

You may submit as many abstracts as you would like, but:

- a. Any one individual can only be a presenter for a single talk (short).
- b. A maximum of three abstracts will be accepted as short talks from any single lab in order to promote diversity at SABER. A research lab is defined as a group of individuals working under a PI (where a PI is an individual eligible to serve as PI/Co-PI on an NSF (or similar) grant). A collaborative proposal across research groups will count as one of these three abstracts.
- c. If an individual submits more than one short talk abstract or has their name as an author and/or listed as PI for more than three short talk abstracts Only the first three abstracts received will be sent out for review. Long talk submissions will not count towards the three-limit on talk submissions for a lab group.
- d. It is expected that multiple PIs working on a common project will submit no more than 2 abstracts related to this project.

CONSIDERATIONS SPECIFIC TO EACH PRESENTATION FORMAT
<p>Long talks are open to individuals at any career stage. These 50-minute talks are intended to be a synthesis of multiple projects over several years that have been completed and/or are nearing publication and that tell a cohesive story about a central theme. There should be a track record of at least 4-5 years of research on a single topic. The most successful long talk abstracts will have made a substantial contribution to the DBER discipline. Abstracts submitted for long talks may be recommended for short talks, roundtables, or poster presentations. Long talk submissions will not count towards the three-limit on talk submissions for a lab group. Long talks are distinct from invited keynote talks.</p>
<p>Short talks are 15-minute presentations intended to showcase results that are complete enough for publication. Emphasis is on communicating robust findings of a complete project (i.e., appropriate and thorough), tried and tested instruments and protocols, and other developed work. Abstracts submitted for short talks may be recommended for roundtables or poster presentations.</p>
<p>Poster presentations are ideal for sharing a new or developing project or gaining specific advice on a particular set of data. Projects that are still early in development are encouraged, including studies with promising, yet minimal, outcomes data; or studies with inconclusive results.</p>
<p>Roundtables are one-hour, small-group structured discussions on similar research projects that are works in progress. The goal for the roundtable session is to facilitate interaction between author/s and attendees to get feedback. Author will be limited to a one-page summary (text or visual), including focused discussion questions, to share with session attendees. Each author has ~10 minutes to present their work, with the remainder of the hour for feedback, suggestions, and larger group discussion from all presenters and non-presenting participants. The short presentations are intended as a springboard for interaction, discussion, and critique. Abstracts submitted for roundtables may be recommended for poster presentations.</p>
<p>Workshops are three-hour participant-interactive sessions designed to provide participants with skills to enhance their teaching and research. Workshops should draw on DBER research. For example, they could provide attendees with skills to enhance their DBER research approaches, or how to implement DBER into your classroom (e.g., evidence-based practices). They should be interactive and participant-centered. Submitters should consider the audience at SABER (<u>Faculty, post-docs, grad or undergraduate students, etc. who engage in DBER</u>) and choose a topic that will be broadly applicable; however, niche topics that may be novel and have potentially broad interest will certainly be considered. The workshop will be a 3 hour block scheduled for Thursday morning prior to the start of the SABER meeting.</p>

SHORT TALKS, POSTERS

Each abstract is evaluated by multiple reviewers from the SABER community according to the following four main categories. Within each main category, the abstract is given three sub-scores using this guideline: this component is not present/clear at all or is only briefly mentioned (**score 1**), this component is present but not clear or complete (**score 2**), or this component is present and clear and complete (**score 3**). This rubric is applicable to mixed methods, qualitative, quantitative, practitioner-focused and theoretical studies. Note that space for written comments within each category is provided in the online system. Written comments are required and we encourage you to make these as specific and clear as possible so that the abstract author may gain insight as to how to improve their abstract.

CATEGORY	QUESTIONS	Not present or only briefly mentioned	Present, not clear or complete	Present, clear and Complete
Study Context	Is the study context and/or literature base clearly described with key citations (author, year).	1	2	3
	Is there a sound rationale for the project?	1	2	3
	Is there an appropriate model, theoretical framework or philosophy ?	1	2	3
Study Design	Is there a clear question and/or educational problem in biology education described?	1	2	3
	Are the design and methods clearly described?	1	2	3
	Are the design and methods appropriate and well-aligned with the question or problem?	1	2	3
Analyses and Interpretations	Are the analyses clearly described?	1	2	3
	Are claims supported by evidence or reasoning and appropriate given the focus of the study and the methods?	1	2	3
	Are the analyses at an appropriate level of completeness given the desired presentation format?	1	2	3
Contribution	Does the study add to, refine, or refute the literature base in biology education?	1	2	3
	Is the study likely to be of general interest to SABER attendees?	1	2	3
	Does the study provide clear implications for teaching, learning, or research in biology?	1	2	3

LONG TALKS

Each abstract is evaluated by multiple reviewers from the SABER community according to the following five main categories. Within each main category, the abstract is given three sub-scores using this guideline: this component is not present or only briefly mentioned (**score 1**), this component is present but not clear or complete (**score 2**), or this component is present and clear and complete (**score 3**). This rubric is applicable to mixed methods, qualitative, quantitative. Note that space for written comments within each category is provided in the online system. Written comments are required and we encourage you to make these as specific and clear as possible. **In addition to an abstract**, Long Talk submissions should include, in a separate document, a paragraph describing your research trajectory in DBER that includes key related/prior publications. Max 300 words. To keep reviews blinded, this paragraph will only be available to the abstract committee.

CATEGORY	QUESTIONS	Not present only brief mention	Present, not clear/complete	Present, clear and complete
Study Context	Is the study context and/or literature base clearly described with key citations (author, year).	1	2	3
	Is there a sound rationale for the project?	1	2	3
	Is there an appropriate model, theoretical framework or philosophy ?	1	2	3
Research Design	Is a clear research question and/or educational problem in biology education described?	1	2	3
	Are the research design and methods clearly described?	1	2	3
	Are the design and methods appropriate and well-aligned with the research question or problem?	1	2	3
Analyses and Interpretations	Are the analyses clearly described?	1	2	3
	Are claims supported by evidence and appropriate given the focus of the study and methods?	1	2	3
	Are the analyses at an appropriate level of completeness given the desired presentation format?	1	2	3
Contribution	Does the study add to, refine, or refute the literature base in biology education?	1	2	3
	Is the study likely to be of general interest to SABER attendees?	1	2	3
	Does the study provide clear implications for teaching, learning, or research in biology?	1	2	3
Scope	Does the project integrate multiple smaller projects that address a central theme ?	1	2	3
	Does the research represent more than 4 years of research on a single theme?	1	2	3
	Does the research make a substantial contribution to the DBER discipline?	1	2	3

ROUNDTABLES

Each abstract is evaluated by multiple reviewers from the SABER community according to the following four main categories. Within each main category, the abstract is given three sub-scores using this guideline: this component is not present (**score 1**), this component is present but not clearly or completely described (**score 2**), or this component is present and clearly described (**score 3**). This rubric is applicable to mixed methods, qualitative, quantitative, practitioner-focused and theoretical studies. Note that space for written comments within each category is provided in the online system. Written comments are required and we encourage you to make these as specific and clear as possible.

CATEGORY	QUESTIONS	Not present	Present, but not clearly described	Present, and clearly described
Study Background	Is the motivation behind the future research or research-in-progress described?	1	2	3
	Is the motivation behind the future research or research-in-progress connected to literature (e.g., gap in field)?	1	2	3
Description of Research Ideas and Desired Feedback	Is the general idea of the author’s research question/educational problem clearly described?	1	2	3
	Does the author clearly describe the feedback they desire?	1	2	3
Participatory Component	Have they described how presenters will engage participants in discussion?	1	2	3
	Are components of a handout/visual clearly described such that participants will be able to provide adequate feedback?	1	2	3
Contribution	Is the roundtable likely to be relevant to SABER attendees?	1	2	3
	Does the study have <i>potential to provide implications for teaching, learning, or research</i> in biology?	1	2	3

WORKSHOPS

Each abstract is evaluated according to the following four main categories by the SABER Abstract Committee. Within each main category, the abstract is given three sub-scores using this guideline: this component is not present or only briefly mentioned (**score 1**), this component is present but not clearly or completely described (**score 2**), or this component is present and clearly and completely described (**score 3**). Note that space for written comments within each category is provided in the online system. Written comments are required and we encourage you to make these as specific and clear as possible.

CATEGORY	QUESTIONS	Not present or only briefly mentioned	Present, not clear or complete	Present, clear and complete
Authors/Presenters	Are the experiences of the presenters relevant to the proposed workshop?	1	2	3
	Is there evidence provided of their expertise (e.g., peer-reviewed publications, presentations at other organizations, Department or University appointments, grants, certificates or licenses, etc.)	1	2	3
Interest	Does the topic have broad appeal to the SABER community?	1	2	3
	Does the workshop aim to teach or share usable information and/or tools that are based in DBER research (e.g., directly applicable to DBER research, implementing DBER in the classroom)?	1	2	3
Expected Learning Outcomes	Are learning objectives clearly stated ?	1	2	3
	Do the activities align with these objectives?	1	2	3
	Are the learning objectives written in terms of higher-order thinking skills ?	1	2	3
Description of activities with participant engagement techniques	Does it have a well-articulated description that seems plausible and appropriate to the topic being taught?	1	2	3
	Does it incorporate elements of interactivity with materials and fellow participants and use approaches that would facilitate learning?	1	2	3