

REQUEST FOR PROPOSALS
Regents STEM (Science, Technology, Engineering, Mathematics)
and Foreign Language Academy
Ohio Board of Regents
October 1, 2008

I. BACKGROUND

H.B. 115 of the 126th General Assembly provided funding in FY 07 to support the implementation of the Ohio Core recommendations through highly focused initiatives designed to increase teacher capacity in mathematics, science and foreign language, as well as provide opportunities for more high school students to engage in dual high school and college learning opportunities in these disciplines. One of the initiatives funded the development and implementation of Regents STEM and Foreign Language Academies. Ten regional and statewide academies were funded by the Ohio Board of Regents in FY 07 for a total of \$3.5 million.

The Regents STEM and Foreign Language Academies are supported for a second and third year in H.B. 119 (Ohio's operating budget bill for FY 08 and FY 09). Funding available for the project is \$1.9 million for FY 09. Specifically, H.B. 119 designates funding for academies that focus on foreign language, science, mathematics, engineering, and technology and provide opportunities for eleventh and twelfth grade students enrolled in public, chartered (community) or nonpublic schools to pursue college-level credit in these disciplines. The relevant H.B. 119 language is included as Appendix B. As in FY 07, the Regents Academy Statewide Advisory Committee is providing leadership for the development of the FY 08 Academies.

The Board of Regents convened a Regents Academy Statewide Advisory Committee, co-chaired by Elizabeth Stroble, Senior Vice President and Provost, University of Akron and Bill Hiller, Executive Director of the Martha Holden Jennings Foundation. Membership includes public and independent higher education faculty and administrators as well as representatives of various math, science and foreign language initiatives. A full-listing of members is available online at <http://regents.ohio.gov/stem/index.php>.

The Regents STEM and Foreign Language Academies provide real opportunities to build capacity in Ohio and connect to other state and federal strategic initiatives. The state has dedicated significant funds to STEM education. Federal and private funding opportunities have also supported capacity building efforts in STEM and foreign language.

II. PROJECT DESCRIPTION

The Ohio Board of Regents invites proposals for *FY 09 Regents STEM (Science, Technology, Engineering, Mathematics) and Foreign Language Academies*.

- Up to eight proposals will be funded for implementation beginning during the FY 09 fiscal year at a total not to exceed \$1.9 million. Maximum funding for an individual proposal is \$300,000. Not all proposals will be funded at this level.
- Funded academies for FY 09 will include, at a minimum, one or two foreign language academies and at least one engineering academy that programmatically or conceptually connects with Project Lead the Way.

- FY 07 and FY 08 academies are eligible for funding, but must demonstrate how the FY 09 funds will build on the foundation developed through the previous experience.
- Science proposals may be defined to include a focus on medicine.

This *Request for Proposals* is intended to solicit proposals from partnerships of public and independent colleges and universities. Proposals should stimulate the development of curricular and pedagogical approaches that are innovative and represent new ways of thinking about teaching and learning, encourage collaboration and on-going interactions between K-12 and higher education, provide students with opportunities for intensive on-campus study resulting in dual high school and college credit in mathematics, science, engineering, and foreign language, and incorporate the use of technology to enhance instruction.

Proposals must describe an overall vision for the academy and also address the key elements outlined below:

1. Identification of lead partner (fiscal agent) and collaborating partners. Fiscal agent must be a public college or university (two-year or four-year) or independent college or university. Collaborating partners might also include specific K-12 schools and districts, business and community partners, and others as appropriate to the proposed academy.
 - 1.1. A primary contact person must be identified for the grant, including name, title, institution, address, telephone, fax and email.
2. Identification of primary disciplinary focus (mathematics, science, engineering, foreign language).
3. Description of curricular and pedagogical approach.
 - 3.1. Previously funded proposals (FY 07 or 08) must describe how funding for an FY 09 academy will build on the strategies and models developed during the previous year's funding, including relevant data of program success. Specifically, FY 09 proposals must describe how proposed programs will be enhanced or revised as a result of program assessments of FY 07 or FY 08 activities.
 - 3.2. Structure and funding of the academy should be determined by the proposed curricular and pedagogical approach and design. Academies can be residential or non-residential in structure (or a mixed model), however proposals should clearly describe the relevance of the residential component to the overall design of the academy and the students to be served. Applicants are encouraged to seek funds and/or in-kind support from other sources to supplement the funds requested for residential experiences in response to this RFP.
 - 3.3. Specific opportunities for intensive on-campus study should be described in the proposal.
4. Use of technology in teaching and learning should be incorporated as a part of all academies.
5. Proposed college-level credit to be awarded (course and credit) and equivalent high school credit.
 - 5.1. Proposal must specify dual high school and college credit in science, mathematics, foreign language, and engineering for eleventh and twelfth grade students.
 - 5.2. All course credits must reflect college level learning outcomes and provide students with graded credit that meets general education requirements and is transferable in some way; remedial credits will not be supported.
 - 5.2.1. Mathematics as an academic content area should provide students with a foundation for future courses in mathematics or be combined with other areas of

study (science, engineering, as examples). Credits that build student capacity to solve problems, for example, are encouraged. As an example, academies proposed in mathematics might focus on statistics and probability. Innovative approaches for preparing students for traditional mathematics study (college algebra, calculus) are also encouraged but should identify strategies for assessing student readiness for these subjects.

- 5.2 Project Lead the Way has accelerated opportunities for high school students to engage in rigorous, problem-based learning that builds from a core foundation in mathematics and science and introduces students to engineering. It is encouraged that institutions consider collaborating on an engineering proposal that builds upon the foundation courses of PLTW for students who have already completed the core curriculum of the program (computational science is one such elective option for students in PLTW).
- 5.3. Proposals must develop a timeline and process for high school and college partners to identify the specific coursework that will be earned for dual credit. While this does not have to be fully negotiated at the time of the initial proposal, the credit and its application to meet both college and high school requirements needs to be clarified for students during the recruitment phase.
- 5.4. Applicants are encouraged to review the draft Partnership for Continued Learning dual enrollment recommendations, particularly those addressing quality and rigor of dual credit coursework, faculty qualifications, and student criteria (<http://www.pcl.ohio.gov/jcore/pcl/HomeContent.jsp>).
- 5.5. As a first priority, foreign language credit should be focused on less frequently taught languages such as Chinese, Arabic, Japanese, Russian.
6. Anticipated students served (number of students, grade level, etc.), up to a maximum of 50 students.
 - 6.1. Include in the plan a description of recruitment strategies for identifying students who might not otherwise have the opportunity to participate in this type of opportunity and identify the measures to be used to ensure student success.
 - 6.2. Academies should enroll up to 50 students, but the total number should be appropriate for the proposed structure and requested funding. Academies must serve, minimally, 30 students. Funding requested should be appropriate for the size of academy.
 - 6.3. Students from public, chartered (community) and nonpublic schools are eligible for participation in the academies.
7. Recruitment strategies.
 - 7.1. Student stipends are encouraged as one means of attracting students who might not otherwise be able to participate as a result of financial need for summer income.
8. Duration of the academy and the anticipated ending date for all academy activities such as follow-up academic year experiences. Note that the time span and contact hours for the proposed academy are expected to be appropriate for college level courses and for the total number of credit hours granted.
9. Describe follow-up during academic year, such as academic and advising programs. Partnerships should describe how contact will be maintained with students and/or further encourage STEM and foreign language careers.
10. Evaluation/assessment strategies.
 - 10.1. Academies will be required to participate in state-level assessment activities, including the provision of information on students to facilitate follow-up and tracking; and documentation of student progress on measures identified by the Ohio Board of Regents and the individual program.

- 10.1.1. Name and contact information for students, including the school district for the student.
- 10.1.2. Descriptive information regarding student participants must include gender, race, and grade-level at the time of participation in the program. It may also include information on eligibility for free and reduced lunch.
- 10.1.3. Total number of students participating in the program (by project) and the average daily attendance of program participants.
- 10.2. Proposals should identify specific learning outcomes for program participants and measures of success.
11. Connection to state, federal and other policy and funding initiatives.
 - 11.1. Matching funds are highly desirable and should be clearly identified in the proposal.
 - 11.2. Grant funds may not be used to supplant funds for existing programs.
12. Sustainability (potential growth, replication).
 - 12.1. Identification of proposed strategies to sustain, enhance and/or replicate successful models of student learning developed through the academy.

III. Evaluation and Award of Funds

Regents STEM and Foreign Language Academies will be awarded by the Chancellor of the Board of Regents based upon the quality of proposals and the results of a two-step process that includes a written response to the Request for Proposals (RFP) and, for those selected, a presentation to the evaluation panel. Selected proposals are expected to demonstrate excellence in engaging student learners through a strategic investment of funds. It is envisioned that successful proposals will:

- Bring together varied and collaborative partners within regions and create new opportunities for students in mathematics, science, engineering, and foreign language that would not otherwise be available. Collaborative partners might include public and private colleges and universities, business partners and K-12 schools and districts.
- Demonstrate potential as a model for future initiatives or expand on existing efforts to build capacity. Strategic state investments have focused on the Centers of Excellence for Mathematics and Science as systemic and sustained collaborations of college and university faculty with K-12 educators. It is desirable to encourage the development of high quality proposals by the Centers as well as ensure that the Regents STEM and Foreign Language Academies in mathematics and science are linked to these statewide efforts. All proposals, however, will be evaluated and judged on their own merits.
- Use technology as a key learning strategy and instructional resource.
- Provide opportunities for foreign language study in shortage areas to address the needs of both the novice learner and heritage speaker.

IV. PROPOSAL REQUIREMENTS

A two-step process will be used for the identification of proposals: 1) initial proposal letter (eight pages total, not including a one-page budget using the attached format and the Proposal Cover Sheet); and 2) oral presentation and dialogue (invited based upon the initial

proposal materials). Proposals (both written and oral presentations) should be able to articulate a vision for the model to be developed and its potential for connecting to other initiatives (state infrastructure resources, future goals, foundation and/or federal funding possibilities). Proposals must address all key elements outlined in the project description.

Proposals should address all of the critical elements listed in Section II and be single-spaced, 11 pt. type. Proposals that do not adhere to this requirement will not be accepted or reviewed. A one page cover letter should accompany the eight page proposal/budget and indicate, by signature, the willingness of the proposed partners to participate in the planning and implementation of the academy.

V. EVALUATION REQUIREMENTS

Each Regents STEM and Foreign Language Academy must identify how it will evaluate the project and assess student learning. All projects must also collaborate with the Ohio Board of Regents on related assessment efforts and efforts to track student progress. Brief project reports will be expected from funded proposals on a schedule negotiated with the Ohio Board of Regents, including a final project report and budget.

VI. BUDGET

1. Up to eight proposals will be funded for implementation beginning during the FY 09 fiscal year at a total not to exceed \$1.9 million. Maximum funding for an individual proposal is \$300,000. Not all proposals will be funded at this level.
2. Budget proposals must include anticipated allocations for faculty, supplies and other reasonable expenses (i.e. housing, support services and staff, curriculum development)
3. Matching funds by foundations, programs, institutions or other entities will be viewed favorably in the selection process.
4. Ohio Board of Regents will approve final budgets for each project.

VII. PROJECT TIMELINE

October 1, 2008	Request for Proposal available
October 7	Information Meeting – Review of RFP, legislation and key points 10:00 am – 12:00 pm Board of Regents offices, 30 E. Broad Street, Columbus, OH, 43215, 36th FL Conference call is available by calling 216-787-0997. Space is limited on the conference call. Video conference available by request. Please RSVP to mcardenas@regents.state.oh.us
November 3, 5 p.m.	Proposals Due and Immediate Dissemination to Review Panel
November 10	Initial Review
November 24 & 25	Oral Presentation

December 2008

Recommendation to Chancellor and Chancellor's Decision

January 2009

Individual Project Meetings, Budget Review and Clarification

VIII. RESPONSE DEADLINE AND SUBMISSION

On or before **November 3, 2008 at 5:00 p.m.**, please email your RFP document as a single attached Word file to Melissa Cardenas at mcardenas@regents.state.oh.us. Please do not send additional files at this time. An information session will be held on October 7, 10 – 12:00 p.m. at the Ohio Board of Regents to answer any questions regarding the proposal process and to communicate the vision/intent of the advisory committee. Information from the October 7 meeting and any relevant questions/answers will be available on the Ohio Board of Regents website at <http://regents.ohio.gov/stem/index.php>.

X. EVALUATION AND NOTIFICATION

The Ohio Board of Regents will develop procedures to review and evaluate the RFI responses to assess organizational experience, qualifications and products that may be appropriate for the proposed project. The Board of Regents will identify potential grantees to make oral presentations and engage in discussions with reviewers. Additional modifications to the proposed academies may be suggested by Regents/Advisory Committee. Final decisions are made by the Chancellor.

Questions can be directed to:

Melissa Cardenas, Assistant Director, Academic Affairs and System Integration

Ohio Board of Regents

mcardenas@regents.state.oh.us

614-387-5690

**Regents STEM and Foreign Language Academy Grants
FY 2009 Initial Budget Summary**

Project Director: _____ Contact email: _____

Academy Name and Partners: _____

Budget Element	Request Program Funds	Other Funds
1. PERSONNEL COSTS (List separately with names and titles)		
2. TUITION AND FEES		
a. Tuition		
b. Fees (describe)		
3. Room and Board (and Related Costs)		
4. Student Incentives/Stipends		
5. Additional Participant Costs		
a. Transportation		
b. Other (identify)		
6. Materials and Supplies		
Total Costs		

Budget Guidance

- 1. Salaries and Benefits:** Salaries for instruction cannot be charged to Regents STEM and Foreign Language Academy requested support when the grant is paying for full tuition. This includes faculty, consultants, and teachers when the main focus of activity is course instruction. Salaries for instructors may be requested if the grant is not paying for tuition. Costs must be explained to ensure that there is no duplication of payment.
- 2. Project Director/Manager:** Salaries and benefits for project managers are justifiable, but should be reasonable and appropriate to the scope and time span of the project.
- 3. Clerical/Administrative Assistance (including staff associate with housing and related elements of the grant):** Must be clearly described in the budget.

**2009 Regents STEM and Foreign Language Academies
Request for Proposals Cover Sheet**

Name of Proposal _____

Lead Institution/Fiscal Agent _____

Partner Institutions _____

Lead Contact Name _____

Organization: _____

Email: _____ **Phone:** _____

Initial Budget Request \$ _____

In-Kind/Matching Support \$ _____

Disciplinary Focus	Course Name	Credit Hours (Sem. or Qtr.)
<i>Mathematics</i>	_____	_____
<i>Science</i>	_____	_____
<i>Foreign Language</i>	_____	_____
<i>Engineering</i>	_____	_____

Participants	Number Expected	Possible Districts
<i>Students</i>	_____	_____
<i>Teachers</i>	_____	_____

Overall Program Length	Days/Weeks/Months
<i>Summer Academy:</i>	_____
<i>Other Activities:</i>	_____

Residential Focus	
<i>Residential/On-Campus</i>	_____
<i>Non-Residential</i>	_____
<i>Combined</i>	_____

Did this Academy receive funding in FY 07 or FY 08? _____

Appendix A

**Regents Academy Statewide Advisory Committee
Membership List
FY 09**

Co-chairs:

Elizabeth Stroble, Senior Vice President and Provost
University of Akron

Bill Hiller, Executive Director
Martha Holden Jennings Foundation

Members:

Shaun Yoder, Director
Ohio Business Alliance for Higher Education and the Economy

Tom Lasley, Dean of Education and Allied Professions
University of Dayton

Lou Staffilino, Executive Director of Teaching Profession
Ohio Department of Education

Peggy Kasten, Director
Ohio Resource Center for Mathematics, Science and Reading

Andrew Tonge, Chair of the Department of Mathematical Sciences
Kent State University

Larry Johnson, Dean of the College of Education
University of Cincinnati

Jane Zaharias, Associate Dean, College of Education
Cleveland State University

Lillie Howard, Vice President for Curriculum and Instruction and Dean,
University College
Wright State University

Mark Nutter, Chief Academic Officer and Dean of Arts and Sciences
Washington State Community College

Dale McVay, Superintendent
Hilliard City Schools

Diane Birckbichler, Director of Foreign Languages, College of Humanities
Ohio State University

Jodi Haney, Professor, Center for Environmental Programs and Co-
Director, Northwest Center of Excellence
Bowling Green State University

Jeff Connor, Chair, Department of Mathematics and Co-Director,
Southeast Center of Excellence
Ohio University

Terry McCollum, Director of discovery and *i*Discovery and Co-Director,
Southwest Center of Excellence
Miami University

Ohio Board of Regents Staff:

Jane Fullerton
Associate Vice Chancellor, Academic Affairs and System Integration

Melissa Cardenas
Assistant Director, Academic Affairs and System Integration

Appendix B

The relevant H.B. 119 language on Regents STEM and Foreign Language Academies follows (Section 375.20.60):

“Of the foregoing appropriation item 235-435, Teacher Improvement Initiatives, up to \$2,000,000 in each fiscal year shall be used to support up to ten regional summer academies that focus on foreign language, science, mathematics, engineering, and technology and prepare eleventh and twelfth grade students enrolled in public or chartered nonpublic schools to pursue college-level foreign language, mathematics, science, technology, and engineering, with a focus on secondary teaching in these disciplines. Successful completion of these academies shall result in dual high school and college credits. Costs shall be based upon reasonable expenses, as determined by the Board of Regents, that institutions of higher education may incur for faculty, supplies, and other associated costs.”