4.21 Trade and Industry (Grades 7-12)

To be endorsed in trade and industry, an applicant shall hold an earned bachelor's or higher degree from an accepted institution of higher education; have completed an approved teacher preparation program including prescribed field experience and student teaching requirements; have completed an approved program in trade and industry education; and have demonstrated the competencies specified below:

- 4.21(1) The trade and industry educator is knowledgeable and able to effectively instruct students about the content of trade and industry education including, but not limited to:
 - 4.21(1)(a) concepts, skills, abilities and expectations relevant to trades and industries in general.

4.21(1)(b) the occupational (career and/or technical) content areas which are appropriate for instruction in secondary schools.

- 4.21(2) The trade and industry educator is knowledgeable and able to effectively instruct students in one or more occupational (career and/or technical) content areas.
- 4.21(3) The trade and industry educator is able to:
 - 4.21(3)(a) instruct students about the dynamic effects of trade and industry and vocational (career and technical) education on the history and development of society(ies).
 - 4.21(3)(b) demonstrate and effectively instruct students about the skills, abilities and other aspects requisite for career development, proficiency and for further training and education in one or more specific occupational content areas including, but not limited to:
 - 4.21(3)(b)(i) the relationship between an occupation and its practical application(s) and incorporation of academic subject matter, concepts, skills and abilities including, but not limited to, communication, problem-solving, inquiry and analysis relevant to a wide range of work settings;
 - 4.21(3)(b)(ii) the safe, efficient and effective use of state-of-the-art and other available, still-utilized tools, equipment, materials and resources relevant to the content area and in a variety of settings and circumstances;
 - 4.21(3)(b)(iii) the appropriate integration and applications of relevant technology within the occupational content area;
 - 4.21(3)(b)(iv) the relevant and current standards, practices and policies affecting the occupational content area and trade and industry in general, and relevant practical applications;
 - 4.21(3)(b)(v) business and management practices including, but not limited to, planning; organizing; managing; the acquisition of equipment, machinery, tools and supplies and their maintenance and storage; record-keeping; budgeting; accounting; marketing; and practical applications in a variety of work-place settings;
 - 4.21(3)(b)(vi) the relationship between business and economics and producers, consumers, communities, states and the country; and
 - 4.21(3)(b)(vii) ethical considerations including, but not limited to, high professional standards, a strong work ethic, personal responsibility and lifelong learning.

- 4.21(4) The trade and industry educator shall provide students with:
 - 4.21(4)(a) a wide variety of instructional approaches adapted to meet the needs of a diverse student population.
 - 4.21(4)(b) a safe and engaging instructional space, which includes the establishment and implementation of appropriate and relevant rules and practices related to appropriate maintenance, storage, distribution and use of equipment, machinery, tools, materials and supplies.
 - 4.21(4)(c) a wide variety of engaging hands-on cognitive and psychomotor experiences relevant to the content area, including the use of related technology to optimize learning and its practical applications.
 - 4.21(4)(d) appropriate and state-of-the art equipment, supplies and materials, within fiscal means.
 - 4.21(4)(e) assessments and self-assessments that promote occupational skills' proficiency.

4.21(5) The trade and industry educator is knowledgeable about and participates in:

- 4.21(5)(a) life-long learning and the continuing acquisition of current information relative to the occupational content area, and the improvement of effective instructional delivery of that content area to students.
- 4.21(5)(b) curriculum implementation across disciplines and articulation between secondary and post-secondary education programs, both occupational and academic.
- 4.21(5)(c) the advocacy for, formation and/or ongoing development of and/or implementation of appropriate content-related student organizations and promotion of student participation in appropriate occupational and professional organizations.
- 4.21(6) The trade and industry educator shall self-assess the effectiveness of instruction based on the achievement of students and pursue continuous professional development through appropriate activities, coursework and participation in relevant professional organizations.