



INSPIRING THE CREATORS OF TOMORROW

February 15, 2024

RE: Support for House Bill 3492- Computer Science Education Advancement Program

Dear Legislators,

My name is Jake Seely and I am a resident of Minnesota and a parent to two students who attend a MN public school. I also work directly with educators across the state assisting with the adoption of computer science curriculum. It is because of these relationships and experiences that I am writing today in support of House Bill 3492.

Computer science is a vital part of our education system. At its core, it teaches students to think critically and work together more collaboratively with their peers. It unlocks creativity and provides the opportunity to grow the skill sets that our children will need for the future. Computer science is one of the fastest growing technology fields, yet we do not currently have enough graduates to fill these positions in our state. Investing in computer science education will open up career opportunities for many students. HB 3492 will allow school districts to apply for funding to unlock computer science and give students exposure to this field.

I support HB 3492 because it will expand computer science education in Minnesota. It will allow schools and districts to expand and adapt their computer science curriculum to keep pace with this quickly changing field. It will give students the opportunity to expand their learning and continue developing their skills in the areas that will open doors of opportunity to the future of 21st-century tech.

Sincerely,

A handwritten signature in black ink, appearing to read "Jake Seely", with a long horizontal flourish extending to the right.

Jake Seely
734 Brook Circle E
Montrose, MN 55363

February 20, 2024

Committee Chair Pryor and Members of the House Education Policy Committee:

On behalf of the nearly 200 technology-enabled companies that comprise the membership of the Minnesota Technology Association, we urge you to pass HF 3492 and provide funding for computer science educator training and capacity-building in Minnesota.

Look across Minnesota and it's clear that nearly every industry is impacted by digital technology. Whether in agriculture, healthcare, manufacturing, finance, retail, transportation, education, or the arts, understanding computers and how to use them to solve problems is an important skill for our current and future workforce. Computer science coursework provides an essential foundation to students – not only for careers in technology, but for every career in today's world.

But sadly, Minnesota continues to rank **LAST** in the nation in terms of the percentage of high schools offering computer science coursework, at just 28%. To our south, Iowa's commitment to CS education is showing, with 84% of its high schools now offering coding classes. To our west, North Dakota recently passed legislation making computer science a graduation requirement for all students. While other states recognize the importance of preparing students for the technology-enabled jobs of the future, Minnesota falls further behind.

The time to act is now. The recently drafted MN State Strategic Plan for Computer Science establishes a road map for CS education success for Minnesota school districts and a key component is funding for teacher training and district capacity-building. A relatively modest investment of \$8 million can jumpstart this initiative and lay the groundwork to successfully educate our next generation of technology creators, not simply users.

We thank you for your leadership on this important investment in Minnesota's future.

Sincerely,



Jeff Tollefson
President & CEO
Minnesota Technology Association

Executive Director

Colleen Riley

2023-2024 Board of Directors

• Mahado Ali

Ruvos

• Jayant Anand

Century College

• Lisa Bruhn

Target

• Terra Carbert

SHEOps Talent

• Vic Dreier

Project Lead The Way

• Mark Gabriel Causapin

Concordia College Moorhead

• Tim Harms

Minnesota State University

Moorhead

• Josh Hogan

Boston Scientific

• Alexandra Holter

Bloomington Public Schools

• Melissa Huppert

Minnesota State – Mankato

• Katie Jamieson

Engage Nonprofits

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• Emily Kinny

The Works

• Nandita Kohli

Cargill

• Molly Leifeld

Saint Paul Public Schools

• Sarah Ness

Southeast Service Cooperative

• Enyinda Onunwor

Saint Paul College

• Cap O'Rourke

O'Rourke Strategic Consulting

• Eva Scates-Winston

Minnesota State

• Patty Born Selly

Hamline University

• Dana Smith

Bemidji Area Schools

• Chris Wernimont

Minneapolis Public Schools

• Michael Wulf

Minnesota STEM Partnership

• Graeme Wyllie

Concordia College Moorhead



SciMathMN brings together a statewide STEM community to promote equitable and accessible STEM learning and workforce participation, empower lifelong learning, and inspire informed community action.

Dear Education Committee Members,

I write in support of HF 3492, the Minnesota Computer Science Education Advancement Act. At SciMathMN we see this bill as key in moving Minnesota forward with equitable access to foundational 21st-century skills and knowledge. All jobs today require digital skills, and moving Minnesota forward on computer science education, builds a more dynamic state economy and skills in high-demand, high-wage jobs.

SciMathMN is a non-profit STEM (Science, Technology, Engineering, and Math) organization that brings together a statewide STEM community, promoting equitable STEM learning and workforce participation, empowering lifelong learning, and inspiring informed community action for all Minnesotans to engage in a dynamic STEM ecosystem, ready for life and work. We are the host of the Minnesota STEM Teachers Center, an online resource for all Minnesota teachers who teach students math or science.

HF 3492 is an important step to approach to the complex challenge of assuring that all Minnesota students have access to computer science education beginning in elementary school, that teachers are adequately prepared and supported, and the state can support the current standards in computer science.

Advanced Placement Computer Science courses act as a useful proxy for access to courses at the high school level. Minnesota's challenge for equity is revealed in the AP test takers. In 2020 only 1,806 high school exams were taken in AP Computer Science by high school students in Minnesota; of those only 23% were taken by female students; only 112 exams were taken by Hispanic/Latino/Latina students; only 82 exams were taken by Black/African American students; only 5 exams were taken by Native American/Alaskan students; only 1 exam was taken by Native Hawaiian/Pacific Islander students (College Board, 2018). Only 84 schools (29% of MN schools with AP programs) offered an AP Computer Science course last year.

The National Center for Science and Engineering Statistics observed in their recent report Diversity in STEM: Women, Minorities, and People with Disabilities "A diverse workforce provides the potential for innovation by leveraging different backgrounds, experiences, and points of view." For Minnesota to have an innovation economy we need to build opportunities for computer science knowledge starting early and continuing toward high school graduation. I urge that the committee pass HF 3492.

Thank you,

A handwritten signature in black ink, appearing to read "Vic Dreier".

Vic Dreier
Board Chair
SciMathMN

John Bartucz
Teaching Specialist
University of Minnesota
215 Johnston Hall
101 Pleasant St. S.E.
Minneapolis MN 55455

2/20/2024

Dear Legislators:

As faculty in both the education and computer science departments at the University of Minnesota, I am writing today in support of the Computer Science Education Advancement bill, [HF 3492](#).

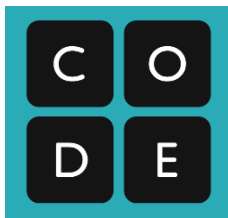
Every K-12 student in Minnesota should have access to computer science (CS) education because computer science impacts almost every facet of our daily lives. Understanding what CS concepts like algorithms and artificial intelligence are and how they impact our daily lives is necessary to be an informed citizen in the 21st century. Computer science also drives innovation in many areas important to our local economies, from agriculture to healthcare to retail to tourism.

It is important that Minnesota invests in CS education for K-12 students and schools. The students who have exposure to CS before college are more likely to major in computing-related fields. However, it is often students with privilege who have had the opportunity to take a CS course, participate in a robotics program, or have a parent or family member encourage them to pursue a career in CS. Adding CS in K-12 schools will increase the number of students aware of computing before college, helping us diversify the students in our programs and the future technologists in our state. Our college computer science graduates have access to well-paying job opportunities in Minnesota and beyond.

Graduates of our programs are in demand and successful in securing job offers. All students in Minnesota should have access to the opportunity to learn computer science before college so they can be engaged citizens and make informed decisions about college and career pathways in computing.

Sincerely,


John Bartucz



February 21, 2024

TO: Minnesota House Education Policy Committee

RE: Letter of Support for HF 3492

Dear Chair Pryor and Members of the House Education Policy Committee:

Thank you for allowing Code.org and CSforALL-MN to submit a joint letter of support for HF 3492, which provides much-needed funding for computer science education to build teacher capacity and course offerings in Minnesota. Dedicated state funding is one of the most impactful ways states can expand students' access to this foundational subject, and we know Minnesota's need for this is great.

Computer science is an essential skill for K-12 students. It develops students' computational and critical thinking skills and teaches them how to create—not just use—new technologies. Computing occupations are the fastest-growing, best paying, and now the largest sector of all new wages in the United States. In Minnesota in particular, the Bureau of Labor Statistics estimates that there are over **7,384 open computing jobs with an average salary of \$105,311**. Every child deserves the opportunity to access the knowledge necessary to succeed in the most in-demand jobs of our 21st century economy.

Unfortunately, according to the data reported to us by the Minnesota Department of Education, only [28% of Minnesota public high schools](#) offer even one foundational computer science course. This is the **lowest percentage of all states in the country**. HF 3492 lays the groundwork to ensure Minnesota makes the investment it needs to provide the best educational opportunities to its students. Further, the bill's prioritization of districts with little to no computer science offerings will ensure this support is focused on schools that need it most.

There is significant support for computer science education from business and state leadership. Eleven CEOs of Minnesota-based industries have signed on to the [Computer Science: Opportunity for Every Student \(CEOsForCS\)](#) letter which is a call “for every student in every school to have the opportunity to learn computer science.” And in July of 2022, Governor Tim Walz [committed](#) to expanding K-12 Computer Science Education in the state of Minnesota as part of a pact with all 50 state Governors, including a specific commitment to allocate state funding for computer science.

It is worth noting computer science offers additional benefits for students who take it. [Studies have shown](#) that students who study computer science perform better in other subjects and excel at problem solving. Especially as stubborn achievement gaps continue to persist in every state post-COVID, computer science can serve as another tool schools can use to help address this issue.

Once again, our two organizations strongly support this critical investment in computer science education in Minnesota and urge passage of HF 3492. Thank you for your consideration.

Sincerely,

Julia Wynn

Director of State Government Affairs

Code.org

Julia.Wynn@Code.org

Jennifer Rosato

Member of the Steering Committee

CSforALL-MN

jrosato@umn.edu