

Iowa Governor's STEM Advisory Council STEM Scale-Up Program Provider Application Rubric

The lowa Governor's STEM Advisory Council's mission is to bring top STEM education opportunities to all learners, especially those historically underserved. The intent of the Scale-Up program is to seed, jumpstart or expand little-known and exemplary programs proven to inspire and educate preK-12 students, enabling educational organizations to sustain beyond the Council's trial investment.

Evidence of Effect

Question to be evaluated:

Q1. Provide evidence of the effectiveness of the program. (2500 character limit).

Score	Reason for assigning the score
7-6	Source(s) of evaluative evidence clearly defined.
	Concise, detailed summary of the body of research used to develop the program provided, with citations.
	Provides a clear summary of evaluation tactics, highlighting benefits for students, educators, and other stakeholders in terms of content and skills acquisition/growth and attitude development and intentions. Includes an instance where assessment informed program practices.
	Source(s) of evaluative evidence clearly defined.
5-4	Overview of the body of research used to develop the program provided. Some sources mentioned. Provides a summary occasionally lacking clarity of evaluation tactics, highlighting benefits for students, educators, and/or other stakeholders and only some terms of content and skills acquisition/growth and/or attitude development and intentions. Explicit instances where assessment informed program practices are omitted.
	Source(s) of evaluative evidence may be unclear .
3-2	General statement about the research used to develop the program provided. Provides an unclear summary of evaluation tactics, highlighting benefits for students, educators, or other stakeholders and only some terms of content and skills acquisition/growth or attitude development and intentions. Explicit instances where assessment informed program practices are omitted.
1-0	Numerous facets of research base, evaluation tactics, benefits, sources, etc., are frequently overlooked or characterized by a lack of clarity.

Iowa Academic Standards Integration

Questions to be evaluated:

Q2.1 How does this program align with <u>lowa standards</u> for Science, Technology, Engineering and/or Mathematics? Demonstrate the primary connections between curriculum and lowa standards and integration across those standards.

Q2.2 Standards integration: Demonstrate how the program integrates across STEM curricular areas. How does this program align with other lowa Academic Standards, including 21st Century Skills and cross-curricular standards? (1500 character limit).

Score	Reason for assigning the score
7-6	The explanation provided clearly establishes a connection between the program activities and lowa Academic Standards for Science, Technology, Engineering, and/or Mathematics, thus meeting lowa Standards in STEM. The explanation shows that program activities integrate seamlessly across STEM subjects, effectively removing academic silos. The explanation demonstrates connections with other Academic areas including 21st Century Skills and other cross-curricular connections.
5-4	The explanation provided clearly establishes a connection between the program activities and lowa Academic Standards for Science, Technology, Engineering, and/or Mathematics, thus meeting lowa Standards in STEM. The explanation demonstrates connections with other Academic areas, including 21st Century Skills and other cross-curricular connections.
3-2	The explanation provided clearly establishes a connection between the program activities and Iowa Academic Standards for Science, Technology, Engineering, and/or Mathematics, thus meeting Iowa Standards in STEM.
1-0	The explanation minimally or negligibly addresses the integration of Iowa Academic Standards, providing insufficient basis to ensure integration.

Scalability

Questions to be evaluated:

Q3.1 (2500 character limit) Describe your program and its scalability for lowa students.

Q3.2 What is required to implement this program?

Score	Reason for assigning the score
7-6	The program has showcased its proficiency in implementing across various diverse learning environments. The program demonstrates substantial capacity to maintain quality over time and during expansion. The response offers a comprehensive description of the infrastructure available for educators in lowa to ensure continuity of program outcomes over time and during expansion.
5-4	The program demonstrates potential for implementation across diverse learning environments. The program demonstrates capacity to maintain quality over time and during expansion. The response offers sufficient infrastructure available for educators in lowa to ensure continuity of program outcomes over time and during expansion.
3-2	The program may face challenges in implementing across diverse learning environments. The program demonstrates little evidence of capacity to maintain quality over time and during expansion. The program's infrastructure for educators in lowa to ensure continuity of program outcomes over time and during expansion lacks clarity.
1-0	The program description lacks clarity regarding the learning environments it serves. The program provides no evidence of capacity to maintain quality over time and during expansion. The program's infrastructure for educators in lowa provides no assurance continuity of program outcomes over time and during expansion.

Professional Development/ Training

Questions to be evaluated:

- Q4.1 (1500 character limit) Please provide a detailed description of how the professional development/training associated with your program will strengthen lowa's STEM educators' pedagogy and content knowledge, provide sustained support, and equip educators to connect student learning within the context of lowa communities and careers. Include an agenda for professional development/training that includes time spent on each portion of the training.
- Q4.2 How will the initial professional development/training be delivered? (The lowa STEM Council Expects professional development/training to foster cohort building among awardees).
- Q4.3 Where will professional development/training be delivered in lowa? (lowa STEM Regional Map)
- Q4.4 Describe how professional development/training will be delivered during the award year. (2500-character limit)
- Q4.5 Minimum number of educators needed to conduct one professional development/training session?
- Q4.6 Maximum number of educators allowed to conduct one professional development/training session?
- Q4.7 Total number of days for your organization to conduct professional development/training for the program?
- Q4.8 If one professional development/training session extends beyond one full day, is it conducted over consecutive days?

Score	Reason for assigning the score
7-6	A clear description is provided of how professional development/training will enhance the pedagogy and content knowledge of lowa's STEM educators.
	The description for training provides context for lowa communities and careers within lowa.
	The description provided for training is clear , covering all expectations for the delivery of the Scale-Up Program training. It includes provisions for engaging with materials/kits, applying professional learning during the session, and discussing implementation in the educator's specific context with peers and experts.
	A somewhat clear description is provided of how professional development/training will enhance the pedagogy and content knowledge of lowa's STEM educators.
	The description for training provides context for lowa communities and careers within lowa.
5-4	The description provided for training covers 2-3 expectations for Scale-Up Program training delivery except for facilitating discussions among educators about implementation in their specific context with peers and experts. It includes some provisions for engaging with materials/kits, applying professional learning during the session, and discussing implementation in the educator's specific context with peers and experts.
3-2	An unclear description is provided of how professional development/training will enhance the pedagogy and content knowledge of lowa's STEM educators.
	The description provided for training fails to adequately articulate context for lowa communities and careers within lowa.
	The description provided for training lacks detailed provisions for engaging with materials/kits, applying professional learning during the session, and discussing implementation in the educator's specific context with peers and experts.
1-0	An unclear description is provided of how professional development/training will enhance the pedagogy and content knowledge of lowa's STEM educators.
	Information regarding professional development/training does not convey competency in strengthening educators' skills or knowledge.
	The description provided for training is minimal and does not meet the expectations for Scale-Up Program training delivery.

Evidence of Effectiveness in Engaging Diverse Learners

Question to be evaluated:

Q5. (2500 character limit) Provide evidence of the program's effectiveness (including each unit of the program) in successfully reaching and engaging all students, especially those from groups under-represented in STEM. Under-represented groups may include African Americans, Latino/as, English language learners, students with disabilities, low socioeconomic status, low test scores, rural, and females.

Score	Reason for assigning the score
14-12	Program has proven to successfully engage a diverse range of learners, especially those who are underrepresented.
11-8	Program provides some indication to successfully engage a diverse range of learners, especially those who are underrepresented.
7-4	Program provides minimal indication to successfully engage a diverse range of learners, especially those who are underrepresented.
3-0	No indication that program would successfully engage a diverse range of learners, especially those who are underrepresented.

Connection to the World of Work

Question to be evaluated:

Q6. (1500 character limit) Provide evidence on how students connect between learning and the world of work. Highlight connections that relate to key industries in lowa, including agriculture, advanced manufacturing, information technology, finance, and health careers.

Score	Reason for assigning the score
7-6	The program presents strong evidence that participants connect their learning to the world of work, including key industries of lowa (agriculture, manufacturing, IT, finance, health).
5-4	The program provides some evidence that participants connect their learning to the world of work, including key industries of lowa (agriculture, manufacturing, IT, finance, health).
3-2	The program provides minimal evidence that participants connect their learning to the world of work. Lacking links to key industries of lowa (agriculture, manufacturing, IT, finance, health).
1-0	The program provides no evidence that participants connect their learning to the world of work in lowa or elsewhere.

Program Budget

Questions to be evaluated:

- Q7.1 What is the budget for the program being proposed for scaling?
- Q7.2 Describe the materials provided to educators.
- Q7.3 One kit can serve up to how many youths?
- Q7.4 Can the program materials be reused multiple times during the day or semester? Educators may use the program materials with multiple youth groups during the day or semester.
- Q7.5 If not, please explain how the program materials are best used? (2500 character limit)
- Q7.6 Does this application include a payment to support educator participation in the professional development/training?
- Q7.7 If an educator support payment is offered, explain how your organization will administer the distribution of funds. (1500 character limit)
- Q7.8 What are the costs to an awardee to sustain the program? (1500 character limit)

Clarity and Organization

Score	Reason for assigning the score
3	Budget is clearly presented, logically organized, and easy to understand.
2	Budget is mostly clear and organized, with minor issues.
1	Budget is somewhat disorganized or unclear .
0	Budget is poorly organized or very difficult to understand.

Accuracy and Justification

Score	Reason for assigning the score
3	Budget amounts are accurate (e.g. align with the budget guidelines) and well justified with clear rationale.
2	Budget amounts are mostly accurate with some justification.
1	Budget includes questionable estimates or lacks clear justification.
0	Budget is inaccurate and lacks any justification.

Alignment with Application

Score	Reason for assigning the score
3	Budget is well-aligned with the stated goals in the application.
2	Budget mostly aligns with the application.
1	Budget has some inconsistencies with the application.
0	Budget does not align with the application.

Completeness

Score	Reason for assigning the score
3	All components of the budget are included (e.g., personnel, materials, training, etc.).
2	Most components of the budget are included, with minor omissions.
1	Some components of the budget are missing or insufficiently detailed.
0	Major components of the budget are missing or barely described.

Sustainability

Score	Reason for assigning the score
2	The application includes clear cost(s) to sustain at the implementation Unit level.
0	The application does not include clear cost(s) to sustain at the implementation Unit level.