

Dear Teacher,

You are invited to participate in the *Environmental Science Literacy Project*—a project that aims to develop research-based learning progressions for water, biodiversity, and carbon. It involves giving your students pre- and post-assessments on science topics. You also have the option of using curriculum materials designed by researchers, although this is not required in order to participate in the study. The pre- and post-assessments will allow researchers an opportunity to explore how students understand conceptual issues related to topics taught by you. In addition, the researchers will collect demographic information about students (e.g., race, ethnicity, socioeconomic status) and performance on other assessments (e.g., standardized assessments) using the students' state issued ID number. Since ID numbers will be used to coordinate assessment data with demographic information, the MSU researchers will not know the identities of participating students.

The researchers may also ask you to respond to questionnaires about your science teaching practices, including questions about your understanding of the science content you are teaching, the lessons you taught and your approaches to teaching those lessons, and your evaluations of teaching materials and professional development activities. You will be identified by code numbers only on these questionnaires, so the MSU researchers will not know the identities of teachers responding to the questionnaires.

Participation in this study will help researchers and teachers develop better science curriculum materials. This will provide benefit to many students and teachers beyond those directly participating in the project. Additionally, participation in this study will allow you to interact with teacher education faculty and graduate students around your teaching and provide you with a valuable professional development opportunity.

There are minimal risks associated with this study. You may choose to have your participation in this project remain confidential and your confidentiality will be protected to the maximum extent allowable by law. You are assured that every effort will be made to protect the confidentiality of information about you, for example, by keeping materials in secure locations only accessible by MSU researchers and Institutional Review Board members, and by using pseudonyms and disguising personal identifiers in any written reports, publications, and presentations. You may also choose to be acknowledged by name as a contributor to this project, and in that way you may waive your right to confidentiality. You are not required to be acknowledged as a contributor, and thus are not required to waive your confidentiality rights.

Participation will require about 4-6 hours of your time during the school year. You may discontinue your participation in this project at any time during the project period (June 2013- August 2014) without penalty. Participation is voluntary, you may choose not to participate at all, or you may refuse to participate in certain procedures or answer certain questions or discontinue your participation at any time without consequence. Your refusal to participate or decision of discontinuing the participation will involve no penalty or loss of benefits to which you are otherwise entitled.

Data from this study may be used in reports, articles, presentations, and in teacher education classes. Some data may be used in teacher support materials for units designed for the Environmental Science Literacy Project. You have the right to read prior to publication any report materials that describe you to assure your identity is adequately disguised or acknowledged (according to your choice). You have the right to review any materials that describe you before they are used in teacher support materials. After this review, you may deny permission to use those materials.

Your confidentiality will be protected to the maximum extent allowable by law. The data will be stored in locked filing cabinets at 319A Erickson Hall, East Lansing, MI for at least 3 years after project closes. The project investigators will have access to the data for research purposes. At Michigan State University, an Institutional Review Board (IRB) reviews all research studies that involve human subjects before the research can be started. Their mission is to protect the rights of research participants. IRB will have access to the research data and results.

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury (i.e. physical, psychological, social, financial, or otherwise), please contact Dr. Charles W. (Andy) Anderson, 319A Erickson Hall, Michigan State University, East Lansing MI 48824, (517) 432-4648, andya@msu.edu.

If you have any questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this research study, you may contact, anonymously if you wish, the Michigan State University Human Research Protection Program at 517-355-2180, FAX 517-432-4503, or e-mail irb@msu.edu, or regular mail at: 207 Olds Hall, MSU, East Lansing, MI 48824.

Your initials give voluntary permission for you and your students to participate in the activities you have indicated below (PLEASE INITIAL EACH LINE YOU APPROVE):

_____ The researchers may ask you to give your students pre- and post-assessments on science topics. You also have the option of using curriculum materials designed by researchers, although this is not required in order to participate in the study. In addition, the researchers will collect demographic information about students and performance on other assessments. Since ID numbers will be used to coordinate assessment data with demographic information, the MSU researchers will not know the identities of participating students.

_____ The researchers may ask you questions about your science teaching practices through anonymous questionnaires, including questions about your understanding of the science content you are teaching, the lessons you taught and your approaches to teaching those lessons, and your evaluations of teaching materials and professional development activities.

Your signature below means that you voluntarily agree to participate in this research study.

Teacher's consent _____ Date _____