

CALL FOR PROPOSALS

2025 NARST Annual International Conference

March 13, 2025, All-Virtual Day March 23 – 26, 2025, In-Person Washington, DC, United States

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Presidential Theme

IN PRAISE OF SCIENCE TEACHERS: ESSENTIAL PARTNERS IN RESEARCHING, REFRAMING, AND REFORMING SCIENCE LEARNING

The year 2025 brings NARST's 98th Annual International Conference. With our 100th anniversary rapidly approaching, now is an opportune time to reflect on a critical component of our organizational identity: science teachers. Many of us recall the historical genesis of the acronym NARST as standing for the National Association for Research in Science Teaching. There is no science *teaching* without science *teachers*.

For this conference, let us centralize, emphasize, and praise the work science teachers do that enables and inspires our efforts as science education *researchers*. Inherent in this theme is an inclusive understanding of the terms science teaching, science teachers, and science education researchers. Science teaching is taken to include engineering education and the diverse ways in which humans engage in and contribute to both disciplines. Likewise, science teaching is not limited to formal brick-and-mortar or digital settings. In addition to professional educators, science teachers include parents, families, and other community members. Many of these same folks can and should play integral roles in the research process.

When we gather in the greater Washington, DC area, let us give voice to the myriad ways in which science teachers (writ large) contribute to researching, reframing, and reforming science teaching and learning. Bearing in mind throughout NARST's ultimate goal of helping all learners achieve science literacy.

Jerome Shaw, NARST President

Program Strands

The 2025 NARST program will feature sessions focused on 14 Program Strands and delivered in several session formats. Proposals must identify the *Strand* that most closely aligns with their proposed topic. The NARST Strands are:

2025 NARST Strands and Descriptions

Strand 1. Science Learning: Development of Student Understanding

How students learn from a variety of theoretical perspectives

Strand 2. Science Learning: Contexts, Characteristics, and Interactions

Learning environments, teacher-student and student-student interactions, and factors related to and/or affecting learning

Strand 3. Science Teaching--Primary School (Grades preK-6): Characteristics and Strategies

Teacher cognition, content knowledge, pedagogical knowledge, pedagogical content knowledge, instructional materials, and strategies

Strand 4. Science Teaching--Middle and High School (Grades 5-12): Characteristics and Strategies

Teacher cognition; content knowledge, pedagogical knowledge, pedagogical content knowledge, and instructional materials and strategies.

Strand 5. College Science Teaching and Learning (Grades 13-20)

Instructor cognition, content knowledge, pedagogical knowledge, pedagogical content knowledge, student understanding and learning, and conceptual change at postsecondary level

Strand 6. Science Learning in Informal Contexts

Learning and teaching in museums, outdoor settings, community programs, communications media, and afterschool programs

Strand 7. Pre-service Science Teacher Education

Pre-service professional development of teachers, pre-service teacher education programs and policy, field experience, and issues related to pre-service teacher education reform

Strand 8. In-service Science Teacher Education

Continuing professional development of teachers, in-service teacher education programs and policy, and issues related to in-service teacher education reform

Strand 9 Dissolved (approved by Board March 15, 2020)

Strand 10. Curriculum and Assessment

Development, implementation, dissemination, and evaluation of curriculum. Development and validation of assessments, including alternative forms of assessment of teaching and learning

Strand 11. Cultural, Social, and Gender Issues

Equity and diversity issues: sociocultural, multicultural, bilingual, racial/ethnic, and gender equity studies

Strand 12. Technology for Teaching, Learning, and Research

Advancing applications of technology and digital tools to promote teaching, learning, and research

Strand 13. History, Philosophy, Sociology, and Nature of Science

Historical, philosophical, and social issues of science as related to science education

Strand 14. Environmental Education and Sustainability

Education related to Earth and ecological systems, environmental literacy and justice, experiential learning, Indigenous perspectives, public participation in science, socio-scientific issues, sustainability, and sustainable development.

Strand 15. Policy, Reform, and Program Evaluation

The construction, interpretation, and implementation of science education policies and reforms at the local, regional, national, or international levels

Virtual Sessions

The NARST 2025 conference is being planned as an in-person event, with an additional day dedicated to virtual presentations. If you would like your proposal to be considered for a virtual presentation, you will indicate this by checking a box within the proposal submission form. All the session formats listed below may be considered for virtual sessions. The policies about the number of first author submissions will apply across in-person and virtual sessions as our goal is to increase opportunities for members to present.

Given the significant costs involved, in-person sessions will not be live-streamed. These sessions may not be attended virtually. If you are unable to travel to the in-person conference, please select the virtual option when submitting your proposal. There will be a short window following notification of acceptance of your proposal when you be allowed to switch from in-person to virtual (providing there is space in the schedule). However, after this deadline, the in-person and virtual sessions will be set, and we will not accommodate any further changes.

We will try to schedule presentations at times that are reasonable for presenters located around the world. If you are planning to present during the virtual conference day, please respond to a question regarding the nearest time zones to your location. It will help us during scheduling.

Proposal Types: Empirical Research or Theoretical/Position

You will be asked to indicate if your proposal is an empirical research paper or a theoretical/position paper. In most cases, an **Empirical Research** paper reports on a completed empirical study. Works in progress that do not have sufficient data to address the research questions at the time of proposal submission should not be submitted. However, works in progress may be submitted as a proposal for a Work in Progress Roundtable. A **Theoretical/Position** paper can be a literature review, an evidence-based position paper, or a paper that presents an original perspective on a theoretical and/or conceptual framework. Theoretical papers should include recommendations for future research. Refer to the proposal review criteria to determine the best fit for your proposal type.

Program Presentation Formats

Note: For all presentation formats, authors should have a method to disseminate their paper if appropriate (exception: work in progress roundtables).

Stand-Alone Paper by individual author or co-authors

Traditional presentation format allows for 15-20 minutes of individual presentation time in a theater-style setting. Typically, four papers are scheduled per session for 90 minutes total and Strand co-coordinators will group them by theme.

Related Paper Set by multiple authors or co-author groups

Groups of authors/co-authors must submit a set of four to five papers for presentation in a single 90-minute time block in the program. The proposal must clearly show the topic focus of the set. Papers within a set will be judged holistically. The group submitting the set will be required to identify their own presider (and discussant if desired) and will

decide on the time allocation for presentations and discussion within the 90-minute block.

Interactive Poster Paper by individual or co-authors

A single author or a group of co-authors may prepare a paper for presentation in an interactive poster format. Poster presenters will be grouped with other poster presenters from the same Strand for a 90-minute time block. Many posters will be scheduled at the same time, so individuals can interact with the presenters, and move to other posters in the same session.

Symposium by multiple presenters

Groups of participants may propose a symposium on a topic or issue. The proposal must involve four to ten participants and explicitly relate to the Strand title and description. The goals of the symposium should be clear and focused, as should the role of each participant and their topic. Symposium sessions will have a 90-minute time block in the program.

Symposium proposals must be submitted as a single document; they may not contain individual papers. The group submitting the proposal will be required to identify their own presider (and discussant if desired) and will decide on the time allocation presentations and discussion within the 90-minute block. Representation from multiple contexts and countries is encouraged.

Roundtables by individual or co-authors

Roundtable sessions allow maximum interaction among presenters and with attendees. They are discussion-oriented and are not intended to be a substitute for a Standalone Paper presentation. The primary focus of the Roundtable is to consider the broader implications of the work and discuss possibilities for the future. Papers accepted for a roundtable session will be grouped into tables with three or four papers per table, clustered around shared interests. The roundtable session will be scheduled for a 60-minute time slot with roundtable authors proceeding according to guidelines distributed at the roundtable sessions. No additional audiovisual equipment, such as a screen or LCD projector, is provided. Authors wishing to display information may do so from their own laptop computer screens or distribute handouts. Please do not expect to deliver a full presentation – the purpose of a Roundtable discussion is to discuss. Please note that no power source will be provided.

This year, we are again offering a second type of Roundtable presentation that will focus on works in progress. The primary focus is to encourage discussion aimed at moving developing work forward. Works in progress may be intermixed with more fully developed work.

The Co-Chairs of the Program Committee are Jerome Shaw, NARST President, and Jennifer Adams, NARST President-Elect, who have the final decision in the assignment of presentation format and may move a proposed presentation into a different presentation format. If the proposer does not want the format assigned to their presentation, the proposer will have the opportunity to withdraw the proposal.

Presentation Limitations (Number and Originality)

To allow all conference participants an opportunity to present, NARST limits the number of times a person can appear as first author at the conference. The rules are that an author may be:

- 1. First author on only one stand-alone paper or a paper within a related paper set, AND
- 2. First author on only one interactive poster paper, AND
- 3. First author on only one roundtable, AND
- 4. Organizer of only one symposium, AND
- 5. Secondary author on any number of stand-alone, related paper set, and/or interactive poster papers.

Authorship will be checked; if you are first author on more than the allowed number, the additional proposals must be withdrawn.

NARST proposals submitted for presentations at the Annual International Conference MUST be original work that has not been published or presented at any other conference (e.g., AERA, ASERA, ASTE, ESERA).

Preparing and Formatting the Proposal

These guidelines apply to all proposals regardless of mode of conference attendance (in person or virtual).

Stand-Alone Paper or *Poster*. The maximum length is five single-spaced pages (excluding references but including tables and figures). All in-text citations should be included in the reference list and references must be in APA format.

Related Paper Set. The maximum length is 10 single-spaced pages (excluding references but including tables and figures). This should begin with a summary of the entire set describing how all of the papers are related, and then provide details of each individual paper integrated into one document. All in-text citations should be included in the reference list and references must be in APA format.

Symposium. The maximum length is 10 single spaced pages (excluding references but including tables and figures). This should include a description of the overall session topic or issue in one document and indicate how the session will run (e.g., panel discussion followed by group discussion). All in-text citations should be included in the reference list and references must be in APA format.

Related Paper Set and Symposium proposals sometimes involved a mixed format (e.g. a panel discussion plus several posters). If your session requires a **room setup** other than standard theater seating (e.g. poster boards, roundtables, classroom tables), you must describe it in the proposal.

Roundtable and Work in progress Roundtable. The maximum length is 5 single spaced

pages (excluding references but including tables and figures). All in-text citations should be included in the reference list and references must be in APA format.

Proposals must be **single-spaced with 1'' (2.54 cm) margins all around, and in font no smaller than 12 on US Letter size paper (8.5" x 11").** If you usually use A4 paper, please convert to US letter size as you finalize your proposal, *before* converting to a PDF format for submission.

Criteria for Review

Your proposal must address the primary criteria that are part of the review process. See the rubric included in this call for details of each criterion.

- (a) subject/problem
- (b) design/procedure
- (c) findings and analysis
- (d) contribution to the teaching and learning of science
- (e) how likely is this presentation to impact members?
- (f) for Roundtables only, have the authors clearly articulated what they would like to discuss?

Blinding the Proposal

All proposals submitted to NARST go through a **blinded**, **peer-reviewed process**. Blinded means there is no information within the proposal that could identify who the author/co-authors are or where they work. Authors are **required** to remove **any** identifiers in the proposal pertaining to the authors, including the institutions involved in or pertaining to the study and research grant or project identifiers. Authors must disguise any information that may lead to the identification of authors. For example, instead of the name of a university use a general description like "research university located in the southeast of the United States". In addition, for self-citations please use the third person, instead of "we" or "I". Include in-text citations as "Author" (e.g. Author, 2019). In the reference list, use only the term "Author" or "Authors" followed by date of publication. These items should be alphabetized in the reference list using the term "Author" or "Authors," not by the author's real name.

Please be aware that PDF files contain metadata that may identify you as the author. After creating your proposal PDF, open it and click on File/Properties. Check whether your name, institution or other identifying information are displayed. If so, delete that information and save the PDF file.

NOTE: Proposals that do not meet these criteria must be corrected or they will not be reviewed.

Creating an Account and Submitting a Proposal

The 2025 NARST Annual International Conference will employ the Oxford Abstracts System, hereafter referred to as "**OAS**". OAS supports proposal submission and review, session building and scheduling, conference program creation, and a mobile-friendly conference program display with personal itinerary and other advanced features.

Step 1. To begin, you must have an OAS account. Go to the OAS Dashboard:

https://app.oxfordabstracts.com/dashboard

If you submitted a proposal or reviewed proposals for the 2023 or 2024 Conference, OAS will recognize your login and you do not need to create a new account. Please test your login by entering your email address and password. **If you are successfully logged in, proceed to Step 2**.

If your email address is not recognized by OAS, you must register before you can enter OAS. Please click on **Create an Account**, then **Continue with email**. Enter your preferred email address; it will be used as your login username. **NARST members, we recommend that you use the same email address as you use to log into the NARST member portal**. Enter your name, professional title (optional), and choose a strong password that you can remember (8+ characters including a letter and a number). Thereafter, OAS will recognize you by your login email, whether you are submitting, editing, or reviewing a proposal; browsing the conference program; reading presentation abstracts; or other conference functions. All communications sent via OAS will be addressed to your login email.

You will receive an email from OAS; click on the **Verify your email address** link to complete the creation of your OAS account.

The OAS dashboard display will inform you that you are not connected to any events. That only means that you haven't interacted with the NARST 2025 Conference yet. For most people, their first interaction will be submitting a conference proposal.

Step 2. Now that you have an OAS account, you can begin submitting your proposal. Go to the NARST 2025 Conference Proposal Submissions form:

https://app.oxfordabstracts.com/stages/46482/submitter

As soon as you start a draft proposal, your account will be linked to the 2025 Conference. Enter some of the proposal information (e.g. the proposal title), then save your work by scrolling down and clicking on **Submit** at the bottom of the proposal submission form. A popup window will list the items that you have not yet completed; just click on **Continue** to save your draft proposal. You will receive an email confirming that you have saved an incomplete proposal.

To continue working on your draft proposal, you can return to OAS using the convenient Dashboard link:

https://app.oxfordabstracts.com/dashboard

If the 2025 Conference is your first interaction with OAS, the 2025 Conference working area will be displayed.

If you previously submitted a proposal for the 2023 or 2024 Conference, you will see links to the 2025 conference working area, and additional links to previous Conferences. **Click on the 2025 Conference** to enter the 2025 working area.

You will see your draft proposal listed in the Submissions section, labeled as "Incomplete" with an Edit link to allow you to continue working on your proposal. When you have provided all required proposal information, the Dashboard will indicate that the proposal is Complete.

If you are submitting more than one proposal (e.g., one Standalone Paper and one Poster), each proposal will be listed in the Submissions section of the OAS Dashboard.

Entering Proposal Information into the OAS Proposal Submission Form

Q1. Empirical Research or Theoretical/Position

An **Empirical Research** paper reports on completed empirical study. Works in progress that do not have sufficient data to address the research questions at the time of proposal submission should not be submitted. *The sole exception is Work-in-progress Roundtable presentations*.

A **Theoretical/Position** paper can be a literature review, an evidence-based position paper, or a paper that presents an original perspective on a theoretical and/or conceptual framework. Theoretical papers should include recommendations for future research.

Related Paper Sets may include a mix of research and theoretical papers.

Q2. Methodological approach

Select the most appropriate option for your proposal:

Mixed Methods Positional/review Qualitative Quantitative Theoretical

Q3. Proposal title

All submissions must provide either a **presentation title** or a **session title** here. Please read and follow these instructions carefully.

Stand-Alone Papers, Posters, and Roundtables: Enter your presentation title.

Symposium: Enter the session title.

Related Paper Sets: Related paper sets will involve one submission from a session organizer that includes the full proposal; and additional submissions by the presenting authors. The latter are used to collect author and presentation information.

If you are a session organizer submitting the full proposal on behalf of a Related Paper Set, enter the session title.

If you are submitting an individual presentation within a Related Paper Set, enter your presentation title here, and enter the session title in the next field.

Q4. If your presentation is part of a Related Paper Set, enter the session title here

If you are submitting one of the presentations included in a Related Paper Set proposal, please enter your presentation title above, and enter the Related Paper Set session title here. This will allow us to place your submitted presentation within the session.

Q5. Abstract

Enter an abstract of your proposed presentation or session (max 200 words). The abstract will be provided to reviewers. If your proposal is accepted, the abstract will be made available to all conference attendees.

Do not include identifying information in your abstract.

Do not use ALL CAPS, all lowercase letters, or undefined abbreviations in your abstract. Please write in complete sentences.

Q6. Authors and Affiliations

IMPORTANT: Please check with your co-authors or session co-organizers regarding their correct affiliation and email address. They will be identified by the email address they used in the Oxford Abstracts system. If you enter a different email address for them, it will be treated as a different person.

Presentations and panels may have up to TEN authors, including yourself.

Stand-Alone Papers, **Posters**, **Roundtables**: Enter the names of ALL authors - including yourself - in the order in which you wish them to appear in the program. Omitted names will not appear in the author index or in the final program. At least one author must be identified as the Presenting Author.

Symposia: Enter the names of all panelists - including yourself - in the order in which you wish them to appear in the program. Omitted names will not appear in the author index or in the final program. Check the Presenting Author box to identify one panelist who will act as **Presider.**

Related Paper Sets:

Session organizer: If you are the lead organizer of this Related Paper Set and are submitting the session proposal, enter information for yourself and any co-organizers. Check the Presenting Author box to identify one organizer who will act as Presider.

Paper authors: If you are submitting an individual paper within a Related Paper Set, enter the authors - including yourself - in the order in which you wish them to appear in the program. At least one author must be designated as the Presenting Author.

Q7. Strands

All proposals are associated with one of the Strands. Please select the appropriate Strand for this proposal.

Q8. Presentation format

Please choose the preferred presentation or session format. The format types are:

Stand-Alone Paper
Poster
Roundtable
Symposium
Related Paper Set
Work-in-progress Roundtable

For Stand-Alone Papers, Posters, and Roundtables, Strand Coordinators will endeavor to respect your preferred format, but limitations on available space and time slots may require that your presentation be assigned to a different format. You may choose an acceptable alternative format in the next form field.

The final decision regarding format rests with the Program Chairs.

Q9. Alternative presentation format

For Stand-Alone Paper, Poster, and Roundtable presentations, please select an acceptable alternative format to be used if your preferred format is not available. We will endeavor to respect your preferred format. Leaving the alternative format blank will not affect the likelihood that your presentation will be accepted.

Q10. Proposal PDF

Most submissions will include a full proposal for peer review.

Related Paper Sets require submission of a single proposal describing the session. Individual presentations within the Related Paper Set are submitted with author and presentation information but do not include individual proposals.

To prepare your proposal, refer to the Proposal Formatting guidelines described above. Proposal files will be examined by Strand Coordinators, and proposals that do not conform to the guidelines must be corrected and replaced before they can be reviewed.

Upload your proposal file as a PDF document of 20 MB or less.

Your proposal PDF file will be renamed automatically to prevent reviewers from identifying the proposal author(s).

Room Setup

Related Paper Set and Symposium proposals sometimes involved a mixed format (e.g. several posters plus a roundtable discussion; a panel with several posters). If your session requires a room setup other than standard theater seating (e.g. poster boards, roundtables, classroom tables), you must describe it in the proposal PDF.

Q11. In-person / Virtual Presentation

The NARST 2025 conference is being planned as an in-person event, with an additional day (March 13) dedicated entirely to virtual presentations. Given the significant costs involved, we are not planning to allow remote presentations during in-person sessions, and we are not planning to live-stream any in-person sessions.

We will try to schedule presentations at times convenient to virtual attendees located around the world.

If you are unable to travel to the in-person conference but wish to present during the online conference day (March 13), please select the Virtual Presentation option below. All presentation and session formats will be considered for the virtual sessions, but the allotted time may differ from an in-person presentation.

If your proposal is accepted, you will have a short window during which you will be allowed to switch from in-person to virtual presentation, providing space is available on the virtual presentation day(s). After that window closes, we will not accommodate any changes.

Your choice of In-person vs Virtual Presentation will not affect peer review or the accept/reject decision.

Q12. Your time zone (virtual presentations only)

If you are planning to present during the Virtual Conference Day on March 13, 2025, please indicate the band of time zones closest to your physical location. This will help us to schedule presentations at reasonable times.

Other Information

Reviewer Rubric

See the Reviewer Rubric in this document for a more complete description of the review criteria. In addition, please complete the checklist at the end of this document for your own use to ensure you have addressed the proposal requirements.

Here is a link to **Frequently Asked Questions** (FAQs) regarding preparation and submission of proposals: https://narst.org/conferences/faq. The FAQ will be updated to reflect the new OAS proposal submission and review system, and to answer new questions that may arise.

Confirmation of Submission

All proposal submission and updates including completion of the submission process will be acknowledged by auto-generated email to the submitting author or session organizer. Additionally, when all required information has been provided, the submitter's OAS Dashboard will list the proposal as Complete rather than Incomplete.

Only the submitter will be able to view the proposal and its reviews in OAS. Only the submitter will receive the decision email. The submitter is responsible for relaying information about submissions, reviews, and decisions to their co-authors or co-organizers.

To inquire about your proposal, please contact paulkemp@narst.org, and provide the proposal ID number in addition to your name.

Submission Deadline

The submission deadline is **5:00 pm (17:00) YOUR local time on Thursday, August 15, 2024** (the annual NARST proposal submission deadline). Typically, over 90% of proposals are submitted in the final 72 hours. This rush can result in system slowdowns. We encourage you to submit your proposal before these last hours to avoid potential delays.

Requirements for Presenting Authors

All presenting authors on accepted proposals need to register for the conference to present. The **presenting author(s)** must register for the Annual International Conference by the close of the Advance Registration period, to be announced at a later date. Presenting authors who do not register by the registration deadline may have their presentation removed from the conference program. It is the responsibility of each presenting author to comply with this requirement. By submitting a proposal, you agree to register by the deadline or have your presentation removed from the program.

Registration Requirement

All presenting authors – and all conference attendees – are required to register for the NARST Annual International Conference. Conference registration opens in early December.

Volunteer to Be a Reviewer

Please consider volunteering to be a reviewer (for peer review of proposals for the program) by completing the reviewer section of the proposal submission form. You will be asked to select 1-3 appropriate Strands, and to select 2 keywords that best fit your reviewing expertise. Careful peer review is crucial to the quality of the NARST Conference. Reviewers are leadership roles that may contribute to your professional development and can be notated on your curriculum vita.

Some conference proposal reviewers are not planning to submit a proposal for the next conference, but will be co-authors or session co-organizers, or are willing to review even if they cannot attend the conference. If you will not be submitting a proposal but are willing to review, please complete the Volunteer to Review form. A link will be provided on the conference website at:

https://narst.org/conferences/2025-annual-conference

Thank you in advance for contributing to the success of the conference!

Presiders

The last author presenting in the session (or organizing author of a symposium) will be the presider for the session and is responsible for keeping the session on schedule.

Presentation Needs at the In-Person Conference

One LCD projector and screen are provided in each presentation room throughout the conference for Stand-Alone Papers, Related Paper Sets, and Symposia. Computers, speakers, and other presentation devices are not provided, so you will need to make your own arrangement for the presentation of electronic material. Please bring connectors as needed.

NARST Proposal Review Rubric

For each category, 3-4 criteria are required. Given the constraints of the 5-page limit for individual paper and poster proposals (10-page limit for related-paper sets and symposia), please assign a numerical rating using the following descriptors as a guide:

5 Highly evident: Proposal provides clear, substantive, and coherent evidence of all criteria

Adequately evident: Proposal adequately describes all criteria in the category.
 Mostly evident: Proposal adequately describes 2 out of 3 criteria in the category
 Somewhat evident: Proposal adequately describes 1 out of 3 criteria in the category

1 Not evident Proposal does not adequately describe any of the criteria in the category

You should explain your numerical ratings by responding to the rubric questions with constructive feedback identifying the proposal's strengths and weaknesses in the text boxes provided. Answering Yes or No to the criteria questions is not considered acceptable feedback. With respect to proposals for related paper sets and symposia, your comments should reflect the quality of *each* of the papers included in the proposal in addition to your summative recommendation and underlying rationale for the proposal as a whole. Reviews should be constructive and respectful.

Subject/Problem

- 1. Is there a clear focus for the study?
- 2. Does the proposal include a clear rationale for the study?
- 3. Does the proposal describe the model, theoretical framework, or philosophy of the study?

Design or Procedure

Research Papers [Empirical Studies]

- 1. Does the proposal clearly describe the methodology (theory of method)?
- 2. Does the proposal clearly describe the research methods, design, and study context?
- 3. Are the methodology, procedure, and design appropriate for the study and clearly aligned with the problem?

Theoretical Papers [Non-Empirical Studies (e.g., conceptual or position papers, reviews of literature)]

- 1. Does the proposal clearly describe the approach used to develop the argument or conduct the review?
- 2. Are the ideological/philosophical positions of the author and sources made clear?
- 3. Does the proposal include an appropriate range of literature?

Analyses and Findings

Research Papers [Empirical Studies]

- 1. Do the data analyses appear to be appropriate, coherent, complete, and aligned with the research questions?
- 2. Are the arguments or interpretations supported by the data and linked to prior literature?
- 3. Does the proposal discuss alternative interpretations, bias, reliability, or validity as appropriate?

Theoretical Papers [Non-Empirical Studies (e.g., conceptual or position papers, reviews of literature)]

- 1. Do the syntheses of ideas appear to be appropriate, coherent, and complete?
- 2. Are the arguments or interpretations supported by evidence?
- 3. Does the proposal discuss alternative interpretations, counterarguments, or bias, as appropriate?

Contribution

- 1. Do the conclusions add to, refine, or refute theoretical constructs?
- 2. Do conclusions contribute valuable insights and implications into teaching/learning/researching science education?
- 3. Does the proposal clearly address, and have implications for, equity issues related to NARST's goal of helping all learners achieve science literacy, including but not limited to race, sex, gender expression, ethnicity, socioeconomic status, access, ability, sexual orientation, language, national origin, and/or religion?

Cohesiveness* (Related Paper-Sets ONLY)

- 1. Are all of the papers in the set focused on a similar concept/theme?
- 2. Do all papers contribute new information to the set, making a meaningful strongly related whole?
- 3. Do all papers contain high quality information leading to a rigorous and comprehensive understanding of the theme?

General Interest

1. Does the content of the presentation promise to be of general interest to NARST members interested in this strand?

- 2. Is the content presented in a way that will be meaningful to NARST members interested in this strand?
- 3. Does the paper promise to be of interest to the education community at large?
- 4. For **Roundtables only**, has the author clearly articulated what they wish to discuss in the Roundtable session?

Overall Rating (1-not recommended; 5 highly recommended)

To maintain the high quality of NARST presentations, please ensure your recommendation aligns with your ratings.

Proposal Submission Checklist

The completion of this checklist may be	helpful in ensuring your proposal meets the requirements.
Names of author(s) correct and co	onsistent throughout
Submission is properly blinded	
Uses pseudonyms to mas	k locations that may identify author(s)
Omit names or other info	rmation that may identify author(s)
Specific descriptions (e.g. identify author(s) are made	, curriculum developed by authors) that may le more general
Third person is used to ref	er to self-citations
	eference list, used "Author" or "Authors" ate for self-citations and alphabetized
Format of the submission meets i	equirements
1" margins all around	
No font smaller than 12-in	nches
US letter size paper (8.5"	x 11") is used
No more than 5 pages (ex	cluding references) for paper, poster, or roundtable
No more than 10 pages (e	xcluding references) for symposium or related paper set
Inclusion of abstract of no	o more than 200 words
All citations included in t	he proposal body are included in the reference list
References adhere to APA	format
Submission is converted to a PDI	⁷ document
	d it and clicked on File/Properties to check if dentifying information were displayed. If so, ad saved the PDF
Submission indicated alternative t	presentation format, if applicable

S	ubmission indicated if email address could be included in program
Sı	ubmission indicated preference of presentation locale of in-person, virtual, or either
Fo	or Symposium and Related Paper Set proposals needing a specific room layout, the requested
room layo	out is described in the proposal.

Timeline

** Add days of the week to the table

Target Date	Tasks
Monday July 1	Call for proposals.
Thursday August 8	Solicit reviewers for Strands.
Thursday August 15	Deadline for NARST proposals submitted to NARST online system. OAS will be closed for new submissions.
~Wednesday August 21	Requested revisions to proposals take place directly within OAS. Reviewers receive proposal assignments.
Monday September 16	Reviewers post completed proposal ratings and recommendations in OAS.
Monday September 30	Strand Coordinators submit Rating Summaries, recommend decisions and presentation formats, and propose SC-organized Paper Set sessions.
Mid-late October	Decision notifications sent to authors. Reviews are available to submitting authors in OAS.