Strands and Review Criteria

Strands provide a foundation and context for proposals for the sessions convened at the 2026 NSTA National Conference on Science Education in Anaheim. 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.

Strand	Descriptions
Using Three-Dimensional Assessment to Evaluate Student Sensemaking	These sessions should strengthen educators' understanding of assessment and enhance their instructional practice. This strand encompasses the full spectrum of assessment design and implementation, including what constitutes three-dimensional (3D) assessment, designing assessments for all learners, task and rubric development, classroom integration, instructional alignment, and using results to inform future learning. Sessions must incorporate assessment materials in context, and all examples should be open educational resources (OER) or freely accessible at no cost. Proposals should clearly identify the specific assessment tools or materials being used and indicate whether the focus is on formative or summative assessment in nature.
Artificial Intelligence in Education	This strand explores "AI in Action," focusing on the practical, ethical, and forward-thinking applications of artificial intelligence in science education. Sessions in this strand will examine how AI is transforming classroom instruction, curriculum and assessment design, and student engagement. Topics include building AI literacy among educators, developing inclusive and responsible implementation guidelines, integrating AI into real-world classroom practices, reimagining pedagogy and assessment through AI, and creating an AI-ready teaching toolkit.
Teaching Strategies and Classroom Practice	This strand is designed for educators and leaders to share their classroom practice. 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 or assessment design 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.
#Trending in Science Education	Proposals in this strand should highlight timely and relevant topics in science and STEM education. Sessions that focus on interdisciplinary teaching and learning, place-based or play-based approaches, storytelling to enhance science understanding, and participatory science—where students collect and analyze real-world data—will be given special consideration. We will also prioritize proposals that share strategies for supporting a wide range of learners, including multilingual learners, neurodiverse students, students with disabilities, and those who may face barriers to access or engagement in science learning.
Leadership and Advocacy	This strand is designed for science educators, instructional coaches, and school or district leaders who are shaping the future of STEM learning beyond their own classrooms. As science and STEM education continue to evolve—driven by emerging technologies, environmental challenges, shifting policies, and changing school dynamics—sessions in this strand will offer practical strategies, actionable insights, and forward-thinking guidance to support success at the classroom, school, and system levels. Topics may include: leading or building effective science/STEM teams, elevating student voice and community partnerships, coaching and mentoring other educators, managing curriculum redesign or system-wide change, and advocating for science and STEM education at the local, state, or national level.
Teacher Well-Being in STEM	This strand focuses on educator well-being, offering strategies, tools, and practical guidance to help educators navigate the demands of the teaching profession while reclaiming time for themselves. We invite presenters to share real-world examples and effective approaches for managing workload, sustaining enthusiasm, building supportive networks, and carving out space for rest, reflection, and renewal. Topics may include wellness resources and time-saving strategies designed to reduce stress and promote balance, such as "Healing through Nature," "Mindful Strategies for Managing Stress and Burnout," "Reclaiming Joy and Balance in Daily Teaching," "Side Hustles: Earning More Without Burning Out," and "Thriving as the Lone Science Teacher."
Lesson Showcase	**This strand is exclusively for poster sessions.** An NSTA Lesson Showcase poster provides educators with a visual platform to share lesson plans or classroom activities. Designed as a collaborative "share-a-thon," these posters highlight successful strategies and resources, often showcasing the before, during, and after stages of a lesson to give attendees a comprehensive overview. Posters should include key lesson elements, supportive visuals to enhance understanding, and resources that enable others to implement the lesson or activity themselves. Presenters engage directly with attendees during dedicated exhibit hours in the expo hall.
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.

NSTA is seeking proposals for the following session types:

POSTER SESSIONS

- Artificial Intelligence in Education
- Using Three- Dimensional Assessment to Evaluate Student Sensemaking
- Teaching Strategies and Classroom Practice
- Lesson Showcase
- #Trending in Science Education
- Teacher Well-Being in STEM

SPEED SHARING

- Artificial Intelligence in Education
- Teaching Strategies and Classroom Practice
- Research to Practice
- #Trending in Science Education

30 MINUTE PRESENTATION

- Artificial Intelligence in Education
- Teaching Strategies and Classroom Practice
- #Trending in Science Education
- Leadership and Advocacy
- Teacher Well-Being in STEM

30 MINUTE ROUNDTABLE

- Artificial Intelligence in Education
- Teaching Strategies and Classroom Practice
- #Trending in Science Education
- Leadership and Advocacy

60 MINUTE PRESENTATION

- Artificial Intelligence in Education
- Teaching Strategies and Classroom Practice
- #Trending in Science Education
- Leadership and Advocacy
- Using Three- Dimensional Assessment to Evaluate Student Sensemaking
- Teacher Well-Being in STEM

60 MINUTE WORKSHOP

- Artificial Intelligence in Education
- Resilience in Teaching and Learning
- Teaching Strategies and Classroom Practice
- Students and Sensemaking
- #Trending in Science Education
- Leadership and Advocacy
- Using Three- Dimensional Assessment to Evaluate Student Sensemaking
- Teacher Well-Being in STEM

120 MINUTE PROFESSIONAL LEARNING WORKSHOP

- Teaching Strategies and Classroom Practice
- Leadership and Advocacy
- Using Three- Dimensional Assessment to Evaluate Student Sensemaking

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.

	Rating Scale: 1 is the lowest rating with 3 being the highest			
Criteria	**1 · Not Acceptable**	**2 · Borderline**	**3 · Exceptional**	**Score**
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.	
2. Supports or identifies specific goals from the NRC Framework, NGSS, or state standards and the contemporary research connected to those standards.	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**.	
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.	
Additional Resources: Sensemaking · Next Generation Science Standards (NGSS)			**TOTAL**	