

Strands provide a foundation and context for proposals for the sessions convened at the 2025 NSTA National Conference on Science Education in Philadelphia. The descriptions and examples below provide additional clarity about the strands and what will be prioritized when evaluating proposals for inclusion in the NSTA conference program. The list of examples is not meant to be all-inclusive.

Proposals that focus on strategies and ideas centering on diversity, equity, and inclusion will be prioritized, in alignment with NSTA's strategic plan to equip and empower all educators in providing access and opportunity for all students to be successful in science and STEM.

Strands and Review Criteria	
Strand	Descriptions
Assessment	Proposals in this strand should focus on improving science and STEM classroom teaching and learning through the use of high-quality assessments. These sessions should deepen the educator's knowledge base and instructional practice. Assessment materials used as the context or examples must be OER or open to all and free of charge.
Resilience in Teaching and Learning	This strand will explore some of the successful techniques, tactics, and resources that provide social and emotional learning programs in the classroom and approaches that encourage an educator's self-care. Examples include stress management, social and emotional health, teacher leadership, fitness, and work-life balance.
Sensemaking and 3D Learning	When students-as-scientists and engineers have authentic, relevant opportunities to actively make sense of the world and beyond (what we call sensemaking) science learning becomes engaging, accessible, and important to all students. Four attributes of sensemaking are phenomena, science and engineering practices, student ideas, and science ideas (grade-appropriate disciplinary core ideas). In this strand, we invite educators to share how they have integrated the pillar(s) of sensemaking into their practice. Particular emphasis will be placed on sessions that provide strategies for lesson design or assessment using at least one of the pillars in combination with student work, student video, or specific examples of the strategy in the classroom and its impacts on student learning.
Research to Practice	Proposals in this strand should focus on highlighting a specific research project, publication, or finding in education and how it can be implemented in the classroom. Proposals that use specific classroom examples or specific classroom strategies will be prioritized.
#Trending in Science Education	Proposals in this strand should focus on hot topics in science education. Proposals connected to interdisciplinary teaching and learning, AI, curriculum-based professional learning, and involvement of local communities in classroom learning will be prioritized.
Leadership	Proposals in this strand should focus on supporting science/STEM leaders. The target audience can be educators or partners in the classroom, administrators, instructional coaches, and district, or national leaders. Example focus areas include professional development (job-embedded professional learning, enactment of high-quality curriculum, instruction, and/or assessment), emerging research areas in leadership, science/STEM professional learning for administrators, management ideas, leading and learning, school branding and social media, working with new teachers, and retaining teachers.
No Strand	If your proposal cannot be strongly connected to any strand above, please choose this option.

Review Criteria

The following key elements will be used by reviewers to evaluate session proposals.

- Alignment to conference strand, theme, or focus area.
- Degree of connection to the [Framework](#), [NGSS](#), state standards, or peer-reviewed contemporary research.
- Focus on equity or Science/STEM for all.
- Use of specific classroom examples, student work, specific strategies, or specific projects/lessons/units.

Conference Strands



- Assessment
- Resilience in Teaching and Learning
- Research to Practice
- Lesson Showcase
- #Trending in Science Education



- Assessment
- Resilience in Teaching and Learning
- Research to Practice
- Students and Sensemaking
- #Trending in Science Education



PRESENTATION

- Assessment
- Research to Practice
- #Trending in Science Education
- Leadership



ROUNDTABLE

- Assessment
- Students and Sensemaking
- #Trending in Science Education
- Leadership



PRESENTATION

- Assessment
- Research to Practice
- #Trending in Science Education
- Leadership



WORKSHOP

- Assessment
- Resilience in Teaching and Learning
- Research to Practice
- Students and Sensemaking
- #Trending in Science Education
- Leadership



WORKSHOP

- Assessment
- Curriculum-Based Professional Learning
- Sensemaking and 3D Learning
- Leadership

NSTA Conference Reviewer • PROPOSAL RUBRIC

Directions: Please use the proposal rubric to rate the proposal from 1-3 for each of the evaluation criteria listed. Total the Score and Answer Q1 below. Clarity of writing and organization should be considered as part of the score in all sections.

Criteria	Rating Scale: 1 is the lowest rating with 3 being the highest			Score
	1 • Not Acceptable	2 • Borderline	3 • Exceptional	
1. Alignment to the conference strand.	The conference strand, theme, or focus area is not incorporated into the proposal.	The conference strand, theme, or focus area is somewhat incorporated into the proposal.	The conference strand, theme, or focus area is clearly incorporated into the proposal.	
2a. Supports or identifies specific goals from the NRC Framework, NGSS, or state standards and the contemporary research connected to those standards. *Please use 2b. for Wellness strand proposals.	The proposal provides no reference to or identifies specific goals from the NRC Framework, NGSS, or state standards. There is no degree of connection to these goals.	The proposal seems to build upon a specific goal from the NRC Framework, NGSS, or state standards and has some degree of connection to this goal(s). The connection can be interpreted rather than evidenced.	The proposal builds upon a specific goal from the NRC Framework, NGSS, or state standards and has a high degree of connection to this goal(s). One can easily see the connection to the Framework, NGSS, or state standards. The connection can be evidenced .	
2b. For Wellness strand ONLY, use this row along. Supports or identifies specific goals from conventional wellness approaches or is supported by robust scientific research.	The proposal lacks a clear connection to conventional wellness approaches or scientific research. The session plan may rely heavily on anecdotal evidence or personal experience without sufficient support from established knowledge.	The proposal shows a general understanding of conventional wellness approaches and incorporates some research-based elements. While the foundation is solid, there may be opportunities to strengthen the evidence base or deepen the integration of wellness principles.	The proposal demonstrates a strong foundation in conventional wellness approaches or is explicitly supported by robust scientific research. Key wellness principles and evidence-based practices are clearly articulated throughout the session plan.	
3. The proposal is grounded in equity or Science/STEM for all.	The proposal provides no indication that the session is grounded in strategies, ideas, or guidance in providing science for all (equitable classroom practices, including all students in learning, inclusive environments, OR culturally relevant pedagogies).	The proposal references specific strategies, ideas, or guidance in providing science for all (equitable classroom practices, including all students in learning, inclusive environments, OR culturally relevant pedagogies). However, the description/abstract does not provide information about the extent to which the session will be grounded in these practices.	The proposal has specific strategies, ideas, or guidance in providing science for all (equitable classroom practices, including all students in learning, inclusive environments, OR culturally relevant pedagogies) and provides multiple examples of how these practices will be demonstrated or addressed in the session.	
4. The proposal engages session participants in classroom/ leadership examples or specific classroom/leadership strategies OR includes examples of assessments [formative and summative], classroom lessons or units, or student work.	The proposal does not engage session participants through classroom examples or specific classroom strategies OR the proposal provides no examples of assessments (formative and summative), use of lessons or units, or student work in the session description/abstract.	The proposal references classroom examples or specific classroom strategies OR examples of assessments (formative and summative), use of lessons or units, or student work in the session description/abstract. However, the description or abstract does not provide information about the extent of use.	The proposal provides at least one example of how the proposed session will include classroom examples or specific classroom strategies OR examples of assessments (formative and summative), use of lessons or units, or student work. It is clear that the use of these/this example will be a large focus of the session/integral piece.	
5. The proposal addresses current issues/hot topics (as identified by you) that have clearly defined takeaways for the attendee	The proposal does not address current issues/hot topics (as identified by you) and/or does not have a clearly defined takeaway for attendees.	The proposal addresses a current issue/hot topic OR has a clearly defined takeaway for attendees but not both.	The proposal both addresses a current issue/hot topic AND has a clearly defined takeaway for attendees.	
6. The proposal is concise, clear, organized, and well-written.	The proposal contains several spelling, punctuation, and grammar errors	The proposal contains minimal errors in spelling, punctuation, and grammar	The proposal is clear and contains no noticeable spelling, punctuation, or grammar issues.	