



Oregon  
University  
System

{ Engineering and Technology Industry Council }

ETIC: A partnership between Oregon's public universities and the private sector

**Request for Grant Proposals**

**Out-of-School Programs for Project-Based Learning in  
Engineering and Applied Sciences**

**September 2, 2009**

**Eligibility**

Only proposals from Oregon University System (OUS) campuses and the Oregon Health and Science University will be considered and be eligible for funding under this solicitation. While partnerships, collaboration, and subcontracts with non-OUS entities are permitted, responsibility for the performance of each program will remain with the campus making the proposal and receiving the funds.

**Funding Goals:**

The following goals apply to this solicitation of proposals for Out-of School (OST) programs for project-based learning in engineering and applied science:

- To grow the availability of proven programs that deliver project-based learning experiences in engineering and applied science for fourth through ninth grade students.
- To recruit and engage growing numbers of students from diverse backgrounds and with diverse learning styles, interests and levels of achievement in a range of OST opportunities in order to prepare them for and retain them in college-level engineering and applied science programs.
- Increase collaboration between OST programs, and between such programs and school-time programs to increase effectiveness of these programs and their ability to serve target populations as well as maximize the use of limited resources and enhance the learning of the collaborating organizations.
- To enhance overall community support of and engagement in OST programs that emphasize engineering and applied science.

**Funding structure**

- Up to \$325,000<sup>1</sup> will be allocated to projects to be performed during 24-month period from October 2009 to September 2011.
- Grants under this RFP are expected to be \$50,000 to \$100,000 each but may be somewhat higher or lower.
- The budget provided with a proposal should show no more than 50% of the expenditures being made during the 12 months ending September 30, 2010.

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<sup>1</sup> \$162,500 is subject to approval of the ETIC Budget for the fiscal year ending June 2010 by the Oregon State Board of Higher Education and \$162,500 is subject to approval of the ETIC Budget for the fiscal year ending June 2011 by the Oregon State Board of Higher Education.

## Schedule

<b>Solicitation of Proposals Sent</b>	September 2, 2009
<b>Proposals Due</b>	September 30, 2009
<b>Notification of Corrections or Clarifications Needed</b>	October 5, 2009
<b>Requested Corrections and Clarifications Due</b>	October 7, 2009
<b>Finalist Recommendations to ETIC</b>	October 16, 2009
<b>Grant Awards Announced</b>	October 20, 2009
<b>Quarterly Reports Due</b>	December 31, 2009, and every 3 months thereafter
<b>Program Completion</b>	On or before September 30, 2011
<b>Final Report Due</b>	30 days after program completion

**Required Elements of the Proposal:** The proposed program should:

- Feature hands-on learning, project-based learning, and/or open-ended team projects.
- Reach a diverse audience of Oregon students in grades four through nine, such diversity including gender, ethnicity, and geography.
- Produce defined outcomes, sustained commitment, personalization, challenging content, and engaged adults.<sup>2</sup>

## Intended Results

- **Outputs** anticipated include:
  - Materials that will prove valuable past the project period to further the goals of the project.
  - More students in grades 4 to 9 that have participated in OST programs that feature engineering and applied science.
  - Family and community members who support students' participation in these OST programs.
- **Outcomes** anticipated include:
  - Students who plan to continue participating in OST programs that feature engineering and applied science.
  - Students who plan to take middle and high school pre-engineering and applied science classes as well as mathematics and science courses.
  - Students who understand key aspects of engineering and applied science including some of the careers associated with these fields.
  - Family and community members as well as professional educators that support OST programs and their connection to school-based STEM education and plan to stay involved.
- The main desired **impact** is an increase in the number and diversity of students who are motivated to pursue college majors in engineering and applied science.

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<sup>2</sup> See Building Engineering and Science Talent (BEST), [http://www.pkcal.org/documents/what\\_works\\_best1.pdf](http://www.pkcal.org/documents/what_works_best1.pdf)

## Evaluation Plans

Formative and Summative Evaluation Plans with focus on proposed outputs and outcomes. See Proposal Content in Appendix 1 for general instructions on what your proposal should include regarding these plans.

Following are some specific suggestions that relate to this scope of work:

- The formative evaluation should review output and outcome metrics as well as other aspects of your proposed program that facilitate making improvements during the period of the project. Possibilities include:
  - Surveying student and adult participants on subjects like
    - Quality of experience
    - Suggestions for improvement
    - Inclination to recommend the program to their peers
  - Tracking attendance and persistence of participation.
  - Tracking increased knowledge, skills, confidence, and attitude towards subject matter.
  
- The summative evaluation could include things like:
  - Number of students and adults that participated as well contact hours for each.
  - Demographic information on those that participated.
  - Summaries of pre- and post- surveys of participating students.
  - Summaries of evaluations of new materials.
  - Suggested improvements in recruitment, delivery, and curriculum,
  - A discussion of issues affecting the growth and sustainment of the program.

## Proposal Submission:

***Proposals will be accepted only via email to [michele\\_vitali@ous.edu](mailto:michele_vitali@ous.edu).*** The preferred format is an Acrobat (.pdf) file; Microsoft Word (.doc) files are also acceptable. Letters of institutional commitment and letters of endorsement, if necessary, may be submitted separately via email or by fax to 503.725.2921 with appropriate identifying information.

***All proposals and supporting materials must be received by noon on September 30, 2009.*** Staff will log and review the proposals for completeness and compliance. We will notify authors of incomplete or incorrectly formatted proposals by October 5, 2007. Authors will have until October 7, 2009, to make corrections and completions after which incomplete and non-compliant proposals will be subject to exclusion.

**Questions:** Please contact Michele Vitali ([Michele\\_Vitali@ous.edu](mailto:Michele_Vitali@ous.edu); 503.725.2919) or Bruce Schafer ([Bruce\\_Schafer@ous.edu](mailto:Bruce_Schafer@ous.edu), 503.725.2915) with questions.

## Appendices

1. Proposal Form and Content
2. Evaluation Criteria

## Appendix 1 – Proposal Form and Content

### PROPOSAL FORM AND CONTENT

Proposals that do not contain all the information requested in this and other sections may be rejected as non-responsive.

#### **Submission Format**

1. The Proposal should be written on standard size (8½" x 11") paper, using generally accessible word processing and document formats conducive to cut-and-paste transfer of information to grants or other summary documents. MSOffice Suite documents are preferred.
2. Proposers should structure responses as outlined in this RFP. Proposals should be prepared so that responses are specifically addressed in the same order as the requested information identified below. Pages should be numbered.

### REPORTING SCHEDULE, SUBMISSION TIPS, PROPOSAL CONTENT OUTLINE, TEMPLATES AND FORMS

#### **Reporting Schedule**

Quarterly reports and a final report will be required of all organizations receiving funding via this RFP. Quarterly reports must include actual completion dates and goals achieved vs. the schedule included in the project proposal. Quarterly reports must include outputs and outcomes vs. the forecasted outputs and outcomes<sup>3</sup> for the period in question and the results of any formative evaluation<sup>4</sup> that occurred during the period. Final reports must also include the actual outputs and outcomes vs. the forecasted outputs and outcomes and the results of the summative evaluation<sup>5</sup> described in your proposal. A template for quarterly and final reports will be provided to those whose proposals are funded. The person responsible for implementing a project may also be asked to attend a quarterly meeting where project progress and plans will be discussed. ETIC has a web page that provides background information and reporting templates at [www.oregonetic.org/09-11/OPASrfp](http://www.oregonetic.org/09-11/OPASrfp)

#### **Proposal submission tips**

- Use plain, descriptive language. Avoid jargon. Define terms, acronyms and abbreviations
- This RFP Appendix uses the W.K. Kellogg Foundation “Logic Model” format including: Assumptions, Planned Work, and Intended Results. An excellent reference on the development and use of Logic Models in Project Planning and Evaluation is the following document: “Logic Model Development Guide” W.K. Kellogg Foundation available on line at this URL: [http://opas.ous.edu/Committees/Resources/Publications/WKKF\\_LogicModel.pdf](http://opas.ous.edu/Committees/Resources/Publications/WKKF_LogicModel.pdf)
- This Logic Model can be briefly summarized as
  - Identify project assumptions and external constraints
  - Identify project resources: human, financial, organizational and community

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<sup>3</sup> See definition of outputs and outcomes under Intended Results in Proposal Content below

<sup>4</sup> See definition of formative evaluation in Proposal Content below.

<sup>5</sup> See definition of summative evaluation in Proposal Content below.

- Show how project planned activities take resources to create outputs such as events, materials, etc.
- Show how project outputs effect participant outcomes: changes in behavior, knowledge, skills
- Connect project outputs and outcomes to three- to five-year impact on the organization and community

## **Proposal Content**

Please describe your proposed project using the following outline. Be concise, specific and give examples and references where appropriate. Conform to the format requirements given in the body of the RFP. Items 1 through 5 below should be covered in no more than ten pages.

1. **Cover Page.** *Use the cover sheet template provided below.*
  - a. *Please provide a short meaningful title and an abstract for your proposal in the spaces provided.*
  - b. *The project contact should be person who should contacted for the purpose of clarifying the information provided in the proposal.*
  - c. *The accounting contact should be the person who should be contacted if/when the proposal is approved and funded, regarding transmittal of funds and related matters.*
2. **Assumptions.** *Give a very brief summary of the problem and issues that your project addresses as well as any additional assumptions.*
3. **Project Plan**
  - a. **Resources** - *Include the human, organizational and community resources to be deployed to implement the proposed project. Include a description of the team that will implement the project and biographies of the team members. If other organizations are expected to collaborate, include a description of their capabilities.*
  - b. **Budget** – *Use the budget template given below to describe the financial resources to be deployed to implement the proposed project. Start your budget at the top of a new page. Follow it with a discussion of the thinking behind each section of the budget. Discuss the staffing, services, supplies, and equipment to be funded by the budget, referring, as appropriate, to the more general discussion of Resources that precedes the Budget. The budget discussion can refer to the description of collaborators and Project Activities that follow the Budget in your proposal. Likewise, your discussion of the cost of evaluations, whether they are budgeted as staff time (covered by Salary Expenses) or as Services, can refer to the description of evaluations that comes later in your proposal.*
  - c. **Other collaborators** – *Other collaborators are resources outside your organization that will contribute to the overall project. Examples might be community partners or subcontractors.*
  - d. **Project Activities** – *Describe what the project will do with resources to achieve the intended results. Describe the logical connection between these project activities and outputs and outcomes.*
  - e. **Schedule.** *Use the schedule template in this appendix. Use a separate page or two for your schedule. For each quarter of the project indicate activities that will occur*

during the period and the measurable outputs of these activities. Indicate who will be responsible by title for each activity and output. Under Milestones indicate what will be completed during the quarter and the date you expect it to be completed.

4. **Intended Results.** *This section should include forecasts for the following*
  - a. **Outputs.** *Outputs are the direct products of project activities. At a minimum you should forecast the number participants in each of your proposed activities and the number of contact hours you expect for each category of participant. (Contact hours are the sum hours of participation by all those in each participation category.)*
  - b. **Outcomes.** *Outcomes are the specific changes in project participants' behavior, knowledge, skills, status, and level of functioning.*
  - c. **Impact.** *Impact is the fundamental intended or unintended change occurring in organizations, communities or systems as a result of project activities within three to five years.*
5. **Evaluation Plans**
  - a. **Formative Evaluation.** *Formative Evaluations help you fine-tune the delivery and quality of experience for participants and staff. This section should describe the resources including the expertise to be used for the formative evaluation as well as the data to be collected, how it will be collected and how it will be used to improve the outcomes of the project. At a minimum the formative evaluation should give the actual outputs and outcomes vs. the forecasted outputs and outcomes for the period in question.*
  - b. **Summative Evaluation.** *A Summative Evaluation measures actual performance vs. planned performance, including quantitative and qualitative measures. It can also include recommendations for further work. This section should describe the resources including the expertise to be used as well as the data to be collected, how it will be collected and how it will be used to create a summative evaluation report. At a minimum the summative evaluation should give the actual outputs and outcomes vs. the forecasted outputs and outcomes for the project as a whole.*
6. **Commitment form from proposing organization.** *Use your campus' standard form or the form provided below. This form should be signed by an authorized official of the proposing organization.*
7. **Commitment form from collaborating organizations, if any.** *(Use the form provided below.)*
8. **Optional letters of endorsement from knowledgeable stakeholders**

*The templates and forms referenced above start on the next page. These forms are also available at [www.oregonetic.org/09-11/OPASrfp/docs/ETIC-RFP-2009Templates&Forms.doc](http://www.oregonetic.org/09-11/OPASrfp/docs/ETIC-RFP-2009Templates&Forms.doc) Instructions for each section are given above and in the templates in italics. Remove the instructions before using the templates so your proposal does not include the instructions.*

*Use this template to create the cover page for your proposal.*

<b>Proposing Organization</b>	
<b>Proposal Title:</b>	
<b>Proposal Date:</b>	
<b>Project Abstract:</b> <i>(Provide a short description of project using no more than the space provided here.)</i>	
<b>Amount Requested:</b>	

<b>Project Contact:</b>	
<b>Title:</b>	
<b>Address:</b>	
<b>Phone and Email:</b>	

<b>Accounting Contact:</b>	
<b>Title:</b>	
<b>Address:</b>	
<b>Phone and Email:</b>	

***Schedule Template***

<b>Quarter Ending</b>	<b>Planned Activity and Measurable Outputs</b>	<b>Responsible persons by title</b>	<b>Milestones with target dates</b>
Dec. 2009			
Mar. 2010			
Jun. 2010			
Sep. 2010			
Dec. 2010			
Mar. 2011			
Jun. 2011			
Sep. 2011			
30 days after project completion	Final report including summative evaluation		

**Budget Template**

<b>Proposal Budget</b>			
Oct. 1, 2009 - Sep. 30, 2011			
	<b>10/1/09 - 9/30/10</b>	<b>10/1/10 - 9/30/11</b>	<b>10/1/09 - 9/30/11</b>
<b>Salary Expenses</b> <i>(for those to be assigned to project)</i>			
<i>One line per role/title with FTE%</i>			\$ -
			\$ -
Other Payroll Expenses for above			\$ -
Subtotal	\$ -	\$ -	\$ -
<b>Services</b> <i>(to be subcontracted)</i>			
Curriculum Development			\$ -
Instructor stipends			\$ -
Printing			\$ -
Evaluation			\$ -
Communications			\$ -
<i>Replace above with your list of services to be subcontracted</i>			
Subtotal	\$ -	\$ -	\$ -
<b>Supplies</b> <i>(to be consumed during project period)</i>			
			\$ -
			\$ -
			\$ -
Subtotal	\$ -	\$ -	\$ -
<b>Equipment</b> <i>(to be retained after project period)</i>			
			\$ -
			\$ -
			\$ -
Subtotal	\$ -	\$ -	\$ -
<b>Grand Total</b>	\$ -	\$ -	\$ -

**Proposing Organization Commitment Form**

Name of submitting department and campus:

\_\_\_\_\_

Our organization will commit to implement the project as described in this proposal if it is accepted and funded.

Comments:

\_\_\_\_\_

Signature of authorized official

\_\_\_\_\_

Date

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Collaborating Organization Commitment Form**

Legal Name of Organization: \_\_\_\_\_

Our organization will commit to participating in the project described by this proposal if it is accepted and funded.

Comments:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

Mailing Address:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Appendix 2 – Evaluation Criteria

### EVALUATION CRITERIA

Proposals will be evaluated for completeness and compliance with this RFP. Proposals considered complete will be evaluated to determine if they comply with the administrative, contractual, and technical requirements of the RFP. If the Proposal is unclear, Proposers may be asked to provide written clarification. **Proposals that do not specifically address the scope of work or do not include the complete Proposal Content may be rejected.**

Proposals will be evaluated based on the following criteria:

	<i>Weight</i>	<i>Maximum Score</i>	<i>Middle Score</i>	<i>Minimum Score</i>
<b><i>ASSUMPTIONS</i></b>				
Assumptions include a very brief summary of the problem and issues that the project addresses as well as any additional assumptions used in designing the project plan.	5%	Project problem statement is concise and clear and aligns very well with the funding goals given in the RFP. Other relevant assumptions are stated clearly and succinctly with citations where appropriate.	Some alignment of problem statement with RFP goals.	Vague problem statement or lack of alignment with RFP goals.
<b><i>PROJECT PLAN</i></b>				
<b>Resources</b> include the human, organizational, and community resources and expertise a project has available to direct toward doing the work.	15%	Proposing organization and any collaborating organizations have extremely high quality and very relevant expertise relative to the proposed project and all its aspects.	Proposing Organization appropriate for project and includes relevant expertise.	Proposing Organization inappropriate for project or lacks relevant expertise.

	<b>Weight</b>	<b>Maximum Score</b>	<b>Middle Score</b>	<b>Minimum Score</b>
<b>Budget</b> describes the financial resources to be applied to the project to underwrite staff salaries, subcontracted services, supplies and equipment.	10%	Budget is very clear about how proposed grant funds will be spent and describes an extremely efficient use of these funds that matches proposed project activities extremely well. Budget will support excellent accountability of use of funds.	Budget is clear and reflects appropriate project costs, but lacks detail or the details are not completely consistent the proposed project activities and its evaluation.	Budget is not clear, does not adequately support the proposed project, and/or does not provide detail for accountability of funds.
<b>Project Activities</b> are what the project does with the resources. Activities are the processes, tools, events, technology, and actions that are an intentional part of the project implementation. These activities are used to bring about the intended project outputs and outcomes as described by the project narrative.	20%	Project includes extremely high quality processes and activities, use resources extremely effectively to produce the desired outputs and outcomes. Proposed activities align very well with required elements given in the RFP. The project delivery model allows full engagement by participants, allowing them to make new knowledge personally relevant and to develop new skills that are very well aligned with the goals of the project.	Project includes good processes and activities that use resources somewhat effectively to produce the desired outputs and outcomes. Proposed activities are somewhat in alignment with required elements given in RFP. Project delivery model should produce some engagement by participants, allowing them to gain new knowledge and skills that are consistent with the goals of the project.	Project processes and activities do not to seem to be appropriate or do not use resources effectively to produce outputs and outcomes. Proposed activities show little or no alignment with required elements given in the RFP. Project delivery unlikely to produce engagement with participants or allow them to gain new knowledge and skills.

	<b>Weight</b>	<b>Maximum Score</b>	<b>Middle Score</b>	<b>Minimum Score</b>
<b>Schedule</b> provides activities, outputs, responsible parties, milestones and completion dates by quarter.	15%	Very detailed and well thought-out schedule describes aggressive but achievable plan that uses the time available very effectively to implement the proposed project activities and produce the associated outputs and outcomes.	Reasonable schedule should allow most of the proposed activities to be completed during the project period and produce some of the desired outputs and outcomes.	Vague or incomplete schedule seems unlikely to implement project activities that will produce the desired outputs and outcomes.
<b>INTENDED RESULTS</b>				
<b>Outputs</b> are the direct products of project activities and may include types, levels and targets of services to be delivered by the project.	10%	Outputs are described that are extremely consistent with the goals of the project. These outputs are tightly coupled to the project activities. The forecasted outputs are described qualitatively and quantitatively.	Outputs are described that are somewhat consistent with the goals of the project. These outputs are connected to proposed project activities. These outputs are described in somewhat quantitative way.	Outputs are vague or unconnected to the project activities and/or inconsistent with the project goals.
<b>Outcomes</b> are the specific changes in project participants' behavior, knowledge, skills, status and level of functioning during the project period.	10%	Outcomes reflect reasonable, progressive steps that participants can make toward longer-term results. Outcomes are within the scope of the project's control or sphere of reasonable influence. Outcomes are specific, measurable, action-oriented, realistic, written as change statements, and achievable.	Outcomes reflect some progress toward longer-term goals. Outcomes relate to project's control or sphere of influence. Outcomes are well articulated and seem achievable.	Outcomes are vague, unrelated to project activities and/or do not reflect longer-term goals.

	<b>Weight</b>	<b>Maximum Score</b>	<b>Middle Score</b>	<b>Minimum Score</b>
<p><b>Impact</b> is the fundamental change occurring in organizations, communities or systems as a result of project activities within 3 to 5 years. Impact may include change that is likely to occur after the project period.</p>	5%	<p>Impact described would make a significant contribution to long-term goals and this impact appears to be highly likely based on the plan and the proposing organization’s capabilities. Project shows high potential for expansion, portability or scalability in areas such as</p> <ul style="list-style-type: none"> <li>• Geographic reach</li> <li>• Underrepresented groups</li> <li>• Educational sectors</li> </ul>	<p>Impact of project is would make some contribution towards long-term goals and appears somewhat likely to occur.</p>	<p>Impact of project is vague, has little relation to the long-term goals or seems unlikely to occur.</p>
<b>EVALUATION PLANS</b>				

	<b>Weight</b>	<b>Maximum Score</b>	<b>Middle Score</b>	<b>Minimum Score</b>
<p><b>Formative Evaluation Plan.</b> Formative evaluations help fine-tune the delivery and quality of experience for participants and staff.</p>	5%	<p>Extremely high quality Formative Evaluation Plan, including plan for measuring:</p> <ul style="list-style-type: none"> <li>• Number of participants in appropriate categories.</li> <li>• Contact hours per participant category.</li> <li>• Quality of participant experience.</li> <li>• Other outputs describes in the proposal.</li> <li>• Other aspects that will help tune project during project period.</li> </ul> <p>The plan would support making appropriate adjustments to the project during its execution increasing the likelihood of maximum success. The people that would be doing the evaluation are highly skilled in formative evaluation.</p>	<p>Formative Evaluation Plan would measure some important success factors and will help make adjustments to the project during its execution.</p> <p>The people that would be doing the evaluation have some skills in formative evaluation.</p>	<p>Formative Evaluation Plan is vague or incomplete. Little or no evidence that those would do the evaluation have required skills.</p>

	<b>Weight</b>	<b>Maximum Score</b>	<b>Middle Score</b>	<b>Minimum Score</b>
<p><b>Summative Evaluation Plan.</b> A summative evaluation measures actual performance vs. planned performance, including quantitative and qualitative measures.</p>	5%	<p>Extremely high quality Summative Evaluation Plan, including plan for measuring:</p> <ul style="list-style-type: none"> <li>• Number of participants in appropriate categories.</li> <li>• Contact hours per participant category.</li> <li>• Quality of participant experience.</li> <li>• Other outputs, outcomes, and impacts described in the proposal.</li> <li>• Other aspects that will help understand the results of the project and opportunities for the future.</li> </ul> <p>The evaluation would support a deep understanding of the outputs, outcomes, and impact of the project. The people that will be doing the evaluation are highly skilled in summative evaluation.</p>	<p>Summative Evaluation Plan will measure some important success factors and would help with the understanding of the outputs and outcomes of the project. The people that will be doing the evaluation have some skills in summative evaluation.</p>	<p>Summative Evaluation Plan is vague or incomplete. Little or no evidence that those that would do the evaluation have required skills.</p>