



FREQUENTLY ASKED QUESTIONS PARENTS/GUARDIANS

How will participating in this project benefit our school community?

By collaborating with The University of Michigan on this new and groundbreaking research project funded by the National Science Foundation (NSF), your child's school has the opportunity to better understand the ways in which children learn. In addition, the results of this study will help us understand which teaching practices are most effective for student learning. As researchers of education and psychology, we can offer insight for teachers and administrators regarding research-based, effective instructional practices and innovations in curriculum that help develop students' academic achievement. Students will find participation enjoyable as they have the opportunity to take part in an innovative and exciting educational research project.

In addition, we recognize that agreeing to collaborate with us on this project requires effort from your child's school. As such, we will provide compensation to thank the school for their contribution to our research. We want to ensure that compensation is appropriate for students, teachers, and the school at large by providing materials, school supplies, and books that further enhance educational opportunities for all students.

Why is this project important?

We are interested in learning about how young children develop the basic cognitive and behavioral skills that are important for success in the early elementary grades. By observing children's behavior and their brain activity when they are performing simple tasks that tap into children's ability to control attention, remember information, and regulate responses, we can better understand how school and classroom experiences influence children's growth in these important abilities.

What is an ERP?

An ERP is an acronym for the term "event-related potential." The brain produces electrical signals while we think and work, and the ERP is simply a pattern of electrical signals generated in response to a specific event or task. We will be using electroencephalography (EEG) technology to measure ERPs. This will enable us to understand student learning from a new neurological perspective. Understanding student learning through this lens will allow us to establish better-informed educational practices to optimize student learning.

Is the method you will use to look at brain activity safe?

Yes! The technology we use is completely safe and non-invasive. It simply measures electrical activity on the surface of the child's head (the scalp). Many studies, including our own previous research, have used this technology with infants and young children. All materials that come into contact with your child will have been thoroughly cleaned and sterilized.

What will I have to do? What is the time commitment?

The research team will be working with each child who has provided assent (and has a consent form completed by their parent/guardian) to participate for a one-hour ERP session during which children will provide a saliva sample for genetic analysis, a separate 30-60 minute behavioral assessment, one session of classroom-based activities, and one classroom observation. We are flexible with scheduling and want to ensure that we accommodate schedules as best as possible (including before or after school, if necessary). We will ask teachers to assist us in identifying times to work with students that are least disruptive to ongoing instructional activities. We will not work with children during lunch, recess, or specials (unless directed to do so). We hope to see each participating child in kindergarten, and follow-up by testing again in first and second grades. This will help us to identify elements of schooling that relate to children's ongoing skill development.

What will my child do?

Your child will be working with trained members of our research team in a designated public area of the school, such as the cafeteria or an administrative office. One component of the assessment involves your child wearing a cap (like a winter hat or a swimming cap) equipped with various sensors. These sensors will allow us to measure children's brain activity while they participate in fun games that require paying attention and remembering information. We use small amounts of water-

based gel on various areas of the cap that will help to provide close contact between the head and each of the sensors on the cap. At the end of the session, the gel is gently removed using a disposable towel. Your child will also participate in a brief (30-60 minute) assessment involving academic and behavioral measures to help us understand what factors contribute to children's ability to regulate their behavior.

Will the cap hurt?

No, there will be no discomfort from the cap. It made of fabric mesh that will fit snugly, but will not hurt in any way. The researchers will ask several times to ensure that the child feels comfortable.

Who will be working with my child at school?

Trained research staff from The University of Michigan will be working with school staff, teachers, and children. We are a friendly and diverse group of education researchers with many years of experience working with young children in a variety of school settings. In addition, all members of our research team have successfully completed a Michigan I-CHAT background check before working with students.

I don't want information about my child to be released to the public. What will you do to ensure confidentiality?

Our research team takes data security very seriously, and we take every possible precaution to ensure that the data we collect are stored securely and confidentially in accordance with the standards of the Institutional Review Board at The University of Michigan. We plan to publish the results of this project, but we will not include any information that would identify individual children. To keep participants' information safe, all records from this study will be stored in our locked laboratory at The University of Michigan, and only trained members of our research team will have access to data resulting from this investigation. Further, to guarantee confidentiality, an arbitrary numeric ID number will identify the records of each child.

Each session may be videotaped for future coding for research purposes only. These videotapes will not be labeled with any identifying information about individual children, and will be stored in a secure cabinet within our lab at The University of Michigan.

Is my child eligible to participate?

If your child is currently in kindergarten, your child may be eligible! The information you provide on the permission form will allow us to determine the eligibility status of each child. Please be assured that the research team will not work with a child without parental permission.

What if I change my mind about participating?

Participating in this study is completely voluntary. Parents may refuse to give permission for their children to participate, or may withdraw permission for their child to be in the study for any reason, without any penalty. In addition, we will personally ask children to provide verbal assent to participate before we work with them. Thus, even if a parent gives permission, their child can decide not to be in the study or to leave the study early.

Sign me up; I'm interested in participating! What do I do next?

Great! Please fill out the consent forms provided. These forms give us permission to work with your child if he or she is eligible to participate.

Who do I contact if I have any questions or concerns about the project?

You may contact Dr. Frederick Morrison, a University of Michigan Professor of Psychology and Education, who is leading the project. His phone number is (734) 763-2214, and his e-mail address is fjmorris@umich.edu. Additionally, you may e-mail us at PathwaystoLiteracy@umich.edu and one of our project staff members will be more than happy to address any questions you have. Please feel free to visit us on the Web for additional information about our project and to meet our Research Team: <http://sites.lsa.umich.edu/pathways-lab/>