How to Write a NARST Proposal Webinar

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Webinar Agenda

01 Introductions

02 Review of proposal guidelines and rubric

03 Strategies for writing a proposal

04 Common weaknesses in proposals

05 Proposal examples

06 Questions?

01
Introductions

....of presenters and participants

02
Review of Proposal Guidelines and Rubrics

Program Formats

- Stand-Alone Paper – 15-20 minute individual presentation (4 papers, 90-min)
- Related Paper Set
- Interactive Poster Paper
- Symposium
- Roundtables

Author and Presentation Limitations

- First author on only one
  - Stand-alone paper or a paper within related paper set
  - Interactive poster paper
  - Round table
- Presenter in only one symposium
- Second author – unlimited
- Proposals will be checked and submissions will be deleted if you are first author on more than one of the same format.
- You cannot submit your NARST proposal to another conference.

Proposal Submission Process

- The Oxford Abstracts (OA) Dashboard: https://app.oxfordabstracts.com/dashboard/
- If you have already created an account on Oxford Abstracts, Log in
- Or create account
  - Username = your preferred email address
  - Create password
- Your account email will be used for NARST correspondence about the conference.

Oxford Abstracts Dashboard

- **Submissions Area** – used to submit and edit your proposal. Click on **New Submission** to start a new proposal, or click **Edit** to load an existing proposal into the submission form for revision. Proposals can be revised up to the submission deadline.

- **Reviews Area** –this area will list your assigned proposals, if you have volunteered to review. Click to open the reviewing form.

In the Proposal Submission form you will see 5 format choices

- Stand Alone Paper
- Related Paper Set
- Interactive Poster Paper
- Round Table
- Symposium

❖ Choose one of the 5 formats, and proceed through the submission form, following the instructions. You can submit an incomplete proposal and return to it later – it will be marked as incomplete until all required information is entered.

Stand-Alone Paper- Enter Proposal Information:

- Title (15 -word limit)
- Proposal Type- Research Paper or Theoretical Paper
  - Note acceptable alternative formats
- Add authors (limit 10)
  - Ask your co-authors what email address you should use for them!
- Abstract (200 word limit- 1200 characters)
- Upload PDF of proposal - **5- page maximum** excluding references
  - All in-text citations should be included in the Reference list- APA formatting
- Choose strand
- Select content keywords
- Volunteer to review and/or preside!
- **Submit Stand Alone Paper Information** (at bottom)

Review Process

- All proposals will undergo a masked, peer review process
- De-identify your proposal and abstract
  - Remove names of authors, institutions, cities
- Example: "A large university in the Midwest"
  - For self-citations, substitute "Authors, [year]"
- PDF files contain metadata that may identify you as the author
  - Open PDF- go to File/Properties- delete any identifying information (your name, institution) and save PDF before you upload it
- Proposals that do not meet these criteria must be corrected before they can be reviewed.

Formatting

- 5- page max not including references
  - APA formatted reference list of all in-text citations
- Single -spaced
- 1-inch margins (2.54 cm) all around
- Font is no smaller than 12 on US letter size paper (8.5" x 11")
- Convert to US letter size before converting to PDF

Five Criteria for Proposal

1. Subject/problem
2. Design/procedure
3. Findings and analysis
4. Contribution to teaching and learning of science
5. How paper will contribute to interests of NARST members

5-page limit is only for proposal not for paper presented at conference.

Confirmation of Submission

- Once you submit,
  - You will receive a confirmation on screen
  - The submitting author will receive a confirmation email
  - Only the proposal submitter can track proposal on Oxford Abstracts Dashboard
    - There will be a confirmation number - keep it for your records

- Note the deadline date and time- most proposals are submitted in last 72 hours- be patient if the server is busy!

Author Requirements

- All first authors:
  - MUST be present at conference and present
  - MUST register by the close of advance registration (or proposal may be removed)
  - Will not be contacted if they don't register in time

- All presenting authors and all conference attendees are required to register for conference.
- If you present a paper, round table or poster, you are required to have an APA 7th ed. formatted paper for distribution at conference (digital link is fine).

Volunteers Needed

- When you submit your proposal, please volunteer to be a peer proposal reviewer!
- If you are not the submitting author, you can volunteer to review here: https://narst.org/conferences/2023-annual-conference/volunteer-to-review
- Please volunteer to be a presider at the conference!

NARST Proposal Rubric

For each category, three criteria are required. Given the constraints of the 5-page limit for individual paper and poster proposals (10-page limit excluding references 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
4	**Adequately evident:**	Proposal adequately describes **all** criteria in the category.
3	**Mostly evident:**	Proposal adequately describes **2 out of 3** criteria in the category
2	**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

Additionally, please make sure that you 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, we ask that your comments 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.

NARST Proposal Rubric

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

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?

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

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?

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, counter-arguments, or bias, as appropriate?

NARST Proposal Rubric

Contribution

1. Do the conclusions add to, refine, or refute theoretical constructs?
2. Do conclusions contribute valuable insights and have 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. Are all papers contributing 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?

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

To ensure NARST has high quality presentations at this year's conference, please only recommend that proposals be accepted for presentation if your ratings are appropriately high and written comments are supportive of this recommendation.

Proposal Submission Checklist

The completion of this checklist may be helpful in ensuring your proposal meets the requirements.

_____ Names of author(s) correct and consistent throughout

_____ Submission is properly masked/ blinded

- _____ Uses pseudonyms to mask locations that may identify author(s)
- _____ Omit names or other information that may identify author(s)
- _____ Specific descriptions (e.g., curriculum developed by authors) that may identify author(s) are made more general
- _____ Third person is used to refer to self-citations
- _____ In the reference list, used “Author” or “Authors” followed by publication date for self-citations and alphabetized accordingly

Proposal Submission Checklist

_____ Format of the submission meets requirements

_____ 1" margins all around

_____ No font smaller than 12-inches

_____ US letter size paper (8.5" x 11") is used

_____ No more than 5 pages (excluding references) for paper, poster, or roundtable

_____ No more than 10 pages (excluding references) for symposium or related paper set

_____ Inclusion of abstract of no more than 200 words

_____ All citations included in the proposal body are included in the reference list

_____ References adhere to APA format

_____ Submission is converted to a PDF document

____ After creating PDF, opened it and clicked on File/Properties to check if name, institution or other identifying information were displayed. If so, deleted that information and saved the PDF

_____ Submission indicated alternative format, where applicable

_____ Submission indicated to if email address could be included in program

03
Strategies for Writing a Good Proposal

Possible Helpful Strategies

- Create a table with the proposal guidelines, your own writing, and the proposal rubric.
- Model your proposal after a colleague's accepted proposal.
- Ask a colleague to read a draft.
- Ask a colleague to score your draft using the rubric.
- Select an appropriate strand.

NARST Strands

1. **Science Learning: Development of student understanding:** How students learn from a variety of theoretical perspectives.
2. **Science Learning: Contexts, Characteristics and Interactions:** Learning environments, teacher-student and student-student interactions, and factors related to and/or affecting learning.
3. **Science Teaching — Primary School (Grades preK-6): Characteristics and Strategies:** Teacher cognition, content knowledge, pedagogical knowledge, pedagogical content knowledge, instructional materials and strategies.
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.
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.
6. **Science Learning in Informal Contexts:** Learning and teaching in museums, outdoor settings, community programs, communications media and after-school programs.
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.

NARST Strands (cont.)

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.
9. *discontinued*
10. **Curriculum and Assessment:** Curriculum development, change, implementation, dissemination and evaluation, including alternative forms of assessment of teaching and learning.
11. **Cultural, Social, and Gender Issues:** Equity and diversity issues: sociocultural, multicultural, bilingual, racial/ethnic, and gender equity studies.
12. **Technology for Teaching, Learning, and Research:** Advancing applications of technology and digital tools to promote teaching, learning, and research.
13. **History, Philosophy, Sociology, and Nature of Science:** Historical, philosophical and social issues of science as related to science education.
14. **Environmental Education and Sustainability:** Education related to Earth and ecological systems, environmental literacy and justice, experiential learning, Indigenous perspectives, public participation in science, socioscientific issues, sustainability, and sustainable development.
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.

04
Common Weaknesses Observed in Proposals

Common Weaknesses

Large differences in the amount of writing/information per section

- Each section is given a guide for the assessors to use in scoring.
- This guide should aid in the amount of information expected per section and unnecessary information should be left out.
- Each itemised guide - which is like a scoring guide - has to be addressed in the paper.

Common Weaknesses (cont.)

Large differences in sections (cont.)

- For instance under subject/problem, the expected information necessary for that section is:

1. Is there a clear focus for the study? The proposal should have a well stated and clear focus.
2. Does the proposal include a clear rationale for the study? The rationale for the study must be clear and convincing enough on the need for the study.
3. Does the proposal describe the model, theoretical framework, or philosophy of the study? In this case, the assessor will be looking for a description on any or a mix of the three depending on the nature of the study.

Common Weaknesses (cont.)

Not knowing what is important to be included

- Realising that, in most cases, each of the sections is copied and pasted from the full paper, the guide should assist in itemising what should be included in each section or what should be left out.

- There are times that writers joggle this information together and reviewers find what is expected in one section is described in another section.

Common Weaknesses (cont.)

Introduction

- It is usual that reading the introduction to a book tells one whether to continue reading or to give it a break.
- Usually, the introduction envelops the subject/ problem and all that is itemized under it.
- It is important for the introduction to be interesting, in simple language, and clearly stated to justify the need.

Common Weaknesses (cont.)

Design and Procedure

- The proposal should clearly describe the research method, procedure, and design.
- These should be appropriate for the study.
- It is noted, in some cases, that these are not clear enough.
- Also, in some cases, where a qualitative method would have been more appropriate, a quantitative method is used.

Common Weaknesses (cont.)

Analysis and Findings

- Under this are 3 items for scoring, namely:
  1. Do the data analyses appear to be appropriate, coherent and complete?
  2. Are the arguments or interpretations supported by the data?
  3. Does the proposal discuss alternative interpretations, bias, etc.?

- The problem here is that some proposal don't even have data, either because they are on-going or theoretical. So it becomes difficult to score this section. Some also don't discuss alternatives to their interpretations.

- Need to focus here on the results.

Common Weaknesses (cont.)

Contributions

There are also three items here too.

1. Do the conclusions add to, refine, or refute the theoretical constructs?
2. Do the conclusions contribute valuable insights and have implications for teaching/learning or researching in science education?
3. Does the proposal clearly address and have implications for equity issues?

Common Weaknesses (cont.)

Contributions (cont.)

- By the time you are concluding, the assessors want to see how the proposal has added to the initially stated theoretical construct.
- Has it added to or refuted the stated constructs?
- On the implications it has for science teaching, research, and equity issues, the latter which is so important and linked to the vision of NARST is excluded in some cases.
- That is, proposal writers don't take special note of the implications with regard to equity issues.

Common Weaknesses (cont.)

General Interest

Items to be assessed include:

1. Does the content of the presentation promise to be of general interest to NARST community?
2. Is the content presented in a way that will be meaningful to NARST members?
3. Does the paper promise to be of interest to the education community at large?

Common Weaknesses (cont.)

General Interest (cont.)

- Looking at the first is the interest of NARST members. The goals of NARST in achieving science literacy and the goals of the year should be addressed.
- The second item is based on the way it is presented. Quite a number of proposals get rejected because they have not been well put together and not well stated.
- Some also get rejected because of language barrier …not able to communicate exactly what is intended.

Common Weaknesses (cont.)

General Interest (cont.)

- It will be necessary to get another ‘eye’ to help read and edit proposals before they are submitted.
- The last item on the larger audience is usually skipped and this is also scored. If NARST is part of a larger science community, then the interest of the community should be of paramount importance.
- Again, since the instruction restricts the proposal to 5 pages, this should be strictly adhered to.

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Examples

Example of a Weaker Proposal

Too short

Our proposal was only 4 rather than 5 pages.

Too little data

Our results should have included more qualitative examples.

Few connections

We did not explain WHY our paper would be of interest to NARST members or to the larger science ed community.

- Link to a weak proposal
- Link to the reviews of this proposal

Example of a Stronger Proposal

Clearer Methods

We provided additional information about our participants and our data analysis.

Substantive Data Presented

We included both figures that summarized data and thick description of a few cases.

Clearer Connections

We discussed how research connects to teacher education and to issues of equity.

- Link to a strong proposal (formatting altered in Google docs)
- Link to the reviews of this proposal

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Questions?

Thanks!