and develop strategies to improve career mobility and stability.

- Improve member value to company.
- Provide a greater worker voice in the company.

- Link skill standards to increased training and upward career mobility for union members.
- Assist employers to match employee skills to the work needed.
- Develop skills-based training and certification initiatives that complement union apprenticeship programs.
- Communicate effectively with employers about worker training and retraining needs.
- Cooperate with education and industry developing school-to-work initiatives.

How Skill Standards Benefit Educators

Educators can identify core competencies and assessments based on the skill standards and implement them in their curriculums. Students can then be required to demonstrate competency throughout their coursework. Academia and industry can build a cohesive relationship through a like-minded expectation of student competencies and work readiness. This enhances an instructor's ability to teach information consistent with industry's entry level expectations and needs. In addition, educators use skill standards to:

- Partner with business and labor in developing school-to-work initiatives.
- Provide effective, targeted instruction.
- Develop benchmarks for certificates of competence earned by students.
- Communicate what companies expect of employees.
- Develop new and evaluate existing curriculum and programs based on industry needs.
- Develop assessments to evaluate skills, knowledge and abilities in classrooms and internships.
- Develop a common language on workforce preparation with business and labor.
- Improve relationships with local businesses, labor unions, other educators and agencies.
- Provide students with relevant career education and counseling.

How Skill Standards Benefit Students and Workers

Skill standards assist students in making career choices by providing industry expectations for success in the workplace. In addition, standards-based curriculum and assessments provide students with credentials that certify work-readiness. Work-ready students can anticipate being hired at higher rates of pay and can experience faster advancement in their chosen fields. Workers can accurately assess their skills against those required for career advancement and plan effectively for their career pathways. They can determine the skills and abilities needed for advancement or transfer within industries, and determine the continuous learning and training they need to upgrade their skills. In addition, students and workers can use skill standards to:

- Achieve clarity regarding what they are expected to learn and how to prepare for work.

- Enter and reenter the workforce with better control of their choices of high skilled and high paying jobs.
- Accurately assess business expectations of the skills needed for positions and careers of their choice.
- Improve mobility and portability of their credentials.
- Obtain certification of competence of the skills they gain through experience, school, training or self-study.
- Enhance their performance and achievement by self evaluation against known standards.
- Be active contributors to the activities that make their organizations successful.

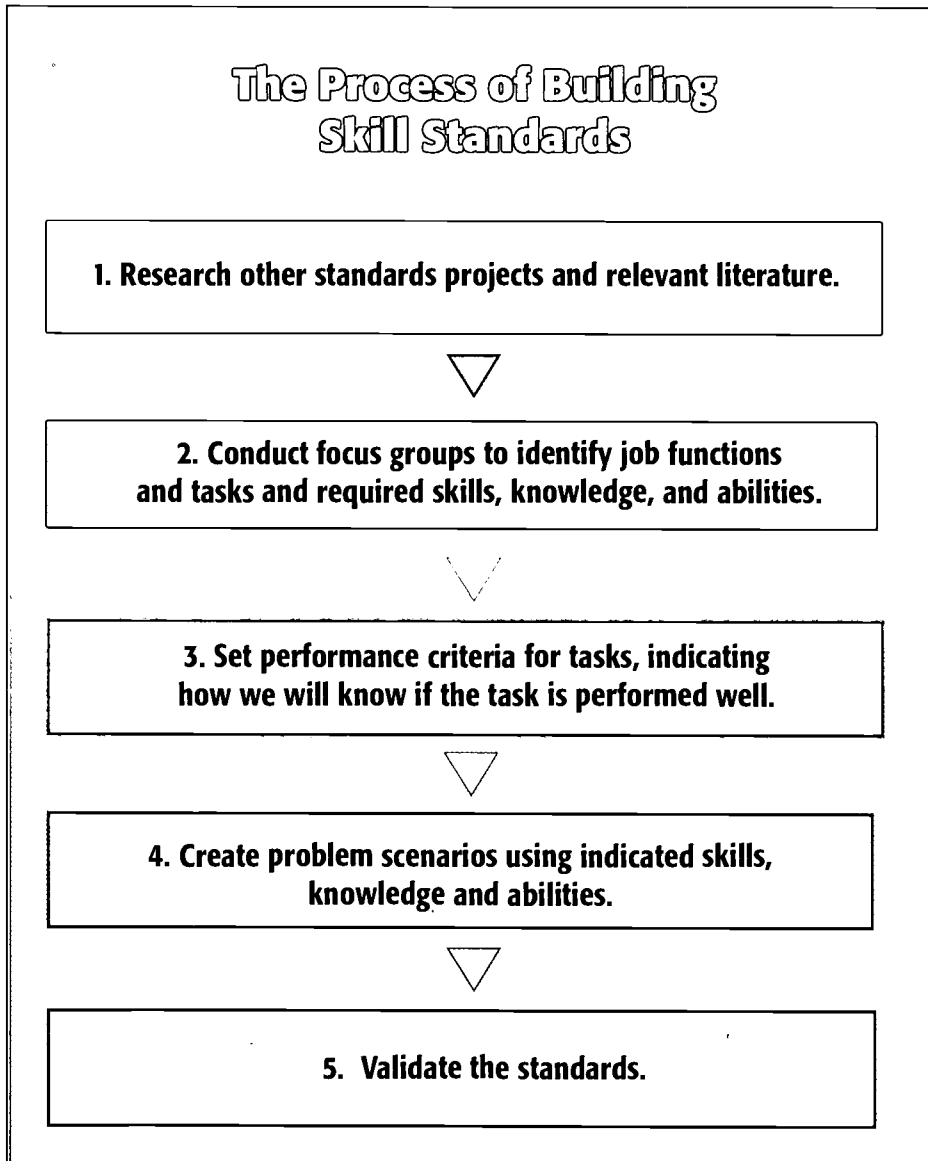## How Skill Standards Benefit Government

Government can provide information that will ensure a better skill match between workers and employers and initiate education reform to better educate future members of the workforce. Skill standards better enable agencies to provide options for career and job mobility and link learning to the needs of the workplace. In addition, government can use skill standards to:

- Assist in the development of a highly skilled, high-quality and competitive workforce and industry base.
- Evaluate the effectiveness of publicly funded education and training.
- Increase opportunities for under-represented populations by making public the information that defines the skills required for success and by facilitating the national adoption of those definitions and their use.
- Support the creation of high performance organizations where they improve living standards for all members of the population.
- Facilitate collaboration between educators and industry.
- Communicate the need and basis for education reform to business, education, labor and the community at large both on local and national levels.

"College is a must... Better skill building, more funding, greater access to a college education. An all-hands-on-deck approach to the educational challenges of America's new century is required...now."

Anthony P. Carnevale, *A College Degree is the Key in* <u>Other Voices, Crosstalk,</u>
Vol. 7, Number 3, p. 10.

THE PROCESS OF
BUILDING
SKILL STANDARDS

The Process of Building
Skill Standards

1. Research other standards projects and relevant literature.

▽

2. Conduct focus groups to identify job functions
and tasks and required skills, knowledge, and abilities.

▽

3. Set performance criteria for tasks, indicating
how we will know if the task is performed well.

▽

4. Create problem scenarios using indicated skills,
knowledge and abilities.

▽

5. Validate the standards.

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PYRAMID OF
COMPETENCIES

The Pyramid of Competencies is a depiction of skill standards in three broad skill categories.

Tier I
Tier I represents the broadest level of competencies, and is the set of employability (SCANS) skills, knowledge, abilities, and personal qualities required of all workers to be successful in today's workplace. These are the universal skills that are needed to apply technical knowledge and tools effectively.

Tier II
Tier II represents technical skills, knowledge, and abilities common to all jobs within a cluster across all industries or industry sectors. For workers in fabrication, for example, knowledge of the applicable federal, state and local laws would be applicable across all sectors.

Tier III
Tier III represents industry-specific technical skills, knowledge, and abilities that are unique to individual jobs or clusters and are the most prone to rapid change. For example, many workers need to upgrade their skills based on sudden market shifts.

Tier III
Industry-specific
technical skills,
knowledge and abilities

Tier II
Technical skills,
knowledge and abilities

Tier I
Foundation skills,
knowledge, abilities
and personal qualities

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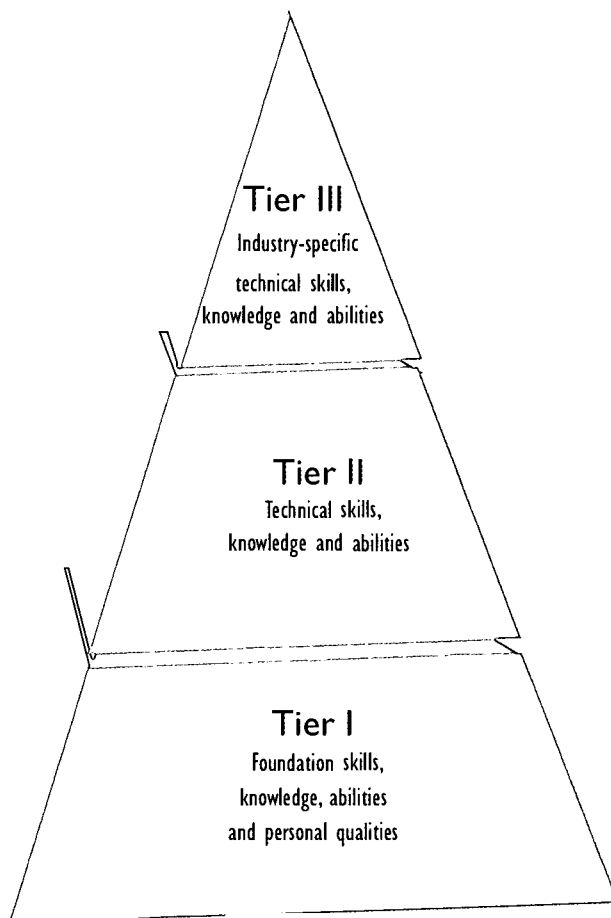
SKILL STANDARDS TO CURRICULUM:
A Continuous Development Process

It is anticipated that the skill standards generated in this project will be used by its education partners to develop or modify curriculum at the community and technical college, four-year college, and university levels. By providing the necessary input from the teaching and training industry, this Skill Standards document is a first step in curriculum development for preparing vocational instructors. We hope it serves the professional-technical college faculty and corporate trainers in particular.

In order to keep current with a rapidly changing workplace, standards need to be reevaluated and updated on a regular basis, with full partner participation at each step. New technological developments impact the ways that workers and their instructors organize and apply their skills, including time management and interpersonal relationships. Increased technological complexity may simplify some of the job tasks but make others more intricate. Today's professional-technical college faculty are asked to acquire a broader range of decision making and customer service skills as well as keeping current with emerging technologies. Ongoing changes like these must be reflected in curriculum in order to meet the needs of industries where expectations for educators are evolving.

Using Skill Standards

Step 1: Skill Standards Identification

- Compile and research existing standards in related jobs and careers
- Conduct focus groups to identify critical work functions and key activities, define key activity performance indicators, and identify technical knowledge, foundation skills and personal qualities.
- Conduct a survey of current workers to determine level of SCANS skills required for the job.
- Develop work-related scenarios to place the skill standards in the context of the work environment.
- Validate the data gathered from the focus group.
- Disseminate skill standards information to involved parties from industry, education and labor for their review and editing.

Step 2: Assessment

- A person generates and collects evidence of his or her ability to perform at the levels determined by the skill standards.
- A student, trainee, apprentice, prospective worker or worker seeking additional training is assessed to determine present skill level through direct and indirect evidence.
- Direct evidence includes products and items produced by the person who is assessed.

- Indirect evidence includes supporting information.
- Assessment results meet the criteria of validity, currency, authenticity and sufficiency.
- Demonstration of validity is a tangible item or record of action.
- Demonstration of authenticity shows that the item or specific piece of a team-effort is produced by the individual being assessed.
- Demonstration of sufficiency provides enough evidence to match key tasks and performance criteria of the skill standards.

Step 3: Curriculum Development

- Identify necessary competencies based on the skill standards information.
- Perform gap analysis to determine changes or additions to be made to curriculum.
- Revise existing curriculum to better meet the current and future needs of the industry.
- Develop new curriculum and establish new programs based on these competencies.
- Develop program outcomes for specific academic and training programs, including Tech Prep, 2-year and apprenticeship programs.

Step 4: Articulation

- Develop models to support the articulation of program outcomes and competencies between academic and training systems.
- Establish articulation agreements between existing programs to ensure portability of skills.
- Connect competencies and Certificates of Competence with benchmark documentation to build national portability systems.

A Continuous Updating Process

A continuous exercise by all partners of revising and validating skill standards on a regular basis is necessary. Updating of curriculum and current training methods to meet workplace standards is required for success in national economic development.

Individual workers must have access to clearly stated competency goals and direct access to skill development assistance. With cooperative effort on local and national levels, we can begin to resolve the workforce shortages in professional-technical education that face us today.

Allied Health Instructor Bonnie Tidwell from Seattle Vocational Institute reviews the key activities.

"How teaching has changed - two patterns are clear to me. First, teaching is becoming more "front-loaded," relying more and more on pre-teaching development of learning outcomes, projects, assessments, instructional resources, and support networks. Teachers cannot rely on making it up as they go along or trust in their experience or knowledge to keep them ahead of the students' and industry's needs. Front-loaded activities are both extensive and intensive and must rank as equally important to student success as instructional method and process."

Steve Quinn
Automotive instructor
Olympic College

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RESULTS: CUSTOMIZED TRAINERS

- Introduction to Customized Trainers Skill Standards
- Summary of Critical Work Functions & Key Activities
- Skill Standards for Customized Trainers
- Validation Survey Results
- Reflections on Customized Trainer Focus Group
- Customized Training, Microsoft Style
- Perspective of an Industry Skills Trainer

RESULTS: CUSTOMIZED TRAINERS

INTRODUCTION TO THE CUSTOMIZED TRAINER SKILL STANDARDS

State of the industry report

According to *The 2000 American Society for Training & Development State of the Industry Report*, which provides a comprehensive review of employer-provided training in the United States, in 1998 companies spent 25 percent of all training expenditures to outside companies, the least of which were technical and vocational institutions and government organizations. Most frequently used types of outsourcing included private training and consulting firms, independent training consultants and contractors, product suppliers, and four-year colleges and universities. The typical subject matter for training was in two categories: (1) technical processes and procedures and (2) information technology skills, each claiming 13 percent of the average organization's training expenditures for the year.[1]

Despite these national trends based on data to 1998, observers from the business community on the Steering Committee noted the similarity of the workplace skills and duties of professional-technical college faculty to their industrial instructors. Boeing, in particular, indicated plans for closer ties with the vocational instructors in two-year colleges. Thus, the project extended itself with another focus group comprised of professional-technical college instructors who do customized training in industry, large corporate trainers, and independent trainers who customize their training for both business and industry and the colleges. We are using the term *customized* to mean training brought out to the corporate world.

Diverging responsibilities

The standards as presented here represent the work of this focus group who initially identified the differences between what they do and what professional-technical college instructors do. When first asked about what's missing, one participant stated not seeing a focus on the learner. The group concurred, noting that college instructors had many more specific duties and regulations. A college instructor who also provides training in industry affirmed the similarities and differences.

We have noted directly on the text when there was disagreement by trainers from large and small organizations about certain tasks such as setting up instructional equipment or systems or working with advisory committees. Rather than advisory committees, trainers use employers and/or a consortium of employers for specific training projects and often serve as a liaison among administrative units within an organization. Trainers who reviewed and validated the work agreed.

[1] *McMurrer, Daniel P., Mark E. Van Buren, and William H. Woodwell, Jr., American Society for Training and Development, The 2000 ASTD State of the Industry Report, pp.12-13.*

Variation in responsibilities

For the most part, however, there was general agreement about the scope of responsibilities except for two areas—(1) budgets and grant writing and (2) student assessment. The first is that the Customized Trainer (or Corporate Trainer) rarely did budgets or grant writing except as related to their contract duties. The second area was more controversial. Some trainers indicated that there could not be quality training without student assessment. Evaluating student performance, however, was not a priority for large companies like Microsoft who could train up to 5,000 people worldwide at one time through online, web-based training systems. Such training also suggested that student safety and ergonomics were not an instructor's responsibility.

Cross-cultural values

A third area was brought out by one of the reviewers, a trainer who works independently with organizations and colleges and is also part of a worldwide organization. She indicated that additional knowledge to critical function F. *Perform administrative functions* was:
*   Knowledge of cross-cultural values in relationship to instructional methodologies/language.
*   Knowledge/self-awareness of instructor style.
*   Knowledge of "co-creating" learning environments, outcomes and processes.
*   Ability to design assessment tools for knowledge, products, processes and skill performance.

Norma W. Goldstein, Ph.D.
Project Director and Editor
Assistant Dean for Instructional Improvement
Renton Technical College

The focus group on The Customized Trainer both validated the standards for professional-technical instructors and highlighted their differences. As one participant stated, "Quality trainers share such common values—good teaching and learning are affirmed for me!"

VALIDATING CUSTOMIZED TRAINER SKILL STANDARDS

After this initial group established the critical functions and key activities of the customized trainer, the information was then given to the members of the steering committee as well as to another group of customized trainers to validate the work that was previously established.

Susie Navone,
Project Coordinator
Renton Technical College

Overall, a group of 50 people composed/reviewed these standards. Because of the diversity of when, where, and for whom customized training is provided, as well as the diversity of expected outcomes, it was difficult to reach much consensus. This document does reflect that diversity and does its best to establish core responsibilities.

SUMMARY OF CRITICAL WORK FUNCTIONS AND KEY ACTIVITIES FOR CUSTOMIZED TRAINERS

Administrative Assistant Diana Hagen from Renton Technical College diligently captures all comments during the Customized Trainer focus group.

A. Manage learning environments

A1. Obtain required equipment, systems, tools, supplies, and materials

A2. Set up instructional systems, equipment and/or tools

A3. Maintain instructional systems, equipment and/or tools

A4. Develop a growth and replacement plan for systems, equipment and/or tools

A5. Supervise learning environments

A6. Research, select, and evaluate off-campus learning environments

A7. Evaluate and monitor the safety of the instructional areas and practices

B. Develop outcomes, assessments, and curricula

B1. Identify, evaluate, and modify current outcomes

B2. Create, evaluate, and modify curriculum

B3. Create, evaluate, and modify assessments

B4. Implement curriculum, outcomes, and assessments

B5. Integrate curriculum with other faculty in the department and in other instructional areas/institutions

C. Develop customized training programs and materials

C1. Develop, review, and update program/course plan

C2. Recruit and work with employers to meet changing needs of the program/course and industry

C3. Identify, evaluate, and modify program/course outcomes and assessments

C4. Research, identify, evaluate, and implement current industry standards and trends

C5. Coordinate program development with other college programs and institutions

C6. Develop customized training programs

D. Provide student instruction

D1. Prepare and/or gather current instructional materials and equipment

D2. Provide individual and group instruction

D3. Initiate, develop, and implement student assessments

D4. Modify instructional materials and methods based on student and industry assessments and feedback

E. Provide support and guidance to students

E1. Respond to student needs

E2. Provide information or referrals to meet student needs

F. Perform administrative functions
   - FI. Perform documentation and record keeping duties
   - F2. Record and submit student grades, if applicable
   - F3. Serve on departmental and college committees, if applicable
   - F4. Provide input for program, schedules and corporate/college publications
   - F5. Develop and manage budgets
   - F6. Research and assist with writing and implementing grants and targeting financial resources, as applicable

G. Create and maintain a professional environment
   - GI. Collaborate with staff, faculty, and students
   - G2. Work with program advisory committee, if applicable
   - G3. Serve on departmental and college committees, if asked
   - G4. Maintain current knowledge of the field
   - G5. Participate in professional networking
   - G6. Develop a professional development plan
   - G7. Promote a professional instructional environment

H. Market customized training
   - HI. Participate in corporate, campus, and community events, as applicable
   - H2. Serve on advisory committees, Tech Prep consortia, and/or other community and college organizations, as applicable
   - H3. Provide information for prospective students
   - H4. Develop and manage public relations information
   - H5. Perform recruiting activities

I. Learn and adapt new technologies
   - II. Obtain and maintain certification on program-specific technology
   - I2. Maintain current knowledge of technology in the field
   - I3. Identify, evaluate and implement emerging technologies according to industry needs
   - I4. Identify, evaluate, and implement new instructional technologies

J. Perform program management functions
   - JI. Perform documentation and record keeping duties
   - J2. Mentor, orient, and support new and part-time trainers
   - J3. Manage instructional and program assistants
   - J4. Research and assist with writing and implementing grants and targeting financial resources, as applicable

VALIDATION SURVEY RESULTS FOR CUSTOMIZED TRAINERS

The job functions and tasks identified during the focus group must be validated by a statistically significant number of vocational teaching professionals. A survey instrument was developed that asked respondents to rate the level of importance for performing each job function and key work activity.

Level of Importance
0 = not important
1 = somewhat important
2 = important
3 = very important
4 = critical

The similarity in responses from the diverse types of customized trainers is significant, and all critical work functions were validated as being important, very important or critical.

Survey responses to the critical work functions were averaged and are presented below.

Level of Importance of the Functions for Customized Trainers

	Not Important	Somewhat Important	Important	Very Important	Critical
A. Manage learning environments					
B. Develop outcomes, assessments, and curricula					
C. Develop customized training programs & materials					
D. Provide student instruction					
E. Provide support and guidance to students					
F. Perform administrative functions					
G. Create and maintain a professional environment					
H. Market customized training					
I. Learn and adapt new technologies					
J. Perform program management functions					

Occupation Cluster: Customized Trainers
Critical Work Function: A: Manage learning environments

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
A1 **Obtain required equipment, systems, tools, supplies, and materials**** *Some trainers from large corporations do not pursue funds.* ***These reviewers also added a performance indicator: Room and facility arrangements are accessible for learners per ADA (American for Disabilities Act) guidelines.*	• Requisitions, budgets and grant requests are submitted in a timely manner per company policies. • Systems, equipment, and tools are thoroughly researched and ergonomic requirements are properly considered. • Equipment/system impact on student learning is documented per company procedures. • Adequate supplies and materials are obtained and maintained. • Equipment, systems, tools, supplies are properly identified/justified. • Alternative sources of funds and system/equipment are actively pursued as appropriate.*	• Knowledge of equipment requisitions procedures. • Knowledge of procedures for submitting budget and/or grant requests. • Knowledge of equipment and tool options and the ability to access relevant sources of information. • Ability to access alternative sources of funds and equipment/systems. • Knowledge of student learning and the ability to determine the impact of equipment/systems. • Knowledge of ergonomics. • Knowledge of company policies and procedures.	• *Understands technology applications.* • *Acquires supplies/equipment, orders/maintains inventory and monitors safe, efficient use of learning materials.* • *Recognizes accuracy of and analyzes information.* • *Identifies goals/constraints, analyzes situation, evaluates alternative solutions and formulates plan of action.* • *Understands system organization, follows procedures and recognizes system strengths/limitations.*
A2 **Set up instructional systems, equipment and/or tools** ** Large companies like Microsoft do not require their trainers to do setup.*	• Systems and equipment setup is completed in accordance with manufacturer's specifications. • All safety procedures are completely followed. • Systems and equipment are set up to ensure access by students. • New systems and equipment are set up to be compatible with existing equipment/systems and learning environment as appropriate.* • Technical support is accessed when appropriate.	• Knowledge of sources of information regarding manufacturer's specifications. • Knowledge of safety procedures. • Knowledge of student access issues regarding systems and equipment. • Knowledge of compatibility issues between new and existing equipment/systems. • Knowledge of existing technical support capabilities.	• *Understands system organization, follows procedures, responds to system demand and recognizes system strengths/limitations.* • *Interprets/summarizes/integrates information.* • *Monitors/troubleshoots system performance and malfunctions.* • *Uses previous experience to predict outcomes and imagination to visualize activities and the relationship between parts/whole.* • *Understands/manipulates technology for desired results.*
A3 **Maintain instructional systems, equipment and/or tools** ** Some trainers are not responsible for repairs or safety standards.*	• Maintenance schedules are properly followed. • All maintenance records/warranty requirements are current and maintained in an organized manner. • Equipment and tools are properly secured and safety standards met.* • Equipment, tools and system malfunctions and repair needs are promptly diagnosed/repaired. • Equipment, tools, and systems are kept clean and properly maintained. • Repair and support personnel are accurately identified and informed.*	• Knowledge of maintenance schedules and procedures and the use of tools required for maintenance of equipment, and systems. • Knowledge of warranty and maintenance records requirements. • Ability to clean and secure tools. • Ability to diagnose and repair systems, equipment and tools. • Knowledge of roles and responsibilities of company personnel and departments.	• *Follows specific maintenance procedures and policies.* • *Pays attention to details, works with minimal supervision and completes assigned tasks* • *Follows/adjusts schedule and efficiently manages time.* • *Monitors system performance, troubleshoots system malfunction and adjusts system operation.* • *·Identifies the problem, appropriately refers discrepancy and analyzes possible causes.*

Occupation Cluster: Customized Trainers
Critical Work Function: A: Manage learning environments

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
A4 Develop a growth and replacement plan for systems, equipment and/or tools * Most independent trainers do this, but large corporate trainers do not.	• Student, program and industry needs are correctly identified and present inventory is accurately assessed. • Funding sources and timelines are correctly identified. • Safety issues are carefully considered.* • Technology changes and industry compatibility are accurately assessed. • Cost-effective recommendations are included in the plan. • Plan includes implementation schedule, personnel training and responsibilities and assessment mechanism and process.	• Ability to access information on funding sources and availability. • Knowledge of current industry, student, program and safety requirements. • Ability to access equipment maintenance information and technical support. • Knowledge of system or program requirements and facility and system capabilities. • Knowledge of assessment tools.	• Records information accurately and prepares and writes simple documents. • Orders and maintains inventory, distributes supplies/equipment, and monitors efficient utilization of materials. • Selects/obtains and analyzes relevant data/information and predicts outcomes. • Understands system principles and policies, follows policies and procedures and recognizes system strengths/limitations. • Understands technological results and identifies appropriate technology.
A5 Supervise learning environments * Generally in large corporations, safety issues are not the responsibity of the trainer.	• All safety procedures are properly followed and requirements are completely met.* • Students and all classroom personnel are thoroughly informed of safety procedures regarding all equipment. • Work ethics and mutual respect are modeled. • Environmental distractions are minimized. • Learning is supported and facilitated by the appropriate use of instructional media and equipment. • Facilities needs and requests are submitted in a timely manner in accordance with company policies and procedures. • Adequate assignments and schedules are established for lab/shop activities. • Off-campus sites and activities are assessed for appropriate management and supervision of students.	• Knowledge of safety requirements and procedures and all OSHA/WISHA and hazardous materials procedures. • Ability to model work ethics and mutual respect. • Knowledge of all applicable laws and regulations regarding the learning environment. • Knowledge of and ability to utilize instructional media and equipment. • Knowledge of facilities and equipment requisition procedures and timelines. • Ability to minimize environmental distractions. • Knowledge of appropriate management and supervision of students for off-campus sites and activities.	• Identifies customer concerns/complaints and responds to customer needs. • Demonstrates commitment to excellence and leads by example. • Displays enthusiasm/positive attitudes and motivates others to extend their capabilities. • Understands applications and manipulates technology for desired results. • Responds appropriately to and takes active interest in others, works to identify/remove social barriers and encourages cooperation. • Identifies the problem, analyzes possible reasons and devises/implements plan of action. • Recognizes differences/biases, demonstrates sensitivity to diversity, respects rights of others and supports individuality.

Occupation Cluster: Customized Trainers
Critical Work Function: A: Manage learning environments

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
A6 Research, select, and evaluate off-campus learning environments * Large corporations such as Microsoft do not require these activities of trainers.	• Off-campus sites are regularly visited to determine suitability for student learning.* • Off-campus learning environments and their site supervisors meet established criteria.* • Off-campus learning sites are identified and properly recruited in accordance with the established course outcomes.* • Meetings are held with site supervisors to inform them of their roles and responsibilities and the roles and responsibilities of students and instructors.* • Work-based learning environments are correctly evaluated in an ongoing manner in accordance with program specification.* • Off-campus sites are researched and evaluated for distinctive needs.*	• Knowledge of off-campus sites and site supervisors criteria. • Ability to recruit off-campus sites which meet established criteria. • Knowledge of roles and responsibilities of site supervisors, instructors and students. • Knowledge of work-based learning environment evaluation procedures and criteria.	• Selects/obtains relevant information, researches additional information sources and creates process for gathering data. • Analyzes organization of data and transfers information between formats. • Understands/interprets/ summarizes/integrates information. • Understands computer operation, performs basic data entry, retrieves stored data and utilizes multiple software. • Identifies goals/constraints, analyzes situation/informa- tion, compiles multiple viewpoints and formulates plan of action.
A7 Evaluate and monitor the safety of the instructional areas and practices * Most large corporate trainers are not required to perform these tasks. ** Some independent trainers do not perform these requirements.	• Students and staff are oriented to safety procedures per company policies and federal and state guidelines.* • Safety rules and regulations are followed. • Incidents are appropriately reported and documented in a timely fashion. • Staff and students have current CPR and First Aid credentials, as required.* • Safety procedures are posted per Labor and Industry guidelines.* • College safety departments/personnel are notified to ensure that safety supplies are readily accessible.* • Safety hazards are reported immediately. • MSDS (Material Safety Data Sheets) are available as required in instructional areas.** • OSHA/WISHA requirements and hazardous materials procedures are completely followed and the learning environment is maintained in compliance with all applicable laws and regulations.**	• Knowledge of safety requirements and procedures and all OSHA/WISHA and hazardous materials procedures. • Ability to read, interpret, and apply MSDS data. • Knowledge of emergency telephone numbers and procedures. • Knowledge of college and state safety policies and procedures. • Ability to operate safety equipment within instruc- tional program.	• Follows rules/policies/ procedures. • Accepts responsibility for own behavior. • Demonstrates commitment to excellence regarding safety. • Identifies system discrepan- cies, monitors system performance, troubleshoots system malfunction/failure and adjusts system operation. • Uses materials in a safe, efficient manner and monitors safe, efficient utilization of materials. • Recognizes accuracy of/ summarizes/integrates and analyzes information. • Recommends course of action.

Occupation Cluster: Customized Trainers
Critical Work Function: B: Develop outcomes, assessments and curricula

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
B1 Identify, evaluate, and modify current outcomes	• Outcomes are properly documented in accordance with company and accrediting body policy and procedures. • Industry standards are thoroughly researched in order to identify outcomes/competencies. • Outcomes are reviewed by advisory committee as applicable. • Outcomes are continuously evaluated and modified as necessary based on changing industry standards/ accrediting bodies.* • Outcomes are written for learner comprehension and performance. • All necessary skills are included in the outcomes.	• Knowledge of documentation procedures to record outcomes. • Ability to access accrediting bodies, industry and corporate sources of information regarding outcomes and standards.* • Knowledge of technical and non-technical skills required for success in the workplace and the ability to translate those into outcomes. • Knowledge of the needs of diverse learners. • Knowledge of outcomes, definitions and requirements.	• Records information accurately, prepares documents and summarizes/ paraphrases information. • Selects appropriate information, identifies relevant details, interprets/summarizes information/facts/specifications, and proposes options based on research. • Makes connections between old and new, demonstrates creative thinking/problem solving, utilizes brainstorming techniques, and develops/ applies creative solutions. • Identifies process, interprets information, applies processes to new information and transfers information between formats. • Demonstrates sensitivity to diversity, supports individuality and supports a correct course of action.

* Most corporations do not have an accrediting body.

B2 Create, evaluate, and modify curriculum	• Curriculum sequence supports student success at achieving outcomes and competencies. • Appropriate learning activities are selected for the curriculum. • Curriculum properly aligns with accrediting bodies, company mission, and department goals and is driven by workforce needs. • Curriculum includes course description, learning outcomes, competencies course content, content objectives, assessment tools, content assessment, ADA accommodations, course and grading requirements. • Proper prerequisites are established if necessary. • Curriculum is regularly reviewed by appropriate personnel and/or accrediting bodies as required to meet all legal requirements.* • Flexibility is built into the curriculum to address multiple learning styles and individual student need. • Curriculum is tailored to individual needs when appropriate. • Opportunities for team teaching with other disciplines are actively explored.	• Knowledge of course description, learning outcomes, course content, content objectives, assessment tools, content assessment and the ability to apply them to curriculum. • Knowledge of curriculum sequencing and prerequisites. • Ability to write competencies and performance objectives. • Knowledge of a variety of teaching and learning strategies appropriate to diverse learners. • Ability to access employers to determine workforce needs. • Knowledge of requirements for ADA accommodation. • Knowledge of curriculum review requirements and procedures and legal issues regarding curriculum. • Knowledge of program adaptation, strategies and processes. • Ability to team teach among/ across disciplines.	• Follows rules, employs level of concentration, pays attention to details and monitors performance standards. • Records information accurately and writes/creates/ edits simple and complex final documents. • Understands continuous improvement process, identifies systemic improvement, suggests system modifications and determines system components to be improved. • Understands learning process, draws upon prior knowledge, selects/applies learning tools and investigates new learning techniques. • Makes connections between old and new, demonstrates creative thinking/problem solving, utilizes brainstorming and formulates new approaches.

Occupation Cluster: Customized Trainers
Critical Work Function: B: Develop outcomes, assessments and curricula

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
B3 **Create,** **evaluate,** **and modify** **assessments** *All independent trainers indicated they perform all these activities, but Microsoft trainers indicated they do very few of these assessments for large numbers of student participants.*	• Outcomes are assessed by a variety of measurements.* • Assessments include a variety of activities including performance-based or theory-based assessments.* • Assessment criteria are established in accordance with industry standards and/or accrediting bodies.* • Assessments accurately measure student performance of specified outcomes and competencies.* • Assessments are evaluated/modified based on industry changes, department input and student needs.* • Assessment tools and criteria provide relevant feedback for learner self-assessment and improvement.*	• Knowledge of test construction. • Knowledge of various approaches to assessing student learning. • Knowledge of theory-based and performance-based assessments. • Knowledge of assessment measurements. • Knowledge of industry and accrediting body standards. • Ability to modify assessments. • Knowledge of feedback strategies appropriate to diverse learners.	• Recognizes poor performance, understands material being taught, identifies training needs and develops appropriate training. • Understands learning process, draws upon experiences and investigates new learning tools/techniques. • Collects data, troubleshoots system performance. • Accurately records information and creates original documents. • Obtains/analyzes relevant information and creates data gathering processes.
B4 **Implement** **curriculum,** **outcomes, and** **assessments** *Only college trainers typically have knowledge of published student outcomes.*	• Outcomes assessments are performed to evaluate student performance according to appropriate criteria. • Student performance is evaluated in relation to published student outcomes/competencies.* • Industry standards are integrated within the curriculum. • Implementation and assessment occur in an ongoing manner to keep current with technology and trends. • Post-completion student and industry assessments are used to improve curricula and instructional practice.	• Knowledge of campus resources for student follow-up questionnaires. • Knowledge of local employer contacts. • Knowledge of and ability to implement curriculum improvements. • Knowledge of current technology and trends. • Knowledge of campus.	• Follows rules, shows initiative and completes tasks. • Understands learning process, draws upon experiences, applies learning tools/ techniques. • Identifies poor performance/ attitudes, knows learning material, conducts training and coaches others to apply related concepts. • Identifies principles, examines data for relevance/accuracy and uses logic to draw conclusions. • Locates information, performs intermediate word processing/ basic spreadsheets and utilizes multiple software.
B5 **Integrate** **curriculum** **with other** **faculty in the** **department** **and in other** **instructional** **areas/** **institutions*** *Independent customized trainers often work independently.*	• Knowledge of course content and outcomes in related departments is shared.* • Competencies are consistent in multi-sectioned courses and overlapping course content areas. • Cross-discipline team teaching is implemented as possible. • Instructional resources are shared across departmental and institutional areas. • Cross-discipline courses are integrated when pertinent. • Tech Prep policies are followed as applicable.	• Knowledge of program and degree requirements of other programs. • Ability to access program and degree requirements of other programs. • Knowledge of and ability to access instructional resources across departments and institutions. • Knowledge of intra-departmental resources. • Ability to integrate cross-discipline courses. • Knowledge of Tech Prep policies and procedures as applicable.	• Demonstrates commitment to social improvement and removing social barriers. • Addresses audience/purpose, actively participates in discussion, poses critical questions and debates issues. • Attends to team members/ activities, resolves conflicts and responsibly challenges existing policies. • Analyzes group dynamics and underlying issues and resolves technical issues. • Analyzes system principles/ configuration, recognizes system limitations and evaluates process.

Occupation Cluster: **Customized Trainers**

Critical Work Function: **C: Develop customized training programs & materials**

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
C1 Develop, review, and update program/course plan	• Course sequence supports student success at achieving outcomes/ competencies. • Program aligns with accrediting bodies and company mission and program meets all legal requirements. • Program meets workforce needs. • Program plan includes learning outcomes and program assessment tools in both core and industry-specific courses. • Proper prerequisites are established if necessary. • Program is regularly reviewed by advisory committee and/or accrediting bodies as required. • Advising and accrediting bodies are notified of proposed changes and appropriate approvals obtained. • Flexibility is built into the program to address multiple learning styles and individual student needs.	• Knowledge of learning process. • Knowledge of accreditation requirements and company mission. • Ability to access sources of information regarding workforce needs and the ability to apply workforce needs to program plan. • Knowledge of requirements of learning outcomes/competencies, program assessment tools, core support and prerequisite courses. • Knowledge of accrediting bodies review, approval procedures and legal requirements regarding program plan. • Knowledge of alternate instructional strategies to accommodate multiple learning styles.	• *Identifies the process, selects appropriate categories, applies process to new information and analyzes organization of information.* • *Collects data, identifies system discrepancies and monitors and troubleshoots system performance.* • *Responds and analyzes customer needs and demonstrates commitment to customer.* • *Analyzes situation and considers risks/implications, generates and evaluates alternative solutions and formulates plan of action.* • *Identifies relevant details/ facts/specifications, follows set of instructions, and interprets/summarizes/ synthesizes information.*
C2 Recruit and work with employers to meet changing needs of the program/course and industry*	• Employers are contacted on a regular basis to determine current and ongoing changes in the industry. • Employer recommendations are solicited and recorded in the minutes as necessary. • Meeting minutes are filed and maintained in accordance with company policies and procedures. • A variety of resources are utilized to network with people working and/or teaching within the field.	• Knowledge of the employer base and the ability to access it. • Knowledge of community diversity. • Knowledge of company/ college policies and procedures. • Knowledge of campus/ company resources.	• *Responds to verbal/nonverbal communication, interprets/ clarifies/influences communication.* • *Demonstrates commitment, works to improve team skills and supports team members.* • *Recognizes job tasks and distributes work assignments.* • *Moderates discussion, interprets complaints/ concerns, analyzes group dynamics and detects underlying issues.* • *Demonstrates commitment to excellence, displays enthusiasm, persuades others to reverse negative attitudes/ behaviors and consolidates varied viewpoints/positions.* • *Understands legal aspects of discrimination, demonstrates awareness of the value of diversity and encourages a correct course of action.*

* Please note: Trainers often use employers and/or a consortium of employers for specific training projects and often serve as a liaison among administrative units within an organization.

Laura Parkins from South Seattle Community College discusses the role of the instructor in the classroom.

Occupation Cluster: Customized Trainers
Critical Work Function: C: Develop customized training programs & materials

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
C3 Identify, evaluate, and modify program/ course outcomes and assessments * Independent trainers do not assess per accrediting bodies.	• Program outcomes are assessed by a variety of measurements. • Program assessment criteria are established in accordance with industry standards and accrediting bodies and accurately measure program performance of specified outcomes/competencies.* • Program assessments are correctly evaluated and modified based on changes in the industry, advisory committee input, and community and student needs. • Program outcomes are properly documented in accordance with college and accrediting body policy and procedures.* • Industry standards are thoroughly researched in order to identify outcomes and competencies. • Outcomes/competencies are continuously evaluated and modified as necessary based on company recommendations, community needs, government and/or transfer require-ments and changing industry standards / accrediting bodies. • Technical and non-technical skills are included in the outcomes in an effective manner.	• Knowledge of outcomes and assessment activities and criteria and relevant industry and accrediting body standards. • Knowledge of company committee protocols. • Knowledge of technical and non-technical skills and the ability to integrate them into outcomes. • Ability to write assessments that accurately measure program outcomes/ competencies and to evaluate and modify program assessments. • Ability to write program outcomes and competencies and knowledge of documen-tation procedures for program outcomes/competencies.	• *Collects data, identifies system discrepancies and monitors and troubleshoots system performance.* • *Composes and edit assess-ment documents, creates original documents.* • *Interprets information, summarizes/integrates information and analyzes information.* • *Identifies personal societal values, demonstrates commitment to social improvement and recom-mends ethical course of action.* • *Demonstrates creative thinking process while problem solving, applies creative solutions to new situations and organizes new processes/procedures.*
C4 Research, identify, evaluate and implement current industry standards and trends * Independent trainers perform only these activities for this function.	• Advisory bodies and agencies are regularly consulted on industry standards. • Industry trends and changes are identified, evaluated and incorporated with management approval.* • Employers/Industries are consulted and/or surveyed on an ongoing basis.* • Retraining and Back-to-Industry opportunities are included in the professional improvement plan. • Research through trade journals, industry visits and networking are conducted on a regular basis including attending professional meetings.*	• Knowledge of management protocols. • Knowledge of current practices and issues in industry. • Ability to demonstrate the applicable and relevant skills required to implement current industry standards. • Knowledge of research theory and design. • Knowledge of applicable laws and industry standards. • Knowledge of appropriate trade journals.	• *Understands continuous improvement process, identifies needed systemic improvement and determines and suggests system modifications/improvements.* • *Selects/obtains relevant data/ information, analyzes data and researches additional information sources.* • *Understands decision-making process, generates and evaluates alternative solutions and formulates plan of action.* • *Applies rules/principles to process/procedure, extracts information and examines information for relevance and accuracy.* • *Presents and explains basic ideas/concepts, analyzes group/individual response and poses critical questions.*

Occupation Cluster: Customized Trainers

Critical Work Function: C: Develop customized training programs & materials

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
C5 **Coordinate program development with other college programs and institutions**	• All Instructional policies and guidelines are thoroughly researched and followed. • Graduation data from transfer institutions is procured. • Knowledge of related course content and outcomes in similar institutions is shared. • Cross-discipline team teaching is implemented when possible. • Instructional resources are shared across departmental and institutional areas. • Cross-discipline courses are integrated when pertinent.	• Knowledge of articulation and/or transfer agreements. • Knowledge of program and degree requirements and outcomes of other programs and institutions. • Ability to access program and degree requirements of other programs and institutions. • Knowledge of and ability to access instructional resources across departments and institutions. • Knowledge of industrial outcomes and competencies.	• *Establishes rapport with customers, modifies behavior to environment and encourages cooperation/negotiation.* • *Understands system organization/hierarchy, analyzes system configuration/ stability and recognizes system strengths/limitations.* • *Attends closely to team activities, actively participates in team activities, works to improve team skills and encourages/supports team members.* • *Understands negotiations process, analyzes group dynamics, and detects underlying issues.* • *Listens attentively and responds to verbal/nonverbal communication and clarifies communication.*
C6 **Develop customized training programs and materials**	• Customer is interviewed to determine individual needs and requirements. • Appropriate goals and outcomes are established. • Appropriate timelines are developed. • Appropriate venues are identified. • Materials and resources are identified, acquired and developed. • Cost parameters are established. • Methodologies are agreed upon. • Prerequisites are identified. • Curriculum/course content are designed to meet customer needs. • Program is delivered to meet customer specifications. • Formal and/or informal assessments based on course outcomes are administered to evaluate student performance as required. • Course evaluations are administered and reviewed with client. • Students are provided information or referrals to meet their learning requirements. • Customer requests for future training are followed up or referred as appropriate. • Marketing plan is developed which includes how to market, what marketing tools to use, schedule of marketing events, and the target population.	• Knowledge of the content. • Knowledge of methodologies. • Knowledge of the tools to develop the materials. • Ability to teach to different learning styles. • Knowledge of a variety of teaching and learning strategies appropriate to diverse learners. • Ability to develop curriculum. • Knowledge of various venues and their advantages and deficits. • Knowledge of and ability to operate equipment required to deliver the program. • Ability to develop and administer assessments to evaluate student performance. • Knowledge of curriculum/ training programs available to students. • Knowledge of student abilities prior to beginning the class and ability to assess students' prior learning.	• *Models proper performance/ attitudes, provides constructive feedback/reinforcement, develops appropriate training procedures and encourages learner independence.* • *Responds to and analyzes customer's needs and demonstrates commitment to customer.* • *Demonstrates commitment to excellence, motivates others to extend their capabilities, displays enthusiasm/positive attitudes and consolidates varied viewpoints/positions.* • *Transfers information between formats.* • *Analyzes group dynamics and detects underlying issues.* • *Identifies own strengths/ limitations, accepts constructive criticism and analyzes and adjusts goals.* • *Understands legal aspects of discrimination, respects rights of others and encourages/ supports individuality.*

Occupation Cluster: Customized Trainers
Critical Work Function: D: Provide student instruction

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
D1 **Prepare and/or gather current instructional materials and equipment**	• Instructional materials are clearly identified, support curriculum outcomes, and are completely reviewed on a regular basis. • All appropriate options are thoroughly researched to ensure quality and currency of instructional materials. • Instructional materials appeal to multiple learning styles and diverse learners. • Instructional materials are customized to meet student needs and program outcomes. • Other resources are consulted to ensure availability of instructional materials.	• Knowledge of instructional materials includes, but is not limited to: textbooks, reference materials, audio-visuals, websites, handouts, software and simulations. • Knowledge of curriculum outcomes. • Knowledge of sources of information regarding instructional materials and the ability to access them. • Knowledge of learning styles and diverse teaching methodologies and the ability to implement them. • Knowledge of state/federal requirements or guidelines regarding instructional materials. • Ability to customize instructional materials to meet student needs and program outcomes. • Knowledge of campus/company resources.	• *Prepares and gathers instructional materials and equipment.* • *Identifies appropriate technology and understands requirements of the task.* • *Understands learning process, selects/applies learning tools, and analyzes application of learning tools.* • *Identifies training needs and develops appropriate training procedures and learning materials.* • *Selects appropriate information/concepts, identifies relevant details, facts, specifications, researches to gain knowledge/information and synthesizes information.* • *Applies appropriate principles/laws/theories to learning situations and generates lesson plans utilizing equipment and materials.* • *Creates comprehensive model/situation and mentally pictures familiar activities and student outcomes.*

Drafting instructor Mike Biell, left, and Electronics instructor David Grant confer over student work on circuit boards at Renton Technical College.

Occupation Cluster: Customized Trainers
Critical Work Function: D: Provide student instruction

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
D2 Provide individual and group instruction	• Group and individual instruction accurately and effectively model and teach industry standards and workplace requirements. • Students are effectively oriented to the learning task, including outcomes, assessments, syllabus and prior related skills and abilities. • Learning is facilitated with clear and effective presentations, demonstrations and active learner involvement. • Regular opportunities are provided for students to practice, perform, and receive feedback on all required skills, competencies, knowledge and abilities. • Instruction promotes the application, transfer and retention of learning. • Student behavior standards (code of conduct, students' rights and responsibilities) are consistently and constructively reinforced. • Student questions and discussions are effectively acknowledged, guided and integrated into the learning process in a positive way. • Learning and curriculum are directed towards program and student outcomes. • Students are encouraged to mentor other students when appropriate.	• Knowledge of safety and operating procedures as related to individual circumstances. • Knowledge of group and individual instruction models, adult learning principles and the ability to adapt strategies to diverse learners. • Knowledge of industry standards and workplace requirements and the ability to adapt them to instruction. • Knowledge of learning tasks, outcomes/competencies, assessments and prior related skills and abilities. • Ability to orient students. • Ability to develop opportunities for students to practice, perform and receive feedback on skills. • Ability to include the retention, application and transfer of learning in instruction. • Knowledge of student behavior standards and the ability to constructively reinforce them. • Ability to integrate questions from students into the learning process. • Knowledge of the subject matter and the ability to demonstrate competency in the field. • Ability to prepare a syllabus.	• *Responds to verbal/nonverbal communication and presents basic and complex ideas and information.* • *Analyzes group/individual response and poses critical questions.* • *Clarifies communication to diverse learners and listens attentively.* • *Responds appropriately to others, shows understanding/ empathy for others and encourages cooperation/ negotiation.* • *Understands learning process, selects/applies learning tools, investigates new learning techniques.* • *Develops multiple learning strategies and materials for diverse learners.* • *Models proper performance/ attitudes and provides constructive feedback/ reinforcement.* • *Develops problem solving strategies and encourages critical thinking.* • *Coaches others to apply related concepts, develops appropriate learning procedures and encourages learner independence.* • *Encourages others to adopt new concepts, displays enthusiasm/positive attitudes, motivates others to extend their capabilities and consolidates varied viewpoints/ positions.* • *Understands legal aspects of discrimination, respects rights of others and encourages/ supports individuality.*

"Here to stay. Standards-based reform is not just another fad - it's alive, well and living in the class-room."

- *American Teacher,* December 1999/January 2000 p. 12.

Occupation Cluster: Customized Trainers
Critical Work Function: D: Provide student instruction

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
D3 **Initiate, develop, and implement student assessments** * Independents and large corporations like Microsoft do not focus on assessments.	• Students effectively demonstrate proper safety and operating procedures. • Accurate records of student assessments, progress and performance are managed. • Instructors are regularly available to discuss student progress as needed. • Self-assessment and peer assessment methods are taught and encouraged in an effective manner.* • Assessment feedback is provided in a timely manner, is guided by assessment criteria, and is clearly supportive of student learning and success. • Assessment criteria are accurately provided to the students prior to the assessment. • Confidentiality and ethical guidelines are completely followed. • Assessment of student learning is on-going. • Assessment tools that are directly related to industry requirements are developed and implemented.*	• Knowledge of proper safety and operating procedures. • Knowledge of how to accurately record student assessments. • Knowledge of self and peer assessment as methods of evaluation. • Knowledge of methods of constructive feedback to students. • Knowledge of assessment tools and techniques, grading policies, methodologies, and criteria and the ability to apply them. • Knowledge of confidentiality and ethical guidelines.	• *Performs measurements, interprets numerical data and predicts results.* • *Understands continuous improvement process and determines system components to be modified or improved.* • *Understands material being taught, provides constructive feedback/reinforcement and develops appropriate training procedures.* • *Recognizes ethical issues and demonstrates honesty and trustworthiness.* • *Identifies facts and principles, applies rules/principles to process/procedure and examines information/data for relevance and accuracy.*
D4 **Modify instructional material and methods based on student and industry assessments and feedback**	• Student feedback is appropriately solicited, acknowledged and applied to the improvement of instruction. • Instruction is adapted to meet diverse learner and motivational needs. • A variety of instructional strategies are applied. • Diverse resources are consulted to identify and access alternative instructional methods and materials.	• Knowledge of and ability to solicit appropriate student feedback. • Ability to apply motivational techniques and address learning styles. • Knowledge of a variety of instructional strategies. • Knowledge of diverse resources for alternative instructional methods and materials. • Ability to modify instructional materials and methods based on student feedback.	• *Recognizes difference/biases, demonstrates awareness of diversity and encourages/ supports individuality.* • *Listens attentively, confirms information and clarifies communication.* • *Understands continuous improvement process and determines system components to be modified or improved.* • *Examines and analyzes information/data, generates/ evaluates solutions and devises/implements plan of action.* • *Recognizes poor performance/ attitudes, understands material being taught, provides constructive feedback/reinforcement and develops appropriate training procedures.*

Occupation Cluster: Customized Trainers
Critical Work Function: E: Provide support and guidance to students

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
E1 Respond to student needs	• Student requests for assistance are responded to in a courteous, respectful, and timely manner. • Multiple modes of communication are used. • Instructor time is properly allocated for the purpose of receiving and responding to group and individual student requests for assistance. • Instructors are regularly accessible, within professional boundaries, to students in accordance with college/company policy and procedures. • Instructor contact and access information is provided in writing to students in a clear manner.	• Knowledge and ability to use voicemail, email and online technologies. • Knowledge of the required and contracted office hours. • Knowledge of professional boundaries and college/company policy and procedures regarding student contact.	• *Presents complex ideas/information, analyzes group/individual response and poses critical questions.* • *Recognizes, analyzes and responds to customer needs and learning styles and demonstrates commitment to learners.* • *Performs given set of tasks and efficiently manages time, adjusts schedule as required and prioritizes daily tasks.* • *Responds appropriately to others, establishes rapport with co-workers and customers, demonstrates commitment to social improvement and encourages cooperation/negotiation.* • *Listens attentively, responds to verbal/nonverbal communication and clarifies and influences communication.*
E2 Provide information or referrals to meet student needs	• Current files or resources of available student services and referral procedures are maintained and readily available to students. • Referrals are conducted in a respectful manner and in compliance with confidentiality and ethical guidelines. • Applicable procedures and guidelines for documentation and follow-up of referrals are followed. • Appropriate recommendations from a service referral or agency are accommodated. • FERPA laws are consistently followed.* • Ongoing communication with student services professionals is maintained.	• Knowledge of available student services and proper procedures. • Knowledge of confidentiality / ethics (FERPA*). • Knowledge of documentation procedures and the ability to follow-up on the referral. • Ability to accommodate the recommendations of the service referral or agency.	• *Recognizes organizational, social and technological systems, follows processes/procedures, responds to system demand and recognizes system strengths/limitations.* • *Responds to verbal/nonverbal communication and interprets, clarifies, and influences communication.* • *Analyzes customer needs, demonstrates sensitivity to customer concerns/interests and demonstrates commitment to customer.* • *Demonstrates sensitivity to fears/concerns of diversity and recognizes the value of diversity and encourages/supports a correct course of action.* • *Identifies process, applies processes to new information and analyzes organization of information and transfers information between formats.*

*FERPA (Family Educational
Rights and Privacy Act, 1974).

Occupation Cluster: Customized Trainers
Critical Work Function: F: Perform administrative functions

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
F1 Perform documentation and record keeping duties	• Attendance records are documented and submitted. • Accurate files are kept. • Current curriculum materials are organized and accessible. • Records are kept in accordance with departmental and company policies and procedures. • Budget records are maintained in accordance with company policies and procedures. • Grant guidelines and requirements are followed as applicable.	• Knowledge of record keeping procedures. • Knowledge of company policies and procedures regarding record keeping. • Knowledge of budget and grant writing, as applicable to contract duties.	• *Demonstrates punctuality, follows rules/schedule, works with minimal supervision and completes assigned tasks.* • *Records/summarizes/ paraphrases information accurately, composes correspondence and creates original documents.* • *Understands computer operation and uses multiple software.* • *Analyzes data and applies multiple formats.*
F2 Record and submit student grades, if applicable* * *Large companies like Boeing and Microsoft do not submit grades on trainees.*	• Grades are accurately calculated according to published grading policy and assessment criteria. • Grades are submitted in accordance with company policies and procedures. • Records of student grades are maintained in accordance with all college/company procedures, state and federal laws and regulations including FERPA *(Family Educational Rights and Privacy Act, 1974).* • All information regarding student grades is treated in an ethical and confidential manner.	• Knowledge of grading policies and assessment criteria. • Knowledge of college policies and procedures. • Knowledge of Family Educational Rights and Privacy Act, 1974. • Ability to apply FERPA regulations/standards. • Knowledge of ethical standards regarding student grades.	• *Uses mathematical techniques, records results and interprets data.* • *Follows rules, works with minimal supervision, monitors performance standards and completes assigned tasks.* • *Understands system principles/terminology, follows grading procedures and responds to system demand.* • *Records/interprets numerical data.* • *Demonstrates honesty, trustworthiness, and commitment to social improvement.*
F3 Serve on departmental and college committees, if applicable	• College meetings are attended regularly in accordance with company policy. • Departmental committees are actively participated in as applicable. • Records of committee activities are kept current and organized. • Accurate information is distributed to colleagues as appropriate.	• Ability to access college policies and procedures regarding committees and committee participation. • Knowledge of college and departmental committees. • Knowledge of appropriate information to distribute to other faculty and departments. • Knowledge of appropriate routing for information and documentation. • Knowledge of roles and responsibilities of committee participants.	• *Actively participates in team activities and supports team members.* • *Performs/prioritizes tasks and efficiently manages time.* • *Interprets positions on issues, motivates others to extend their capabilities and to reverse negative behaviors and consolidates varied viewpoints.* • *Maintains self-control, accepts responsibility for own behavior, and sets well-defined goals.* • *Maintains positive self-image, defends beliefs, and understands own impact on others.*

Occupation Cluster: Customized Trainers
Critical Work Function: F: Perform administrative functions

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
F4 **Provide input for program, schedules and corporate/ college publications*** ** Only those trainers who work with the colleges and large companies like Microsoft perform this function.*	• Schedules are coordinated between program core and support courses. • Schedules and publications regarding the program are kept current and comply with all legal requirements. • Accurate program information is provided to corporate/college departments responsible for publication. • Accuracy of information in corporate/ college schedules and publications is monitored and modified as necessary. • All printed materials about programs are consistent. • Input includes times, room, and teaching assignments.	• Knowledge of program requirements and courses. • Ability to schedule courses within a program • Knowledge of legal requirements regarding corporate/college publica- tions. • Knowledge of program information. • Knowledge of publication modification procedures. • Knowledge of publication timelines.	• *Collects data, troubleshoots system failure and analyzes system operation.* • *Records information accurately, completes forms and creates original documents.* • *Prepares schedule and recommends adjustments.* • *Understands negotiations and publication processes, moderates discussion, and analyzes group dynamics.* • *Selects/obtains/analyzes relevant data and researches additional resources.*
F5 **Develop and manage budgets**	• Needs are annually identified and prioritized in accordance with company policies and procedures. • Adequate resources are identified to meet the program needs. • Resources are expended in a timely manner following company policies and procedures to support the program. • Equipment replacement plan is developed and reviewed annually. • Budgetary restrictions are followed and calculations are accurately formulated. • Appropriate documentation is maintained according to company policies and procedures.	• Knowledge of budgets and the budgeting process. • Knowledge of budget and college/company constraints. • Knowledge of college/ company policies and procedures. • Knowledge of documentation requirements. • Ability to document program activities and expenditures.	• *Performs routine record keeping, maintains balanced accounts, develops budget proposals and forecasts department or project costs.* • *Compiles multiple viewpoints, generates/evaluates alternatives, formulates action plans and predicts outcomes.* • *Uses materials safely and maintains supplies/equip- ment/inventory.* • *Uses mathematical processes and interprets mathematical data.* • *Determines budget outcomes/ applications and designs new organizational systems.*
F6 **Research and assist with writing and implementing grants and targeting financial resources, as applicable*** ** Please note: most customized trainers in large, small or independent organizations perform this function infrequently unless it is part of their contract responsiblities.*	• Appropriate campus personnel are contacted to investigate grant opportunities. • Necessary data is procured or provided as requested. • Necessary forms and/or documents and reports are completed within established guidelines. • Funds are expended in accordance with grant proposal restrictions. • Grant proposal presentations to appropriate personnel are made as necessary. • Grant follow-up and evaluations are completed in a timely manner.	• Ability to research information and write proposals in accordance with grant guidelines. • Ability to manage grant funds. • Ability to assess and communicate progress and effectiveness of the grant • Ability to identify and contact appropriate financial resources as applicable.	• *Identifies process, applies processes to new information and proposes new processes and systems.* • *Records/summarizes/ paraphrases/synthesizes information and creates original documents.* • *Completes assigned tasks and pays attention to details.* • *Provides accurate communi- cation, summarizes/ integrates/analyzes informa- tion and designs charts/ graphs.* • *Demonstrates creative thinking/problem solving, utilizes brainstorming, applies/formulates creative solutions/approaches.*

Occupation Cluster: Customized Trainers

Critical Work Function: G: Create and maintain a professional environment

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KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*

G1

Collaborate with staff, faculty, and students

- Curriculum and course materials and resources are provided as required.
- When applicable, performance is properly assessed, feedback is provided and recommendations are made as appropriate.
- Questions are answered and assistance is provided as necessary in a courteous and respectful manner.
- Colleagues and staff are responded to in a timely manner.
- Institution wide and inter-disciplinary student learning activities and initiatives are fully supported.
- Departments and services are accurately informed of needs in a professional and collaborative manner.

- Knowledge of locations to file or post curriculum and course materials and resources.
- Knowledge of procedures to request resources from library, instructional software and adoption procedures and ordering processes.
- Knowledge of organizational departments and services available.
- Knowledge of professional growth opportunities.
- Knowledge of program requirements and outcomes.
- Knowledge of performance assessment, feedback and recommendation procedures.

- *Modifies behavior to environment, shows understanding/empathy for others, works to identify/ remove social barriers and encourages cooperation/ negotiation.*
- *Follows schedule.*
- *Efficiently manages time, prioritizes daily tasks and prepares schedule.*
- *Recognizes organizational, social and technological systems, understands system organization/hierarchy, responds to system demand and recognizes system strengths/limitations.*
- *Actively participates in team activities, volunteers for special tasks, supports team members and assumes responsibility for accomplishing team goals.*
- *Sets well-defined/realistic goals and demonstrates commitment to program development, applies self-management skills and demonstrates commitment to self-improvement.*

Customized trainers are hard at work during a focus group at Renton Technical College.

Occupation Cluster: Customized Trainers
Critical Work Function: G: Create and maintain a professional environment

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
G2 **Work with program advisory committee, if applicable*** * * If asked, some customized trainers perform this function and are active members of college program advisory committees - see G3.	• Instructor-attended advisory committee meetings are held on a regular basis in accordance with college policies and procedures. • Instructors participate in advisory committee meetings. • Advisory committee recommendations are considered and implemented as appropriate. • New advisory committee members are recruited on an ongoing basis. • Advisory committee members reflect the diversity of the community and industry. • Advisory board participation and productivity are actively encouraged.	• Knowledge of college policies and procedures regarding advisory committee recommendations. • Knowledge of faculty role regarding advisory committee protocols. • Knowledge of industry and ability to utilize advisory committee for student benefit. • Knowledge of the relevant field of study, program requirements and accreditation requirements. • Ability to implement committee recommendations into program. • Ability to recruit new members to the committee.	• *Maintains self-control, sets and pursues well-defined goals, and applies self-management skills.* • *Actively participates in team activities, volunteers and supports team members.* • *Understands legal aspects of discrimination, demonstrates sensitivity to diversity and encourages correct action.* • *Identifies training needs, provides constructive feedback, develops appropriate training procedures and judges training alternatives.* • *Encourages others to adopt new concepts, demonstrates commitment to excellence, motivates others, consolidates varied viewpoints and empowers individuals/teams to achieve excellence.*
G3 **Serve on departmental and college/company committees, if asked*** * * Most independent trainers do not perform this function. Trainers from big organizations often do, if asked.	• College committees are attended with full participation in accordance with college policy. • Departmental committees are attended with full participation as applicable. • Records of committee activities are kept current and organized in accordance with college and program accreditation requirements. • Accurate information is distributed to colleagues as appropriate. • Confidentiality and ethical guidelines are followed according to college/company policy. • Student, faculty, program, department, division or college perspectives are effectively advocated. • Assignments are completed in a thorough and timely manner. • Participation supports the purpose and goals of the committee.	• Knowledge of policies as they relate to participation on committees. • Knowledge of employment contract provisions in regards to participation on the committee. • Knowledge of departmental and college committee policies. • Knowledge of college and program accreditation standards for committee record keeping. • Knowledge of policies and procedures as they relate to committee record keeping. • Knowledge of confidentiality and ethical guidelines. • Ability to advocate student, faculty and program perspectives. • Knowledge of purposes and goals of the committee.	• *Performs tasks, monitors task sequence and efficiently manages time.* • *Applies self-management skills and adjusts goals.* • *Displays positive attitudes, encourages others to adopt new concepts/reverse negative attitudes/behaviors and maximizes strengths/minimizes limitations.* • *Interprets information and applies processes to new information.* • *Attends regularly, follows procedures, and demonstrates optimism/initiative.* • *Attends closely to team activities/team members and demonstrates commitment.* • *Moderates discussion, interprets complaints/concerns, detects underlying issues and analyzes group dynamics.*

Occupation Cluster: Customized Trainers
Critical Work Function: G: Create and maintain a professional environment

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
G4 **Maintain current knowledge of the field**	• Working relationships with students, company staff, faculty, administrators, employers, and advisory committees are professionally maintained. • Memberships in appropriate professional organizations are obtained and maintained. • Subscriptions to professional publications are maintained and properly utilized. • Local regional and national seminars, workshops and meetings are attended as appropriate. • Company procedures are followed regarding attendance at professional functions. • A variety of resources is utilized to network with people working and/or teaching within the field.	• Knowledge of methods for fostering professional relationships. • Knowledge of appropriate organizations in the field and their application processes. • Knowledge of roles and responsibilities of membership in a professional organization. • Ability to access relevant sources of information regarding subscriptions and publications and professional development opportunities. • Knowledge of travel request procedures and professional development reimbursement procedures.	• *Identifies need for self-improvement, accepts constructive criticism, demonstrates commitment to self-improvement, analyzes and adjusts goals.* • *Selects/obtains relevant information, predicts outcomes, researches additional resources and creates data gathering processes.* • *Volunteers for special tasks and demonstrates commitment to improve current knowledge.* • *Understands strengths/limitations, identifies own skills/abilities, accepts constructive criticism and actively seeks self-improvement.* • *Researches to gain knowledge/information, proposes options/solutions based on research and synthesizes information.*
G5 **Participate in professional networking**	• Working relationships in the industry and with students, staff, faculty, administrators, employers, and advisory committees are maintained in an effective manner. • Memberships in appropriate professional organizations are obtained and maintained in an effective manner. • Subscriptions to professional list-serves and publications are maintained and properly utilized. • Seminars, workshops, and local, regional, and national meetings are attended as appropriate. • A variety of resources are utilized to interact with people teaching and working in the related field.	• Knowledge of methods for fostering professional relationships. • Knowledge of appropriate organizations in the field and their application processes. • Knowledge of roles and responsibilities of membership in a professional organization. • Ability to access relevant sources of information regarding subscriptions and publications and professional development opportunities. • Knowledge of travel request procedures and professional development reimbursement procedures.	• *Understands computer operation, utilizes integrated/multiple software, utilizes networks and composes multimedia presentations.* • *Obeys team rules, actively participates in team activities, demonstrates commitment and encourages team members.* • *Identifies own strengths/limitations, evaluates self continuously and actively seeks self-improvement opportunities.* • *Draws upon experiences/prior knowledge, interprets and applies new knowledge and experience and investigates new learning techniques.* • *Communicates appropriate verbal/nonverbal messages, presents complex ideas/information, analyzes group/individual response, and poses critical questions.*

Occupation Cluster: Customized Trainers
Critical Work Function: G: Create and maintain a professional environment

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
G6 **Develop a professional development plan**	• Plan is developed in a timely manner and updated regularly. • Files and resources for all applicable certification and professional development requirements are maintained in an orderly and effective manner. • Appropriate activities are thoroughly researched and properly identified and completed. • Documentation is accurately maintained in accordance with college policies and procedures. • Plan includes activities to address areas for improvement and professional growth.	• Knowledge of sources of information for applicable certification and professional development activities and requirements. • Knowledge of policies and procedures regarding professional development and required elements of a professional improvement plan. • Ability to develop a plan that addresses areas for improvement and professional growth. • Knowledge of documentation and approval procedures. • Ability to fulfill the requirements of certification, including all required activities.	• *Accepts constructive criticism, demonstrates commitment to self-improvement, applies self-management skills and appropriately modifies goals.* • *Examines data, analyzes possible causes, generates/ evaluates solutions and devises/implements plan of action.* • *Identifies process, applies processes to new information, rearranges systems and proposes new processes.* • *Records information accurately and completes forms/surveys/etc, summarizes/paraphrases information and creates original documents.* • *Responds to system demand and recognizes system strengths/limitations.*
G7 **Promote a professional instructional environment**	• Professional teaching practices are identified and implemented. • Learning is cooperatively accomplished between the teacher and the student. • A positive role model is provided for the students. • Ethical and professional relationships with students are understood and maintained. • Professional boundaries with students are established, modeled, and maintained. • Classroom and other instructional areas are maintained in a safe, inviting manner.	• Knowledge of and ability to implement professional teaching practices. • Knowledge of state and company policies and procedures of professional boundaries. • Knowledge of program-specific code of ethics. • Ability to assess self and student behaviors.	• *Identifies personal societal values, demonstrates trustworthiness, demonstrates commitment to personal/ social improvement and recommends ethical action.* • *Shows understanding for others, demonstrates commitment to social improvement, works to remove social barriers and encourages cooperation.* • *Models proper performance/ attitudes, coaches others to apply related concepts, develops appropriate training procedures and encourages learner independence.* • *Understands standards, leads by example, displays enthusiasm/positive attitudes and maximizes strengths/ minimizes limitations.* • *Demonstrates sensitivity to fears/concerns of diversity, respects rights of others.* • *Encourages individuality and responsibly challenges discriminatory practices/ procedures.*

Occupation Cluster: Customized Trainers
Critical Work Function: H: Market customized training

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
H1 Participate in corporate, campus, and community events, as applicable	• Community and campus event offerings are researched. • Events determined to promote the program, recruitment of students, and/or enhance student learning are identified. • Promotional information is made available. • Policies and procedures regarding off-campus events are met. • Trainer's role is clearly identified.	• Knowledge of relevant campus and community events. • Ability to select appropriate events to enhance student learning. • Knowledge of policies and procedures regarding campus and community events. • Knowledge of setup and organization procedures for campus and community events. • Ability to perform event responsiblities, as applicable.	• Obeys team rules, demonstrates commitment and encourages/supports team members. • Communicates appropriate verbal/nonverbal messages, addresses audience/purpose, actively participates in discussion and analyzes group/individual response. • Responds appropriately to others, establishes rapport with co-workers and customers, demonstrates commitment to social improvement and works to identify/remove social barriers. • Listens attentively, responds to verbal/nonverbal communication and interprets/ influences communication. • Starts on time and adjusts schedule as required.
H2 Serve on advisory committees, Tech Prep consortia, and/ or other community and college organizations, as applicable	• Appropriate high school and college advisory committees are effectively participated in. • Information gained at committee meetings is reported to program faculty and staff. • Accurate and complete program information is provided at committee meetings. • Related Tech Prep activities are effectively participated in. • Articulation agreements are properly created and maintained.	• Knowledge of contacts for high school and college advisory committees and Tech Prep consortia members. • Ability to create and maintain articulation agreements. • Knowledge of the program and its requirements. • Ability to implement articulation agreements.	• Understands system principles/terminology, follows procedures, analyzes system configuration and recognizes system strengths/ limitations. • Actively participates in team activities, volunteers for special tasks, demonstrates commitment and supports team members. • Willingly helps others, modifies behavior to environment, demonstrates commitment to social improvement and encourages cooperation/negotiation. • Demonstrates sensitivity to customer concerns/interests, demonstrates commitment to customer and makes exceptional effort for organizational commitments. • Records information accurately, prepares messages, summarizes information and composes/ edits correspondence.

Occupation Cluster: Customized Trainers
Critical Work Function: H: Market customized training

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
H3 Provide information for prospective students	• Group information sessions are properly scheduled, advertised, and conducted on a regular basis. • Individual informational meetings are properly scheduled as needed. • Accurate information packets are developed and disseminated to prospective students. • Faculty member is reachable by telephone and promptly returns calls. • Faculty member may be contacted through a variety of methods ie: mail, phone, email. • Prompt responses are made to contacts through a variety of channels (email, phone, etc.)	• Knowledge of program options. • Knowledge of the contents, scheduling, advertising and conducting of group information sessions. • Knowledge of procedures and content for individual information meetings. • Knowledge of contents of information packets. • Knowledge of mail, phone, and electronic communication protocols.	• Listens attentively, responds to verbal/nonverbal communication, confirms information and interprets and clarifies communications. • Recognizes customer needs, demonstrates sensitivity to customer concerns/interests, analyzes customer needs and demonstrates commitment to customer. • Follows schedule, adjusts schedule as required by supervisor and adjusts schedule for students, prioritizes daily tasks and prepares and organizes multiple schedules. • Identifies process, selects appropriate categories, interprets information and transfers information between formats. • Maintains self-control, sets well-defined/realistic goals and applies self-management skills. • Demonstrates sensitivity to fears/concerns of diversity, respects rights of others, encourages/supports individuality, encourages/ supports a correct course of action.

Corporate trainer Jay Hopper from Renton Technical College analyzes the key functions.

Objective 6:   Increase state investment in job-linked customized training.
Objective 13: Expand the use of portable skill standards in workforce development programs.

Progress of Agencies in Implementing High Skills, High Wages, Washington's Comprehensive Plan for Workforce Training and Education. Fifth Annual Report to the Legislature, Washington State Workforce Training and Education Coordinating Board, (1999).

Occupation Cluster: Customized Trainers
Critical Work Function: H: Market customized training

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
H4 Develop and manage public relations information	• Accurate information is provided to appropriate entities for creation and modification of published materials regarding programs/courses. • Information in published materials is continuously monitored for currency and accuracy. • Public relations department is accurately advised regarding misinformation about the programs/courses in a timely manner, and an effective course of action is recommended. • All timelines are met as required by the public relations department or equivalent college entity.	• Knowledge of procedures and schedules of the college Public Information Office. • Knowledge of media used by the college. • Knowledge of programs and target markets.	• *Adjusts schedule as required by supervisor, prioritizes tasks and adjusts task sequence.* • *Understands continuous improvement process and determines system components to be modified.* • *Qualifies/analyzes information, interprets and summarizes information, researches to gain knowledge/information and synthesizes information.* • *Performs assigned tasks, follows rules/policies/procedures, pays attention to details and follows up on assigned tasks.* • *Selects/obtains data/information relevant to the task, integrates multiple items of data, researches additional information sources and creates data gathering processes.*
H5 Perform recruiting activities	• Accurate records of student, program, and placement success stories and data are properly maintained. • Presentations to high school students, teachers, parents, colleges and community organizations are provided on a regular basis. • Program information is compiled and given to appropriate college recruiter on a regular basis.	• Knowledge of program assessment data (graduation rates, job placement rates, etc.). • Knowledge of students who have completed the programs successfully. • Knowledge of contacts in the high schools, colleges and in community organizations. • Knowledge of media to be used in promotional activities. • Ability to prepare materials for presentation.	• *Listens attentively, responds to verbal/nonverbal communication and clarifies/influences communication.* • *Understands legal aspects of discrimination, respects rights of others and encourages/supports a correct course of action.* • *Identifies customer concerns/complaints, demonstrates sensitivity to customer concerns/interests, analyzes customer needs and relates to customer fears/concerns.* • *Identifies process, interprets information and analyzes organization of information.* • *Presents basic and complex ideas/information, composes/presents well-organized speech and speaks extemporaneously.*

Business Computer instructor Glen Johansson, left, from Spokane Community College reviews the standards with Automotive instructor Chuck Cox from Big Bend Community College.

Occupation Cluster: Customized Trainers
Critical Work Function: I: Learn and adapt new technologies

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
I1 Obtain and maintain certification on program specific technology* * Only Boeing trainers and community college trainers reported performing this function.	• All applicable certification requirements are kept in an organized and accessible fashion. • Appropriate activities for certification are accurately and effectively identified and completed. • Documentation is accurately maintained and properly submitted according to requirements of certifying bodies. • Certification reviews are scheduled to ensure compliance and assist in planning for anticipated changes.	• Ability to access sources of information related to the activities needed for certification. • Knowledge of the requirements of the certifying bodies. • Knowledge of certification training programs and their availability and cost. • Knowledge of documentation submittal and filing procedures. • Ability to successfully complete certification requirements.	• *Outlines maintenance procedures, follows specified maintenance and identifies symptoms.* • *Follows proper procedures, understands operation/ interaction and examines task/technology relationship.* • *Identifies appropriate technology, understands requirements of the task and understands technological results.* • *Identifies goals and constraints, evaluates alternative solutions, formulates plan of action and predicts outcome/result based on experience.* • *Records information accurately, completes forms/ surveys/etc, composes/edits correspondence and creates original documents.*
I2 Maintain current knowledge of technology in the field * These activities may not apply to all trainers.	• Seminars, workshops, and courses in technology are attended with full participation. • Current professional literature about the application of emerging technology is selected and read on a regular basis. • Return-to-industry opportunities are pursued and followed up in an effective manner.* • Advisory committees and employers are thoroughly consulted regarding emerging technologies.*	• Knowledge of seminars and workshops offered that relate to technology. • Knowledge of professional literature related to emerging technology. • Knowledge of return-to-industry opportunities and application procedures. • Ability to access all information related to seminars, courses, and workshops on the Internet and on list-serves. • Ability to access advisory committees. • Ability to create opportunities to apply current technical knowledge and skills.	• *Maintains positive self-image, identifies own skills/abilities, accepts responsibility for own behavior and actively seeks self-improvement opportunities.* • *Identifies data/information, integrates multiple items of data, contrasts conflicting data and researches additional information sources.* • *Identifies relevant details, facts, specifications, probes and researches to gain knowledge/information and synthesizes information.* • *Identifies need for self-improvement, maintains self-control, demonstrates commitment to self-improvement and applies self-management skills.* • *Actively participates in team activities, demonstrates commitment and assumes responsibility for accomplishing team goals.*

ERIC

Occupation Cluster: Customized Trainers
Critical Work Function: I: Learn and adapt new technologies

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
I3 Identify, evaluate, and implement emerging technologies according to industry needs * Microsoft trainers reported not performing this activity.	• Relevant information related to emerging technologies is thoroughly researched on an ongoing basis. • Advisory committee and professional affiliations/organizations are consulted with on a regular basis. • Technologies are accurately and thoroughly assessed for appropriateness and currency. • New technologies are incorporated into existing curriculum, outcomes and assessments effectively and in a timely manner. • Continual assessment of student progress with new curriculum and outcomes is performed and maintained in an effective manner.* • Current research and development on relevant technologies are continually reviewed and communicated to appropriate parties.	• Ability to research and access information related to emerging technologies. • Ability to relate emerging technologies to outcomes/competencies, and assessments. • Ability to modify curriculum and adapt emerging technology into instruction. • Ability to assess and interpret student progress as related to curriculum. • Knowledge of industry leaders and technology suppliers related to emerging technology. • Ability to evaluate new technology in regards to its usefulness, effectiveness and long-range implications. • Ability to research funding of new equipment and material.	• *Understands technology applications, follows proper procedures, understands operation and manipulates technology for desired results.* • *Identifies appropriate technology, understands requirements of the task and understands technological results.* • *Makes connections between old and new, demonstrates creative thinking process while problem solving, and develops/applies creative solutions to new situations.* • *Understands continuous improvement process, identifies needed systemic improvement, suggests system modifications and determines system components to be improved.* • *Collects data, identifies system discrepancies, monitors system performance and troubleshoots system malfunction.*
I4 Identify, evaluate, and implement new instructional technologies	• New instructional technologies are researched by fully participating in professional conferences and consulting with advisory committees. • Industry and technology suppliers are properly consulted to stay current on new instructional technologies. • List-serves and professional organizations are actively pursued and effectively utilized. • New methodologies related to instructional technologies are properly evaluated. • New technologies are implemented in accordance with college/company policies and procedures. • Online resources are properly utilized as needed.	• Knowledge of sources of information regarding professional conferences. • Ability to access industry suppliers and knowledge of how to network with them. • Knowledge of list-serves and professional organizations. • Ability to evaluate new methodologies related to instructional technologies. • Ability to implement new instructional technologies. • Knowledge of college/company policies and procedures.	• *Identifies appropriate technology, understands task requirements, analyzes task/technology relationship and proposes technological solutions.* • *Understands technology applications, follows proper procedures, and manipulates technology for desired results.* • *Identifies process, applies processes to new information and transfers information between formats* • *Understands computer operation, utilizes multiple software and locates/manipulates information* • *Develops/applies creative solutions to new situations, formulates new ideas and organizes new processes.*

Occupation Cluster: Customized Trainers
Critical Work Function: J: Perform program management functions

KEY ACTIVITY	PERFORMANCE INDICATORS *How do we know when the task is performed well?*	TECHNICAL KNOWLEDGE *Skills, Abilities, Tools*	EMPLOYABILITY SKILLS *SCANS Skills and Foundational Abilities*
J1 **Perform documentation and record keeping duties**	• Attendance records are documented and submitted. • Current curriculum materials are organized and accessible. • Records are kept in accordance with departmental and company policies and procedures. • Budget records are maintained in accordance with company policies and procedures. • Accurate committee files/minutes are kept. • Assistance is provided with writing and implementing grants, as applicable.	• Knowledge of record keeping procedures. • Knowledge of company policies and procedures regarding record-keeping. • Knowledge of grant writing if applicable to contract duties.	• *Records information accurately, completes forms/surveys/etc, summarizes/paraphrases information, creates original documents.* • *Identifies process, interprets information, analyzes organization of information and transfers information between formats.* • *Performs basic data entry, utilizes integrated/multiple software, locates information and retrieves stored information/data.* • *Recognizes organizational, social and technological systems, follows processes/procedures and recognizes system strengths/limitations.* • *Performs assigned tasks, pays attention to details, monitors performance standards and follows up on assigned tasks.*
J2 **Mentor, orient, and support new and part-time trainers**	• Curriculum and course materials and resources are accurately provided as required/appropriate. • When applicable, orientation and paperwork needs are met. • Employment regulations are followed in accordance with company policies. • All applicable laws, regulations, company policies are communicated and followed. • When applicable, performance of part-time faculty is properly assessed, feedback provided and recommendations made as appropriate. • When applicable, appropriate staffing needs are accurately identified, assessed and prioritized. • Part-time faculty questions are answered and assistance is provided as necessary in an expedient, courteous and respectful manner. • Clear lines of communication are identified and established.	• Knowledge of curriculum, course materials, and resources. • Knowledge of employment regulations, laws and college policies. • Knowledge of company assessment and feedback techniques. • Knowledge of staffing needs and the ability to assess and prioritize them to meet program or department needs. • Knowledge of orientation procedures.	• *Recognizes job tasks, analyzes work assignments, assesses individual knowledge/skills and monitors performance.* • *Listens attentively, confirms information and clarifies communication.* • *Models proper performance/attitudes, coaches others to apply related concepts, provides constructive feedback and encourages learner independence.* • *Provides accurate communication, prepares basic reports, selects methods of communication and summarizes/integrates information.* • *Encourages others to adopt new concepts, leads by example, motivates others to extend their capabilities and persuades others to reverse negative attitudes/behaviors.* • *Appropriately refers complaint/discrepancy, analyzes possible causes/reasons, recommends action plan and generates/evaluates solutions.*

Occupation Cluster: Customized Trainers
Critical Work Function: J: Perform program management functions

KEY ACTIVITY	PERFORMANCE INDICATORS How do we know when the task is performed well?	TECHNICAL KNOWLEDGE Skills, Abilities, Tools	EMPLOYABILITY SKILLS SCANS Skills and Foundational Abilities
J3 Manage instructional and program assistants*

Please note: only large companies like Microsoft indicated trainers performing this function. | • A list of current job responsibilities is accurately provided and clarified, and an effective process is in place to clarify ongoing task assignments.
• Orientation to policies, procedures, and the physical work environment is provided in an effective manner as needed.
• Information about ongoing professional development opportunities is accurately provided and supported.
• Job performance is properly assessed according to company policies and procedures.
• Information about safety practices is adequately relayed. | • Knowledge of management techniques and current job responsibilities.
• Knowledge of updated information of college policies and procedures.
• Ability to orient new assistants.
• Knowledge of professional development opportunities.
• Ability to conduct performance appraisals for instructional and program assistants.
• Knowledge of safety practices in the learning environment. | • Recognizes job tasks, distributes work assignments, delegates responsibilities and monitors performance.
• Identifies with team, volunteers for special tasks, works to improve team skills and encourages/supports team members.
• Motivates others to extend their capabilities, displays enthusiasm/positive attitudes, persuades others to reverse negative attitudes/behaviors and maximizes strengths/minimizes limitations.
• Conducts task specific training, coaches others to apply related concepts, provides constructive feedback/reinforcement and develops appropriate training procedures.
• Employs level of concentration, works with minimal supervision, monitors performance standards, and follows up on assigned tasks. |
| J4 Research and assist with writing and implementing grants and targeting financial resources as applicable*

* Only community college trainers perform this function. Independents may assist, if requested, as part of their contractual responsibilities. | • Appropriate campus personnel are contacted to investigate grant opportunities.
• Necessary data is procured or provided as requested.
• Necessary forms and/or documents and reports are completed within established guidelines.
• Funds are expended in accordance with grant proposal restrictions.
• Grant proposal presentations to appropriate personnel are made as necessary.
• Grant follow-up and evaluations are completed in a timely manner.
• Appropriate financial resources are identified, evaluated and contacted. | • Ability to research information and write proposals in accordance with grant guidelines.
• Ability to manage grant funds.
• Ability to assess effectiveness of the grant.
• Knowledge of grant writing protocols.
• Ability to identify and contact appropriate financial resources, as applicable. | • Interprets information and applies processes to new information.
• Analyzes organization of information and transfers information between formats.
• Records information accurately, summarizes/paraphrases information, composes/edits correspondence and creates original documents.
• Volunteers for special assignments, works with minimal supervision, pays attention to details and completes assigned tasks.
• Prepares basic summaries and reports, analyzes information and designs charts/graphs.
• Applies creative solutions to new situations, generates unique solutions, formulates new ideas/plans/approaches and organizes new processes/procedures. |

Customized trainer, Karen Johnson, takes time out to share a smile with her colleagues.

REFLECTIONS ON CUSTOMIZED TRAINER FOCUS GROUP

Industry Outlook

The outlook for training is exceptionally high, in fact vibrant. Training demands in industry are skyrocketing. The high tech industry has a profound need for high touch/high tech training, and the high touch training will have a dramatic impact on all industries.

Companies such as Boeing and Intermec have huge divisions designing and delivering training in the area of sales, marketing, product knowledge, effective educational products for clients, media development for web training, and affective behavioral skills for the workplace. These training programs are designed to reach, recruit, and retain high tech workers. The market is massive.

Technical colleges can have a large share of the market if they can use the instruments we used in the focus groups to quickly, efficiently and competently design training packages. The National Skills Standards Board is on the right track in designing a model for development that will stand the change of time. It will provide the "rule" or standard to evaluate; it will provide the "communication" with all participants, and it will provide the "relationship" with each role played in the partnership. Margaret Wheatley's design for surviving rapid change in the organization can happen with this model.

Personal Ah Ha's:

After 25 years as an instructor in one capacity or another, this is the first time I felt that the role, work functions and responsibilities of the professional-technical college instructor were articulated accurately. I was excited at the completion of this model.

I am encouraged by the functional use of the SCANS skills assessment instrument and the DACUM process, both of which I have used successfully in the last few years. As a developer, instructor and evaluator, I am most encouraged that this can only have a positive effect on evaluation, accountability, agents of changes and finally the success of the newly trained worker in the workplace.

"Those things that are not INSPECTED are not RESPECTED."

Thanks for the opportunity to be involved with the process. I look forward to using the model in my consulting business.

Karen Johnson,
Education Consultant
Performance Dynamics
Federal Way, WA

Dr. Julie Miller from Business Writing that Counts! and
Bill Vaughn from Microsoft discuss the ins and outs of
customized training.

CUSTOMIZED TRAINING, MICROSOFT STYLE

Training at Microsoft can be broken down into a couple of categories. I'm not talking about training products we produce but rather interactive "live" sessions, web-delivered sessions, recorded and re-broadcast sessions, and those developed for conferences which are pretty much the same. The classes we do here at MSTE (Microsoft (internal) Technical Education) are somewhat different in that they often are more than just lecture; they include lab work on a computer. Sometimes, they also have interactive evaluations.

However, very, very few of the hundreds (thousands?) of courses, lectures, sessions and classes have any form of a "test" afterwards. While some of the developer classes have labs that have "correct" answers, these labs are never graded. Years ago when we taught train-the-trainer certification courses at Microsoft University, we did have a test the student had to pass to "graduate." This is the only time any feedback was required. Students or session attendees are requested to provide a course/instructor evaluation, but in this case the course and instructor are graded, not the student.

Classes up to 5,000

For the last 14 years at Microsoft, and for the 15 years in the industry before that, the pattern has been pretty much the same. We would prepare a lecture lasting typically 45 to 90 minutes long with "view foils" or PowerPoint. Copies were distributed to the students along with note pages containing supplementary materials and background information. For longer sessions lasting from 8 to 40 hours, we would simply combine shorter sessions together. To ensure that the audience was understanding the information, I would start the session with an individual interview (when the class was less than 40 or so). This told me what the person expected, how they were using the technology being presented, and how I should modify the content to meet their needs. While impractical for larger groups that ranged to over 5,000, I used the insight gained from the smaller classes to address their needs.

I just returned from a typical conference that had about 50 such sessions. Each lasted about 90 minutes with a short break between. Content is typically broken into three to eight or more tracks, each focusing on an individual course of study. Sessions start early and end late. Since an individual instructor rarely does more than one session, his workload is not that great. On the other hand, I typically do three 60-90 minute sessions, usually back-to-back. This way I can provide more depth and more foundational material.

Class management challenging

Sessions are usually highly technical. There is no check to see if the students meet any prerequisites, although course descriptions clearly state these up front. We at MSU and MSTE were constantly con-fronted with folks who could barely find the room, much less have the required years of experience. We

taught to these folks just the same - if their checks cleared. We did not, however, slow the class down for them.

Because of the type of audience (typically geeky prima donnas) and that many of them knew each other or the trainer, class management was very challenging. Students also knew they did not have to get any of the material as their boss would not grade them on the results. Students often interrupt the instructor with pertinent (and impertinent) questions. While some instructors won't permit this, I do. It keeps me on track and permits me to provide more focused information. We have to make sure that these questions don't derail the schedule, and so I will answer the question and move on without starting a long-winded interaction with the student. I'll go back to the student at the next opportunity to make sure he or she got a complete answer.

All of these sessions are done with PowerPoint now. While the quality of these varies a great deal, many are quite innovative. Consider that the trainer is often a developer or product manager with no presentation or training experience. The conference coordinators often hire consultants to come in and coach these folks to avoid the common speaking and presentation mistakes-with mixed success. I have been coached many times and I have coached many, many speakers.

We try to develop presentations with a limited number of bullets per page, with hierarchical organization and a variety of text and graphics to appeal to the various types of learners. I mix in humor into my talks to keep people on their toes and keep them awake. Far too many of the sessions I attend could be used in sleep deprivation therapy. My sessions are usually top-rated.

Demonstrations

Demonstrations are an important component of successful presentations. These developers want to see code and how it works to solve their problems. Lecture-only presentations are tough to do for these people without an occasional switch to the live code. The demonstrations are usually done on a separate machine or on a laptop provided by the trainer. Getting these demos ready to go ahead of time is extremely time consuming and complex. It's a lot easier to do now with laptops that are strong enough to hold and run the systems software and configurations required by the demo programs. It is essential that the demonstration be scripted. That is, the trainer should not make up demonstrations on the fly to address individual questions. Demonstrations illustrate the point and should be presented so the student can see how to solve a specific problem.

Many of these talks are really marketing in disguise. That is, we show new features to encourage people (developers, users, customers) to buy the new version or better use the existing version. They also tend to reduce the product support costs. While customers bristle at purely marketing focused slides, they do not seem to mind those that provide good how-to information. My presentations are also brutally frank. When there's a bug, I tell them about it and take the heat when I get back in town. But the developers I talk to appreciate the honesty. Trainer credibility is very important. These sessions are done by the thousands every year.

Opinions expressed are my own and not necessarily those of Microsoft Corporation.

Bill Vaughn
Developer Trainer,
Microsoft Technical Education
Microsoft Corporation

PERSPECTIVE OF AN INDUSTRIAL SKILLS BOEING TRAINER

Thank you for the opportunity to participate in the focus group on Customized Trainers held at Renton Technical College. I was very impressed with the diversity of our group that included representatives from small business owners, trainers from large businesses, and technical instructors/trainers from Washington State's community and technical college programs.

In reflecting back at what was discussed in our focus group, several things come to mind. New instructors should come to the school with basic skills and knowledge they must possess to perform the job for which they are being trained. Most new instructors should bring four basic qualities to the job of teaching. They are:

- Positive attitude
- Subject matter expertise
- Presentation skill and
- Being a good employee role model for those they teach.

In the first year, instructors need training so they are prepared to teach. Secondly, they must teach the class. The first activity is the heaviest during the first few months of an instructor's assignment. The second will require getting the instructor away from platform skills of lecturing and more into facilitating learning by asking questions, creating situations for learning, and giving students an opportunity to apply their new learning in class.

Secondly, the subsequent years would include designing and developing instructional materials, evaluating learners' performance, advising students, and transferring the student's new learning from the classroom to the job.

The challenges for a two-year college professional-technical instructor do not end after the first year. It is just the beginning.

Grace L. Richardson
Industrial Skills Instructor
The Boeing Company

(Editor's Note: Grace participated in the focus group on Customized Trainers.)

Industrial skills trainers Grace Richardson and Billy D. Diamond from The Boeing Company work hard editing the skill standards for corporate trainers.

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Janie Schwark, Microsoft Corporation
Gary C. Micheau, Kaiser Aluminum & Chemical Corporation
Kathleen Clarno, Simpson Tacoma Craft

Higher Education:

Kevin Nemeth, Central Washington University
Dr. Jan Bowers, Central Washington University
Sandy Colson, Central Washington University

Focus Group Participants

The six focus groups consisted of professional-technical college faculty
and customized trainers who represented all 34 community and
technical colleges in the State of Washington as well as small and large
training businesses.

Collectively this document is backed by 761 years in a variety of
professional fields and 1,122 years of teaching and training. In general,
the participants:

1. Represented all 34 Colleges and the Northwest Indian College
2. Came from area businesses and industries
3. Totaled 78:
   27 Men
   51 Women
4. Representing Business were:
   15 Instructors
   159 Years in the profession
   239.5 Years teaching
5. Representing Health were:
   9 Instructors
   88 Years in the profession
   148.5 Years teaching
6. Representing Human Services were:
   8 Instructors
   76 Years in the profession
   127 Years teaching
7. Representing Technology were:
   17 Instructors
   162 Years in the profession
   196 Years teaching
8. Representing Trade and Industry were:
   14 Instructors
   153 Years in the profession
   182 Years teaching
9. Representing Customized Trainers:
   14 representatives
   123 years in the profession
   229 years teaching and training

Focus Group Participants:
Education

Lead Welding instructor and industrial trainer, Mike Driscoll from Centralia College listens attentively to the discussion during the Customized Trainer focus group.

Marty Mattes	Bates Technical College
Shairose Gulamani	Bellevue Community College
Margaret Turcott	Bellevue Community College
Dan Beeson	Bellingham Technical College
Irene Farquhar	Bellingham Technical College
Chuck Cox	Big Bend Community College
Mike Driscoll	Centralia College
Jill Johnson	Centralia College
Shoshanna Porter	Clark College
Patti Serrano	Clark College
Lloyd White	Clover Park Technical College
Curt Freed	Columbia Basin College
Gisela Dicklin	Edmonds Community College
Terri Odegard	Edmonds Community College
Elizabeth Clark	Everett Community College
Chris Bradberry	Grays Harbor College
Penny Woodruff	Grays Harbor College
Mary Jo Adams	Green River Community College
Karl Hoffman	Green River Community College
Joyce Strain	Green River Community College
Kathy Oberg	Highline Community College
Lea Ann Pratt	Highline Community College
Paul Axtell	Lake WA Technical College, WFT
Ralph Jones	Lake WA Technical College
Charlotte Brock	Lower Columbia College
Debbie Bedford	North Seattle Community College
Linda Wilkinson	North Seattle Community College
Guy Pace	Northwest Indian College
Lynne Yurovchak	Northwest Indian College
Steve Quinn	Olympic College
Vidya Thiramurthy	Olympic College
Barbara Clapett	Peninsula College
Tommie Schwent	Peninsula College
Katey Burns	Pierce College/Puyallup
Edryce Reynolds	Pierce College/Puyallup
Jo Ann Baria	Pierce College/Steilacoom
Dr. Craig Anderson	Renton Technical College
Ginger Lewis-Castle	Renton Technical College
Jay Hopper	Renton Technical College
Judith Lily	Renton Technical College
Alex Lorentson	Renton Technical College
C.R. Johnson	Seattle Central Community College
Melissa Longmuir	Seattle Central Community College
Dr. Carol Weaver	Seattle University
Bonnie Tidwell	Seattle Vocational Institute
Sally Rollman	Shoreline Community College
Jean Matthews	Skagit Valley College
Ted Rodriguez	Skagit Valley College
Dr. Brent Chapman	South Puget Sound Community College
Joan Martin	South Puget Sound Community College
Laura Parkins	South Seattle Community College

Cheryl Bruce	Spokane Community College
Glen Johansson	Spokane Community College
Judy Forbes	Spokane Falls Community College
Linda Roth	Spokane Falls Community College
Jim Carroll	Tacoma Community College
Melinda Brennan	Walla Walla Community College
Dean Sutton	Wenatchee Valley College
Karen Blakely	Whatcom Community College
Jane Twaddle	Yakima Valley Community College

Business

Dr. Julie Miller	Business Writing That Counts!
Carol Kuhns	Educational Training Center, Kent
Bill Vaughn	Microsoft Corporation
Karen Johnson	Performance Dynamics
Lynn G. Brown	The Boeing Company
Billy D. Diamond	The Boeing Company
Cynthia Henry	The Boeing Company
Grace Richardson	The Boeing Company
Gary Sivertsen	The Boeing Company
Dr. Anita Schamber	World Vision

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In addition to the focus group participants, we also want to recognize the additional instructors and students who took the time to be photographed for this publication.

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Stacie Farrell, student	Clover Park Technical College
Luther Taylor	Clover Park Technical College
Ronnie Bland, student	North Seattle Community College
John D. Post	North Seattle Community College
Judy Smith, student	North Seattle Community College
Michael E. Biell	Renton Technical College
Charissa Church, student	Renton Technical College
David C. Grant	Renton Technical College
Nicole Korsmo, student	Renton Technical College
Jacquelyn Long, student	Renton Technical College
Patci Serrano	Renton Technical College
David B. Warren, student	Renton Technical College
Joseph T. Samuels, student	Skagit Valley College
Catarino S. Meza, student	Skagit Valley College
Patrice K. Martin, student	Skagit Valley College
Stephanie L. Thomsen, student	Skagit Valley College
Raymond A. Pinney, student	Skagit Valley College
Thanh Nguyet Nguyen, student	Skagit Valley College
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For more information:
        Web references:
        www.nssb.org
        www.standards.siu.edu
        www.ncee.org
        www.ansi.org
        www.ericae.net
        www.ncrve   (especially document MDS 777)

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"No one teaches another, nor is anyone self-taught. People teach each other mediated by the world."
— Paulo Freire

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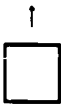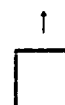| The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
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