Version Date: July 2, 2015

Northwestern University School of Education and Social Policy Parent Consent Form for Research

PROTOCOL TITLE: Building on Blocks-based Programming

PRINCIPAL INVESTIGATOR: Uri Wilensky, PhD, Professor at Northwestern University **STUDENT INVESTIGATOR:** David Weintrop, Doctoral student at Northwestern University

SUPPORTED BY: Northwestern University

Introduction/Purpose

Your teen is being asked to take part in a research study. This form has important information about the reason for the study, what your teen will do, and the way we would like to use information about your teen if you choose to allow them to be in the study.

Your teen is being asked to participate in a research study investigating how high school students learn to program. The purpose of this study is to understand the influence programming environments and languages have on student learning with the goal being to design more effective programming tools for introductory computer science classrooms. Your teen is being asked to participate because he/she has enrolled in an introductory computer science course.

Procedure

As part of this study, your teen's programming class will be videotaped, the work your teen produces will be collected, and your teen may be asked to participate in short interviews about class material. Specifically, the study consists of the following:

- Researcher observations: Researchers will observe and videotape during your teen's computer science class. We will observe the direct instruction portions of the first 15 weeks of class. We will be careful not to get in the way of normal classroom activities.
- Student work: Samples of the work your teen completes in class during the first 15 weeks of class will be collected. These materials will be collected online and not interfere with normal classroom activities.
- Student interviews: Your teen may be interviewed during the workshop portions of the class. The researcher will ask your teen to think-aloud and explain their thought process during the workshop. These interviews will be video-recorded. Your teen may also be asked to participate in one-on-one interviews with the researcher. These interviews are voluntary and will occur after school or during your teen's lunch period. The interviews will last for roughly 30 minutes and ask students to talk about concepts from class and have them work through additional activities similar to those used in the class. Interviews will occur at most once a week for the 15-week duration of the study.
- Student surveys: Your teen will be asked to take a short (roughly 20 minutes) attitudinal survey three times during the study and two content assessments. All students in the class will take these assessments; only students who are consented to participate will have their responses shared with the researcher.

When we observe, we will be careful not to videotape any students that are not participating in the research. If we tape someone by accident, then we will erase them from the videotape. Your teen cannot participate in this research if they do not want to be videotaped.

Risks

IRB #: STU00097586-MOD0002 Approved by NU IRB for use on or after 8/3/2015 through 6/25/2016.

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Participation in this study may involve the following risks:

It is possible that your teen may be somewhat uncomfortable when being interviewed or observed. But we will do everything we can to minimize the discomfort. If at any time you or your teen requests us to stop videotaping, we will do so.

Benefits

There may be no direct benefit to your teen by his/her participation in this research study. However, the study has the potential to improve teaching and learning of computer science for all students.

Alternatives

You may choose not to have your teen participate in the videotaping or collection of student work. Students that do not take part in this study will still be able to fully participate in all classroom activities. If your teen chooses not to participate in the study, we will make sure that we do not videotape them and will not collect any of their course work or survey resonses. If we tape someone by accident, then we will erase them from the videotape. You also have the option to not have any of the video that includes your teen shown in scientific publications and at academic conferences.

Confidentiality

Participation in this research study may result in a loss of privacy, since persons other than the investigator(s) might view your study records. Unless required by law, only the study investigator, members of the investigator's staff, and the Northwestern University Institutional Review Board will have the authority to view your study records. They are required to maintain confidentiality regarding your identity.

The results of this study may be used for publication or presentations at scientific meetings. Your teen will be identified by pseudonym and not by name so that your teen's identity and personal information will be kept confidential. Specifically, if your teen's individual results are discussed in written form, your teen's identity will be protected by using a study code number or a pseudonym, rather than your teen's name or other identifying information. We will be careful, though, to choose excerpts to present that are not embarrassing. If your teen does not participate, then your teen's name and image will not appear in any of these video excerpts. We will never tell teachers or school administrators any personal information about your teen.

With your consent, we may also show short video excerpts of your teen's class in publications and presentations at scientific meetings. If your teen does not consent to have video of them shown in publications and presentations of scientific meetings, then his/her image will not appear in any of these video excerpts.

Financial Information

Participation in this study will involve no cost to you or your teen. Your teen will not be paid for participating in the classroom portion of the study. We will be asking students to volunteer to meet with the researcher for an interview during a time that is convenient to them (for example, during their lunch period), students will be provided with a \$5 gift certificate to Mariano's if they participate in the interview portion of the study.

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Participant's Rights

If you choose to allow your teen to be in this study, your teen has the right to be treated with respect, including respect for their decision whether or not they wish to continue or stop being in the study. Your teen is free to stop being in the study at any time.

Choosing not to be in this study or to stop being in this study will not result in any penalty to your teen or loss of benefits to which your teen is otherwise entitled. Specifically, your teen's choice not to be in this study will not negatively affect your teen's standing in their school, nor will it affect your teen's participation in other research projects or collaborations in which you allow them to participate.

If you or your teen want to speak with someone *who is not directly involved* in this research, or if you or your teen have questions about your teen's rights as a research subject, contact the Northwestern University Institutional Review Board Office. You can call them at (312) 503-9338 or send e-mail to irb@northwestern.edu.

Audio/Video Recordings

At the end of this consent form, you will be given the option to consent to have the video recordings of your teen shown in scientific publications or presentations. With your permission, we may publish and present photographs, audio recordings, and videos of your teen including his/her face when it is relevant to understanding the results of the study. No other personal information about your teen will be included in the presentation.

All video records will be kept after the end of the study. The records will always be stored on a password protected computer that only researchers have access to.

Contact Persons

If you have any questions during your time on this study, call us promptly. Dr. Uri Wilensky is in charge of this research study. You can call Dr. Uri Wilensky at (847) 467-3818 with questions about this research at any time. You can also call David Weintrop at (773) 454-1239.

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Study Summary

Your teen is being asked to participate in a research study investigating how high school students learn to program. As a participant in the study, your teen will not be asked to do any additional work beyond what is expected in the class, with the exception of optional interviews that will happen outside of class time. Participation in this study includes class observations, collection of materials produced by your teen as part of the course, and interviews with researchers about concepts taught in the class.

Consent

I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to have my teen participate in the research study described above and will receive a copy of this consent form after I sign it.

Teen's Name (prin	nted)	-	
Please initial one of	of the following to indicate your choice:		
	I agree to allow my teen to participate in this study and be videotaped during his/her class. I do not agree to allow my teen to participate in this study and be videotaped during his/her class.		
Please initial one of	of the following to indicate your choice:		
	I agree to have videos of my teen shown in scientific meetings. I do not agree to have videos of my teen sl presentations at scientific meetings.	-	
Parent/Legal Guar	dian's Name (printed) and Signature	Date	
Name (printed) an	d Signature of Person Obtaining Consent	- Date	

Parents please be aware that under the Protection of Pupil Rights Act. 20 U.S.C. Section 1232(c)(1)(A), you have the right to review a copy of the questions asked of or materials that will be used with your students. If you would like to do so, you should contact David Weintrop at (773) 454-1239 to obtain a copy of the questions or materials.