

RESEARCH PARTICIPANT CONSENT FORM- PARENT

Collaborative Research: SEI: Teachers and Researchers Advancing Integrated Lessons in STEM
(TRAILS) 2.0

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Key Information

Please take time to review this information carefully. This is a research study. Your child's participation in this study is voluntary which means that you may choose not allow your child to participate at any time without penalty or loss of benefits to which your child is otherwise entitled. You may ask questions to the researchers about the study whenever you would like. If you decide to have your child take part in the study, you will be asked to sign this form, be sure you understand what your child will do and any possible risks or benefits. This study will investigate secondary students' engagement in science inquiry and engineering design learning activities.

What is the purpose of this study?

The TRAILS 2.0 team will work directly with up to 90 secondary Biology or Agriculture (Life Science) and Engineering/ Technology Education teachers to impact up to 10,000 students within schools in eastern Chesapeake Bay (Delaware, Maryland, and Virginia), Southeastern Colorado and Northern New Mexico, and native Hawaiian-serving schools. The goal of this study is to

- improve student's capacity to pursue STEM careers by strengthening their 21st century skills (creativity, critical thinking, collaboration, communication)
- enhance socio-emotional outcomes (STEM career awareness, perception of STEM, attitude towards place (hometown setting)).

What will I do if I choose to be in this study?

Your child (the student) will be asked to respond to surveys about his or her socio-emotional competencies (21st century skills, STEM career interest, perception of STEM, attitude towards place) before and after participation in TRAILS lessons. TRAILS researchers will also collect additional classroom data, including classroom products such as student designs, reflection papers, classroom observations, and interview responses. Your child will be asked to participate in up to (2) one-on-one interviews, which will last up to 30 minutes each. Your child may also be asked to engage in one focus group interview along with up to 5 students, lasting up to 50 minutes. Interviews will be conducted during the class time. You have the right to review all the research materials that will be given to your child.

How long will I be in the study?

Your child will learn two STEM units implemented by his/her science/engineering technology teachers during the school year. Each unit lesson is composed of 5-10 sessions, lasting 1-2 weeks.

What are the possible risks or discomforts?

The risks participants in this study will encounter are no more than what the participant would encounter in everyday life. Breach of confidentiality is always a risk with data, but we will take precautions to minimize this risk as described in the confidentiality section. Information your

child provides and statements he/she makes will not be used in any way to evaluate their performance as students in their respective classes.

Are there any potential benefits?

Your child will benefit from science and engineering practices as they work through a design problem. They may increase STEM content knowledge, 21st century skills, STEM career interest, perception of STEM, and attitude towards place (hometown setting).

Are there costs to me for participation?

There are no anticipated costs to participate in this research.

Will information about me and my participation be kept confidential?

This study is funded by National Science Foundation (NSF). It is important to note that when conducting this research, the researchers cannot guarantee the confidentiality of subjects because they cannot control what subjects might share outside of the research environment. All data will be de-identified using a coding scheme and stored by the lead investigator until data analysis is complete, by June 2027. Any electronic files will be kept in a Purdue secured share drive. Any written record of participants' responses and files of de-identified student codes will be kept in a locked file cabinet in the TRAILS research office in the Young Hall, Purdue Polytechnic. Only researchers involved in this project will have access to the data. All data will be deidentified, and the data will not be used for any other purposes aside from this research and results will be disseminated to educational research journals and all data will be deidentified. The project's research records may be inspected by the Purdue University Institutional Review Board or its designees, the National Science Foundation, and by departments at Purdue University responsible for regulatory and research oversight to ensure that participants' rights are being protected.

What are my rights if I take part in this study?

Your child does not have to participate in this research project. You may choose not to participate now, you may withdraw your participation at any time without penalty. Participation in this study will not affect your child's grade. Participants and parents/guardians of student have the right to inspect, upon request, any instrument of materials related to the research within a reasonable period of time after their request is received.

Who can I contact if I have questions about the study?

If you have questions, comments or concerns about this research project, you can talk to one of the researchers. Please contact the lead researcher, Todd Kelley at (765) 496-2383 or trkelley@purdue.edu. The email address is irb@purdue.edu. To report anonymously via Purdue's Hotline, see www.purdue.edu/hotline

If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (irb@purdue.edu) or write to:

Human Research Protection Program - Purdue University
Ernest C. Young Hall, Room 1032
155 S. Grant St.
West Lafayette, IN 47907-2114

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research study, and my questions have been answered. I am prepared to participate in the research study described above. I will be offered a copy of this consent form after I sign it.

Consent here (preferred) : https://purdue.ca1.qualtrics.com/jfe/form/SV_7Wcz39K2c7tVYkS



If you prefer, sign this hard copy and return it to your child’s classroom Teacher.

Student’s Name

Parent’s Name

Parent’s Signature

Date



Researcher’s Signature

2/1/2022
Date