

IDAHO STEM ACTION CENTER

SUBJECT

STEM School Designation Recommendations

REFERENCE

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| December 2016 | Board approved legislation to provide for the award of a science, technology, engineering and mathematics (STEM) school or STEM program designation. |
| April 2018 | Board approved STEM School Designation standards for public schools and programs. |
| December 2018 | Board received an update from the STEM Action Center on the process for identifying schools for STEM School Designation and a general update on the activities of the STEM Action Center. |

APPLICABLE STATUTE, RULE, OR POLICY

Section 33-4701, Idaho Code

ALIGNMENT WITH STRATEGIC PLAN

Goal 3: Workforce Readiness, Objective A: Workforce Alignment

BACKGROUND/DISCUSSION

Section 33-4701, Idaho Code, was enacted by the legislature in 2017, establishing a STEM school designation to be earned by schools and programs that meet specific standards established by the State Board of Education (Board). Pursuant to Section 33-4701, Idaho Code, the Board is charged with awarding STEM school and STEM program designations annually to those public schools and programs that meet the standards established by the Board in collaboration with the STEM Action Center.

The Board approved STEM School Designation Standards at the Regular April 2018 Board meeting. As provided in the information at the April Board meeting, the Board approved STEM School Designation Standards aligned with AdvancED STEM School Certification Standards and Indicators. In June 2018 the STEM Action Center in collaboration with Board staff began planning for the Idaho STEM School Designation application process. Schools submitted materials to the AdvancED platform between August – October 2018. School site visits were conducted November 1 – 6, 2018 with AdvancED STEM Certification awarded at the conclusion of the visit based on the AdvancED STEM School Criteria. Due to the alignment between the AdvancED STEM School Certification requirements and the Idaho STEM School Designation Standards, any school receiving AdvancED STEM School Certification will have also met Idaho's standards for STEM School Designation.

PLANNING, POLICY AND GOVERNMENTAL AFFAIRS
JANUARY 18, 2019

Four schools applied for the Idaho STEM School Designation, and all were certified through the AdvancED process: Galileo STEM Academy and Barbara Morgan STEM Academy in West Ada, Temple View Elementary in Idaho Falls, and Bingham Academy in Blackfoot. The STEM Action Center Board is recommending the State Board of Education approve of all four schools for Idaho STEM School Designation. Schools receiving this designation are eligible to receive funds from the STEM Action Center.

IMPACT

There is no fiscal impact to the State Board of Education. The STEM Action Center will award \$10,000 from its general fund appropriation in FY19 to each designated school. The STEM Action Center is anticipating this annual \$10,000 award for the duration of the designation, and up to four additional years, pending annual appropriation.

ATTACHMENTS

Attachment 1 – STEM School Designation Recommendation

STAFF COMMENTS AND RECOMMENDATIONS

Pursuant to Section 33-4701, Idaho Code:

- The state board of education shall award STEM school and STEM schools and public school programs that meet the standards established by the state board of education in collaboration with the STEM Action Center.
- The STEM Action Center Board shall make recommendations annually to the State Board of Education for the award of a STEM school designation.
- STEM designations shall be valid for a term of five (5) school years. At the end of each designation term, a school may apply to renew its STEM designation. Schools may apply to expand a STEM program designation to a STEM school designation, in alignment with established deadlines, at any time during the term of the STEM program designation.

The STEM Action Center Board met on January 15th and is forwarding the schools identified in Attachment 1 for Board consideration.

Staff Recommends Approval

BOARD ACTION

I move to approve the request by the STEM Action Center Board to designate Galileo STEM Academy and Barbara Morgan STEM Academy in West Ada School District #2, Temple View Elementary School in the Idaho Falls School District #91, and Bingham Academy Charter High School in Blackfoot Idaho as STEM Schools.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

Idaho STEM Certification Review Summaries
Prepared by AdvancED for
The Idaho STEM Action Center

Galileo STEM Academy, West Ada, Grades K-8

The AdvancED STEM Certification Review Team conducted an on-site review of Galileo STEM Academy on November 1-2, 2018. The school was well-prepared and provided the team with a wide variety of documents prior to the on-site visit including an Executive Summary, Narrative Summaries, and a Self-Assessment. While on-site, the team interviewed 41 stakeholders and formally observed 24 classrooms using the eleot®. The team also informally visited numerous classrooms and discussed STEM-related issues with members of the staff.

The STEM Certification Review Team found that the school is meeting the AdvancED Standard for STEM Certification. The Galileo team's average rating of the 11 STEM Indicators was 3.50 compared to the AdvancED average of 2.8 required for STEM Certification. Along with rating the Indicators, the team also identified four Powerful Practices. These Powerful Practices were related to positive school climate, collaboration opportunities for teachers, support of cross grade level activities, a STEM Advisory committee consisting of community business partnerships, and the opportunity for student interactions with STEM professionals.

As with any school, the STEM Certification Review Team also found some areas where the school could make its STEM program even stronger. One area identified as an Opportunity for Improvement was development of an assessment rubric with common components for all grade levels. The team also mentioned that the school might want to consider expanding the PLCs (Professional Learning Communities) for the staff. While PLCs are already in place, the staff and administration stated that this was an area of focus for improvement to sustain the work that is occurring.

In closing, the AdvancED STEM Certification Review Team commended all of the Galileo STEM Academy stakeholders for their hard work and dedication to implementing a high-quality STEM program for all students.

Barbara Morgan STEM Academy, West Ada, Grades K-5

The AdvancED STEM Certification Review Team conducted an on-site review of Barbara Morgan STEM Academy on November 5-6, 2018. The school was well-prepared and provided the team with a wide variety of documents prior to the on-site visit including an Executive Summary, Narrative Summaries, and a Self-Assessment. While on-site, the team interviewed 64 stakeholders and formally observed 23 classrooms using the eleot®. The team also informally visited numerous classrooms and discussed STEM-related issues with members of the staff.

The STEM Certification Review Team found that the school is meeting the AdvancED Standard for STEM Certification. The BMSA team's average rating of the 11 STEM Indicators was 3.38 compared to the AdvancED average of 2.8 required for STEM Certification. Along with rating the Indicators, the team also identified four Powerful Practices. These Powerful Practices were related to the collaboration that has created a "culture of curiosity", common planning periods of 60 minutes for teachers to collaborate and develop interdisciplinary STEM projects and the support of EL (English Learner) program. In addition, the review team also found that the staff made a concerted effort to "get to know" the students and give the students a "voice" in school decision making with the development of a Student Leadership Team.

As with any school, the STEM Certification Review Team also found some areas where the school could make its STEM program even stronger. Two areas identified as Opportunities for Improvement were the development of more systematic protocols for the use of performance-based assessments and increasing the opportunities for students to participate in internships, mentorships, and job shadowing. The team also mentioned that the school might want to consider formalizing some of their processes for sustainability, increasing the use of differentiation in the classroom, developing a consistent engineering design model that could be used on a school-wide basis, and continuing to search for grant opportunities to support the STEM program.

In closing, the AdvancED STEM Certification Review Team commended all of the Barbara Morgan STEM Academy stakeholders for their hard work and dedication to implementing a high quality STEM program for all students.

Temple View Elementary School, Idaho Falls, Grades PK-6

The AdvancED STEM Certification Review Team conducted an on-site review of Temple View Elementary School on November 1-2, 2018. The school was well-prepared and provided the team with a wide variety of documents prior to the on-site visit including an Executive Summary, Narrative Summaries, and a Self-Assessment. While on-site, the team interviewed 64 stakeholders and formally observed 17 classrooms using the eleot®. The team also informally visited multiple classrooms and discussed STEM-related issues with members of the staff.

The STEM Certification Review Team found that the school is meeting the AdvancED Standard for STEM Certification. The team's average rating of the 11 STEM Indicators was 3.27 with an average of 2.8 required for STEM Certification. Along with rating the Indicators, the team also identified four Powerful Practices. These Powerful Practices were related to collaboration opportunities for teachers, professional development activities directly related to STEM implementation, community partnerships, and student interactions with STEM professionals.

As with any school, the STEM Certification Review Team also found some areas where the school could make its STEM program even stronger. One area identified as an Opportunity for Improvement was related to the alignment of performance-based assessments with the curriculum being taught. The team also mentioned that the school might want to consider formalizing some of their processes for sustainability, expanding the range of technology tools used to support student learning, and developing a consistent engineering design model that could be used on a school-wide basis.

In closing, the AdvancED STEM Certification Review Team commended all of the Temple View Elementary School stakeholders for their hard work and dedication to implementing a high-quality STEM program for all students.

Bingham Academy, Blackfoot, Grades 9 – 11 (currently)

The AdvancED STEM Certification Review Team conducted an on-site review of Bingham Academy on November 5-6, 2018. The school was well-prepared and provided the team with a wide variety of documents prior to the on-site visit including an Executive Summary, Narrative Summaries, and a Self-Assessment. While on-site, the team interviewed 51 stakeholders and formally observed 24 classrooms using the eleot®. The team also informally visited multiple classrooms and discussed STEM-related issues with members of the staff.

The STEM Certification Review Team found that the school is meeting the AdvancED Standard for STEM Certification. The team's average rating of the 11 STEM Indicators was 3.0 with an average of 2.8 required for STEM Certification. Along with rating the Indicators, the team also identified two Powerful Practices. These Powerful Practices were related to the collaborative culture that has led to many opportunities for inquiry-based learning for students and the structured opportunities for teachers to collaborate and develop interdisciplinary STEM projects. In addition to the Powerful Practices, the team also found that the staff made a concerted effort to "get to know" the students and meet the individual needs of all students.

As with any school, the STEM Certification Review Team also found some areas where the school could make its STEM program even stronger. Two areas identified as Opportunities for Improvement were the development of more systematic protocols for the use of performance-based assessments and increasing the opportunities for students to participate in internships, mentorships, and job shadowing. The team also mentioned that the school might want to consider formalizing some of their processes for sustainability, increasing the use of differentiation in the classroom, developing a consistent engineering design model that could be used on a school-wide basis, and continuing to search for grant opportunities to support the STEM program.

In closing, the AdvancED STEM Certification Review Team commended all of the Bingham Academy stakeholders for their hard work and dedication to implementing a high-quality STEM program for all students.