

Advancing Informal STEM Learning (AISL): Solicitation 13-608

Questions from Webinars 101 & 102 as well as email

December 2013

The following questions were posed by the field in relation to the AISL solicitation (13-608). As the questions were compiled from multiple webinars as well as email, we have grouped the questions by topic. If you have additional questions, please send an email to DRLAISL@nsf.gov.

Note that the solicitation and GPG are the official documents guiding this competition. In cases of contradictions, follow the solicitation and GPG.

I. General Questions

II. Program Solicitation Questions

III. Proposal Preparation and Review Questions

I. General Questions

Q: When can proposers expect to receive **notification of FY2014** funding?

A: Summer of 2014

Q: Will there be a **January 2015 deadline**?

A: No, there isn't a January 2015 deadline. November 14, 2014 is the FY2015 deadline.

Q: The names of program officers were not listed in the solicitation. **How do I contact someone?**

A: The solicitation specifically provides the email: DRLAISL@nsf.gov. This is generally the fastest way to get a response from a program officer familiar with the nature of your question or request and who is available. If your proposal was declined and you are resubmitting, you are welcome to contact the program officer you worked with before.

Q: Where can I find **proposals that AISL funded** in the past.

A: NSF.gov, click Award Search or go to the AISL page and look through Recent Awards. Funded projects and evaluations may also be found on informalscience.org.

Q: What is a realistic **project start date** for projects receiving FY2014 funding?

A: No sooner than six months after the date of your proposal submission.

Q: Where can I learn more about **successful AISL projects**?

A: The [NSF Awards database](#) lists all projects funded by the AISL and the former ISE program. The CAISE website, informal.science.org, provides some examples of projects.

Q: Where can I find **evaluations** from previously funded projects?

A: Search InformalScience.org to find evaluation instruments and products, AISL project abstracts, reference materials, case studies and reviews, and instructional materials.

Q: Where can I find more CAISE **resources** about working with NSF support?

A: [NSF AISL](#) section of the informal.science.org website provides a collection of information for working with NSF support, evaluations tools, white papers, inquiry group reports, and reports from NSF funded conferences. Many of these documents are specifically geared toward informal science education proposals.

Q: Earlier solicitations talked about **grant supplements**. Are supplements still available?

A: Given limited funds, AISL is not considering supplement for FY2014.

Q: What qualifies as **informal STEM learning**?

A: Please see the webinar slides and informal.science.org for examples of the breadth and depth of the field. If you have specific project question, please contact us through DRLAISL@nsf.gov.

II. Program Solicitation Questions

Q: What has **changed in the new program solicitation** (NSF 13-608) compared to the previous solicitation (NSF 12-560)?

A: We recommend you review the slides, listen to the audio, and read transcript from Webinar 101, also posted on the [AISL website](#). The changes are discussed there. They are also mentioned on page 1 of the [new solicitation](#) (#13-608).

Budget, Costs, and Allowable Expenses

Q: Is the **funding level** denoted in the solicitation for the life of the project or for each year of the project?

The maximum funding level is for the life of the project, not for each year. For example, a research project may have up to a 5 year duration, but the cumulative total, for all the years, may not exceed \$1.5 million.

Note that we have introduced minimum request levels. The key is to justify the level of your funding request.

Q: For projects with budgets greater than the NSF request, should we still include a total project **budget spreadsheet** as a Supplementary Document?

A: Refer to the NSF Grant Proposal Guide section on, Facilities, Equipment and Other Resources for guidance (GPG II. C. i.). Do not list additional funding sources or amounts in the project narrative as cost sharing is not allowed.

Q: We anticipate seeking **funding from other sources**, should we enter our expected cost-sharing amount in line item “M” on the budget form?

A: No. NSF no longer requires fiduciary information related to cost sharing. Line item “M” should always be entered as \$0 for the AISL program, regardless of a project’s intent to acquire additional funding resources.

Q: What activities and expenses are **ineligible** for funding through the AISL program?

A: Budgets cannot include in line items costs already recovered through the organization's federally negotiated indirect cost rate. See the solicitation and NSF's Grant Proposal Guide (GPG) for ineligible expenses.

Q: Section B. Budgetary Information under the Other Budgetary Limitations, states “Budgets cannot include in line items costs already recovered through the organization's **federally negotiated indirect cost rate**,” what does this mean?

A: This means that you can’t put direct cost line items into your budget that are appropriate for the indirect cost line items. In other words, you can’t ask for the same funding twice in the budget.

Q: Is it permissible to request funding for **graduate tuition** for participants?

A: The AISL program budget allows for graduate student tuition, as do most of the NSF-funded projects. Undergraduate tuition funding is not permissible.

Q: With regard to the budgeting guidelines for **Senior Personnel** found in the GPG, can you provide more information about the two-month salary limit for senior personnel?

A: The NSF requirement on PI and other AISL personnel time was designed with university researchers in mind; it is not unusual for an AISL proposal to request senior personnel at more than 2 months. At the same time, ALL proposers exceeding the 2 months limit must provide a brief rationale for the time beyond 2 months in the budget justification section of their proposal.

Q: Can we use award funds to **pay for educational exhibits**?

A: Yes, if they are logical components of your project and support the knowledge building goals of your project.

Q: What is a **typical budget** for honorariums for expert advisors?

A: NSF cannot provide this type of input.

Deliverables

Q: What specific types of **project activities** will the AISL program fund?

A: The program funds informal science education research as well as the development, production, and evaluation of innovative out-of-school learning experiences. It does not fund the actual operations of those experiences once they are developed and evaluated. So, for example, the program doesn't fund the operational expenses of a summer camp as a stand-alone endeavor. But it can fund the development and evaluation of new ideas on how to improve the STEM learning outcomes of summer camps or summer camps that are part of a comprehensive youth program. Or, AISL may fund research with respect to learning at a summer camp. Similarly, the program can't fund a competition but it can fund development of an innovative type of competition, a study of how to develop effective competitions, or a competition as part of a larger project with other learning materials.

Q: Is research limited to how people learn, or would a citizen science project that provides scientific information qualify?

A: This is a question we get quite a bit in terms of citizen science. The knowledge building we do in this division has to do with how people learn and the environments in which people learn. Generating scientific STEM knowledge can be an important component of an AISL project, particularly in citizen science. However, AISL-funded projects need to also have a knowledge building component that is focused on learning or learning environments.

So if the primary intellectual merit of your project is understanding better how wetlands work, that is not appropriate to AISL. However, if you're studying how people learn about wetlands or how data can be collected such that the participants involved learn science inquiry skills, those are learning-focused questions. Note: We wouldn't fund a citizen science project that doesn't result in good data for scientists because that's part of the definition for citizen science, but all AISL projects need to build knowledge about learning or learning environments.

Q: There is two-year institution that teaches [fill in the blank] to pre-service students and in-service professionals. Could we study the way instructors instruct? Is that a good topic to look at for this type of funding?

A: Pre-professional and professional programs are likely to be part of a formal school setting. In such case, it would not be appropriate as the primary audience for an AISL award. If the situation needs clarification, contact DRLAISL@nsf.gov.

Q: Will the AISL program support **book publishing** as a primary deliverable?

A: Book publishing as a stand-alone activity is not something that we can fund. However, a book can be a secondary deliverable that accompanies or results from an exhibit, media, research, conference, or other AISL project.

Eligibility

Q: Can a proposer be a **Principal Investigator (PI) or Co-PI** on multiple AISL grant submissions?

A: The current solicitation does not place any limits on the number of proposals that a PI can submit.

Q: Can a Principal Investigator (PI) be from a **business or for profit organization**?

A: Yes. Proposals can be submitted by non-profit and for-profit organizations.

Q: Can universities and businesses collaborate on a proposal? Does it make a difference if the business is a **not-for-profit**?

A: Proposals to the AISL Program can include any combination of organizational types, including not-for-profits and for-profit.

Q: Will a PI or Co-PI who does not have a history of **prior NSF support** be penalized?

A: No. Each proposal is evaluated on the merits of the case that is made for funding and on the qualifications of the PI and team, whether they have received NSF funding before or not. Senior personnel who have had prior NSF funding should describe the outcomes and relevance of prior work to the current project.

Q: Does the PI have to have a **PhD**?

A: No. The PI needs to have sufficient expertise to run the project and needs to establish expertise and capacity in a two page CV.

IRB

Q: Are we required to submit our proposals to a **human subjects review board** in advance of the full proposal submission?

A: You are not required to have the IRB process completed by the time the full proposal is submitted. However, it is important that the Human Subjects issue is addressed in the proposal and that the determination has been made whether to check the box on Human Subjects on the front cover of the proposal. If appropriate, you can also note on the cover page that the human subjects exemption or approval is pending.

Q: When is the **official IRB letter** needed?

A: An official IRB letter must be in place before a proposal can be recommended for funding. Proposers sometimes wait until they get to the negotiation phase before obtaining an IRB letter. So, it depends on the availability of your IRB to process your required documents and produce the IRB letter once funding is imminent.

Q: Are there other resources for **learning about IRB** in informal STEM learning environments?

A: Recently, CAISE has published a [series on IRB](#) on the InformalScience.org website under Perspectives that may be helpful.

Program Audiences

Q: Is the AISL Solicitation designed to serve **K-12 settings**?

A: The primary mission of the AISL program is to stimulate knowledge building and innovations in learning STEM outside formal school settings. This doesn't mean that informal learning can't occur inside school buildings, such as after-school or community programs. What we don't fund is the development of, for example, 5th-grade classroom earth science instructional materials developed exclusively for a formal, K-12 academic program. However, formal education audiences, including teachers, may be appropriate secondary audiences and are often targeted as part of the outreach efforts of exhibit and television projects when constituting a small fraction of the total audience. Innovative linkages between formal and informal educational practices are encouraged, as are innovations that are cross-setting or independent of setting, such as those involving mobile technologies.

Q: Can **undergraduate students** be considered to be a professional audience?

A: Undergraduates can be considered "professional audiences" if the project's goal is to train them to contribute to the education of the public about STEM or to otherwise advance the knowledge and skills of informal STEM education professionals – the same way that, say, science center volunteers might be trained to work with visitors. One issue is whether that training comes as part of a formal education experience where tuition and fees are involved. The AISL program does not pay for undergraduate tuition and fees (though graduate tuition is allowable).

Q: Would projects related to **health or medicine** fall under "science" and be considered appropriate for an AISL grant?

A: Typically, health and medicine are not eligible for NSF funding. However, the operative rule is that, if one can find that NSF supports research in the discipline of interest, then one can submit to the AISL program. For example, microbial ecology research is funded by NSF, so education related to that is eligible. Refer to the Grant Proposal Guide.

Q: Does an entire project have to be around **underrepresented populations** or just practically focus on them?

A: Projects aren't required to focus on an underrepresented population or an underserved population, but it is encouraged when it is appropriate for the project.

Q: Is **teacher professional development** part of the purview of informal STEM projects?

A: The primary thrust of an AISL proposal should be on informal STEM learning outside the classroom. However, you can include some resources for teachers in classrooms. Professional audiences, such as educators and/or STEM professionals working with informal audiences, are legitimate primary audiences for AISL proposals.

If the primary professional audience is teachers from formal schools, the DRK-12 program is likely a better fit.

Project Types

Q: Is there a **limit to the number of awards** an institution can receive across all project types, or within a project type?

A: The guidelines indicate no limits on the number of proposals that can be submitted. The number of awards to an institution or PI does depend on a range of portfolio-balancing assessments that are taken into account at NSF.

Q: Are **collaborators** required for all types of proposals?

A: Collaborations are not mandatory, but highly encouraged for all proposal types; it is a rare proposal that cannot be strengthened by collaboration. Note that the solicitation asks for expertise in both ISE "practice" (the doing of ISE) and "knowledge building" (evaluation and/or research) as part of the project's leadership team.

Q: This solicitation seems to prioritize research. How can departments or institutions that aren't research institutions **make a competitive case** to demonstrate competence and expertise in educational research?

A: Knowledge building is a key component of the NSF mission. If your organization doesn't have knowledge building expertise, consider collaborating with individuals or organizations with such expertise. (See previous question and answer, as knowledge building is not the only expertise that is valued.)

Q: When applying for a **Pathways grant**, how much information should we include in the full proposals describing the major project we are working toward versus what we're seeking funding for under Pathways?

A: A Pathways proposal must provide sufficient information that clearly indicates (a) the team's intent, at the time the Pathways proposal is submitted, for what a future full-scale or other project type might entail, and then, related to that, (b) what major issues/problems/decisions (via a feasibility study, pilot program, front-end audience work,

etc.) need to be explored during the Pathways project to help clarify what the concept of the full-scale project will be.

Q: Is there a **limit to the amount of money** (or proportion of funds awarded, if successful) that can be allocated by the prime to its subcontractor(s) for Pathways Projects?

A: Every project distributes its funds in different ways. There is no specification on that distribution. When the full proposal is submitted, the budget justification pages are where NSF staff and reviewers will look to see your rationale for the budget components.

Q: What is the **difference between the project types**?

A: See [Webinar 101 and 102 slides, audio files, and transcripts](#) for examples in addition to the solicitation descriptions.

Q: In regard to Broad Implementation grants, is a **formative evaluation** required?

A: It's not required for all Broad Implementation projects, but it is expected for those that are planning significant adaptations, such as to reach new audiences.

Q: If my Innovations in Development project has **both a research and an evaluation component**, where do I describe each?

A: See [Webinar 101 slides, audio files, and transcripts](#) for more discussion of the evaluation and external review sections of the solicitation.

If the research component is for knowledge building of your project, describe it in the Project Design section of the project narrative. The evaluation components are (1) for iterative improvement of the research component and of the development component and (2) for accountability. These would be described in the Evaluation and External Review section of the project narrative. (If evaluation is the key knowledge building component of your project, it would likely make most sense to be described in Evaluation and External Review.) It is important, however, that you use your judgment as to what makes most sense for describing your project as there isn't a cookie-cutter AISL project.

Q: Is **summative evaluation** required for a development project?

A: A knowledge building product is required; this can be research or summative evaluation. Please see the solicitation. Webinar slides, transcripts, and audio files may also be helpful.

Q: Can you direct us to a white paper which describes **the difference between research and evaluation** for AISL projects?

A: One of the challenges for all of us in the education field is that there are varying definitions of research and evaluation, many of them overlapping. We recognize many evaluators use "research" methods, and researchers do evaluation. Most important in terms of your proposal is that you design a coherent project and make a case for what you are doing, why it's important, and how your project aligns with the solicitation guidelines.

Q: Can award funds be used to **cover evaluation costs**?

A: Yes.

Q: What **percent of the budget** should go to evaluation?

A: The funds you allocate should depend on your project and what the evaluator is doing. There are no percentage guidelines.

Q: Last year, there were **additional funds for project with research components**. Are those additional funds still available?

A: The same total amount of funding is available per project; we just don't have an add-on research piece. You may include the research piece directly. We made this change for two reasons. First, knowledge building, through research and/or evaluation, is a component of all AISL projects now. Second, in many cases, the budgets submitted last year were not sufficiently articulated that we could tell what the research component was. Thus, it appeared that people were asking for additional funds without a justification. The current system should resolve this issue.

Q: For **Broad Implementation** projects, the solicitation says you must have documented evidence of success. Does it have to be from a prior NSF grant?

A: No, it does not have to be from a prior NSF grant. The important part is that you have research and/or evaluation that you sufficiently describe your evidence that the current iteration of the project is successful in the ways that you indicate, so that it is reasonable to consider expanding its reach or focal audience.

Q: If you want to run a **workshop as part of the dissemination plan** for an Innovations in Development proposal, should you apply for the workshop funding separately?

A: In this case, the workshop is an integral part of the dissemination plan, so you would include the workshop as part of your Innovations in Development proposal. It would not be a standalone proposal. That said, you could propose workshop based on previous work or awards that would seek to build knowledge as opposed to disseminate knowledge.

Q: Where do you send a proposal for a **conference for less than \$50,000**, which can be submitted at anytime?

A: You submit the proposal through Fastlane, just like any other proposal for this solicitation. You are encouraged to email and/or talk to a program officer before you submit.

III. Proposal Preparation and Review Questions

Proposal Preparation

Q: Which section of the proposal should include the **intended outcomes**?

A: The Project Rationale section is the primary place where the proposal should explain the intended outcomes.

Q: According to the guidelines can we still send supplemental materials, such as CD/DVDs or **prototype website** for panelists to preview?

A: Yes.

Q: Please clarify the reasons for limiting the length of **Supplementary Documents**.

A: We are trying to reinforce the idea that supplementary documents should not be extensive. The reasons for this are: (a) equity and a level playing field for PIs and (b) to reduce the burden on reviewers. AISL proposals have had a long history of including supplementary documents, some quite lengthy. Evaluation plans have not infrequently been longer than the proposal itself and have included pages of boilerplate descriptions of the evaluation firm. We have specified page limits for supplementary documents related to details of evaluation. Samples of draft materials, which are optional, are not specified in terms of length because different kinds of proposals have different needs, but all are encouraged to be brief. Letters of commitment are not subject to any length constraints.

NSF has distinguished between “Appendices” and “Supplementary Documents,” a distinction that is not always understood by PIs. Like the rest of NSF, AISL can allow Appendices only if they receive prior authorization.

The AISL program staff still encourages PIs to make sure all essential project information, including evaluation and external feedback, are well integrated into the 15 pages.

Q: Should we include a **list of references** cited?

A: Yes, a references cited section is required for the full proposal submissions. This section is not included in the 15 page count.

Q: Do we have to identify all **consultants**?

A: Appropriate planning and preparation should be evident in the proposal. You need to identify the consultants or the type of consultants and their expected qualifications that your project will require, if the specific consultant is not named. As with an exhibit development project, it might not be possible to identify the fabricator of the exhibit at the time of the submission. If awarded, however, the award letter may contain a clause about the requirement for having the fabricator approved by the program officer when the project gets to that stage.

Proposal Review

Q: In light of the **new Merit Review Criteria** implemented NSF-wide on January 14, 2013, will proposals in the future be evaluated based on these criteria?

A: Yes. Proposers should familiarize themselves with the Merit Review Principles and Criteria described in GPG Chapter III.A. For comprehensive outreach and training materials visit the Revised Merit Review Criteria Resource site.

Q: To what extent is NSF going to inform and prepare the reviewers on the new **Common Guidelines**? Should we assume the reviewers will be familiar with these?

A: The reviewers need to be familiar with NSF Merit Review criteria and the AISL solicitation.

We shared the Common Guidelines because they informed the AISL solicitation, and we wanted the field to understand the background for changes. The Common Guidelines are also likely to play a larger role in the next solicitation.

Q: What **percentage of proposals** are ranked "Highly Competitive" and "Competitive?"

A: There are not standards or recommendations with respect to a number or proportion of proposals receiving a particular ranking.

Q: Does my proposal have to receive all **Excellents** to be funded? If it does, will it be funded?

A: No, your proposal does not have to receive all Excellents to be funded. Receiving all Excellents does not guaranty funding. Reviewer recommendations are advisory to NSF.

Q: If NSF has **questions about my proposal**, how will I receive them?

A: By email to the PI.

Q: Can we **serve as a reviewer** if we are planning to apply for this funding competition?

A: If you are a PI or Co-PI, you cannot be a reviewer this round.