R4863 Rule Language Changes

9/16/2025

NOTE TO BOARD: These two K-6 endorsements (Ethnic Studies & Computer Science) were missing from the 9/5/2025 Revisor's Draft of R4863. I will ask the Revisor's Office to add these into the next version of the proposed rule. -Steve Rollin

Computer Science Licensure

Line	Edit
Insert between 60.9 and 60.10	[NOTE: This change proposes a K-6 elementary level endorsement for Computer Science.] **8710.4880 KINDERGARTEN THROUGH GRADE 6 COMPUTER SCIENCE ENDORSEMENT LICENSE.** Subpart 1. **Scope of practice**. A teacher of computer science (CS) is authorized to provide to students in grades kindergarten through 6 instruction that is designed to teach students how to think computationally, create new technologies, use and create software, and understand how computers process information. A teacher of computer science is also authorized to provide student instruction for exploring the foundational concepts of algorithms, computational thinking, problem-solving, creativity, logical thinking, and preparing for the digital world. Subp. 2. **Endorsement requirements**. An applicant seeking a license to teach computer science must meet the requirements for a license pursuant to parts 8710.0311 to 8710.0314 and Minnesota Statutes, section 122A.181 to 122A.184. An applicant for endorsement in computer science must hold or apply and qualify for a license to teach elementary education under part 8710.3200. Subp. 2a. **Endorsement program**. A candidate completing a board-approved endorsement program for computer science must demonstrate the content standards set forth in subpart 3. Subp. 3. **Subject matter standards**. A candidate for endorsement as a teacher of computer science must demonstrate the knowledge and skills in items A through B. A. Computer science knowledge and skills. CS teachers demonstrate and continuously develop thorough knowledge of CS content. They demonstrate proficiency with the CS concepts of the grade bands they teach, and they integrate these concepts with CS practices, including

	computational thinking. They also understand the progression of content before and after the grade bands they teach. CS teachers must: 1. Apply CS practices. Apply CS and computational thinking practices in flexible and appropriate ways. Practices include: Fostering an Inclusive Computing Culture Around Computing, Communicating About Computing, Recognizing and Defining Computational Problems, Developing and Using Abstractions, Creating Computational Artifacts, and Testing and Refining Computational Artifacts. 2. Apply knowledge of computing systems. Apply knowledge of how hardware and software function to input, process, store, and output information within computing systems by analyzing interactions, designing projects, and troubleshooting problems. 3. Model networks and the Internet. Model how computing devices connect via networks and the Internet to facilitate communication, and explain tradeoffs between usability and security. 4. Use and analyze data. Collect, store, transform, and analyze digital data to better understand the world and make more accurate predictions. 5. Develop programs and interpret algorithms. Design, implement, debug, and review programs in an iterative process using appropriate CS tools and technologies. Interpret algorithms, and explain tradeoffs associated with different algorithms. 6. Analyze impacts of computing. Analyze how people influence computing through their behaviors, cultural norms, and social interactions, as well as how computing impacts society in both positive and negative ways. B. Instructional Design. CS teachers design learning experiences that engage students in problem solving and creative expression through CS, using pedagogical content knowledge (PCK). They plan to meet the varied learning, cultural, linguistic, and motivational needs of individual students in order to build student self-efficacy and capacity in CS. CS teachers must: 1. Analyze CS curricula. Analyze CS curricula for implementation in their classrooms in terms of CS standards alignment, accuracy, completeness of content, cultural relevance, and accessibility.

	2. Develop standards-aligned learning experiences. Design and adapt learning experiences that align to comprehensive K-12 computer science standards. 3. Design inclusive learning experiences. Use Universal Design for Learning (UDL), Culturally Relevant Pedagogy (CRP), and other techniques to support all students in successfully accessing and engaging with content. 4. Build connections between CS and other disciplines. Design learning experiences that make connections to other disciplines and real-world contexts. 5. Plan projects that have personal meaning to students. Plan opportunities for students to create and share open-ended and personally meaningful projects. 6. Plan instruction to foster student understanding. Plan activities that use evidence-based, CS-specific teaching strategies to develop students' conceptual understanding and proactively address student misconceptions in CS. 7. Inform instruction through assessment. Develop multiple forms and modalities of assessment to provide feedback and support. Use resulting data for instructional decision-making and differentiation. Subp. 3a. **Placements for candidates completing a program.** The candidate must complete a practicum teaching students in computer science in the kindergarten through grade 6 levels.

Ethnic Studies Licensure

Line	Edit
Insert between 53.8 and 53.9	[NOTE: This change proposes a K-6 elementary level endorsement for ethnic studies.] **8710.4820 ETHNIC STUDIES ENDORSEMENT LICENSE FOR ELEMENTARY EDUCATION TEACHERS.** Subpart 1. **Scope of practice**. A teacher of ethnic studies is authorized to provide to students in kindergarten through grade 6 instruction in the interdisciplinary study of race, ethnicity, and indigeneity. Subp. 2. **Endorsement requirements**. An applicant seeking a license to teach ethnic studies must meet the requirements for a license pursuant to parts 8710.0311to 8710.0314 and Minnesota Statutes, section 122A.181 to 122A.184. An applicant for endorsement in ethnic studies must hold or apply and qualify for a license to teach elementary education under part 8710.3200. Subp. 2a. **Endorsement program**. A candidate completing a board-approved endorsement program for ethnic studies must demonstrate the content standards set forth in subpart 3. Subp. 3. **Subject matter standards**. A candidate for endorsement as a teacher of ethnic studies must demonstrate the knowledge and skills in items A through B. A. Content Standards. (1) A teacher of ethnic studies Is able to analyze social and human relationships with the natural world. Examples of this Include but are not limited to: (a) Cultural and economic relationships with water, land, air, etc. (b) How relationships to the natural world shift over time and space due to the impacts of colonial contexts specifically European imperialism and the colonization of Africa. Asia. North & South America. South Pacific) (c) How economics and culture impacts the relationships that communities have with the natural environment through consumption,

	acquisition as opposed to sustainability/regeneration (ex. turning land into property) (d) The intentionally unequal impacts that communities experience due to the effects of human life on the natural environment (e.g. the effects of environmental racism). (2) A teacher of ethnic studies can analyze how indigeneity, race, gender, and other markers of identity are constructed and how these structures are maintained through power and language. Examples of this include but are not limited to: (a) How discrimination based on indigeneity, race, gender, economic, and social group identity created and continues to affect the history, health, growth, and current experience of communities and groups of people. (b) How discrimination and the oppression of various indigenous, racial and ethnic groups have produced resistance movements. (3) A teacher of ethnic studies understands the construction of tribal sovereignty/federal nation-to-nation status of American Indian nations. Examples of this include but are not limited to: (a) The relationships of land to tribal sovereign nations and political status. (b) The history and existence of Indian Education programs across Minnesota. (c) The existence and importance of Dakota and Anishinaabe Sacred Sites across Minnesota. (d) How to compare and contrast the political status differences between tribal homelands, tribal citizen, US citizen, state citizen, dual citizen, federally recognized tribal members, lineage, immigrant, refugee, and the relationships between these groups. (e) The long-term impacts and implications of the treaties today, especially for Dakota and Anishinaabe nations and their sovereignty. (f) The construction of race and indigeneity, (e.g., complicating ideas such as blood quantum, Mestizaje, AfroLatinidad); examining how geography and politics mediate these constructions.

	(4) A teacher of ethnic studies understands how to deconstruct narratives regarding cultural relationships to oppression. Examples of this include but are not limited to: (a) Narratives of resistance and activism within communities that have historically faced oppression. (b) The power of false narratives regarding the helplessness of the colonized, enslaved, and disenfranchised and how those narratives can be dispelled. (c) That colonization was/is a dynamic process that required the facilitation of powerful people within colonized groups, and not simply an event resulting in one group having continuous and supreme power over another. B. Pedagogical Practices, Learning Environment, & Community Relationships. (1) A teacher of ethnic studies draws on community cultural wealth as a framework for asset-based teaching. Examples of this include but are not limited to: (a) Community cultural wealth model includes navigation, language, aspiration, resistance, family, social, cultural as notions of cultural capital (2) A teacher of ethnic studies understands how to be intentional to avoid causing harm. Examples of this include but are not limited to: (a) Trauma-informed pedagogies, recognizing that students carry their lives into the classroom with them; avoiding re-traumatizing students through images, words, texts, and behaviors that perpetuate historical oppression; facilitating classrooms where children have agency, discuss emotions. and question. (3) Community Relationships. A teacher of ethnic studies understands how to engage their local community. Examples of this include but are not limited to: (a) Partnering with community organizations, (b) Understand the importance of participating in local community spaces, (c) Collaborating and communicating with local elders (d) Apply pedagogical practices in community spaces (e) The importance of supporting BIPOC community businesses.

	(4) A teacher of ethnic studies creates learning opportunities in which families, neighborhoods, land and place become central sites for Ethnic Studies. Examples of this include but are not limited to: (a) The roles of informal and formal education outside of the classroom (community organizations, religious/spiritual spaces family education, etc.), (b) Heritage and ancestral knowledges are passed down through oral histories and stories that are part of family culture, (c) Kinship networks (how families are constructed) vary across communities and the relationship to everything in creation/all my relatives/relations). Subp. 3a. **Placements for candidates completing a program**. The candidate must complete a practicum teaching students in ethnic studies in the kindergarten through grade 6 level.