INTRODUCTION

The following rubric represents criteria for all phases of the judging process. Judges review only eligible submissions. See here for eligibility information. Judges assess applications based on both the rubric and the UL Innovative Education Award's priorities.

There is a three-part judging process. First, judges across the US and Canada conduct a desk review to promote the highest-scoring applications to the next phase. Each application is reviewed by at least two judges. In March or April, a different set of judges gather in person to assess the remaining applications. This group promotes a maximum of ten finalists to the next round. At this point, finalists may be asked to produce a document or simple video to respond to judges' questions or concerns about the original application. In May, a different set of judges reviews the finalists' original applications, as well as new materials responding to questions. At this time, judges may also schedule a short Skype interview with applicants.

KEY CONCEPTS AND DEFINITIONS

E-STEM – The award focuses on programs that use the **environment as a pathway to STEM learning**. The UL Innovative Education Award values all parts of E-STEM, but there are several important components that reflect the vision of the award.

ENVIRONMENT – We encourage both applicants and judges to be inclusive in thinking of the environment. Environment in the context of the UL Innovative Education Award is defined broadly, including urban, suburban, and rural areas, as well as built spaces. Programs should delve into the relationships between the environment and local communities. When thinking of environment, we encourage applicants to look beyond habitat or species conservation.

KEY CONCEPTS AND DEFINITIONS (cont.)

ENGINEERING – The award champions engineering and design solutions to environmental issues. We believe an engineering mindset is critical in addressing real world problems, where youth study an environmental issue, devise and assess potential approaches to solving the issue, and implement an effective solution. When thinking of engineering, we encourage both applicants and judges to be inclusive of engineering approaches and materials. Engineering is not always bridges and robotics; it can include rain collection devices or clean air tools. The award equally values all types of engineering.

INNOVATION – The award prioritizes innovation in approaches on two levels: youth engagement and environmental solutions. First, we ask judges to consider the degree of novelty programs incorporate into learning systems. Innovative learning systems often depart from practices and outcomes found in traditional classroom and extracurricular education. Second, we also ask judges to consider the novelty of environmental solutions promoted by the program. These innovative solutions may employ new technology or interventions in addressing actual environmental issues. Across all types of innovation, we encourage judges to remember that new or advanced technology does not necessarily entail innovation.

Judges may also consider how to assess quality and innovation. New and innovative practices may not always be fully tested or widely implemented, so we ask judges to look for indicators of quality and effectiveness. On the other hand tried and true program approaches may not be innovative, but they may be effective. Ultimately, we ask judges to balance innovation and quality. Neither aspect should be lacking from a program that receives high scores.

REPLICABILITY & SCALABILITY – There is no single score for program replicability or scalability. As an award for innovation, we ask judges to consider if the program's innovation offers replicable value if others learn about this effort, or is scalable itself, and if that replication or scaling has the potential to advance the field for the better. Evidence of replicability and/or scalability should be indicated in program leaders' efforts or plans to scale up the program reach or activity.

INNOVATIVE
EDUCATION AWARD

POWERING A SUSTAINABLE TOMORROW

KEY CONCEPTS AND DEFINITIONS (cont.)

AUDIENCE REACH – There is no requirement for the number of youth impacted by the program, though the number of students reached is a strong consideration. We ask judges to carefully consider the breadth of audience reached, as well as the depth of that impact for members of the program audience. Judges are encouraged to consider the efficient use of program funds per student. While there is no score assigned specifically for audience reach, judges should use comparisons of audience breadth and depth of impact per person as a means to assess programs of similar quality and equally appreciate programs that are able to extend their reach in unique and impactful ways.

MAIN CRITERION 1
ADVANCING STEM LEARNING (TOTAL POINTS: 10)

OVERVIEW:

Strong programs advance science learning through research and investigative experiences for young people. STEM learning is a top concern for the winners, with an emphasis on creative approaches to problem solving and critical thinking. Ultimately, this effort will help young people acquire 21st century skills.

CRITERIA, SUB-CRITERIA, & RATINGS:

Innovation for this category is rated on a 10-point scale, looking at evidence and quality of evidence presented, as well as the success of the innovation.

SUB-CRITERIA

The application should address up to three of these sub-criteria of Advancing STEM Learning. The following list of sub-criteria is intended to help judges and applicants consider important areas of innovation, but are not considered the exclusive criteria representing the category.

- Emphasizes critical thinking skills, in line with those described by the Partnership for 21st Century Skills;
- Enables hands-on, experiential learning in spaces or areas, or with materials related to research;
- Supports creativity among individuals or groups, particularly in experimental design;
- Provides opportunities for students to engage in collaborative research;
- Scaffolds participants' ability to access and select relevant E-STEM information and resources;
- Integrates multiple E-STEM disciplines in a meaningful way in learning and teaching;
- "OTHER" creative strategies to enhance problem solving and critical thinking.

MAIN CRITERION 2
CIVIC ENGAGEMENT & SOCIAL RESPONSIBILITY (TOTAL POINTS: 10)

OVERVIEW:

Applicants make substantial contributions towards solving real-life problems. They demonstrate a commitment to promoting these solutions among their networks and communities. Applicants also encourage active citizenship by serving as role models for their partners and the community.

CRITERIA, SUB-CRITERIA, & RATINGS:

Innovation for this category is rated on a 10-point scale, looking at evidence and quality of evidence presented, as well as the success of the innovation.

SUB-CRITERIA

The application should address up to three of these sub-criteria of Civic Engagement & Social Responsibility. The following list of sub-criteria is intended to help judges and applicants consider important areas of innovation, but are not considered the exclusive criteria representing the category.

- Promotes civic engagement, where civic engagement means active participation in the public life of a community in an informed, committed, and constructive manner, with a focus on the common good;
- Uses service learning to address an issue or concern that is specific o a community or region (please identify why this effort is of civic importance);
- Engages and supports at-risk youth;
- Focuses on environmental health or safety;
- Engages with professionals or experts to receive guidance or mentoring;
- Shares tools and resources with other organizations in order to address community or safety issues;
- Engages in synergistic partnerships with individuals or groups outside of the program to address community or safety issues;
- OTHER" creative strategies for promoting citizenship and social responsibility in the service population.

MAIN CRITERION 3
SOLUTIONS FOR ENVIRONMENTAL CHALLENGES (TOTAL POINTS: 10)

OVERVIEW:

Applicants utilize STEM-based tools and apply STEM solutions to real environmental problems in their communities or regions.

CRITERIA, SUB-CRITERIA, & RATINGS:

Innovation for this category is rated on a 10-point scale, looking at evidence and quality of evidence presented, as well as the success of the innovation.

SUB-CRITERIA

The application should address up to three of these sub-criteria of Solutions for Environmental Challenges. The following list of sub-criteria is intended to help judges and applicants consider important areas of innovation, but are not considered the exclusive criteria representing the category.

- Addresses local environmental problems as an integral part of the program;
- Learns from and collaborates with local communities about the environmental problems that affect them the most;
- Uses innovative, novel, or experimental E-STEM solutions or tools to tackle environmental issues;
- Builds skills for communicating about E-STEM-related information;
- Adopts and implements practical and appropriate solutions for the communities that the program works with;
- "OTHER" relevant strategies for tackles real challenges in the environment.

SCORING

Ratings of these criteria and sub-criteria use the chart in Figure 1 to cross-reference evidence and success of innovation in determining the 0-10 point score.

Poor – Programs that poorly exemplify innovation and quality in a given category can only score 0-4 points.

Adequate – Projects that adequately exemplify successful innovation and quality can score 1-6 points. Projects that present no direct evidence or unclear evidence will not be ranked above adequate.

Good – Projects that are a good example of successful innovation and quality can score 5-8 points, depending on quality of evidence.

Excellent – Projects that exemplify excellence in innovation and quality can score 7-10 points, but will only be considered for this category if they present moderate to ample evidence that is also clear.

FIGURE 1: RATING CHART

Rating	Evidence of Implementation - Quantity and Quality - and Quality of Innovation
0 Points	No direct evidence **AND** a poor example of successful innovation and quality for this category
1 Points	Minimal evidence present, **BUT** evidence is unclear **AND** a poor example of successful innovation and quality for this category **OR** No direct evidence **AND** no implied evidence **AND** an adequate example of successful innovation and quality for this category
2 Points	Moderate evidence present, **BUT** evidence is unclear **AND** a poor example of successful innovation and quality for this category **OR** Minimal evidence present **AND** evidence is at least somewhat clear **AND** a poor example of successful innovation and quality for this category **OR** No direct evidence, **BUT** some implied evidence **AND** an adequate example of successful innovation and quality for this category

3 Points	<u>Ample evidence</u> present, **BUT** evidence is <u>unclear</u> **AND** a <u>poor example</u> of successful innovation and quality for this category **OR** <u>Moderate evidence</u> present **AND** evidence is <u>at least somewhat clear</u> **AND** a <u>poor example</u> of successful innovation and quality for this category **OR** <u>Minimal evidence</u> present, **BUT** evidence is <u>unclear</u> **AND** an <u>adequate example</u> of successful innovation and quality for this category
4 Points	<u>Ample evidence</u> present **AND** evidence is <u>at least somewhat clear</u> **AND** a poor example of successful innovation and quality for this category **OR** <u>Moderate evidence</u> present, BUT evidence is <u>unclear</u> **AND** an <u>adequate example</u> of successful innovation and quality for this category **OR** <u>Minimal evidence</u> present **AND** evidence is <u>at least somewhat clear</u> **AND** an <u>adequate example</u> of successful innovation and quality for this category
5 Points	<u>Ample evidence</u> present, **BUT** evidence is <u>unclear</u> **AND** an <u>adequate example</u> of successful innovation and quality for this category **OR** <u>Moderate evidence</u> present AND evidence is <u>at least somewhat clear</u> **AND** an <u>adequate example</u> of successful innovation and quality for this category **OR** <u>Minimal evidence</u> present **AND** evidence is <u>at least somewhat clear</u> **AND** a <u>good example</u> of successful innovation and quality for this category

6 Points	Ample evidence present **AND** evidence is at least somewhat clear **AND** an adequate example of successful innovation and quality for this category **OR** Moderate evidence present **AND** evidence is at least somewhat clear **AND** a good example of successful innovation and quality for this category
7 Points	Ample evidence present **AND** evidence is somewhat clear **AND** a good example of successful innovation and quality for this category **OR** Moderate evidence present **AND** evidence is clear **AND** a good example of successful innovation and quality for this category **OR** Moderate evidence present **AND** evidence is at least somewhat clear **AND** exemplifies excellence in successful innovation and quality for this category
8 Points	Ample evidence present **AND** evidence is clear **AND** a good example of successful innovation and quality for this category **OR** Moderate evidence present **AND** evidence is clear **AND** exemplifies excellence in successful innovation and quality for this category
9 Points	Ample evidence present **AND** evidence is at least somewhat clear **AND** exemplifies excellence in successful innovation and quality for this category
10 Points	Ample evidence present **AND** evidence is clear **AND** exemplifies excellence in successful innovation and quality for this category