Informed Consent

Please read this document carefully before you decide to allow your child to participate in this research study. Your child's participation is voluntary, and you can decline to have them participate, or withdraw consent at any time, with no consequences.

Title of the study: Gator Goldberg Engineering Explorers Summer Camp 2022

Principal Investigator: Dr. Nancy Ruzycki

Principal Investigator email: nruzycki@mse.ufl.edu

Purpose of the Study:

This study is designed to measure students' and teachers' motivation and interest for computational thinking, engineering design, use of technology and system thinking as ways to solve real-world problems as they participate in the Gator Goldberg Engineering Explorers Summer Camp 2022.

Your child's participation in this study completely optional. Your child can still participate in the camp without agreeing to join the study.

Procedure:

Your child is invited to participate in a study that aims to understand how engaging with engineering design project and computer science activities will help increase middle school students' and teachers' confidence in and increase their motivation for computational thinking, engineering design, use of technology and system thinking as ways to solve real-world problems.

If you agree for your child to participate in this study, you are allowing us to use information that is collected during normal educational practices.

If you agree for your child to participate in this study the following types of data will be collected:

- Online survey: Your response to online surveys distributed at the end of each camp day.
- Artifacts: A variety of artifacts will be collected to document the work of all participants. These may include but
 are not limited to project outputs, process maps, design products, and reflective journals that are created as ad
 hoc in order to meet the goals of the summer camp.
- Observations: Observation data in the form of field notes of face-to-face meetings may be collected to document the interactions among participants.
- Grades for science and math subjects for longitudinal study: We will be collecting the student grades for their science and math subjects for two years after the camp conclusion.
- Semi-structured interviews: Interviews lasting approximately 15-30 minutes will be conducted to gain insight into the perspective and practices of all participants. Interviews will be audio or video recorded and transcribed. Interviews will focus on the following kinds of questions:
 - o For students:
 - Describe your experiences in completing the camp activities.
 - What has been challenging for you during the camp?
 - What have you learned as a result of the camp activities?
 - For teachers:
 - Describe your experiences in completing the camp activities.
 - How has your participation impacted the way you think about teaching?
 - How do you plan to incorporate computational thinking, engineering design, use of technology and system thinking in your future classrooms?

Possible Benefits:

Our goal is to engage middle school students and teachers in summer camp activities to help improve their confidence in and increase their motivation for computational thinking, engineering design, use of technology and system thinking as ways to solve real-world problems. The study participants represent the target audience for this intervention that intends to improve the experience and outcomes for all involved. Thus, during and following development, they may

experience direct benefits in the form of increased engagement, performance and satisfaction during the weeklong summer camp.

Possible Discomforts and Risks:

Our research involves understanding how summer camp activities help improve middle school students' and teachers' confidence in and increase their motivation for computational thinking, engineering design, use of technology and system thinking as ways to solve real-world problems. As such, we envision minimal risk or harm associated with participating in this project.

Time Required and Compensation

The study will occur over 5 to 10 days, depending on the camp schedule and we anticipate requiring your child to participate daily. There will be no compensation for participating in this study.

Confidentiality

All information gathered in this study will be kept confidential. No reference will be made in written or oral materials that could link your child to this study. All physical records will be stored in a locked file cabinet and only **Dr. Nancy Ruzycki** and the independent research team will have access. When the study is completed and the data has been analyzed, the information will be shredded.

Voluntary Participation

Your child's participation is strictly voluntary. Non-participation or denied consent to collect some or all of the data listed above will not affect your child's grades or his/her status as a student. In addition, you may request at any time that your child's data not to be included.

Withdrawal from the study:

You are free to withdraw your consent to have your child participate in the study and to stop participating in this study at any time without consequence. If you choose to withdraw your child's participation from the study, any information collected from will be discarded and will not be included in the study.

Contact Information

If you wish to discuss the information above or any discomforts your child may experience, please ask questions now or contact one of the research team members listed at the top of this form. If you have any questions regarding your child's rights as a research subject, please contact the Institutional Review Board (IRBO2) office phone: (352) 392-0433 or email: irb2@ufl.edu.)

Agreement:

I have read the procedure described above. I voluntarily agree to have my child participate in the procedure have received a copy of this description.		
Parent Name	_	
Parent Signature	Date	
Name of Person obtaining informed consent	_	