



VIRGINIA BOARD OF EDUCATION

AGENDA ITEM

Agenda Item: Q

Date: July 25, 2024

Title: First and Final Review of 2024 Guidelines for the General Requirements of Qualifying for the STEM+C Competition Grant

Presenter: Em Cooper, Deputy of Teaching and Learning

Purpose of Presentation

Action required by state or federal law or regulation

Executive Summary

During the 2024 Legislative Session, the Virginia General Assembly passed [SB 5](#), the STEM+C Competition Grant Program, which was established as an Act to amend the Code of Virginia by adding in Title 22.1 a chapter numbered 28 to consist of sections number Section 22.1-381, 22.1-382, and 22.1-383 of the Code of Virginia. This Act mirrors expired Code that directed the Board of Education (“Board”) to develop and issue guidelines for the general requirements of qualifying for a STEM+C grant and develop a grant application based on these guidelines.

In 2016, the Board developed a Guidance for the Submission of Application document to meet legislative requirements outlined in Chapter 25 Science Technology, Engineering, and Mathematics Grant Program and Fund. The STEM Competition Team Grant application process has been in effect since 2016 and grants have been issued to public schools to support STEM Competition Teams. [Senate Bill 5 from the](#) 2024 legislative session indicates the addition of computing team competitions to the grant and the name of the grant has been updated to the STEM+C Competition Team Grant. Computing includes computer science, computational thinking, and computer coding.

The STEM+C Competition Team Grant Program is established to encourage interest in STEM+C-related subject areas and supports STEM+C extracurricular team-building activities in public schools in the Commonwealth by providing grants for use in establishing or supporting STEM+C competition teams. The goals of the STEM+C competition grant include:

- Increase awareness of careers in science, technology, engineering, mathematics, and computing (STEM+C) among teachers and students.
- Engage students in extracurricular, STEM+C related team-building activities through problem-based, project-based team competitions.
- Foster STEM+C competition team development and growth throughout Virginia.
- Focus on STEM+C literacy skills through hands-on experiences. These experiences will include problem-driven integrated STEM+C activities that use collaboration, communication, creativity, critical thinking, and ethics to explore the challenges and opportunities of the STEM+C Competition Team Grant Initiative.

The only changes to the previously approved guidelines reflect the legislative changes which are to update the language to include computing (defined as computer science, computational thinking, and computer coding) and the remove the minimum poverty rate application requirement that was required in the previous legislated STEM Competition Grant requirements. The attached Guidelines for General Requirements of Qualifying for STEM+C Competition Grant (Item A) and the STEM+C Competition Grant Application (Item B) reflect the updates indicated by legislation.

This item supports Priority 4 of the Board’s Comprehensive Plan 2024-2029 (to create innovative pathways for every learner) by providing students opportunities to engage in STEM+C experiences that focus on opportunities to meet and apply rigorous STEM standards and provide skills that can build workplace readiness.

Action Requested

First and Final review: Action requested at this meeting.

Superintendent’s Recommendation

The Superintendent of Public Instruction recommends that the Board of Education approve the 2024 Guidelines for the General Requirements for Qualifying for the STEM+C Competition Grant and the 2024 STEM+C Grant Application.

Rationale for Action

The STEM+C Grant provides schools with funding to support the implementation and expansion of after-school or enrichment STEM+C competition teams. The 2024 Guidelines for the General Requirements for STEM+C Competition Grant reflects changes to the current guidelines by expanding competition opportunities to explicitly include computing and eliminate the poverty level barrier that has existed in prior legislation.

Previous Review or Action

None

Background Information and Statutory Authority

The STEM Competition Grant was created and funded through legislation introduced in 2016 ([SB 17 STEM programs; grants for donations to programs at qualified schools](#)). The legislation indicated that the Board was to administer grant funding to provide \$5000 to qualified schools per year to fund STEM programs with a maximum of two funded programs per school per school year. Qualified schools could receive funding for two years with the first-year funding to implement a competition team and the second-year funding to expand the competition team program within the school. The 2016 legislation indicated that the poverty level (minimum 40 percent) was a qualification criterion for the grant. The Department developed a Guidance document and application process for the STEM Competition Grant.

The Department has overseen the implementation of the grant since the 2016-2017 academic year. The chart below indicates the number of grants awarded and the school divisions that received the grants. A single division may have multiple qualified schools that receive STEM Competition Grants.

| Year | Year 1 Grants Awarded | Divisions | Year 2 Grants Awarded | Divisions Receiving Grants |
|-----------|-----------------------|-----------|--------------------------------|--------------------------------|
| 2016-2017 | 20 | 17 | NA (first year of the program) | NA (first year of the program) |
| 2017-2018 | 14 | 11 | 20 | 17 |
| 2018-2019 | 22 | 12 | 14 | 11 |
| 2019-2020 | 22 | 13 | 22 | 13 |
| 2020-2021 | 19 | 14 | 13 | 8 |
| 2021-2022 | 24 | 15 | 17 | 12 |
| 2022-2023 | 19 | 14 | 11 | 8 |
| 2023-2024 | 22 | 13 | 9 | 8 |

The STEM Competition grants have funded teams to attend a variety of competitions including First and VEX robotics competitions; drone, solar car, and underwater submersible competitions; coding competitions; and engineering challenges. STEM+C competitions allow students to apply what they have learned in CTE, science, and mathematics to societal problems as they learn skills that will prepare them for working collaboratively in a workforce setting.

Implementation and Communication

Immediately after the final Board approval of the 2024 Guidelines for the General Requirements of Qualifying for the STEM+C Competition Grant, the application will be shared with divisions through multiple communication channels including the VDOE website, Virginia Education Update Newsletter, and the VDOE Instruction Update.

Impact on Fiscal and Human Resources

Funds for this program have been placed in a non-reverting, non-general fund account as intended by the General Assembly to allow grants to be awarded during the 2022-2024 biennium to qualifying school STEM+C Competition Team Enrichment programs. The VDOE can absorb the administrative workload for this program with existing staff.