

# 2008 PROGRAM OUTCOMES ASSESSMENT SUMMARY REPORT

PROGRAM: CARPENTRY - AAS DEGREE AND CERTIFICATE

DATE: 29 JANUARY 2008

**DEMONSTRATION OF LEARNING:** *What assignments or projects demonstrate student learning outcomes are achieved?*  
*[Note: evidence of learning contained in Assessment methods and Findings sections.]*

Learning Outcomes	Assessment methods
Work safely on a construction site.	WCO 120 (Core) and WCO 140 (First Aid) First quarter students learn and are tested on basic skills and competencies in the core course and in first aid.  Safety instruction, such as safe use of tools, fall and arrest techniques, scaffold and harness use, are integrated throughout the program through weekly safety meetings. Students are assessed for safe tool and equipment practices, site housekeeping and clean up.
Demonstrate an understanding of the work ethic to be a successful carpenter.	Students are assessed through observed behaviors such as: attendance, punctuality, use of time, completing projects efficiently, product quality, working as a team, staying on task, following instructions.
Communicate and understand the interpersonal relationships among co-workers and with customers.	Teamwork is emphasized in the form of group projects. Students plan, evaluate, problem solve, and present solutions. They are evaluated for sharing skill sets, participation, contribution, and demonstrated ability to work with others.
Demonstrate the ability to recognize a problem, develop strategies to overcome the problem and keep a project on track.	Projects are selected to improve students' depth and range of skills. Students are observed and assessed for applied math and techniques, design, efficient use of materials, presenting options, multiple uses of tools and blueprint reading.
Demonstrate the ability to think like a trades person to balance craftsmanship and	Each succeeding quarter includes group projects and student competencies are assessed individually based on a list of skill sets assigned to each quarter.  Students are challenged to plan, estimate costs and execute plans as a team trough

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<p>economics to produce an acceptable product.</p>	<p>integrated learning experiences. Sample projects include disassembling a building, building stairs, designing and building a deck, building a foundation for an existing house, or constructing a house for the ground up. Students are challenged to care for materials, practice efficiencies of motion and time, take pride in their work and practice ergonomic use of tools.</p> <p>Instructors get to know students very well and learn their strengths and weaknesses. Students have weekly evaluations through progress reports and safety meetings.</p>
<p>Master the skills to become employed as a carpenter or in a related field.</p>	<p>Each succeeding quarter includes individual or group projects and student competencies are assessed individually based on skill sets assigned to each quarter.</p> <p>Those students who successfully master the skill sets may graduate after the 4th quarter. Those who are not ready for employment are advised to take the optional fifth quarters to improve skills and confidence.</p>
<p>Demonstrate an enhanced understanding of the relationship of carpentry, cabinetmaking and marine carpentry and/or the business aspects of carpentry.</p>	<p>Work site projects allow students to observe real world application of what they learn in class. Students and faculty de-brief on the experience and discuss relationship of program curriculum to the practice of carpentry and related trades. Attention is paid to conservation of resources, keeping costs down, calculating materials and costs, and observing industry standard and codes.</p>

**EXTERNAL EVIDENCE?** *Alumni, employer, Curriculum Review, Technical Advisory Committee feedback?*

The program relies on feedback from students' quarterly course evaluations, program graduates, employers of interns and graduates, the Technical Advisory Committee and King & Snohomish County Master Builders, and the Association of General Contractors. The feedback from these sources informs program changes.

The TAC is a particularly powerful force in gathering resources to improve facilities and curriculum. This body includes both union and management constituencies in industry as well as former students. The feedback from this body is critical to keeping program aligned with changes in industry.

Seattle Central Community College Curriculum Review reports are prepared and reviewed on a three year cycle.

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Programs are expected to document their learning outcomes and assessment practices.

The State Board of Community and Technical Colleges require faculty to have a five-year professional development plan. These plans enable faculty to catch up with changes in industry and improve their own skills and knowledge.

### **FINDINGS:** *What have you learned from your outcomes assessment activities?*

Many graduates of the program are major players in Washington State industry. Four members of the current TAC are highly successful industry leaders. This body finds that the program is handicapped by operating in substandard facilities, limiting the program curriculum. The limitations include adequate workspace (insufficient space in WWII era portables), outdated equipment, and an infrastructure that does not support IT requirements. These deficits make it hard for the program to adapt to changes in industry.

The faculty are concerned that they are losing other strong candidates who are dropping off the wait list and going directly into industry and training on the job. Members of the TAC and other industry representatives report that the skill level of people in shops is going down. The employers report a high rate of unfilled positions and want more students from the program to fill these spots. They are forced to hire people off the street and provide on the job training because the demand for skilled workers is far greater than the supply. However, employers benefit when they can employ program graduates who enter the workforce with basic safety and technical skills training. The facilities and limit the size of enrollment. The new building will allow for some expansion in enrollment if only by building programs that use the facilities in the evening hours.

Direct input from employers comes in the form of requests for student employment. The employers are questioned about former students and their preparation for the job. The feedback is largely anecdotal but it frequently includes concrete suggestions that lead to adjustments to the curriculum. The same opportunity arises when former students return to visit and they tell faculty about their experience on the job and how well they were prepared or what they wish they had learned in the program.

Only a small number of students elect the internship option but it is a valuable experience because those who do take advantage of it return to the program with a real understanding of how important the program skill sets are in preparing them for employment. This experience is not meant as a bridge to employment but as a skill building experience. Unfortunately, a number of students are employed directly from the internship without completing the program and many other students drop out of the program before completing the certificate because of industry demand.

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**ACTIONS TAKEN:** *What program changes have you made in the last three years? -- WHAT WAS THE IMPETUS FOR CHANGE?*

The basics of carpentry do not change and the faculty report that changes are introduced as needed to address industry changes, the development of new materials, and changes in building codes. There is currently a focus on the building envelope and new products and techniques for preventing mold and water damage by creating moisture barriers. Building envelope design and product application techniques are all folded into instruction as they are required by industry.

The TAC helped build an argument for a new facility and successfully lobbied the college to finance a master plan for the new facility. The proposal was successful and the staff is now engaged in the design phase for a new campus with updated equipment and teaching and learning spaces. The building phase is expected to begin in Fall 2009.

**ACTIONS PLANNED:** *What program changes or new assessment activities are you planning for next year?*

The program is working with the TAC and King & Snohomish County Master Builders to develop stronger internship program. One factor under consideration is to require that employers not hire interns until they have completed the program.

The TAC wants to add evening classes so that people working in the field can upgrade their skills for advancement. They see an increasing demand for skilled workers and believe a credit bearing evening program would help satisfy demand for more qualified workers.

Faculty plan to establish a mechanism to record input from employers and program graduates. The first step will be to document feedback from these sources. They would also like to see more systematic contact with graduates through a college sponsored alumni association.

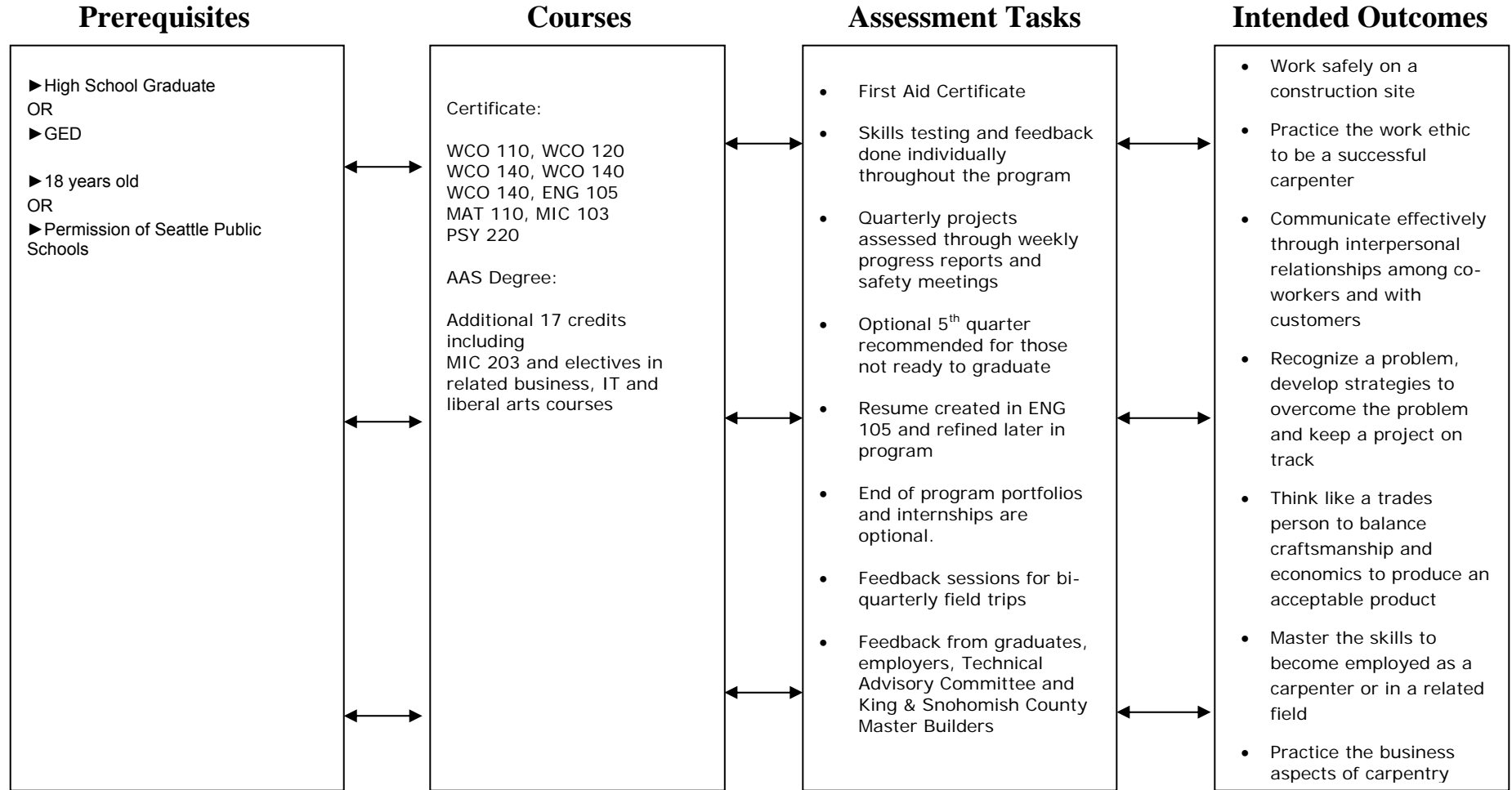
Program Name:

**Carpentry – AAS Degree and Certificate**

Revised 29 January 2008

**Theme(s):** Pride in workmanship; work ethic; build confidence

**Program Role:** The Carpentry Program's four-quarter program is designed to prepare students for employment as apprentice carpenters.



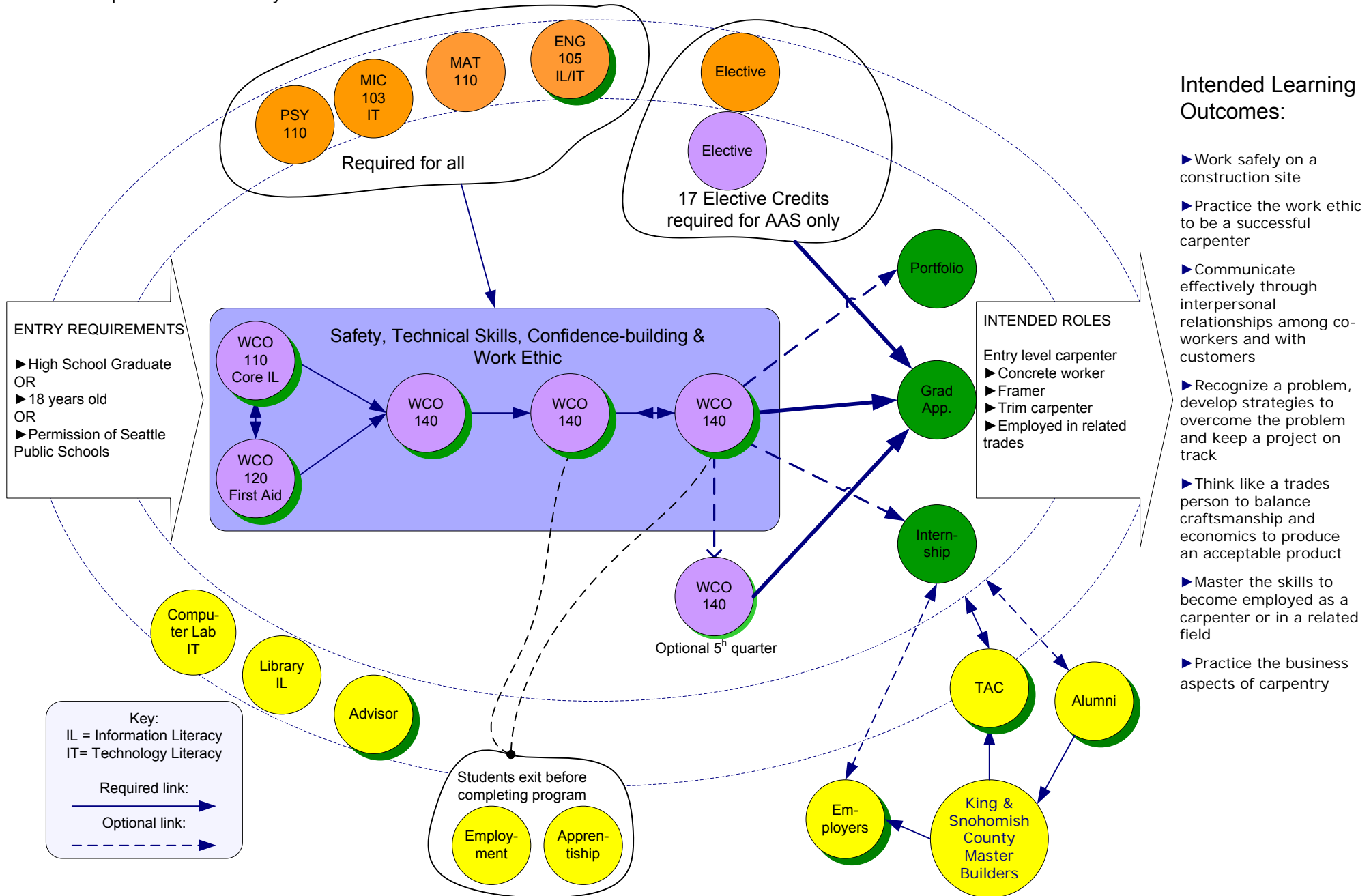
*What must students understand to demonstrate the intended outcome?*

*What skills must students master to demonstrate the intended outcome?*

*What will students do in here to demonstrate evidence of the outcome?*

*What do students need to be able to DO "out there" that we're responsible for "in here"??*

Program: Carpentry – AAS & Certificate  
 Snapshot on: 29 January 2008



## Program Assessment Inventory

Program:                     Carpentry – AAS and Certificate                    

Assessment methods used to determine that students are prepared to succeed and that they have achieved the program learning outcomes when they complete degrees or certificates.

	<i>Early program</i>	<i>Mid program</i>	<i>End of program</i>
<b><i>Students are prepared to learn (prerequisites)</i></b>			
ASSET test scores			
COMPASS test scores			
SLEP test scores			
Other? <i>HS Grad, GED and 18 or permission of Seattle Public Schools</i>	<i>prerequisite</i>		
<b><i>Students are assessed as they move through the program</i></b>			
Competencies assessment	<i>integrated one on one feedback</i>		
Internship feedback		<i>not required</i>	
Pre-Mid-Post assessment			
Service Learning experience feedback			
Student course evaluations		<i>quarterly</i>	
Student focus groups			
Student grades		<i>quarterly</i>	
Student interviews			
Student self assessment		<i>integrated</i>	
Student surveys			
<b><i>Students are assessed as they complete the program</i></b>			
Completion statistics			<i>by college</i>
Capstone projects			
Graduation statistics			<i>by college</i>
Portfolios			<i>not required</i>
Presentations			<i>integrated</i>
<b><i>External assessment data is collected</i></b>			
Transfer rates			<i>by college</i>
Employer surveys			<i>informal</i>
Technical Advisory Committee		<i>meets quarterly</i>	
License certification success rates			<i>by college</i>
Performance in 4 year programs			
Employment rates			<i>by college</i>
Salary statistics			
Survey of former students			<i>informal</i>
Other?			

## Wood Construction Program Outcomes

### **Carpentry** – AAS Degree – 2006 Learning Outcomes

Upon earning an AAS degree in Carpentry a student will:

1. Work safely on a construction site.
2. Demonstrate an understanding of the work ethic to be a successful carpenter.
3. Communicate and understand the interpersonal relationships among co-workers and with customers.
4. Demonstrate the ability to recognize a problem, develop strategies to overcome the problem and keep a project on track.
5. Demonstrate the ability to think like a trades person to balance craftsmanship and economics to produce an acceptable product.
6. Master the skills to become employed as a carpenter or in a related field.
7. Demonstrate an enhanced understanding of the relationship of carpentry, cabinetmaking and marine carpentry and/or the business aspects of carpentry.

### **Carpentry** – Certificate – 2006 Learning Outcomes

Upon earning a certificate in Carpentry a student will:

1. Work safely on a construction site.
2. Master the skills to become employed as a residential carpenter or in a related field.
3. Demonstrate an understanding of the work ethic to be a successful carpenter.
4. Solve problems and keep a construction project on schedule.