

**UNIVERSITY OF GEORGIA
CONSENT FORM**

Foundational Research on the Effects of Student Constructed Multiple Representations and Student Collaborations in Solving Problems at Undergraduate Physics Courses.

Researcher's Statement

We are asking you to take part in a research study. Before you decide to participate, it is important that you understand why the research is being done and what it will involve. This form is designed to give you the information about the study so you can decide whether to be in the study or not. Please take the time to read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information. When all your questions have been answered, you can decide if you want to be in the study or not. This process is called "informed consent."

Principal Investigator: Dr. Nandana Weliweriya
Department of Physics and Astronomy
Email: nandanaw@uga.edu
Phone: 706-542-6425

Purpose of the Study

As part of a larger project to investigate problem solving processes among introductory-level physics students, we investigate how students construct and coordinate among multiple representations while solving problems.

Then, the main goal of this project is to understand students' problem solving processes with multiple representations that will ultimately lead us to develop worksheets/ activities that will help students to understand the importance of each and every semiotic resource that they might use to construct representations while solving problems.

Study Procedures

You must be 18 years of age or older to participate in this study. If you agree to participate, you will be asked to give us the permission to access your problem solving videos of PHYS 1251 or PHYS 1252 course.

In order to give us the permission you can either sign this paper copy or electronically complete and sign a similar version of this consent form.

After getting your permission, the principal Investigator (Dr. Nandana Weliweriya) and his research students will analyze your videos only for the above research purpose. None of your private information will be shared with other parties or none of your private information will be shared in research articles.

Video clips or stills may be used in presentations or publications resulting from this research. However, your name will be omitted and your face will be obscured in any such clips or stills. Beyond possible use in research presentations or publications, all video recordings will be destroyed after a maximum of three years.

Risks and Discomforts

We do not anticipate any risks or discomforts from participating in this research.

Benefits

This work will help researchers build models of student construction and use of multiple representations in physics and, more broadly, in STEM.

Privacy/Confidentiality

The data collected from you will include your videos, name, e-mail address, and UGA ID number. Your e-mail address, name, and UGA ID will be destroyed after data collection is complete. All other data will be stored electronically in password-protected files on the primary researcher's computer. Researchers will not release identifiable results of the study to anyone other than individuals working on the project without your written consent, unless required by law.

Taking part is voluntary

Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. Your decision about participation will have no bearing on your grades or standing in any class. If you decide to stop or withdraw from the study, the information/data collected from or about you up to the point of your withdrawal will be kept as part of the study and may continue to be analyzed.

If you have questions

The main researcher conducting this study is Dr. Nandana Weliweriya, a professor at the University of Georgia. Please ask any questions you have now. If you have questions later, you may contact Dr. Weliweriya at nandanaw@uga.edu or 706-542-6425. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 706-542-3199 or irb@uga.edu.

Research Subject's Consent to Participate in Research:

Please provide initials below if you agree to give us the permission to access your problem solving videos.

To voluntarily agree to take part in this study, you must sign on the line below. Your signature below indicates that you have read or had read to you this entire consent form, and have had all of your questions answered.

Name of Researcher

Signature

Date

Name of Participant

Signature

Date