



RESEARCHERS FAQ

Understanding the New Rubric

How is this evaluation different from other research competitions?

Our new Indigenous-centered rubric celebrates YOU as a whole person, not just your research results. We evaluate four pillars: your Interest in STEM, your Engagement & Sense of Belonging, your STEM Competencies & Confidence, and your Future Intentions. This means your cultural identity, community connections, and traditional knowledge are valued as strengths that make you a better scientist.

What are the four pillars and why do they matter?

Pillar 1 - Interest in STEM

Your curiosity, passion, motivation, and community connections

Pillar 2 - Engagement & Belonging

Your confidence as an Indigenous scientist and cultural integration

Pillar 3 - STEM Competencies

Your research skills and ability to bridge different ways of knowing

Pillar 4 - Future Intentions

Your commitment to continued STEM work and community impact

These pillars recognize that being a successful Indigenous scientist means more than just technical skills - it includes your identity, community connections, and vision for using STEM to help others.

What does "Indigenous-centered evaluation" mean for me?

It means judges are trained to recognize and value Indigenous ways of knowing, traditional knowledge, and community-based approaches as legitimate and valuable parts of your scientific work. Your cultural background is seen as a strength that enhances your research, not something separate from it.

Cultural Integration & Identity

How do I incorporate my Indigenous identity into my presentation?

Be authentic! Share how your cultural background influenced your research interest, mention traditional knowledge that relates to your topic, discuss what you learned from family or community members, or explain how your work could benefit Indigenous communities. Remember - your identity makes you a stronger scientist, not a different kind of scientist.

What if my research isn't directly connected to my community?

That's perfectly fine! Not all research has immediate community applications. You can still share your personal motivation for choosing the topic, mention any cultural perspectives that influenced your thinking, or discuss how your research skills might be applied to community needs in the future. Authenticity matters more than forcing connections.

Can I mention traditional knowledge even if it's not my main focus?

Absolutely! Even basic connections to traditional knowledge are valued. You might mention how your grandmother's plant knowledge sparked your interest in biology, how traditional ecological observations relate to your environmental research, or how cultural protocols influenced your research ethics. Any authentic connection strengthens your presentation.

What if I'm not comfortable discussing my cultural identity publicly?

You should never feel pressured to share more than you're comfortable with. Even simple statements like "As an Indigenous student, I see science as a way to help my community" or "My cultural background taught me to observe nature carefully" can be meaningful. Share what feels authentic to you.

Presentation Preparation

How do I show "passion" and "curiosity" during my presentation?

Let your genuine excitement show! Speak with enthusiasm about what interests you, explain why you chose your topic, share what surprised you during your research, and discuss what questions you still want to explore. Your natural curiosity and enthusiasm are your best tools.

What kinds of future goals should I mention?

Be honest about your plans! Whether you want to continue in STEM education, pursue specific careers, use your skills to help your community, or integrate traditional knowledge with Western science - judges want to hear your authentic aspirations. Your goals can be specific or general, but they should reflect your genuine interests.

How do I demonstrate confidence if I'm nervous?

Nerves are normal! Confidence comes from preparation and remembering that you belong here. Practice explaining your research until you feel comfortable, remember that judges want you to succeed, focus on sharing your story rather than performing perfectly, and know that your perspective is valued and needed in STEM.

What should I do if I make a mistake during my presentation?

Stay calm and keep going! Small mistakes don't matter - judges are evaluating your overall passion, engagement, and potential, not perfection. If you need to correct something important, do it briefly and move on. Your resilience and ability to continue shows strength.

Scoring & Expectations

What does "exceptional" look like for my education level?

Excellence looks different at every level:

Middle School: Natural curiosity, basic community connections, confidence in presentation, simple future goals

High School: Sustained interest, cultural pride, concrete post-graduation plans, self-directed learning

Undergraduate: Academic competency with cultural integration, clear career direction, independent research skills

Graduate/Professional: Advanced expertise, mentorship potential, sophisticated community impact vision

Will judges understand my cultural references?

Judges receive comprehensive training on Indigenous research methodologies and cultural competency. If they need clarification about cultural references, they'll ask respectful questions during the Q&A. Don't hesitate to share your cultural knowledge - it's valued and they want to learn from you!

What if I don't have traditional knowledge to share?

Not every Indigenous student has the same level of access to traditional knowledge, and that's okay! You can share your perspective as an Indigenous person in STEM, discuss your motivation to help Indigenous communities, or mention your interest in learning more about traditional knowledge. Your identity and perspective are valuable regardless.

How important is technical perfection compared to cultural integration?

Both matter, but this rubric values you - *as a whole person*. Strong cultural integration, authentic passion, and clear community connections can be just as important as technical skills - especially for younger students. Focus on sharing your complete story, not just your research results.

Community Connections

How do I connect my research to community benefit?

Think broadly about impact! You might discuss how your research could help address health disparities, environmental challenges, educational needs, or economic development in Indigenous communities. Even basic research can eventually benefit communities through new knowledge, technologies, or approaches.

What if I don't live on a reservation or in a tribal community?

Community connections don't require specific geographic locations. You might connect to urban Indigenous communities, Indigenous professional networks, cultural organizations, or the broader Indigenous community. Your perspective as an Indigenous person in STEM is valuable regardless of where you live.

How do I respectfully discuss traditional knowledge I'm still learning about?

Be honest about your learning journey! We are all lifelong learners when it comes to traditional knowledge and cultural understanding. You can say things like "I'm learning about traditional ecological knowledge from my elders" or "My community has traditional practices that relate to my research, and I'm working to understand these connections better." You might also express "I'm on a journey to better understand how my cultural knowledge connects to my scientific work."

Judges appreciate authentic learning processes and understand that cultural knowledge deepens over time through relationship and experience.

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Different Education Levels

I'm in middle school - what should I focus on?

Focus on your natural curiosity and excitement! Share why you chose your topic, what you learned that surprised you, how your family or community influenced your interest, and what you want to study next. Remember, we're all lifelong learners - judges want to see your enthusiasm for learning and potential for growth, not perfect research or complete understanding.

I'm in high school - how is this different from science fair judging?

This evaluation looks beyond just your project to consider your growth as an Indigenous scientist. Share your sustained interest in STEM, how your cultural identity influences your scientific thinking, your concrete plans for after graduation, and your vision for using STEM to help others. We value your journey of discovery - both in science and in understanding your cultural connections to STEM.

I'm an undergraduate - what level of sophistication is expected?

Show your growing expertise while maintaining authentic cultural connections. Demonstrate solid research competencies, discuss how you integrate Indigenous perspectives with academic learning, share clear career goals, and explain your vision for community impact through your STEM work. Judges understand that you're continuously learning to bridge different knowledge systems - this ongoing growth is valued, not seen as incomplete knowledge.

I'm a graduate student or professional - how do I stand out?

Demonstrate advanced expertise while showcasing leadership potential and commitment to lifelong learning. Show sophisticated methodology integration, discuss your role in mentoring others, explain your vision for advancing Indigenous representation in STEM, and share your concrete plans for community impact and systemic change. Highlight how you continue to deepen your understanding of traditional knowledge and cultural connections throughout your career.

Practical Questions

How long should my presentation be?

Oral presentations: 20 minutes including Q&A
Poster presentations: Be prepared for 2-3 minute conversations with multiple judges.

Practice staying within time limits while covering all four pillars.

What should I wear for my presentation?

Dress professionally or in a way that makes you feel confident and authentic. Earrings, ribbon shirts, moccasins, medallions - you name it, we love it. The most important thing is that you feel comfortable and confident.

What types of questions might judges ask?

"Why did you choose this research topic?"
"How does your cultural background influence your approach to science?"
"What do you plan to study or pursue next?"
"How could your research benefit Indigenous communities?"
"What challenges have you overcome in your STEM journey?"

Support & Resources

Can I practice my presentation beforehand?

Oral presentations: 20 minutes including Q&A
Poster presentations: Be prepared for 2-3 minute conversations with multiple judges.

Practice staying within time limits while covering all four pillars.

What if I need accommodations for my presentation?

Dress professionally or in a way that makes you feel confident and authentic. Earrings, ribbon shirts, moccasins, medallions - you name it, we love it. The most important thing is that you feel comfortable and confident.

Who can I contact if I have questions?

General questions: research@aises.org

Day-of-conference support: Look for staff with "Research Competition" identification

Accessibility needs: research@aises.org

What happens after my presentation?

You'll receive feedback from judges using our "what went well" / "even better if" format, be recognized in the conference program and abstract booklet, have opportunities to network with STEM professionals and other student researchers, and potentially connect with mentors or career opportunities.

Winners will receive notification and be invited to a Student Awards Ceremony on Saturday.

Mindset & Encouragement

What if I don't feel "smart enough" compared to other presenters?

You belong here! Remember that "We Are All Scientists" - your unique perspective, cultural knowledge, and scientific curiosity make you a valuable contributor to STEM. Judges are evaluating your potential and growth, not comparing you to others.

How do I stay confident presenting to other Indigenous STEM professionals and students?

Remember that you're among a supportive community! The AISES conference brings together people who understand the importance of diverse voices in STEM and want to see you succeed. These judges and audience members are excited to support the next generation of scientists. They're not just evaluating your research - they're celebrating your potential and cheering you on as part of the STEM community that values all perspectives and backgrounds.

What's the most important thing to remember?

Be authentically yourself! The judges want to see your genuine passion, cultural connections, and scientific potential. Your identity and unique perspective strengthen STEM fields. Remember, we are all lifelong learners on our journey of understanding both science and our cultural knowledge - judges value your authentic learning process and growth. Focus on sharing your story with pride and confidence, knowing that your ongoing journey of discovery is part of what makes you a strong scientist.