**281—46.6 (258)** Career and technical education program approval and review. The purpose of the career and technical education program approval and review process is to promote the establishment and maintenance of high-quality secondary and postsecondary career and technical education programs that implement best practices resulting in effective teaching and learning. The program approval and review process will ensure that all career and technical education programs are compatible with educational reform efforts, are capable of responding to technological change and innovation, and meet the educational needs of students and the employment community.

**46.6(1)** Secondary program approval. All career and technical education programs offered by a district shall be approved by the department. As a condition for approval, a district shall comply with the following requirements for career and technical education program approval.

*a.* Data collection and analysis. A district shall, for each program, conduct an analysis of appropriate data and information related to the program and occupational fields applicable to the program. For purposes of this subrule, data shall include, at a minimum, program enrollment numbers and trends by high school, course completion rates and trends, data required under federal statute governing career and technical education, and labor market information and socioeconomic and demographic data elements as provided by the partnership.

*b. Program report and self-study.* A district shall create a program report and self-study for each offered program. The program report and self-study shall include narrative on the following criteria:

(1) Program overview. This section shall include an overview of the program's purpose, a summary of data and information as described under paragraph 46.6(1) "a" and any conclusions drawn from this data and information, and an analysis of future trends in occupations associated with the program.

(2) Statement of program goals, objectives, and outcomes. This section shall include clear statements of the program's goals, objectives, and outcomes, including a justification of the program's goal(s), objective(s), and outcome(s) based on the review conducted under subparagraph 46.6(1) "b"(1), and describe methods which will be used to measure the program's stated outcomes.

(3) Competencies. This section shall describe the established program competencies aligned with state standards pursuant to rule 281—46.5(258) and the program's goals, objectives, and outcomes; include evidence of advisory committee approval of competencies, technical skill assessment tool(s), and proficiency benchmarks; include evidence of postsecondary approval of competencies and technical skill assessment tool(s); outline and describe the coherent sequence of coursework which constitutes the program, including any related foundational and concurrent enrollment coursework, depicted in a plan of study template; describe processes utilized to employ contextualized and effective work-based, project-based, and problem-based learning approaches; describe efforts to integrate career and technical education student organization(s) into the program, if applicable; and describe processes utilized to review and update the curriculum, ensuring continued relevancy to the occupational field.

(4) Student assessment. This section shall describe how the program will assess student outcomes established under subparagraph 46.6(1) "b"(2) and program competencies established under subparagraph 46.6(1) "b"(3) and the established technical skill assessment tool(s) to measure competencies, utilizing industry-approved technical skill assessments, where available and appropriate.

(5) Educational resources. This section shall describe key equipment and materials currently used in instruction; processes to determine whether the equipment is relevant and up to date; processes to maintain the equipment; and new equipment needs, with a description of how the proposed new equipment would improve the program.

(6) Advisory council. This section shall describe how the program engages with the business community to recruit members for the advisory council pursuant to rule 281—46.8(258) and include a current member list with titles and company; describe advisory committee meeting logistics including, but not limited to, meeting frequency, agendas, and minutes; detail and describe the advice the advisory council has suggested for the program and any actions or results taken by the program which stem from this advice as well as any advice not acted upon by the program; and include, as an appendix to the narrative, advisory council minutes from the prior year.

(7) Partnerships. This section shall describe how the program's curriculum is integrated with other curricular offerings required of all students; describe the articulation, contractual agreements for shared courses with community colleges, and other agreements with community colleges and other postsecondary institutions; and describe how the program partners with counselors at various levels to assist all students and stakeholders in the exploration of pathway opportunities within the service area.

(8) Removing barriers. This section shall describe how the program removes barriers for all students to access education opportunities both while in and beyond high school.

c. Feedback. The district shall submit the program report and self-study completed under paragraph 46.6(1) "b" to the partnership for peer review and feedback. The partnership shall complete a review of the program report and self-study and provide the district with recommendations and feedback based on that review. The partnership's recommendations shall be documented and submitted to the department and the district. The partnership shall include in the recommendations a determination of whether the program should or should not receive department approval. A program must be recommended for approval by the partnership for the program to receive approval by the department. The district will modify the program report and self-study based on the partnership's recommendations. The partnership's recommendations shall be included as an appendix to the program report and self-study submitted to the department. The final program report and self-study shall be submitted by the district to the department.

*d.* Department approval. Final approval of programs will be reserved for the department. Approval shall be awarded to a program if clear evidence of compliance with the criteria established in this rule is provided in the program report and self-study as required under paragraph 46.6(1)"b." A program which fails to be approved by the department will have one year to address identified deficiencies and resubmit for approval of the program. The department will provide a summary of the deficiencies in need of addressing.

**46.6(2)** *Postsecondary program approval.* All community college career and technical education programs shall be approved through the process established in 281—subrule 21.4(3).

**46.6(3)** Secondary program review. The program review process will ensure that 20 percent of secondary career and technical education programs are reviewed on an annual basis and that career and technical education programs meet standards adopted by the board. The review shall include an assessment of the extent to which the competencies in the program are being mastered by the students enrolled, the costs are proportionate to educational benefits received, the career and technical education curriculum is articulated and integrated with other curricular offerings required of all students, the programs would permit students with career and technical education backgrounds to pursue other educational interests in a postsecondary institutional setting, and the programs remove barriers for all students to access educational and employment opportunities.

*a.* Secondary program review. As a condition of continuing approval, districts shall comply with the following requirements for career and technical education program review. Units of instruction required under rule 281—46.4(258) must have students from each participating high school enrolled. Each district that sends students to a shared program with another district which is used by the sending district to fulfill the requirements of rule 281—46.4(258) must have students from the sending district enrolled in the shared program.

(1) Conclusions drawn from annual program measurement. A district shall, for each program, annually review and evaluate program outcomes and student assessment data. The district shall describe any conclusions drawn from the review and evaluation of program outcomes and student assessment data, and how those conclusions impact the future direction of the program. In addition to and as a result of this review, the district shall identify program strengths, in order of importance, and describe how these strengths will be maintained; perceived barriers to accomplishing the program's goal(s) and objective(s); and primary opportunities for improvement, in order of importance, and how these opportunities for improvement will be addressed. The district shall also review program enrollment and participation data by high school to determine if students from each participating high school have access to the program.

The district shall describe how the district is ensuring access to the program for all students from each participating high school.

(2) Revision of program goals, objectives, and outcomes. The district shall update and make appropriate revisions to the program, including goals, objectives, and outcomes, as outlined in the program report and self-study based on the results of the activities prescribed under subparagraph 46.6(3) "a"(1).

b. Feedback. The district shall submit the program report and self-study completed under subparagraph 46.6(3) "a"(2) to the partnership for peer review and feedback. The partnership shall complete a review of the program report and self-study and provide the district with recommendations and feedback based on the review. The partnership's recommendations shall be documented and submitted to the department and the district. The partnership shall include in the recommendations a determination of whether the program should or should not receive department approval. A program must be recommended for approval by the partnership for the program to receive approval by the department. The district will modify the program report and self-study based on the partnership's recommendations. The partnership's recommendations shall be included as an appendix to the program report and self-study submitted to the department. The district to the department. The district to the department.

*c.* Department approval. Final approval of programs will be reserved for the department. Approval shall be awarded to a program if clear evidence of compliance with the criteria established in this rule is provided in the program report and self-study as required under this rule. A program which fails to be approved by the department will have one year to address identified deficiencies and resubmit for approval of the program. The department will provide a summary of the deficiencies in need of addressing.

**46.6(4)** Postsecondary program review. The postsecondary program review process shall ensure career and technical education programs meet standards adopted by the board. The review shall include an assessment of the extent to which the competencies in the program are being mastered by the students enrolled, the program costs are proportionate to educational benefits received, the curriculum is articulated and integrated with other curricular offerings required of all students, the program provides opportunities for students to pursue other educational interests in a postsecondary institutional setting, and the program removes barriers for all students to access educational and employment opportunities.

*a. Process.* Each community college shall establish a process which ensures at least 20 percent of career and technical education programs are reviewed on an annual basis. The department will ensure compliance with the requirements of this paragraph through the community college accreditation process established in 281—Chapter 24.

*b.* Components. The following minimum components will be addressed through the process outlined in paragraph 46.6(4) "*a.*"

(1) Industry or professional standards. Community colleges shall utilize standards established and recognized by industry or professional organizations when available and appropriate. In lieu of these standards, community colleges shall develop program standards through a structured group interview process, which involves committees of incumbent workers within an occupational cluster analyzing standards which include new and emerging technologies, job seeking, leadership, entrepreneurial, and occupational competencies. This analysis includes identifying standards that ensure program participants have access to instruction which leads to employment and further training. All standards will be analyzed for the reinforcement of academic skills.

(2) Program standards. Additional standards which shall be addressed during the program review include currency of curriculum; faculty qualifications; professional development; adequacy of equipment and facilities; student outcomes, in terms of student demographics to include gender, race and ethnicity, national origin, and disability; enrollment retention, completion, and replacement rates; articulation; and employment rates and wages.

(3) Advisory council. The community college shall document how the program engages with the business community to recruit members for the advisory council required under rule 281—46.8(258). Program review documentation shall include a current member list with titles and employer; advisory committee meeting logistics including, but not limited to, meeting frequency, agendas, and minutes; advice the advisory council has suggested for the program; and any actions or results taken by the program which stem from this advice.

(4) Articulation. Teachers and administrators from both secondary and postsecondary instructional levels shall (when applicable) meet to identify competencies required at each level and to jointly prepare agreements of articulation between secondary and postsecondary levels for specific occupational areas. Such joint articulation efforts will facilitate the secondary-postsecondary transition and help reduce duplication between the two levels.

**46.6(5)** *Program modification.* Any modifications to a program must be approved by the department. Modification includes, but is not limited to, a change to the courses in the program, a change to the description of a program, discontinuing a program or option, a change to instructional or occupational classification, or changes in program entrance requirements.

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