

## **Call for Proposals for STEM and STEAM School Designation and STEM and STEAM School Equivalent for Schools in the State of Ohio**

### **BACKGROUND AND PURPOSE**

The power of technology has changed economies around the world and created a demand for new skills in which imagination, intellect and invention are essential. To ensure that Ohio has a place in the 21st century economy, it pursued new ways to develop this type of intellectual capital in all students and particularly in ways that will support our emerging economic strengths. Ohio's Third Frontier Project was created to foster the commercialization of technology focused in key economic clusters and to create new jobs and economic growth that enhances the quality of life for all Ohioans. While it is understood that technology can lead to faster business growth, higher wages and a large multiplier effect for the economy, what is unclear is how to ensure that its citizens possess the intellectual capital to lead this technology-based revolution. Ohio must find effective ways to better align education systems to ensure sufficient intellectual, entrepreneurial and technical talent. STEM and STEAM schools, which partner with higher education institutions and businesses, were created to meet this need.

### **OBJECTIVES**

Future economic growth and prosperity in Ohio depends on an aligned education system that supports the state's economic development efforts and helps all Ohio students to become innovators and inventors, self-reliant and logical thinkers and technologically proficient problem solvers. This RFP invites proposals to do all of the following:

1. Create a school (in any of the grades kindergarten through 12) to help generate a talent base that will establish Ohio as a catalyst and global leader in attracting, educating and producing the next generation of scientists, engineers and other professionals needed to create tomorrow's innovations for the betterment of all citizens;
2. Foster increases in the number of Ohio's citizens studying and working in STEM fields;
3. Foster development of stronger skills in problem solving, innovation and teamwork for all students.

### **ELIGIBILITY**

Proposals may only be submitted by a partnership of public and private entities consisting of at least all of the following:

1. A city, exempted village, local or joint vocational school district or an educational service center;
2. Higher education entities;
3. Business organizations

A community school established under Chapter 3314 of the Ohio Revised Code, a chartered nonpublic school or both may be part of the partnership.

## HOW TO SUBMIT A PROPOSAL

### A. Letter of intent

Schools planning to apply for STEM or STEAM designation should submit a **letter of intent** to apply, **before 5 p.m. on Wednesday, Dec. 19, 2018**. Letters of intent should indicate the type of designation (STEM or STEAM), school grade band (elementary, middle school or high school), and must identify a point of contact with name, address, telephone number and email address. An electronic pdf of the letter should be emailed to [Buddy.Harris@education.ohio.gov](mailto:Buddy.Harris@education.ohio.gov) by the above due date.

### B. Proposal

**The STEM Committee must receive proposals by 5 p.m. on Friday, March 8, 2019.** An electronic PDF should be emailed to: [Buddy.Harris@education.ohio.gov](mailto:Buddy.Harris@education.ohio.gov).

Each proposal must include the following:

1. Cover letter: Cover letters should not exceed one page, and must identify the primary contact person by name, address, telephone number and email address.
2. Cover Sheet: Complete the form (pages 3 and 4 of this document), check the appropriate boxes and affix signatures.
3. Proposal narrative:
  - a. Respond to the questions on page 5 and 6 of this document. Responses should be in narrative form. Each question serves as the heading of a new section of the narrative.
  - b. The proposal narrative should be no more than 20 pages in length, double spaced, with 1" margins and size 11 font. The 20-page limit does not include the cover letter, cover sheet, or letters of commitment.
4. Letters of commitment: Applicants should include letters of commitment from all partners named in the proposal. Letters should be limited to one page, signed, and on partner's letterhead.
5. Proposals may include an *optional* appendix of evidence and examples that reflect the nature of the school's curriculum and culture and that serve to illustrate what is described in the narrative. The appendix may *not* be used for adding additional narrative beyond the 20-page limit. The appendix is limited to 10 pages and should not include resumes or personal information of school employees or other individuals.

Applicants are strongly advised to review the "[Quality Model for STEM and STEAM Schools](#)," for clarity and examples of high-quality STEM/STEAM practices.

Applicants are responsible for timely submission of proposals. Proposals become the property of the Ohio Department of Education. Proposals meeting the above requirements will receive careful consideration. This consideration will be regarding designation as a STEM or STEAM school in Ohio and will not include any consideration of grant funds. Applications will be reviewed by the STEM Committee and the Ohio STEM Learning Network.

The Ohio STEM Learning Network (OSLN) offers technical assistance to schools interested in the STEM/STEAM destination process. Please contact OSLN directly by **Jan. 15, 2019** for guidance on technical assistance. Upon request, OSLN will also provide written feedback on proposal drafts submitted to OSLN by **Jan. 29, 2019**, for full review prior to submission to the Ohio Department of Education. Email [osln@battelle.org](mailto:osln@battelle.org) with questions.

## COVER SHEET

Please indicate the type of designation being sought (check one). Community schools and chartered nonpublic schools should check STEM or STEAM "Equivalent."

STEM School  STEAM School   
STEM School Equivalent  STEAM School Equivalent

School IRN: \_\_\_\_\_

School name: \_\_\_\_\_

School mailing address: \_\_\_\_\_

City: \_\_\_\_\_ Zip: \_\_\_\_\_ County: \_\_\_\_\_

Grade levels served by the school (check all that apply):

K  1  2  3  4  5  6  7  8  9  10  11  12  Other \_\_\_\_\_

Type of School: (check one)

District school  Independent STEM/STEAM school

Community school  Chartered nonpublic school

**CONTACT INFORMATION:**

School Principal/Director name: \_\_\_\_\_

School Principal/Director email: \_\_\_\_\_

School Principal/Director phone: \_\_\_\_\_

Treasurer/Fiscal officer name: \_\_\_\_\_

Treasurer/Fiscal officer email: \_\_\_\_\_

Treasurer/Fiscal officer phone: \_\_\_\_\_

Superintendent/CAO contact name: \_\_\_\_\_

Superintendent/CAO contact email: \_\_\_\_\_

Superintendent/CAO phone: \_\_\_\_\_

**ASSURANCES**

In accordance with ORC 3326.03 (or 3326.032 for community schools or chartered nonpublic schools), please provide the following assurances. By checking the "agree" box, you attest to the following:

The school will operate in compliance with the provisions of the proposal as accepted by the committee.

Agree

The school will operate in compliance with ORC 3326 (or sections 3326.032 and 3326.09 for community schools and chartered nonpublic schools).

Agree

The school will be under the oversight of a governing body. (Include a description in the narrative where indicated.) **If applicant is a community school, the school has a sponsor and a letter of support from the sponsor is included. Governing authority support is indicated by the signature below.**

Agree

**In the event of closure, the assets of the school will be distributed in accordance with Ohio Revised Code.**

Agree

\_\_\_\_\_  
School Principal/Director signature                      printed name                      date

\_\_\_\_\_  
Treasurer/Fiscal officer signature                      printed name                      date

\_\_\_\_\_  
Superintendent/CAO signature                      printed name                      date

For Community Schools:

\_\_\_\_\_  
Sponsor Representative Signature                      printed name                      date

\_\_\_\_\_  
Governing Authority President                      printed name                      date

**Proposal Narrative Instructions:**

In your proposal narrative, please respond to each of the following prompts, in order. Your responses should be in narrative form and use the provided headings. Each response should have its own separate section in the narrative. The proposal narrative is limited to 20 pages and must be double spaced, with 1" margins and size 11 font.

1. Brief Overview of school:

2. **Student Participation:** Describe how you plan to ensure all students in your school will participate in STEM.
3. **Partnerships:** Describe the school's public/private partnership structure, including institutions of higher education and businesses. If the proposal is for a STEAM school or STEAM school equivalent, your description should include arts organizations. Using specific examples, describe how the partnership is inclusive of key stakeholders, and how partners will be utilized in curriculum development, instructional design, and providing learning opportunities for students.
4. **Governing Body:** Describe the members of the school's governing body and how they are selected. Describe how the body's membership supports the operation of a STEM or STEAM school. Though not required, if your school has a STEM advisory group, please describe how the advisory group will work with the governing body.
5. **Curriculum:** STEM schools are REQUIRED to offer a **rigorous, diverse, integrated** and **project-based** curriculum, with the goal to prepare students for college, the workforce and citizenship. Include specific examples of how the curriculum:
  - a) Emphasizes the role of science, technology, engineering and mathematics in promoting innovation and economic progress, including examples of how science, technology, engineering, and mathematics are integrated into studies in other content areas;
  - b) Incorporates scientific inquiry and technological design, including examples of how inquiry drives the curriculum;
  - c) \*Includes the arts and humanities, including examples of how the curriculum integrates the arts and humanities with the STEM disciplines;
  - d) Emphasizes personalized learning and teamwork skills, including examples of how the curriculum provides for individualized learning experiences and opportunities for collaborative problem solving.

\*If the proposal is for a STEAM school or STEAM school equivalent, the proposal must emphasize how the curriculum will integrate arts and design into the study of science, technology, engineering and mathematics to foster creative thinking, problem-solving, and new approaches to scientific invention.
6. **School Leaders:** Describe how the school will ensure school leaders support the curriculum principles of offering a rigorous, diverse, integrated and project-based curriculum, with the goal to prepare students for college, the workforce and citizenship. Using specific examples, describe how school leaders create and support and sustain innovative and effective teaching and learning environments, and the advancement of STEM education. (Applicants are encouraged to reference the ["Quality Model for STEM and STEAM Schools"](#) on ODE's STEM webpage.)
7. **Effective Teachers:** Describe how the school recruits and retains faculty members with a high interest in STEM education and experience with innovative instructional methods
8. Describe how the school will ensure teachers and support staff will promote the curriculum principles of offering a rigorous, diverse, integrated and project-based curriculum, with the goal to prepare students for college, the workforce and citizenship. Using specific examples, describe how teachers will be trained and supported to ensure effective STEM practices are used in all disciplines.
9. **Curriculum Team:** Describe how the school's curriculum will be developed by a curriculum team\* consisting of, at minimum: 1) the chief academic officer, 2) a higher education partner, 3) a teacher, and 4) a member of the public with expertise in the application of science, technology, engineering or mathematics. Describe how the team will develop an innovative curriculum.

\*If the proposal is for a STEAM school or STEAM school equivalent, the curriculum team must also

include an expert in the integration of arts and design into the STEM fields.

10. **Sharing Best practices:** Briefly describe how the school will capture and share knowledge for best practices and innovative professional development throughout the region and throughout the state including engaging with the Ohio STEM Learning Network. Best practices should align with the Quality Model for STEM and STEM Schools and target the following three domains: 1) A Culture of Learning – Beliefs and Dispositions, Equity and Access, 2) Learning and Teaching, and 3) Pathways to Success in Careers
11. **In-Kind and Financial Support:** Describe how the school has received or will receive in-kind and financial support from regional education partners and business entities. Include examples of how the in-kind and financial support reflect the community’s priorities for STEM education. Describe how this will be used to support innovative STEM/STEAM programming

**Additional considerations:**