



STEM Education Innovation Alliance

<https://wsac.wa.gov/STEM-Alliance>

David Schumacher, Executive Director
Washington State Office of Financial Management
PO Box 43113
Olympia, Washington 98504-3113

Dear Mr. Schumacher,

The STEM Education Innovation Alliance (STEM Alliance) is pleased to send these recommendations to improve STEM Education in the next biennium. Since 2014, the STEM Alliance has brought together leaders from education, community stakeholders, industry, labor, and non-profits to ensure that Washington's education system aligns with the needs of the state's workforce, and that the workforce looks like the state as a whole: diverse, dynamic, and creative. These recommendations are modest, scalable, and touch every part of Washington's education and training system, and we hope they are included in the Governor's proposed budget this December.

In the past, the recommendations of the group have come forward too late in the process to be considered during the Governor's budget process. This year, the STEM Alliance sought to change that by creating a subcommittee to bring forward recommendations in time for consideration by the Governor and the Office of Financial Management. The group worked quickly, and targeted three key areas:

- 1) The STEM Education Pipeline and bringing more people into science and math teaching.
- 2) Early STEM; ensuring that all kids K-5 are ready to learn about their world.
- 3) Ensuring that graduates of Washington's high schools and postsecondary education and training system are ready for the opportunities in high-demand STEM fields.

1: For the STEM Education Workforce, the STEM Alliance recommends:

Two provisos, one in WSAC's section of the budget, and the other in the PESB's sub-section of Part V. The provisos dedicate additional General Fund dollars to two key parts of the state's many educator pathways.

At PESB, the funding would add \$500,000 to the Teacher Academy programs, Recruiting Washington Teachers and the Bilingual Educator Initiative. This new funding would target future STEM educators, and help them into colleges of education, building a diverse next generation of STEM teachers for Washington.

At the Washington Student Achievement Council, the funding would flow through the Educator Conditional Scholarship programs, helping current teachers re-tool and add STEM endorsements, current paraeducators to earn their teaching credentials, and soon-to-be teachers to earn money for school in exchange for service in Washington classrooms. Combining these two efforts – one at the very beginning of the educator pathways, and the other at the end – ensure we not only fill current openings but build a growing pipeline.

2: For Early STEM, the STEM Alliance Recommends:

Systems Improvements in Early STEM:

Support the ongoing creation and usage of State of the Children reports. The State of the Children: Early Learning & Care report series, provide an in-depth look at the health of our early learning and childcare systems. In its first iteration the State of the Children Reports brought together more than 34 data sources provided by 20 organizations, into one single interactive dashboard and regional report series. *This report is not currently funded by the state*, however there is an *urgent* need for regions and local communities to have regular and reliable access to data that can guide increased access to early learning through coordinated recruitment and enrollment efforts.

Increase alignment and improving use of Washington Kindergarten Inventory of Developing Skills (WaKIDS) assessment to measure and support Early STEM. More antiracist and culturally appropriate professional development are needed for teachers to understand how to provide developmentally appropriate opportunities for children to demonstrate and grow their early STEM skills in ways that are culturally responsive and achieve equitable outcomes across populations. The state currently uses WAKIDS at the start of Kindergarten and Smarter Balance assessments in reading and math in the 3rd grade. There is a need for a crosswalk that connects the two, and training for how to use this to enable better student outcomes.

Expand OSPI's "Pathways" series to articulate the developmental progression of skill development for STEM, building off the [Washington Early Learning and Development Guidelines](#) and existing Pathways documents -fund the creation, implementation and usage of a new pathway on STEM, as well as professional development on how to use it.

COVID response - Support access to outdoor learning in preschool and the early grades:


Outdoor learning can provide high-quality learning opportunities, while providing for increased safety during the pandemic, as well as implementing curriculum rooted in STEM concepts and pedagogy. While nature-based programs can be operated without the additional cost of facilities, some additional and unique program supplies are needed for nature-based programs, such as rainy-day gear, hygiene, and outdoor adventure supplies. These additional costs can be a burden for some families to access ONBP. A "Goods & Gear" grant would be instrumental in removing barriers to access for low-income families.

3: For STEM Career Readiness, the STEM Alliance Recommends:

Increase access to Computer Science by supporting regional implementation, community partnerships & planning: Working through the Education Service District regional structure, CS Implementation lead positions could provide technical assistance to the K12 system for implementation of Computer Science standards and support for offering CS courses and developing CS career pathways in partnership with local and statewide networks.

Community based outreach & engagement in STEM programs: Create grants for regional Career Connected Learning Rural Navigators housed in community-based organizations to help families and students find, enroll in, and complete various career connected learning opportunities in their region. The Navigators (or similar title if potentially confused with other 'navigator' roles) are trusted messengers who will direct educators, business, and community-based organizations to all the career connected learning programs available in the region and how to access them. The grants will fund: Partnering with rural districts and working with the ESD coordinator and CCW Networks; developing a core group of CCL contacts at assigned rural middle and high schools; assisting districts with developing and executing FAFSA/WAFSA nights, HSBP planning sessions, career days/fairs, etc.; and communicating with parents, students, and families around various career connected opportunities.

Sincerely,

A handwritten signature in black ink that reads "James B Dorsey". The signature is written in a cursive style with a large, looped "D" at the end.

James B. Dorsey
Co-Chair
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