

Endorsement Program Approval for Technology Education

Please complete this form to request State Board of Education approval for the endorsement program indicated.. Please note that a program is a comprehensive set of learning opportunities developed to help the candidate to demonstrate the competencies specified in chapter 180-82A WAC. Majors/degrees are not automatically equivalent to endorsement programs.

To complete the form place your cursor on any of the gray text fields in the two right hand columns. You can also move from one text area to another by using the tab or arrow keys. Please return the completed form to your OSPI liaison.

College/University Central Washington University

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Competency	Strategies that will be used to assess candidate capacity/ performance related to the competencies
1. Career-Technical Education Common Core: State Learning Goals.	
The career-technical teacher is able to apply and integrate the state's learning goals and essential academic learning requirements in program implementation and assessment.	Oral presentations, Analytical papers, Group discussions, Exams, Development of lesson plans, Journal critiques, Cooperative learning projects
K1 Learning Goals.	
S1.1 Relate student learning activities to the four learning goals.	Exams, Group discussions, Development of lesson plans including national standards
S1.2 Implement instructional strategies which focus students' achievements of benchmarks in related essential academic learning requirements and achievement of Goals 3 & 4.	Develop and present lesson plans and lessons with assessment of essential learnings and national standards, Group discussions, Cooperative learning projects, Exams
S1.3 Integrate career-technical program assessment with the assessment of the related learning goals and the essential academic learning requirements.	Develop and present lesson plans and lessons with assessment of essential learnings and national standards, Exams
2. Career-Technical Education Common Core: Learning Environment.	
The career-technical teacher is able to create and sustain safe learning environments which prepare diverse students for the workplace, advanced training, and continued education.	Students demonstrate safe use of machines and tools, Develop and present lesson plans and lessons with assessment of essential learnings and national standards
K2.1 School.	
S2.1.1 Implement effective classroom management strategies which meet diverse	Group discussions, Exams, Real and/or simulated classroom teaching experience

needs of students.	
S2.1.2 Establish and maintain positive student-focused learning environments.	Group discussions, Real and/or simulated classroom teaching experience
S2.1.3 Implement classroom strategies which comply with school law and education policies.	Group discussions, Real and/or simulated classroom teaching experience, Exams
S2.1.4 Incorporate industry or OSPI approved standards of safety and healthy practices into learning environment.	Direct observation, Exams, Group discussions, Real and/or simulated classroom teaching experiences, Design a production system meeting industrial safety standards
S2.1.5 Create a learning environment that simulates the workplace.	Real and/or simulated classroom teaching experiences, Design and operate a production system for producing wood based products
S2.1.6 Practice workplace ethics.	Real and/or simulated classroom teaching experiences, Work in a production environment to produce a product that must meet consumer standards for quality
S2.1.7 Emulate workplace standards.	Real and/or simulated classroom teaching experiences, Work in a production environment to produce a product that must meet consumer standards for quality.
S2.1.8 Encourage appreciation of learning, invention, and risk taking.	Real and/or simulated classroom teaching experiences, Work in a production environment to produce a product that must meet consumer standards for quality, Group discussion, Self-reflection
K2.2 Family.	
S2.2.1 Demonstrate effective interactions with parents and/or guardians which support student learning and well being.	Group discussion, Real and/or simulated classroom teaching experiences
S2.2.2 Create an environment which clarifies relationship between work, family, and multiple life roles.	Course readings, discussions, Instructional Unit and lesson planning
K2.3 Community.	
S2.3.1 Utilize the community as a learning environment.	Research projects and/or journal critiques, Exams, Course readings, discussions, Instructional Unit and lesson planning
S2.3.2 Provide opportunities for interaction on community concerns and issues.	Course readings, discussions, Instructional Unit and lesson planning
K2.4 Work.	
S2.4.1 Practice workplace cultures and expectations.	Work as part of a manufacturing team
S2.4.2 Use work sites as an extension of classroom to facilitate student achievement of specific industry competencies.	Service learning projects, Work experience gained as required for voc. certification
3. Career-Technical Education Common Core: Student Characteristics and Related Instructional Strategies.	
The career-technical teacher is able to identify the diverse needs of students and implement programs and strategies which promote student competency and success.	Exams, Group discussions, Real and/or simulated classroom teaching experience
K3.1 Needs/Styles.	

S3.1.1 Adapt the curriculum plan to recognize stages of human growth and development.	Development of lesson plans, Course readings, discussions, Instructional unit and lesson planning
S3.1.2 Accommodate student special needs and learning styles.	Group discussion, Exams, Real and/or simulated classroom teaching experience, Course readings, discussions, Instructional unit and lesson planning
S3.1.3 Plan curriculum to incorporate multiple intelligence.	Development of lesson plans, Course readings, discussions, Instructional unit and lesson planning
S3.1.4 Foster development of student self-awareness, confidence, and character.	Course readings, discussions, Instructional unit and lesson planning
S3.1.5 Develop student initiative and teamwork skills.	Collaborative projects, Work together to design a product and a production system
S3.1.6 Encourage development of sound social and personal ethics.	Course readings, discussions, Instructional unit and lesson planning
S3.1.7 Utilize knowledge of social issues impacting student learning.	Journal critiques, Course readings, discussions, Instructional unit and lesson planning
S3.1.8 Identify stages of student career development including, but not limited to post-secondary opportunities and a 13th year plan.	Student and career portfolio, Self-analysis of own disposition
K3.2 Diversity/Equity.	
S3.2.1 Accept and encourage students in nontraditional career roles.	Self-analysis of own disposition, Course readings, class discussions, lesson planning
S3.2.2 Recognize and support diversity.	Self-analysis of own disposition, Course readings, class discussions, lesson planning
S3.2.3 Recognize impact of diversity and equity issues on student learning.	Self-analysis of own disposition, Course readings, class discussions, lesson planning
S3.2.4 Provide curriculum and instructional strategies which meet diverse needs of students.	Real and/or simulated classroom teaching experience, Development of lesson plans
K3.3 Method Strategies Resources.	
S3.3.1 Employ effective classroom management strategies.	Real and/or simulated classroom teaching experience, Peer evaluation, Exams, Journal critiques
S3.3.2 Implement effective teaching techniques that accommodate diverse learning styles.	Real and/or simulated classroom teaching experience, Exams, Peer evaluation

S3.3.3 Demonstrate use of a variety of instructional strategies to implement subject area competencies.	Real and/or simulated classroom teaching experience, Group discussions, Peer evaluation
S3.3.4 Adapt curriculum to all learning levels.	Real and/or simulated classroom teaching experience, Development of lesson plans, Development of scenarios and case studies
S3.3.5 Use resources and instructional techniques that incorporate current technology needs of business/industry/labor.	Use computer software related to industry, Self-resourcefulness
S3.3.6 Use instructional techniques that develop career decision making and employability skills.	Real and/or simulated classroom teaching experience, Development of lesson plans
S3.3.7 Provide students with opportunities to become independent learners.	Students research, design and construct individual projects
S3.3.8 Facilitate student development of leadership skills, as defined in the Washington State recognized CTSO appropriate to program area.	Students serve as production managers, designers, purchasing managers, and quality control inspectors in group projects
S3.3.9 Utilize business and labor partners to infuse workplace standards and practices into curriculum.	Individual and group projects, Work experience required for voc. certification
S3.3.10 Promote and develop lifelong learning.	Individual research projects, Academic service learning projects
S3.3.11 Publicize the program content and benefits to students.	Course readings, class discussions, lesson planning
S3.3.12 Provide for entry, transition, and continuation in educational process.	Course readings, class discussions, lesson planning
K3.4 Program Organization.	
S3.4.1 Develop new course proposal based on OSPI guidelines.	Unit planning
S3.4.2 Develop curriculum based on industry standards as approved by local advisory committee.	Real and/or simulated classroom teaching experience, Development of lesson plans
S3.4.3 Design and implement program scope, sequence and assessment which enables students to develop marketable competencies.	Real and/or simulated classroom teaching experience, Development of lesson plans
S3.4.4 Demonstrate ability to write unit and lesson plans incorporating variety of instructional strategies, and all aspects of career and technical program approval.	Development of lesson plans, Unit Planning
S3.4.5 Revise curriculum based on occupational changes.	Development of lesson plans, Unit Planning
S3.4.6 Design and implement program assessments.	Development of lesson plans, Instructional Planning

K3.5 Integration.	
S3.5.1 Provide opportunities for students to productively integrate career and academic disciplines.	Journal critiques Course readings, class discussions, lesson planning
S3.5.2 Provide activities to connect school experiences to workplace.	Visitations to obtain info and materials, Work experience required for voc. certification
S3.5.3 Select and apply appropriate technology to teaching process.	Oral presentations, Educational Technology presentations
S3.5.4 Guide students in balancing competing demands and responsibilities of work and family.	Instructional Planning
K3.6 Assessment/Evaluation.	
S3.6.1 Develop effective evaluation techniques which includes student, family, community, industry certifications, and teacher involvement in assessing student performance.	Group discussion, Develop and present lessons, Instructional Planning & Assessments
S3.6.2 Use variety of assessment methods including portfolios to measure student learning and development.	Group discussion, Instructional Planning & Assessments
S3.6.3 Use student achievement and performance information to advise and involve students and families.	Instructional Planning, Assessment, & communication strategies
S3.6.4 Develop and utilize strategies and tools to assess and document student progress.	Instructional Planning & Assessments
S3.6.5 Facilitate student understanding of their progress.	Assessment & Discussion
S3.6.6 Use assessment to monitor and improve instructions.	Assessment & Instructional Planning
4. Career-Technical Education Common Core: Personal and Professional Attributes.	
The Career-Technical teacher models personal and professional attributes and leadership skills which reflect productive life and work roles.	
K4.1 Human Relations.	
S4.1.1 Demonstrate positive attitude.	Work with others in a team project, Self-analysis of own disposition
S4.1.2 Demonstrate enthusiasm.	Work with others in a team project, Self-analysis of own disposition
S4.1.3 Demonstrate self-motivation.	Complete projects at student's pace, Work with others in a team project, Self-analysis of own disposition
S4.1.4 Demonstrate ability to support change.	Work with others in a team project, Self-analysis of own disposition
S4.1.5 Demonstrate trustworthiness.	Work with others in a team project, Self-analysis of own disposition
S4.1.6 Demonstrate teamwork skills with	Work in teams to complete production projects,

diverse groups.	Orally report on project and justify project with data obtained in the team project
S4.1.7 Demonstrate customer-centered focus.	Work in teams to complete production projects Orally report on project and justify project with data obtained in the team project
K4.2 Communication.	
S4.2.1 Demonstrate effective listening skills.	Presentations with peer critiques
S4.2.2 Demonstrate effective oral presentation skills.	Oral presentations to small and large groups, Real and/or simulated classroom teaching experience
S4.2.3 Demonstrate ability to read with comprehension.	Journal critiques, Reading, Discussion, Instructional Planning
S4.2.4 Demonstrate effective writing skills, including technical writing skills.	Write production instructions and schedules, Create a process plan and flow chart for a team project, Keep records of progress towards the timely completion of the team project, Record and analyze inspection data obtained from the team project
S4.2.5 Demonstrate ability to serve as a facilitator.	Resolve differences of opinion on product design questions
K4.3 Student Centered.	
S4.3.1 Demonstrate empathy and caring.	Real and/or simulated classroom teaching experience, Classroom Management & Discussion
S4.3.2 Demonstrate willingness to serve as effective mentor/advocate.	Real and/or simulated classroom teaching experience, Classroom Management & Discussion
S4.3.3 Demonstrate ability to serve as positive and appropriate role model.	Real and/or simulated classroom teaching experience, Classroom Management & Discussion
S4.3.4 Demonstrate willingness to accept and respect diversity.	Real and/or simulated classroom teaching experience, Classroom Management, Instructional Planning & Discussion
K4.4 Thinking/Problem Solving.	
S4.4.1 Demonstrate problem solving process.	Use software to solve product design problems, Individual and group projects
S4.4.2 Demonstrate ability to identify and evaluate quality.	Serve as quality control monitors on a production project, Organize and run the team project, Orally report on project and justify project with data obtained in the team project
S4.4.3 Demonstrate creative and critical thinking.	Application projects, Exams

K4.5 Workplace Competencies..	
S4.5.1 Document recent specific occupational experience.	Work experience required for voc. certification
S4.5.2 Demonstrate positive interaction with diverse student population.	Real and/or simulated classroom teaching experience
S4.5.3 Model inclusive corporate citizenship practices.	Individual and group projects
S4.5.4 Demonstrate appropriate technology skills.	Produce projects and computer generated drawings
S4.5.5 Demonstrate workplace basic skills.	Work experience required for voc. certification, Operate machines and use computer software, Work on individual and group projects
K4.6 Organization and management competencies.	Students serve as production managers, Work on projects including: forming a team to plan, organizing and running the team project. Create a process plan and flow chart for the team project, Estimate the amount of time required to complete the team project, Keep records of progress towards the timely completion of the team project, Record and analyze inspection data obtained from the team project, Orally report on project
S4.6.1 Demonstrate personal management and organization skills.	Form a team to plan, organize and run the team project, Create a process plan and flow chart for the team project, Estimate the amount of time required to complete the team project, Keep records of progress towards the timely completion of the team project, Record and analyze inspection data obtained from the team project, Orally report on project
S4.6.2 Apply quality management and continuous improvement principles.	Form a team to plan, organize and run the team project, Create a process plan and flow chart for the team project, Estimate the amount of time required to complete the team project, Keep records of progress towards the timely completion of the team project, Record and analyze inspection data obtained from the team project, Orally report on project
K4.7 Lifelong Learner.	
S4.7.1 Design and implement an initial personal and professional growth plan.	Development of a professional development plan
S4.7.2 Demonstrate the role of professional organizations in professional development.	Development of a professional development plan with a description of involvement in professional organizations
5. Career-Technical Education Common Core: Partnerships.	

The Career-Technical teacher implements and maintains collaborative partnerships with students, colleagues, community, business, industry, and families which maximize resources and promote student self-sufficiency.	
K5.1 Business/Industry/Labor.	
S5.1.1 Maintain advisory committees that reflect occupation's complexity.	Group discussion
S5.1.2 Maintain advisory committees that sustain and improve program quality.	Group discussion
S5.1.3 Participate in related occupational organizations.	Work experience required for voc. certification
S5.1.4 Create business partnerships to ensure program relevance.	Group discussion, Work experience required for voc. certification
S5.1.5 Publicize program content and benefits to business, industry, and labor.	Group discussion, Work experience required for voc. certification
K5.2 Family/Community.	
S5.2.1 Inform, involve, and collaborate with parents and/or guardians to support student success.	Assessment Planning, Family Involvement Planning
S5.2.2 Participate in community activities to improve curriculum and instructional practices.	Instructional and Assessment Planning, Family Involvement Planning
S5.2.3 Publicize program content and benefits to family and community.	Family Involvement Planning
K5.3 Colleagues.	
S5.3.1 Collaborate with colleges to improve and implement innovative curriculum and instructional strategies.	Curriculum & Instructional Planning
S5.3.2 Participate in related professional organizations which impact program policy and resource allocation.	Group discussion, Opportunities are available to join and participate in professional organizations
S5.3.3 Publicize program content and benefits to colleagues.	Real and/or simulated classroom teaching experiences, Involvement in professional organizations
K5.4 Partnership Systems.	
S5.4.1 Recognize partnerships which enhance school-to-career preparation for all students.	Involvement in professional organizations, Group discussion
S5.4.2 Publicize program content and benefits to parents.	Assignment
6. Technology Education Common Core: Technology.	
The technology teacher demonstrates knowledge and understanding of concepts related to the nature of technology and the knowledge and understanding of the relationship between technology and society.	

K6.1 Develop an understanding of the characteristics and scope of technology.	Group/class discussion, Exam
K6.2 Develop an understanding of the core concepts of technology.	Group/class discussion, Exam
K6.3 Develop an understanding of the relationships among technologies and the connections between technology and other fields of study.	Group/class discussion, Exam
K6.4 Will develop an understanding of the cultural, social, economic, and political effects of technology.	Group/class discussion, Exam
K6.5 Will develop an understanding of the effects of technology on the environment.	Group/class discussion, Exam
K6.6 Will develop an understanding of the role of society in the development and use of technology.	Group/class discussion, Exam
K6.7 Will develop an understanding of the influence of technology on history.	Group/class discussion, Exam
7. Technology Education Common Core: Design.	
The technology teacher demonstrates the knowledge and understanding of design.	
K7.1 Develop an understanding of the attributes of design.	Application projects, Lab work, Homework, Exams
K7.2 Develop an understanding of engineering design.	Application projects, Lab work, Homework, Exams
K7.3 Develop an understanding of the role of troubleshooting, research and development, invention and innovation, and experimentation in problem solving.	Application projects, Lab work, Homework, Exams
8. Technology Education Common Core: Technologies Ability.	
The technology teacher demonstrates the knowledge and understanding of the abilities of a technological world.	
S8.1 Develop abilities to apply the design process.	Application projects, Lab work, Homework, Exams
S8.2 Develop abilities to use and maintain technological products and systems.	Application projects, Student will manufacture a metallic component to specified dimensions and tolerances
S8.3 Students will develop abilities to assess the impact of products and systems.	Application projects, Lab work, Homework, Exams
9. Technology Education Common Core: Design World Context.	
The technology teacher demonstrates competency in five of the following seven areas of the design world context with a concentration in at least one.	
K9.1 Develop an understanding of medical technologies.	

K9.2 Develop an understanding of agricultural and related biotechnologies.	
K9.3 Develop an understanding of energy and power technologies.	Application project, Oral presentations, Exams
K9.4 Develop an understanding of information and communication technologies.	Application project, Oral presentations, Exams
K9.5 Develop an understanding of transportation technologies.	Application project, Oral presentations, Exams
K9.6 Develop an understanding of manufacturing technologies.	Application project, Oral presentations, Exams
K9.7 Develop an understanding of construction technologies.	Application project, Oral presentations, Exams
S9.1 Able to select and use medical technologies.	
S9.2 Able to select and use agricultural and related biotechnologies.	
S9.3 Able to select and use energy and power technologies.	Identify and use electrical components and measurement equipment in lab applications, Assignments/lab work, projects
S9.4 Able to select and use information and communication technologies.	Use appropriate software for specific applications, Assignments/lab work, projects
S9.5 Able to select and use transportation technologies.	Assignments/lab work; projects, Journal critiques
S9.6 Able to select and use manufacturing technologies.	Participation in productions/manufacturing projects, Oral presentations
S9.7 Able to select and use construction technologies.	Identify and use construction tools on assignments/lab work and projects
10. Technology Education Common Core: Laboratory.	
The technology teacher demonstrates the ability to manage a technology education laboratory.	
S10.1 Demonstrate the safe operation of a wide variety of manual and power tools used in the fabrication of both metallic and nonmetallic parts.	Application projects, Student will manufacture a metallic component to specified dimensions and tolerances
S10.2 Manage a storage system for raw materials such as wood, plastics, metals, adhesives, fasteners, and coatings, and a variety of manual and power tools, as well as apparatus for applied science activities.	Design and create a tool holder for a specific tool or set of tools
S10.3 Demonstrate ability to lay out and organize a laboratory for multiple uses, with a high priority for student safety, ease of supervision, and the efficient flow of raw materials and materials under process.	Create a process plan and flow chart for a team project, Design a school classroom and laboratory teaching area
S10.4 Design and modify a laboratory facility to reflect a variety of curriculum directions.	Design a public school classroom and laboratory teaching area

11. Technology Education Common Core: Leadership.	
The technology teacher models attributes and leadership skills, which reflect on-going professional development, models effective leadership traits, and demonstrate the ability to facilitate, supervise, and evaluate TSA student leadership activities.	
S11.1 Develops and carries out a professional development plan.	Development of a professional development plan, Group discussion
S11.2 Has knowledge of and participates in appropriate professional organizations and serves in a leadership role.	Participation in collegiate and/or professional organizations
S11.3 Participates in activities that will result in improved technological knowledge and developments related to teaching.	Participation in collegiate and/or professional organizations, Visitations to schools
S11.4 Organize or continue a TSA chapter including conducting regular chapter activities.	Class discussion, Visitations to schools
S11.5 Integrate TSA into program curriculum.	Class discussion, Visitations to schools
S11.6 Provide the opportunities for students to participate in extended day activities.	Instructional & Family Involvement Planning
S11.7 Extend learning into the community where appropriate and when possible.	Instructional Planning
Describe evidences that candidates will provide to document candidates' positive impact on student learning in the respective endorsement area.	
<p>Students completing student teaching in the Industrial/Technology Education endorsement area will be assessed using the Performance-based Pedagogy Assessment (PBPA) tool. The PBPA requires pre-service teacher candidates to document evidence of positive impact on student learning through development and implementation of a unit plan specific to the endorsement area. The unit plan will address the diversity of student in the pre-service candidate's field placement and will include effective planning, instructional strategies, management of instruction, and assessment strategies. In addition, the pre-service teacher candidate will be observed to assess effective verbal and non-verbal communication techniques, appropriate classroom management and discipline, and effective interactions with parents to support student learning.</p>	
Describe the assessment system by which candidate performance, relative to the competencies, will be aggregated, analyzed, and used for program improvement.	

Pre-service teacher candidate assessment of instruction: Each faculty member who teaches a course in the endorsement area is assessed by pre-service teacher candidates at the end of the quarter (Student Evaluation of Instruction – SEOI). Instructors use assessment data to improve instruction. In addition, many instructors administer additional assessments that provide more in-dept qualitative data concerning course content, instructional techniques, and assessments. Instructor assessment of instruction: Based on pre-service teacher candidate performance on course performance indicators (projects, tests/quizzes, presentations, etc.), instructors compile and analyze data collected at the end of each quarter and make adjustments necessary to increase the effectiveness of individual courses and programs as a whole.

The Technology Education program is improved in several ways. First, data from students, field supervisors, first-year teacher follow-ups, and follow-up surveys of TE teacher graduates provides the department and methods teachers information that is used to improve, revise, and modify the program. Second, our program is compliant with the state of Washington technology education program standard stated in the WAC. Finally, our program is internally discussed in faculty meetings: how it fits with our other programs, resource coordination, staffing, room utilization, and program assessment.