What the Judges Are Saying...

The UL Innovative Education Award supports excellence and innovation in youth programming that uses the Environment as a pathway to STEM learning. Each year, judges review the applications and critically examine the state of innovation demonstrated by the submissions. The following themes rose to the top in judges' deliberations in 2018 and provide insight into the innovative work that ULIEA values.

Leveraging Strategic Partnerships – Judges noted the importance of creating key partnerships in many of the submissions that were seen as innovative and impactful. E-STEM programs partners ranged from local connections with schools, community members, and government officials to wider global partnerships across national boundaries. Judges were impressed with organizations that were really looking at the context in which interventions were taking place, and meaningfully thinking about how collaborating with other organizations could expand opportunities for program participants. They highlighted the importance of systems thinking that often leads to great partnerships, not just in how an organization contextualizes its efforts but also in how it creates systems that generate lasting, impactful change in communities that are connected by geography or ideas. Considering partnerships that extended past the local community, judges felt projects with the potential to be scalable and replicable showed greater promise in creating meaningful change.

Thoughtfully Using Technology – Many of the judges reflected on how technology is playing a more prominent role in solutions to current day E-STEM issues than ever before. Ultimately, judges underscored that it's not just technology that is impressive, but how it is used and the solutions it results in, which evidence its innovation. They thought it was clear in program design when program leaders honestly asked, "what is the value of using this technology for young people?" Whether using tools such as YouTube or apps for deeper statistical analysis or even for storytelling, judges felt technology was certainly opening doors and allowing organizations to engage their audiences in ways that were previously impossible. Judges were impressed by the ability of E-STEM programs to teach technology concepts and skills to youth at such a young age. At the same time, they noted that using technology is particularly powerful when it is coupled with experiential learning, oftentimes in research and data collection activities. Judges expressed their appreciation of programs that were outcome-focused, which actually brought youth in the field and engaged them with nature and real-world issues.

Long-Term Engagement... and Tracking – Judges applauded programs that create prolonged and sustained engagement with youth. While acknowledging that some students will attend only a one-time field trip or workshop, judges were impressed with programs that give students the opportunity for layered, iterative experiences, inviting them so stay connected for months and even years. When learning experience can build on each other over time, judges assert that young people and their families can really understand and embrace pathways to E-STEM

professions. An additional plus are programs that create space for alumni participants to give back and remain connected. Judges felt alumni support was a great reflection of programs' impacts, and can support a sense of community and civic accountability and leadership. Finally, judges pointed out the added benefit of long-term engagement with participants as this approach provides ample opportunity for evaluating outcomes.

Respecting Youth —Judges loved programs that both acknowledge and respect youth by involving them in decision making about projects and guiding the focus of the program itself. They felt this approach is rare, particularly when so many programs focus on teaching young people rather than facilitating their exploration. The "facilitating-type" programs not only give students the opportunity to pursue their ideas, but also trust them to do so. Judges saw this paradigm as particularly successful and innovative. Youth-driven projects, they asserted, impassion and connect young people to a project's goals, not only motivating youth to engage more deeply in creating meaningful solutions, but also helping the community to benefit from young people's creativity and hard work.

Training the Trainers —This year the judges also noticed a theme of training the trainers among innovative E-STEM programs. This approach represents a top-down process in which organizations see the need to integrate E-STEM skills and guidance in communities through existing or prospective educators. Judges felt this strategy is a good investment, as it can leverage an organization's resources exponentially increase impact. The model can help sustain E-STEM programs and encourage the creation of new ones by developing a more skilled workforce of educators. Training the trainers also meets a critical need of the E-STEM field — professional development — which is often cut from organizational budgets.