1. What is this study about?

The project aims to understand girls’ attitudes towards technology and careers in computing, a male-dominated field. Dr. Rode hopes this study will lead to best technology design practices for young girls. Doing so will make technology more accessible to girls and in turn encourage more girls to consider careers in computing.

2. How long will it last?

We expect that your daughter will be in this study for a maximum of two years unless one of the following occurs sooner:

- Your child reaches the end of the 9th grade
- Your child stops attending AIS
- You or your child choose to stop participating in this study

3. Who will be on campus as part of the research team?

Dr. Jennifer Rode and her graduate students will conduct the study. A little more about each of them:

- Dr. Jennifer Rode: an Assistant Professor at Drexel with appointments at the University of Siegen and University College London. She did her graduate studies
at University of California, Irvine and Carnegie Mellon. Her post-doctoral work was at Cambridge University. She was one of the creators of the TiVo user interface.

- Andrea Marshall: a PhD student at Drexel and Dr. Rode’s advisee. Her research interests lay in the intersection of gender, technology, and craft; to this end she holds both an MLIS in Library and Information Science and an M.A. in Women’s and Gender Studies both from Rutgers.
- Michelle Purcell: a PhD student at Drexel. Her research interests include computer-supported cooperative work, computing education and technology-enhanced learning. She has 13 years industry experience in software and systems engineering, and holds an MS in Information Systems.
- Ajit Chandrasekar: holds a BS degree in Information Technology and is in his second year of his master’s of Information Systems at Drexel.

All members of the research team have completed the standard Agnes Irwin clearance checks, including medical, FBI & PA background checks and the PA child abuse history clearance.

4. What happens when my daughter is a part of the study?

In phase one, your daughter will be observed in classes that use technology and will be interviewed regarding her attitudes toward technology. Interviews will take place during study halls and other non-academic periods.

In phase two, based on data gained through observations and interviews, and in partnership with your daughter’s teachers, the research team will construct technology projects to enrich your daughter’s regular coursework. The project will involve new forms of computing with sensors that respond to light, movement, and heat, and output devices that include lights and buzzers. These technologies have both artistic and scientific potential, and will enrich your daughter’s curriculum by giving her exposure to “next generation” technologies.

5. What happens if I do not give consent for my daughter to be a part of the study?

Dr. Rode and her team will not interview, photograph or take notes on your daughter’s interactions with technology. The team will still be in the classroom observing and your daughter may still benefit from their presence if she seeks them out for support or mentoring.

6. Will participating in the study (or not) impact my daughter’s grades in any way?

No.

7. Do the members of the research team have prior experience with middle school girls?

The team has a range of experiences with middle school girls:
• Dr. Rode was responsible for the usability design on the widely adopted programming language, Alice. Some of your daughters have already had experience using Alice through their participation in Robotics.
• Dr. Rode has also acted as a merit badge counselor for hundreds of Girl Scouts, as well as a swimming and sailing coach. Dr. Rode is known for her research on a large European Union project creating novel technologies for classrooms, and her publication “Curriculum Centered Design” which discussed how technology design practices can enhance educational goals.
• Andrea Marshall, while new to teaching middle school girls, has substantial teaching experience. Previously, she was on the teaching faculty at Rutgers University and Middlesex County College. She has previously taught high schoolers for the Drexel Computing Academy.
• Michelle Purcell, a mother of two, serves as a mentor for her daughter's Girl Scout First Lego League robotics team. She has previously given Career Day lectures on computing for middle school students and taught high schoolers for the Drexel Computing Academy.
• Ajit Chandrasekar has previously taught high schoolers for the Drexel Computing Academy which with Dr. Rode.

8. Are there specific classes that the research team will observe for phase 1 of the study?

In phase 1 Dr. Rode’s team will concentrate its observations on any course in which technology is used.

9. In which classes will the research team concentrate its efforts in part 2 of the study?

In phase 2 Dr. Rode’s team will work with:
• 7th grade: Digital Arts.
• 8th grade: Earth Studies.

In both cases the team will work with teachers to create technology interventions that are informed by its research findings in phase 1 about girls interests in technology, and which support the teachers’ lesson plans, and adhere to best educational practices in technology.

10. Do I have to sign both consent forms (for phase 1 and phase 2) at the same time?

No, you may sign phase 1 now, and make your decision regarding phase 2 later.

11. If I change my mind and I want to retract my consent for my daughter to participate in the study, what are my options?

You may retract it anytime without penalty to your daughter.
12. If my daughter does not want to participate in the study, even though I have given consent, what are her options?

She does not have to! Before interviewing or taking notes on your daughter, Dr. Rode and her team will ask your daughter’s permission separately. Only if both you and your daughter agree will she be enrolled in the study.

Should you have any additional questions regarding this study, please contact Mariandl Hufford, Director, Center for the Advancement of Girls at The Agnes Irwin School. She is best reached by emailing her at mhufford@advancinggirls.org.