



Dear Parent or Guardian,

Hello! I'm Carmela Amato-Wierda, Associate Professor of Materials Science at the University of New Hampshire in Durham. I also lead [Manchester CREATES](#), a program funded by a Build Back Better grant from the U.S. Economic Development Administration. This program is designed to help build a skilled workforce for Manchester's growing regenerative medicine and biotechnology industries. We provide teachers with free project-based professional development in STEAM (science, technology, engineering, art, and mathematics). Your child's teacher took part in this professional development.

We are doing a research study to see how well our program works to improve STEAM teaching and get students interested in STEAM topics through project-based learning (UNH IRB-FY2024-192). Our research team includes me; Shannon McCracken Barber, Manchester CREATES Project Director; Amy Booth, statewide NH CREATES Project Director; and Eleanor Jaffee, Manchester CREATES evaluation and research partner. We are inviting your child to join the study. We plan to invite around 300 students to take part.

This consent form describes the study and helps you to decide if you want your child to participate. It provides important information about what your child will be asked to do in the study, about the risks and benefits of participating in the study, and about your child's rights as a research participant. You should:

- Read the information in this document carefully, and ask me or the research personnel any questions, particularly if you do not understand something.
- Not agree to allow your child to participate until all your questions have been answered, or until you are sure that you want to.
- Understand that your child's participation in this study involves them taking a brief (10-15 minute) survey during class time.

If you allow your child to participate in this study, your child will be asked to take a brief (10-15 minute) online survey during class. Neither you nor your child will receive any compensation for participating. Even though your child will not get direct benefits, what we learn could help other students in Manchester and beyond by making STEAM teaching better.



Taking part in this study is voluntary. If you do not allow your child to participate, neither you nor your child will experience any penalty or negative consequences. It will not affect your child's class grade or standing in any way. If you do allow your child to participate, your child may still refuse to answer any question or refuse to participate at all. If you allow your child to participate and your child wants to, and then either you change your mind or your child changes their mind, you may withdraw your child, or your child may withdraw, at any time during the study without penalty. Any data already collected as part of your child's participation will remain part of the study records.

We will be collecting identifiers at the classroom level only for this study: the school district, school, teacher, class subject(s), and grade level(s). We will NOT be collecting any individual student identifiers. However, any communication via the internet poses minimal risk of a breach of confidentiality. To help protect the confidentiality of your child's survey data, we will keep all electronic files in USNH Microsoft 365 secure cloud storage accessible only to the research team. We will report the survey results in aggregate (all grouped together) or grouped by school and/or grade level. We will never identify individual participants in our program evaluation reports or public research reports. Public research reports may include journal publications and conference presentations. The survey data will be retained for three years after the grant period (anticipated to end in April 2027, but with the possibility of renewal/extension) so that we can respond to questions about the results.

If you have any questions about this research study or would like more information before, during, or after the study, please contact Eleanor Jaffee at eleanor.jaffee@unh.edu. If you have questions about your child's rights as a research participant, you may contact Melissa McGee in UNH Research Integrity Services at 603-862-2005 or melissa.mcgee@unh.edu to discuss them.

If you permit your child to participate in this survey, please complete the opt-in form and return it to your child's teacher. Thank you for your consideration.

Best regards,
Carmela Amato-Wierda