

University of North Texas Institutional Review Board

Informed Parent Consent Form

Before agreeing to your child's participation in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted. We will be collecting data materials to assist with determining the effectiveness of the energy curriculum we are developing.

Title of Study: Going Green! Middle Schoolers Out to Save the World (MSOSW)

Investigator: Gerald Knezek, Ph.D., University of North Texas (UNT) Department of Learning Technologies.

Purpose of the Study: You are being asked to allow your child to participate in a research study which involves participating in a science curriculum that allows students to use energy monitoring equipment at home or in a classroom setting to build models of energy consumption under the guidance of their teachers. By the conclusion of the study, students will understand the relationship between energy, economics and climate change, and long-term interest in STEM (science, technology, engineering, and mathematics) related careers will be established.

Study Procedures: Your child will be asked to complete a brief, 25-item questionnaire about what they think makes great science curriculum. This questionnaire will be administered twice, once at the beginning of the program and once at the end. It will take approximately 15 minutes to complete the survey each time (pre-test and post-test), but will be administered in the classroom and will require no time commitment outside of class. Your child will also be asked to complete a 12-item questionnaire on whether or not a career in science would interest them. The questionnaire will be administered twice, once at the beginning of the program and once at the end. It will take approximately 10 minutes to complete and will require no time commitment outside of class.

Foreseeable Risks: No foreseeable risks are involved in this study. However, students will be required to measure electricity consumption of standard, plug-in household electric appliances, such as televisions, computers, and other 110-volt consumer appliances. This will require that students handle common 110-volt electrical cords, plugging and unplugging the cords into standard 100-volt, household electrical outlets and circuits. Students will be required to study electricity safety procedures under the supervision of a parent or guardian, and pass an examination administered by teachers, before using the monitoring equipment.

Benefits to the Subject or Others: We expect the project to benefit your child by giving them an understanding of the relationship between energy, economics, and climate change. We anticipate that long-term interest in STEM-related careers will be established. The foundation for this project strongly promotes the philosophy of "giving back" to one's community, in this case by contributing a model of energy usage. The project could be the beginning of a path toward choosing a STEM education and careers as a means of empowerment to act upon a deep student concern – saving the world.

Compensation for Participants: None

Procedures for Maintaining Confidentiality of Research Records: Only aggregate-level data (classroom averages, etc.) will be reported for outcomes of the project. Individual student data will never be used to report findings. Each student enters a pre-assigned ID number in place of their name for the purpose of initially matching pre- and post- measures and demographic information for analysis. They will not be asked to enter their names. Individual student identifiers are removed from the researchers' records once each student's pre-assessment is matched to its post-assessment. This safeguards privacy for individuals even down to the level of research assistants, etc. that may work on analysis of the data sets. The confidentiality of your child's individual information will be maintained in any publications or presentations regarding this study.

Questions about the Study: If you have any questions about the study, you may contact Gerald Knezek, Ph.D. at telephone number 940-565-4195 or by email at gknezek@gmail.com.

Review for the Protection of Participants: This research has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants' Rights: Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- The study has been explained to you and all of your questions have been answered. You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to allow your child to take part in this study, and your refusal to allow your child to participate or your decision to withdraw him/her from the study will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your child's participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as the parent/guardian of a research participant and you voluntarily consent to your child's participation in this study.
- You have been told you will receive a copy of this form.

Printed Name of Parent or Guardian

Signature of Parent or Guardian

Date

For the Investigator or Designee: I certify that I have reviewed the contents of this form with the parent or guardian signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the parent or guardian understood the explanation

Signature of Investigator or Designee

Date

Student Participant Assent Form

You are being asked to be part of a research project being conducted by the University of North Texas, Department of Learning Technologies.

This study involves participating in a new science curriculum that will allow you to use energy monitoring equipment in diverse home and community settings to build accurate, scientifically important models of energy consumption in homes and communities, under the guidance of your teachers.

In addition to the science project that will be part of your science curriculum for the year, you will also be asked to complete a brief, 25-item questionnaire about what you think makes a great science class. This questionnaire will be administered twice, once at the beginning of the program and once at the end. It will take approximately 15 minutes to complete the survey each time, but it will be administered in the classroom and will require no time commitment outside of class. You will also be asked to complete a brief, 12-item questionnaire about whether or not a career in science would be interesting to you. This questionnaire will also be administered twice, once at the beginning of the program and once at the end. It will take approximately 10 minutes to complete the survey each time with no time commitment required outside of the class. As part of instruction involved with the unit, you will be asked to complete a quiz which assesses how much information you know about energy consumption.

If you decide to be part of this study, please remember you can stop participating any time you want to.

If you would like to be part of this study, please sign your name below.

Printed Name of Student

Signature of Student

Date

Signature of Investigator

Date