JUDGES FAQ

Understanding the New Rubric

What training will I receive on Indigenous research methodologies?	All judges complete comprehensive training covering Indigenous research approaches including community-based participatory research, traditional knowledge integration, two-eyed seeing methodology, and cultural research protocols. Training includes case studies, evaluation practice, and calibration sessions to ensure consistent application.
How do I evaluate traditional knowledge integration fairly?	Traditional knowledge should be valued as legitimate scientific methodology. Look for respectful integration where students connect ancestral knowledge with contemporary research approaches. This might include traditional ecological knowledge, community-based data collection, or cultural protocols informing research design. Don't expect sophisticated integration from younger students - basic acknowledgment of traditional knowledge is appropriate for their level.
Do I need to be Indigenous to judge effectively?	No, but cultural competency is essential. Our training provides the foundation you need to recognize and value Indigenous research approaches. Focus on learning from the training, asking questions when uncertain, and maintaining a respectful, open mindset toward different ways of knowing.

Evaluation Process

How do I score each pillar objectively?	Each pillar receives one overall score (1-4) based on the presenter's education level. Use the evaluation criteria as guidance, but focus on the holistic demonstration of each pillar. Consider: Does this student show exceptional interest for their level? Do they demonstrate strong STEM identity? Are they confident in their competencies? Do they have clear future intentions
What if a student doesn't mention community connections?	Not all research will have direct community applications, and that's acceptable. Look for authentic connections where they exist rather than forcing community relevance. However, students who do demonstrate community connections and Indigenous knowledge integration should receive higher scores as this reflects the program's values and priorities.
How do I adjust expectations across education levels?	*Middle School:* Focus on basic curiosity, family/cultural learning, simple future goals *High School:* Look for sustained interest, cultural pride, concrete post-graduation plans *Undergraduate:* Expect academic competency, cultural integration, clear career direction *Graduate/Professional:* Evaluate expertise, leadership potential, sophisticated community impact vision

Cultural Competency

What if I'm not familiar with Indigenous research approaches?

The judges' training provides foundational knowledge, but you're not expected to be an expert in all Indigenous research methods. Ask questions - this is exactly what the training is for!

During presentations, you can ask clarifying questions during the Q&A portion if appropriate, or note this for post-presentation discussion. Focus on the student's confidence and clarity in explaining their approach rather than your familiarity with specific methodologies. Remember that the diversity across Indian Country means that not all judges will be familiar with every cultural reference or traditional practice mentioned - this is completely normal and expected. When students share cultural knowledge you're unfamiliar with, appreciate their willingness to educate and focus on how confidently they integrate their cultural perspective with their scientific work.

How do I recognize and value traditional knowledge?

Traditional knowledge might appear as:

- Integration of ancestral ecological observations
- Community-based data collection methods
- Cultural protocols informing research ethics
- Elder or family knowledge informing research questions
- Traditional practices connected to contemporary science

Value these as legitimate research contributions, not just cultural add-ons.

What cultural considerations should I keep in mind?

- Respect different communication styles and presentation approaches
- Understand that some students may be more reserved initially but warm up during discussion
- Recognize that family and community connections are central to Indigenous worldviews
- Avoid deficit thinking - look for strengths and unique perspectives students bring
- Be patient with students who are integrating multiple knowledge systems
- Value storytelling and narrative approaches as legitimate forms of scientific communication
- Understand that some students may prefer indirect communication or take time to formulate thoughtful responses

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	• Recognize that collaboration and collective knowledge are often prioritized over individual achievement • Appreciate that students may reference spiritual or ceremonial aspects as part of their research approach • Be aware that eye contact norms may vary - some students may show respect through different gaze patterns • Understand that silence or pauses may be thoughtful consideration rather than uncertainty • Recognize that students may feel responsibility to represent their entire community, which can create additional pressure • Value the courage it takes for students to share traditional knowledge in academic settings
How do I handle cultural references I don't understand?	It's okay to not understand every cultural reference. Focus on the student's confidence and authenticity in sharing their cultural connections. If clarification would help evaluation, ask respectful questions like, "Can you tell me more about how that traditional practice connects to your research?"
What feedback should I provide to students?	Use the "What went well" / "Even better if" feedback model. Start with specific strengths tied to the rubric pillars, then offer constructive growth suggestions. For example: "What went well: Your passion for water quality research really came through, and I loved hearing about your grandmother's teachings. Even better if: you could share more about your specific plans for using this research to help your community." For younger students, emphasize encouragement and future potential. For advanced students, provide substantive suggestions for continued development.
How do I handle presentations that don't fit traditional research formats?	Embrace diverse approaches! Some presentations may include storytelling, community-based methodologies, or non-traditional formats. Evaluate based on the four pillars rather than conformity to Western academic presentations. This diversity is a strength of Indigenous-centered evaluation.
What if a student becomes emotional during their presentation?	This may indicate deep personal connection to their research, which is positive for Pillar 1 and 2 evaluation. Provide a supportive environment, offer a moment to collect themselves if needed, and continue with encouragement. Emotional connection often reflects authentic passion and community commitment.
Should I score during the presentation or after?	Take brief notes during the presentation, but complete scoring immediately afterward while the presentation is fresh in your mind.

Avoid letting current scores influence evaluation of subsequent presenters.

Scoring Guidelines

What does "exceptional" really mean for each education level?	Excellence looks different at every level: *Middle School:* Natural enthusiasm, basic community connections, family learning integration, sees self as scientist *High School:* Self-directed research interest, cultural pride, concrete future plans, sustained STEM engagement *Undergraduate:*Academic competency with cultural integration, clear career trajectory, community impact planning *Graduate/Professional:* Expertise demonstration, mentorship potential, sophisticated community impact vision, leadership qualities
How do I handle a presentation that's technically weak but culturally rich?	Remember this rubric values holistic Indigenous STEM development, not just technical proficiency. Strong cultural integration, community connections, and authentic passion may outweigh technical limitations, especially for younger students. Consider the whole person and their potential for STEM persistence.
What if I'm uncertain about a score?	When in doubt, consider the student's education level and focus on their potential rather than perfection. Err on the side of encouragement while maintaining standards. Discuss uncertainties with fellow judges and use the rubric criteria as your guide.
How should I structure my written feedback on the rubric?	Follow the "What went well" / "Even better if" format for all written feedback: What went well examples: • "Your passion for environmental justice really came through when you discussed water quality on your reservation" • "The way you integrated your grandfather's traditional fishing knowledge with modern data collection was impressive" • "Your confidence in presenting and answering questions showed strong STEM identity" • "Your specific plans for studying environmental engineering demonstrate clear future goals" Even better if examples:

- "Even better if you could share more about what sparked your initial interest in this topic"
- "Even better if you could explain how your research methods connect to traditional approaches"
- "Even better if you could describe specific ways you see yourself contributing to your community through STEM"
- "Even better if you could share what challenges you expect to face and how you'll overcome them"

This format ensures balanced, constructive feedback that celebrates strengths while providing clear direction for growth.

Ethics & Professionalism

How do I maintain confidentiality about presentations?	All presentation content and evaluation discussions remain confidential. Don't share student work, scores, or evaluation discussions outside the judging context. Respect the trust students place in sharing their research and cultural connections.
What if I have a conflict of interest with a presenter?	Recuse yourself immediately if you have personal, professional, or institutional relationships that could bias evaluation. This includes students from your institution, family members, research collaborators, or anyone you've mentored. Inform competition organizers so alternative judging arrangements can be made.
How do I provide culturally appropriate feedback?	• Lead with strengths and positive observations • Be specific about cultural integration successes • Offer growth suggestions as opportunities rather than deficits • Acknowledge the courage it takes to share cultural knowledge in academic settings • Encourage continued exploration of Indigenous knowledge integration • Focus on the student's learning journey and growth potential rather than current limitations • Validate their identity and perspective as assets to the scientific community • Be encouraging about their unique contributions to STEM fields • Recognize effort and persistence, especially if they've overcome barriers • Acknowledge their role as knowledge holders and cultural bridges in STEM • Express appreciation for learning something new from their presentation • Encourage their continued participation in STEM and Indigenous communities
Who can I contact if I have questions during judging?	Competition coordinators will be available throughout the event. Look for staff with "Research Competition" identification or contact research@aises.org for immediate assistance.
What resources are available for continued learning about Indigenous research?	We'll provide resources including reading lists, webinar opportunities, and connections to Indigenous research networks. This experience should be the beginning of your cultural competency development, not the end.
How does my participation impact the broader AISES mission?	Your culturally competent evaluation helps identify and encourage diverse STEM leaders while building institutional capacity for recognizing diverse research approaches, including Indigenous methodologies. You're contributing to systemic change that supports increased representation in STEM fields and validates diverse knowledge systems. Your participation helps create more

inclusive STEM environments where all students can see themselves as capable scientists and where different ways of knowing are valued as contributions to scientific excellence.