The Advancing Informal STEM Learning (AISL) Program
**Merit Review Criteria**

**Intellectual Merit and Broader Impact**

1. What is the potential for the proposed activity to:
   a. advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
   b. benefit society or advance desired societal outcomes

2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?

3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?

4. How well qualified is the individual, team, or institution to conduct the proposed activities?

5. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?
Solicitation-Specific Review Criteria

Broadening Participation

➢ To what extent does the proposal identify the characteristics and needs of the targeted underrepresented groups (public or professional) to be served?

➢ To what extent does the proposal include specific plans or strategies for addressing or accommodating the specific interests, community or cultural perspectives, and/or educational needs of participants of the identified underrepresented groups?
Advisory Boards
Connected with the program’s strategic priority of encouraging collaboration & partnerships, advisors and advisory boards are one way to bring needed expertise and perspectives to the work being conducted.

Advisors & Advisory Boards can help in meeting the NSF merit review criteria. Panels often suggest them as a way bolster the work of a project.

Their use is optional
Considerations for establishing Advisors/Advisory Boards

What is the overall purpose of your work?

What questions are you asking?

How is your project set up to address the core team’s biases?

Whose experience, expertise, perspectives could be important contributions to the work?
Advisory boards can provide perspectives/expertise on:

- Content
- Context
- Broader impacts work (e.g., connections to the wider field[s])
- Broadening Participation work
- Other

Often project teams get input/feedback when conceptualizing a project and/or working on the proposal.
From the AISL program perspectives, the inclusion of advisors or advisory boards is not about checking a box.

Consider:
• What is the work these people or groups will do (what are the goals and objectives)?
• How are they really contributing to the work, not rubber stamping the work?
• Mutual benefit: How do they learn from you/your project as well as bring knowledge to the project?
• What is the frequency of contact? Form(s) of communication?
• How will you know the Project Team Advisor/Advisory Board relationship is working?
• Advisors/Advisory Boards are not “one size fits all”
Evaluation
Evaluation in AISL Projects

All AISL project proposals are required to specify the evaluative processes they will use to achieve the following two goals:

1. **Support iterative improvement.** Evaluative processes should ensure that a project gets appropriate, rigorous, external input throughout the life of the project. Such input is essential for project monitoring, management, and continuous quality improvement. External feedback should enrich (and potentially challenge) teams’ perspectives.

2. **Promote accountability.** Evaluative processes should address questions such as: Is the project addressing its stated goals? What is the quality of the work?
The objectives of the evaluation include:

• Recommending evidenced-based adjustments to project plans.
• Determining the effectiveness and impact of the products or processes.
• Attesting to the integrity of outcomes reported by the project.
• Assessing whether the project is making satisfactory progress toward its goals.
Proposals should describe critical features of the evaluation design:

- Evaluation questions
- Data to be gathered & Sampling methods
- Data analysis plans
- Expertise of those responsible for evaluation.

Proposals should *distinguish* evaluation from other critical research components. This does not mean that research & evaluation have no relationship.
Use of Advisory Boards as the External Evaluator

IF establishing an Advisory Board for the purpose of external evaluation, like what should be done if hiring an individual or firm to conduct the evaluation, here are things to keep in mind:

• Bring the *Evaluation Advisory Board* (evaluator) on at the beginning of the project, not after everything has been decided.

• The *Evaluation Advisory Board* designs the evaluation plan in concert with the team. This means that there will likely be one advisor who is the Lead on the advisory board.

• The *Evaluation Advisory Board* determines how data is collected, when reporting will occur and generates the evaluation report according to the agreed upon timeline.
Check out these resources on the CAISE website:

Designing Evaluation
https://www.informalscience.org/what-evaluation-0

11 Tips for a Better Advisory Board Meeting
https://www.informalscience.org/news-views/11-tips-better-advisory-board-meeting