

March 25, 2025

Dear Senate Education Policy Committee Members,

As a constituent, science educator and member of the Minnesota Science Teachers Association, I call on you to oppose lines 3.13 - 3.18 *Sec. 2. Minnesota Statutes 2024, section 120B.024, subdivision 2*, as proposed in **HF1306/SF1740**, and to carefully consider how proposed changes will affect Minnesota's commitment to maintaining high-quality science education. According to the National Science Teachers Association and the Minnesota Science Teachers Association, to teach science effectively, a teacher should have:

- Science content knowledge above the course level being taught. These are generally specified in the Science Licensure Standards.
- Science teaching pedagogy that supports student learning of science concepts and skills at the grade level being taught.
- An understanding of students' developmental processes at the grade level they are teaching.

I am concerned that the language changes proposed in HF1306/SF1740 would make it so that many Minnesota students would have unqualified educators as instructors for required science courses. This will negatively impact these students' college and career readiness. Every citizen benefits from a solid knowledge base in scientific content and practices. This language would result in some students benefiting from a high quality, well prepared science educator, while others would not. Now more than ever, we need a populace that is knowledgeable in basic science theory and practice. This is vital for a thriving citizenry and growth in industry and the environment.

HF1306/SF1740 Lines 3.13 - 3.15 *Sec. 2. Minnesota Statutes 2024, section 120B.024, subdivision 2*, would be amended to read:

(h) A health education teacher is not required to meet the requirements of Minnesota Rules, part 3505.1150, subpart 2, item B, to meet the credit equivalency requirements of paragraph (b).

Health education licensed teachers are generally prepared to teach health courses which are primarily in grades 5-9. Often, community experts (tiers 1 or 2) teach specialized courses, like Health for Certified Nursing Assistants (CNAs) or pre-nursing courses, which are offered in some high schools. These courses are elective, being specific to the nursing profession.

A health education teacher does not have the content preparation to teach life science, earth science, physics and chemistry courses at the middle or high school level. The proposed language in HF1306 would allow a teacher with a health education license to teach required middle and high school science courses. According to statute, these courses are required science credits for high school graduation. These courses are also required to be admitted into colleges and universities, and are prerequisites for numerous college courses and majors. Health education teachers would be asked to teach these courses without meeting science licensure standards, or showing evidence of subject matter proficiency, such as the passing of an MTLE content test. This will put many Minnesota students at a distinct and preventable disadvantage.

HF1306/SF1740 Lines 3.15 - 3.18 *Sec. 2. Minnesota Statutes 2024, section 120B.024, subdivision 2*, would be amended to read:

(i) A health science career and technical education credit may fulfill a health or science credit if the course meets the applicable state and local standards in health or related science Standards.

This change could provide a science credit for students, but it would be an elective credit that would not help the student fulfill the science graduation requirements. Graduation requirements provide consistency and equity for all students.

The graduation requirements in science are:

“three credits of science, including one credit to satisfy all the earth and space science standards for grades 9 through 12, one credit to satisfy all the life science standards for grades 9 through 12, and one credit to satisfy all the chemistry or physics standards for grades 9 through 12.” *Minn. Stat. 120B.024 Subd. 1.*

These credits are based on science standards that were developed using science education research about the concepts and skills needed by all students to be college and career-ready. The standards committee that wrote the standards included representation from colleges, K-12 educators, and industry. A health science class would be treated similarly to other science electives, which provide an additional science credit above the required three credits.

As a veteran (24 years) science teacher, I am very concerned about the loss in consistency and quality of science education for so many Minnesota students, should this proposed language become law. I see firsthand how imperative effective science teaching is in preparing students for college, industry, conservation, the economy and civic engagement.

I understand and sympathize with the challenges of teacher shortages across the state, but solutions must reflect the integrity of teacher preparation. Compromising pedagogy training or content knowledge preparation will not serve students, educators, or Minnesota’s long-term educational goals. We need to tackle this issue differently by encouraging and supporting the teachers we do have. One way is to streamline a path for teachers to become proficient in new content knowledge and pedagogy so that they can add additional licenses through PELSB’s current licensure pathway options and bolstering their expertise through targeted professional development opportunities. This important work would require partnerships between higher ed, MDE, PELSB and districts - all prioritizing and supporting teachers as they do this work.

PELSB offers multiple short-term solutions, such as Out-of-Field Placements (OFPs) and Innovative Program Permissions (IIPs). Several teachers have added the 5-8 General Science or a 9-12 content-area license by meeting the licensure standards through workshops, online study, or courses. This provides another pathway to increase the range of courses they may teach.

In conclusion, all Minnesota’s students deserve highly qualified, well-prepared teachers who can provide them with the robust science education they need to succeed in an increasingly complex world. I encourage you to support initiatives and policies that foster both innovation and excellence in teacher preparation. We, all the stakeholders, need to come at this challenge in new and creative ways. Therefore, I ask you to **reject the language proposed in lines 3.13 - 3.18 in HF1306/SF1740**. I am happy to help in any way I can. I appreciate your time and consideration.

Sincerely,

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