

# **STEM Learning Platform Invitational RFP**

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REQUEST FOR PROPOSALS

And

GUIDELINES FOR SUBMISSION

OF

COMPETITIVE PROPOSALS TO SUPPORT SUSTAINED AND  
SUCCESSFUL COLLEGE READY STEM COLLABORATIONS IN  
POLICY, PRACTICE AND PARTNERSHIP

**Proposals due November 19, 2010**

FY 2011 STEM Initiatives Funds

For the period from January 20, 2011 to June 30, 2011



Ohio STEM Committee  
RFP Release  
September 28, 2010

## **Background & Purpose:**

The power of technology has changed economies around the world and created a demand for new skills in which creativity, innovation and global competence are essential ingredients. 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 we ensure that our 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.

To ensure that Ohio has a place in the 21<sup>st</sup> century economy, we must consider new ways to develop this type of intellectual capital in all students, and particularly in ways that will support our emerging economic strengths. One important investment involves the creation of regional STEM schools and/or learning platforms that are deeply engaged with higher education institutions and businesses, and expanding STEM education to many school sites across the state through these regional partnerships. To that end, Governor Ted Strickland and key legislators in the Ohio General Assembly established and invested in a bold and coherent STEM education and economic growth portfolio beginning in 2007. These leaders continued that investment in H.B. 1 of the 128<sup>th</sup> General Assembly through a \$5,000,000 appropriation each fiscal year of the current biennium. This investment involves expanding the impact of Ohio's STEM education initiatives on the K-12 level.

Section 3326.06 of the Revised Code specifies that *"The STEM committee, shall work with an Ohio-based nonprofit enterprise selected by the committee to support the strategic and operational coordination of the public and private STEM education initiatives and resources focused on curriculum development, instruction, assessment, teacher quality enhancement, leadership recruitment and training, and community engagement. The nonprofit enterprise...shall have the proven ability to accumulate resources to enhance education quality across the educational continuum, from preschool to college, shall have experience in large-scale management of science and technology resources, and shall have a documented institutional mission to advance STEM education."* On January 24, 2008, after a full review process, the STEM committee selected Battelle Memorial Institute (Battelle) to serve as this nonprofit enterprise. Battelle provides the aforementioned support services at no cost to the state and recently extended its commitment to support STEM programming authorized in H.B. 1.

Battelle also manages the Ohio STEM Learning Network (OSLN), the private-sector arm of Ohio's STEM initiative. This collaborative enterprise is designed to augment state efforts by building STEM capacity through public and private partnerships in regions across Ohio where the STEM Subcommittee has also made investments. Battelle, the Bill and Melinda Gates Foundation, and other outside private and LEA partners help support STEM schools and initiatives strategically placed in key economic and cultural regions of the state. The OSLN supports the development of STEM schools and is working to translate their innovations through a Hub infrastructure into regional and state STEM education quality-improvement to reach all students in all schools throughout the state.

For further information on how the Ohio STEM Learning Network can support the work of previous award winners and new applicants, please visit [www.OSLN.org](http://www.OSLN.org). Progress reports submitted to the STEM Committee under Section 3326.06 of the Revised Code describing the prior state-funded initiatives can be found on that site and may be helpful to applicants responding to this RFP.

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On March 12, 2010, the STEM Committee met and agreed upon a two-pronged approach to the distribution of the FY 2010 grant funds. Those RFPs, which reflected the decision of the STEM Committee, was intended to:

- 1) Amplify/accelerate the reach and impact of STEM regional partnerships. The first category of funds was directed to regional partnerships of school districts, higher education entities, and business organizations with high quality plans to support regional or statewide STEM education through one or more of the following:
  - a. Enhancement of existing STEM schools;
  - b. Increasing the ability of an existing STEM school to generate regional impact;
  - c. Growth of linkages and support in region (e.g., outreach to other areas of state) by issuing awards for: K-8 Programs of Excellence and STEM Initiatives which may include professional development, or connectivity to the Strategic Plan for Higher Education in Ohio (i.e. Choose Ohio First, Woodrow Wilson Fellowship).
- 2) Catalyze the start-up of new partnerships in underserved Ohio regions. The second category of funds was directed to applicants seeking planning funds for new STEM schools and/or to create a regional STEM partnership (regional partnership) of school districts, higher education entities and community/business organizations that can support and advance sustainable STEM education. For that RFP, the regions of interest are Northwest Ohio and Southeast Ohio. The proposal must describe a that makes the eventual creation of a STEM school and/or collaborative learning platform highly likely.

On July 9<sup>th</sup>, 2010, the STEM Committee met and agreed on a two-pronged approach for the distribution of the FY 2011 grant funds. These RFPs reflect the decision of the STEM Committee, and are designed to:

- 1) Amplify/accelerate the reach and impact of network approaches to key issues in college ready STEM across the state by identifying, connecting and developing high quality demonstration sites focused on three competitive priorities (e.g., student performance, teacher effectiveness and distribution and student engagement and persistence in STEM fields).
- 2) Advance the start-up of new partnerships in Northwest and Southeast Ohio to establish collaborative STEM learning platforms. The second category of funds is directed to applicants who received FY 2010 planning funds for new STEM Hubs/schools and/or to create a regional STEM partnership (regional partnership) of school districts, higher education entities and community/business organizations that can support and advance

sustainable STEM learning platforms. For this RFP, the recipients of the planning grants must design scalable and sustainable approaches to enhancing college ready STEM that fit the regions they serve.

## **I. Objectives for STEM Learning Platform RFP and College Ready STEM Demonstration Grant RFP:**

Future economic growth and prosperity in Ohio depends on an aligned statewide education system that supports the state's economic development efforts and helps all Ohio students to become self-reliant and logical thinkers and technologically proficient problem solvers. These two RFPs invite applicants to address the following:

- 1) Build on Ohio's established STEM partnerships to increase the number of Ohio citizens studying and working in STEM fields as well as promote better STEM literacy for all students;
- 2) Build on the established infrastructure of STEM schools and programs of excellence to increase the number of students developing stronger skills in problem solving, innovation, teamwork and the STEM disciplines;
- 3) Foster the emergence of STEM learning platforms in northwest and southeast Ohio connected to the statewide STEM network to help establish a talent base that will establish Ohio as a magnet 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; and
- 4) Connect and leverage the public/private participation associated with the Ohio STEM Learning Network to accelerate progress within and across all identified regions.

## **II. Distribution of Funds and Eligibility for Invitational STEM Learning Platform RFP:**

The STEM Committee **will only** accept proposals submitted by applicants who received planning funds from the STEM Committee in FY 10 to establish new STEM schools and/or regional newly recognized regional STEM partnerships in Northwest and Southeast Ohio. An allotment of \$2,000,000 (\$1,000,000 dedicated to Northwest and \$1,000,000 to Southeast, Ohio) is budgeted. Proposals may be submitted **only** from entities that received FY 2010 planning grants from the STEM Committee.

## **III. Eligible Expenses**

Grant funds may only be expended for the purposes set forth in Ohio Revised Code Chapter 3326. and Section 265.20.60 of H.B. 1 of the 128<sup>th</sup> General Assembly. Consideration will be given to the entire budget proposal, including other sources of funds.

#### **IV. Key Dates**

- RFP release September 28, 2010
- Information session for planning grant recipients, 10:00 am -2:00 pm on October 7, 2010 at COSI, the science education center in Columbus, Ohio (333 West Broad Street)
- Required letter of intent must be submitted to the Chancellor's office prior to 5:00 pm on October 15, 2010
- Proposals due November 19, 2010
- November 29, 2010-December 20, 2010 Review of Proposals
- STEM Committee funding recommendations mid-January 2011.

#### **V. Anticipated Awards**

Implementation grants for new STEM learning platforms in Southeastern Ohio and Northwestern Ohio may each request up to \$1,000,000 in FY 11 funds.

The committee is *not* obligated to expend all of the dollars that have been set aside for this initiative. Any award of Grant Funds in respect to this RFP will be subject to availability of funds as provided in Ohio Revised Code Section 126.07.

#### **VI. How to Submit an Invitational STEM Learning Platform Proposal**

An information session from 10:00 am to 2:00 pm (encouraged, but not required) will be held for interested parties on **Wednesday, October 7th** at COSI Columbus, 333 West Broad Street.

**A required letter of intent form must be delivered by 5:00 p.m. on October 15, 2010 (see Section X for form).**

STEM Learning Platform proposals must be received by the Chancellor's office **before 5:00 p.m. on November 19, 2010**, and must be submitted in the following manner:

- One original proposal copy written in the provided report template, stapled in the upper left-hand corner and three-hole punched down the left side. (**Proposals should not be submitted with any plastic coverings or in binders.**)
- Eight paper copies of the proposal stapled in the upper left-hand corner and three-hole punched down the left side.
- One electronic PDF on a CD of the proposal.

Applicants are responsible for timely submission of proposals. Proposals become the property of the STEM Committee and are subject to public records laws of the state. Proposals containing all required elements will receive careful consideration but cannot be guaranteed funding.

This RFP is intended for up to two implementation grants based on the results of the previously awarded and completed planning grants. It requires collaboration among higher education, business, philanthropic and community organizations with preK-12 schools in Northwest and

Southeast Ohio to advance the quality, scalability and sustainability of STEM education innovations focused on increasing post-secondary degree achievement in STEM fields. The proposal should be no more than 13 pages in length including the budget narrative. Proposals should be single spaced, 1” margins and size 11 Times New Roman font. The 13 page limit does not include the cover letter or letters of commitment; however, letters of commitment should not exceed additional 15 pages.

**Key Definition: A collaborative STEM learning platform must be a coherent program used across all participating organizations with a common framework for connecting curriculum, instruction, assessment, teacher quality, leadership quality and outreach. The platform may take the form of a brick and mortar school, a virtual school and/or a highly collaborative network of coordinated STEM teaching and learning initiatives.**

A STEM learning platform implementation grant must address the following requirements:

### **1) Selection of a Collaborative STEM Learning Platform Format: Physical, Virtual, Networked and/or Hybrid Approach**

The grant must establish, spread and sustain at least one collaborative STEM learning platform (i.e., brick and mortar, virtual, and/or networked learning platform). Regardless of the format chosen, the implementation grant should be based on the five design principles outlined in H.B. 119 and H.B. 1 (college ready STEM curriculum and skills, increase capacity and broaden opportunity through K-12, Higher Education and Business Partnerships, foster a strong collaborative teaching and learning community focused on STEM, make STEM literacy attainable and desirable for all, and drive scalable and sustainable STEM education innovations).

### **2) Platform Governance**

Assurances that the STEM learning platform will be under the oversight of a governing body, a description of the members of that governing body, and how they will be selected. An existing local Board of Education may serve as the governing board if a brick and mortar school with a separate IRN is established as the designated STEM learning platform. Assurances that if a STEM school format is chosen, it will operate in compliance with **Chapter 3326** of the Revised Code and the provisions of the proposal as accepted by the STEM Committee. The respondent agrees to comply with all applicable federal, state, and local laws in the conduct of the work hereunder. Note: A STEM school must meet state testing requirements and will receive report cards (O.R.C. §§ 3326.14 and 3326.17).

### **3) Curriculum Principles**

Evidence that the learning platform will offer a rigorous, diverse, integrated, and project-based curriculum to students in any of grades six through twelve, with the goal to prepare those students for college, the workforce, and citizenship, and that does all of the following:

- Incorporates scientific inquiry and technological design
- Includes the arts and humanities

- Emphasizes personalized learning and teamwork skills
- Focuses on the whole student
- Demonstrates alignment with the Ohio Academic Content Standards. Proposals should demonstrate evidence of research and plans to incorporate technology and engineering (the T & the E in STEM) into proposed curriculum
- Enables students to demonstrate learning and understanding through performance assessments of complex, authentic tasks that reflect subject matter and global knowledge, skills and habits of mind
- Enables students to perform as teams in which all members produce deliverables, solve problems and earn grades or other rewards collaboratively
- Includes interdisciplinary experiences that link content from across the academic content areas and promotes synthesized understandings not attainable through a disciplinary approach.

#### **4) Platform Design Principles**

Regardless of the format chosen, a platform must follow these four design principles: a) The platform must identify a stewardship group that includes at least one IHE, one K-12 and one Business/Philanthropy partner that serve as principal partners for the stewardship of the enterprise; b) The stewardship group must identify and be accountable for a college ready STEM agenda that fits the needs of the region and has clear and measurable goals; c) The platform must align with the teaching and learning curriculum design principles identified in HB 119 and HB 1 (see above); and, d) The Stewardship group must provide a five year business model to demonstrate the scalability and sustainability of the platform beyond the monies provided by the implementation grant.

The stewardship group must create a STEM platform that:

- Connects and develops key STEM education assets in region such as STEM schools, K-8 Programs of Excellence, Career Tech programs and informal learning opportunities (e.g., museums, camps, competitions, etc). Leverage current and potential local, state, federal, private and philanthropic investments in STEM education.
- Fosters regional partnerships that promote public and private engagement in STEM education. These partners must collectively commit resources and are accountable for spreading the impact of STEM schools and associated research to communities of teachers, students, and families across their region. A list of organizations and duly authorized names and title of the partnership members must be included.
- Details an approach to STEM education in both rural and urban settings.
- Participates and contributes as a full member of the Ohio STEM Learning Network.
- Provides assurances that the collaborative learning platform has received commitments of sustained and verifiable fiscal and in-kind support from regional education and business entities.
- Enables the proposed work to be sustainable beyond the grant period. A track record of regional resource support for pre-existing STEM initiatives is important to the extent that it supports the case that more regional expansion can be catalyzed with the funding from this RFP.

## **I. PREPARATION OF PROPOSAL**

All proposals must use the format that follows including lettered headings. It is essential that all of the elements of this outline be explicitly addressed and the proposal parts should be presented in the order prescribed here.

### **A. Proposal Cover Letter**

- Signature(s) of the Principal Partners of the Collaborative Learning Platform
- Signature of the Institutional Representative of the Fiscal Agent who has the authority to accept and expend grant monies.

### **B. Abstract**

Provide a brief (1 or 2 paragraph) abstract summarizing the objectives of the proposal and a summary, not to exceed 2 pages, of the proposed project. This summary should discuss the project objectives, principal partners, measurable goals, timeline for main activities and expected outcomes.

### **C. Collaborative Learning Platform Structure**

- Identify all principal partners (including at least one IHE, K-12 and Business/Philanthropy partner).
- Describe the role and contribution of partners.
- Evidence of platform planning must be shown including meeting dates, places, topics and names of participants and their positions.
- Signatures of representatives from all partners involved in platform implementation are required.

### **D. Platform Goals, Objectives and Anticipated Outcomes**

The objectives should pinpoint what the applicant plans to do and expects to achieve. They should be relatively few in number and listed in approximate order of priority or importance. Remember that what is stated as the applicant's objectives sets the framework and tone for judging what the applicant plans to achieve. Goals should be measurable. All curriculum principles and platform design principles must be addressed explicitly.

### **E. Evidence of Prior Success**

The applicant describes evidence of success in successful STEM education to date. In particular, the narrative should provide background on the project to date such as: a) performance indicators and data; b) scope of participants (e.g., students served, teachers involved, etc); and, c) a final report of planning grant activities and results. This is the

place to make as strong a case as possible for the importance of the demonstration project being proposed: it may add to the general body of knowledge about a problem; it may expand possible ways to organize and deliver services to meet a particular priority area; it may do both. The point is to marshal a credible, straightforward argument for why this project will add value to a statewide network of STEM schools, programs, hubs and platforms. It is critical that the timing and sequence of the project be clear in the reviewers' minds; perhaps including a descriptive diagram or flow chart of the history of the consortium to date.

## **F. Work Plan**

The proposed work should be sufficiently well planned so that the applicant can specify a set of tasks that will cover all the activities needed to establish a learning platform and connect to a statewide network. Every task noted should have some corresponding description to show how it will be accomplished and every major activity targeted for completion should have a corresponding task. The applicant should list in table form the key individuals (by name or by role in the demonstration site) and the number of days they will devote to each task. To the extent possible, personnel crucial to a successful project should be named and described in this section. The full curricula vitae on all these individuals should be appended to the proposal. The application should state who is responsible for what sets of activities and how those individuals relate to one another and to the principal investigator and/or project director. For multi-site platforms, it should also say who acts as the liaison across the sites. It should be possible to indicate all this in a single organizational chart.

## **G. Proposal Budget Summary** (Form is in Section X of this RFP)

- Itemized budget reflecting requested support and any cost-sharing and/or in-kind support.
- Copies of the Budget Summary form must be provided.

## **H. Budget Narrative**

- Provide a narrative for each cost in the budget. Describe the time involvement, roles and responsibilities of the demonstration project director and staff members.
- Specify cost-sharing (university in-kind support, school district support, leveraged funds from other state and national sources, etc).
- Indirect costs, to a maximum of 8% of the total direct costs may be charged.

## II. PROPOSAL FORMAT

The proposal must be formatted in the following manner:

- Proposal narrative must not exceed **thirteen (13) pages** in length, excluding the cover letter, abstract, budget summary, vitae, letters of support, and lists of references cited.
- Narrative must be **single-spaced**.
- All major subject headings must be underlined and/or highlighted.
- Proper indentation and spacing must be used to offset the headings.
- Use readable print size, no smaller than 11 Times New Roman
- All pages must be numbered with one inch margins.

The Review Panel appreciates clear, concise, complete, carefully written and proofread proposals that meet all guidelines. Appendices of reasonable length (generally less than 15 pages, not counting required MOU and Planning Grant Final Report) may be included; however, there is no guarantee that the panel will review them completely.

## III. PROPOSAL EVALUATION CRITERIA

Applications that meet initial screening criteria will be reviewed by a technical review panel. Reviewers will score the applications, basing their scoring decisions and approval recommendations on the evaluation criteria specified in this grant program announcement. The following criteria are used to score proposals. (Relative weights are shown in parentheses). Proposals must address all evaluation criteria.

**A. Platform Design (40 Points)**. The application describes specific plans for establishing the platform in terms of the tasks to be performed. It includes relevant information about: concise and clear statements of platform goals and measurable/achievable objectives; an explicit description of how the platform will identify and link up to other related projects across the region and state; what the platform will do and how it relates to similar work done in the area; data to be collected (including specification of data sources); plan for data analysis; and key tasks/milestones/phases in the progress of the platform.

**B. Knowledge, Experience and History (20 Points)**. The application describes the applicant's prior experience and the project's history in the identified priority areas. The application provides evidence of understanding and knowledge of prior and ongoing work in STEM education, the personnel are to be organized in the platform and how they will be used to accomplish specific objectives.

**C. Level of Effort and Strength of Principal Partners (30 Points)**. The resources that will be needed to conduct the platform are specified, including personnel, time, budget, and facilities. The staffing pattern clearly links responsibilities/levels of efforts to project tasks. The platform's costs are reasonable in view of the anticipated results. Any collaborative effort (including subcontracts) with other organizations is clearly identified. The budget includes justifications and explanations for the amount requested, and the estimated costs must be reasonable considering the anticipated results.

**D. Willingness and Capacity to Participate in an On-going State-wide Network (10 Points).** Evidence of capacity and commitment to sustain the learning platform and participate in a state-wide network after grant monies are expended. Private sector and/or other match resources may be particularly relevant to this expectation.

#### **IV. PROPOSAL SUBMISSION AND DEADLINES**

Please return the REQUIRED INTENT TO SUBMIT PROPOSAL form to the office of the Chancellor by 5:00 p.m., October 15, 2010. An original and eight copies of the proposal, each stapled in the upper left corner, must be submitted along with one electronic PDF on a CD of the proposal. No binders or plastic covers will be allowed. Please complete the Proposal Checklist and submit with your proposal. **Proposals must be received at the Chancellor's office by 5:00 p.m. on November 19, 2010. Late or incomplete proposals will not be accepted. We will not accept faxed or e-mailed proposals. Proposals must be submitted to the address below.**

Submit proposals to:

**STEM Learning Platform Invitational RFP  
c/o Briana Hervet  
Ohio Board of Regents  
30 East Broad Street, 36th floor  
Columbus, Ohio 43215-3414**

#### **V. AWARD NOTIFICATION AND OTHER PROCEDURAL INFORMATION**

Approval of grant awards is expected to be made no later than January 30, 2011, contingent **upon the availability of funds.** All institutions submitting a proposal will be notified in writing regarding the funding decision. **On Thursday, October 7, 2010 from 10:00 am - 2:00 pm an information session of invited planning grant applicants from Northwest and Southeast Ohio will be held** at COSI, the science education center in Columbus, Ohio (333 West Broad Street). Interested parties should contact:

Briana Hervet  
Director, Choose Ohio First  
Ohio Board of Regents  
P: 614.644.9602  
F: 614.466.5866  
E: [bhervet@regents.state.oh.us](mailto:bhervet@regents.state.oh.us)

## VI. LEGAL

The STEM Committee reserves the right to request additional information to assist in the review process, to require new applications from interested parties, to reject any or all applications responding, to fund any proposal in part or in whole, or to re-issue the announcement if it is determined that it is in the best interests of the State. Issuing this announcement does not bind the State to making an award. The Chancellor reserves the right to adjust the dates for this announcement for whatever reasons are deemed appropriate. The Chancellor reserves the right to waive any non-substantive infractions made by an applicant, provided that the applicant cures such infraction upon request. All costs incurred in preparation of a proposal shall be borne by the applicant. Proposal preparation costs are not recoverable under an award. The applicant understands that the information provided herein is intended solely to assist the applicant in submittal preparation. To the best of the office of the Chancellors' knowledge, the information provided is accurate. However, the Chancellor does not warrant such accuracy, and any errors or omissions subsequently determined will not be construed as a basis for invalidating this solicitation. Interested parties bear the sole responsibility of obtaining the necessary information to submit a qualifying proposal. The Chancellor retains the right to modify or withdraw this solicitation at any time, to the extent permitted by federal law. By submitting a proposal, applicants expressly agree to these terms. Any award of Grant Funds in respect to this RFP will be subject to availability of funds as provided in Ohio Revised Code Section 126.07.

## VII. PROPOSAL FORMS (attached)

1. Required Intent to Submit Form
2. Proposal Checklist
3. Proposal Budget Summary

### TIME TABLE

<u>DATE</u>	<u>ACTIVITY</u>
September 28, 2010	Issue Request for Proposals
October 7, 2010	Statewide Forum and Information Session at COSI (not mandatory)
October 15, 2010	Return <b>Required</b> Intent to Submit Proposal Form (5:00 pm to Chancellor's office)
November 19, 2010	Proposals due by 5:00 p.m. in the offices of the Chancellor
November 29, 2010- December 20, 2010	Review of Proposals
January, 2011	Approval of Proposals for Funding

**STEM LEARNING PLATFORM INVITATIONAL GRANTS  
PROGRAM**

**Intent to Submit Proposal FY 2011**

Project Director \_\_\_\_\_

Lead Partner \_\_\_\_\_

Address \_\_\_\_\_

Title of Proposed Project:

List Names and Affiliations of All Principal Partners:

Please return by October 15, 2010  
Briana Hervet  
Ohio Board of Regents  
30 East Broad Street, 36<sup>th</sup> Floor  
Columbus, Ohio 43215-3414  
bhervet@regents.state.oh.us

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# STEM LEARNING PLATFORM INVITATIONAL GRANTS PROGRAM

## Proposal Checklist FY 2011

Project Director:

Project Title:

Please complete this checklist and include it with your proposal

\_\_\_\_\_ An original, 8 copies of the proposal and one PDF on a CD are included.  
(All stapled in the upper left corner, no binder or plastic cover allowed)

\_\_\_\_\_ Proposal Cover Letter with appropriate signatures

\_\_\_\_\_ Abstract

\_\_\_\_\_ Budget Summary and Narrative  
(Proposal Budget Summary Form)  
(A detailed budget narrative is included)

\_\_\_\_\_ One page vitae of key personnel