

1. Introduction

This survey has been designed to collect data on your experiences, views, and insights in computing. It also gathers data on the idea of using a robot to teach introductory computing concepts. It is being conducted by Douglas Blank, Associate Professor Computer Science, Bryn Mawr College.

Your time and effort in filling out this survey is greatly appreciated. There are about 30 questions on this survey and should take about 10-15 minutes to complete. At the end of the survey, you may optionally fill in your email address in order to be entered to win a robot. This is an anonymous survey and your email address will be separated from the rest of your answers. In addition, we will only use your email address to pick the winner of the robot. Immediately afterwards, your email addresses will be deleted.

Due to requirements of consent, you must be 18 years or older to participate in this survey. If you have any questions about the research, please feel free to contact Douglas Blank, Associate Professor Computer Science, Bryn Mawr College at: dblank@brynmawr.edu or 610-526-6501. If you have any questions about your rights as a research participant, please contact Leslie Alexander, Professor and Chair, Bryn Mawr College IRB at: lalexand@brynmawr.edu or 610-520-2635.

Thank you again for taking the time to fill out this survey!

2. General Information

1. Your current age:

- 18 - 22
- 23 - 29
- 30 - 39
- 40 - 49
- 50 - 59
- Over 60

2. Your gender:

- Male
- Female

3. Your ethnicity:

- African
- Asian
- Caucasian
- Hispanic
- Other

4. Highest level of completed education:

Education Survey

- Middle School
- High School
- Undergraduate Degree
- Masters Degree
- Postgraduate Degree

5. Which of the following statements would you say best describes you?

- I take life easy
- I live a balanced life
- I work hard and play hard
- I am an overachiever

6. Do you own a computer? If yes, is it your own or is it shared with others?

- No, I do not own a computer
- Yes, my own
- Yes, shared

7. When were you first exposed to computer programming?

- I have never been exposed to computer programming
- Before middle school
- In middle school
- In high school
- In college
- After college

8. Have you taken a computer programming course?

- Yes
- No

9. Which, if any, programming languages have you used? (check all that apply)

- None
- Java
- Scheme
- Python
- Visual Basic

- C/C++/C#
- Other (please specify)

Other

10. In your opinion, women don't tend to take computer programming courses because (check all that apply):

- Women are not engaged by the topics taught in these courses.
- The courses are too hard for women
- Women aren't good at computer programming
- Women are discouraged from taking these courses
- Women don't want to be seen as "nerds"
- The field is biased against women
- Women find the environment uncomfortable
- Women aren't prepared for these courses
- Teachers and professors alienate women who take these courses.
- Other (please specify)

Other

3. Your first computer programming course

The following questions are about the first computer programming course that you took.

1. When did you first take a computer programming course?

- Before middle school
- In middle school
- In high school
- In college
- After college

2. How would you rate your teacher in that first programming course?

- Incompetent
- Barely competent
- Competent
- Excellent

3. My first computer programming textbook was:

- I don't remember
- I didn't have a textbook/I didn't use it
- Terrible
- Not very helpful
- It was ok
- Very helpful
- Excellent

4. Which of the following categories best describe the type of programming course that you first took?

- Computer Science
- Computer Engineering
- Information Technology
- Computer Information Systems
- Business
- Mathematics
- Other (please specify)
- Other

5. I had at least one computer programming course which was designed to be a "weed-out" course (e.g., the instructor was hoping to pass only the best, and discourage the rest).

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

6. My first computer programming course made me want to learn more about computing.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

7. Approximately what percentage of your entire class/grade took a computer programming course, when it was first offered?

- Less than 10%
- About 25%
- About 50%
- About 75%
- Over 90%
- Nearly 100%
- I don't know/remember

8. Approximately what percentage of your first computer programming course was male?

- Less than 10%
- About 25%
- About 50%
- About 75%
- Over 90%

Nearly 100%

I don't know/remember

4. Additional Education, Other topics

1. Computer programming courses would be more interesting if students were given the task of programming robots.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

2. A student who took a course which featured the task of programming a robot would lead the student to take a subsequent computing course and learn more about programming.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

3. Suppose that an introductory computer programming course uses robots to help teach the course. Do you think that the appearance of the robot affects a student's decision about enrolling in the course?

Yes

No

The following are images of robots that could potentially be used in a computer programming course.



Robot A



Robot B

Robot C



Robot D

Robot E



Robot F

4. Please rank the robots shown above in order of their appeal (1 being the most appealing, and 6 being the least appealing)

	1	2	3	4	5	6
Robot A	jn	jn	jn	jn	jn	jn
Robot B	jn	jn	jn	jn	jn	jn
Robot C	jn	jn	jn	jn	jn	jn
Robot D	jn	jn	jn	jn	jn	jn
Robot E	jn	jn	jn	jn	jn	jn
Robot F	jn	jn	jn	jn	jn	jn

There are two robots shown below



Pleo, the Dinosaur Robot



Gyro, the robot on wheels

5. Which of the two robots shown above do you like better?

Pleo, the Dinosaur Robot

Gyro, the robot on wheels

Here is another set of images, displaying robots which could be used in a computer science course.



Robot A



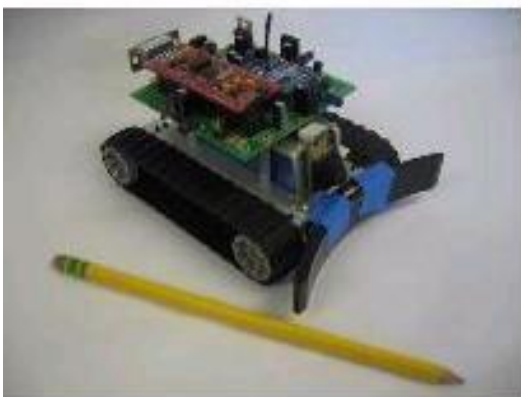
Robot B



Robot C



Robot D



Robot E



Robot F



Robot G



Robot H

6. Please rank the robots shown above according to their appeal (1 being your favorite, and 8 being your least favorite.)

	1	2	3	4	5	6	7	8
Robot A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Robot B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Robot C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Education Survey

Robot D	jn	jn	jn	jn	jn	jn	jn	jn
Robot E	jn	jn	jn	jn	jn	jn	jn	jn
Robot F	jn	jn	jn	jn	jn	jn	jn	jn
Robot G	jn	jn	jn	jn	jn	jn	jn	jn
Robot H	jn	jn	jn	jn	jn	jn	jn	jn

Please select how much you agree or disagree with the following statements.

7. Creativity is an important aspect of computer programming.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

8. A programmer needs to be creative.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

9. What do you think of women and their interest in computer programming?

Most women are very interested in computer programming.

Most women have moderate interest in computer programming.

Most women have little or no interest in computer programming.

10. Computer programming requires long hours of tedious work.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

5. Email Address to enter the lottery

Thank you for taking the time to fill out this survey. Your time and effort are greatly appreciated. Please enter your email address below to be registered for the lottery to win a robot. We will delete your email after the drawing, and your email address will never be associated with your other answers.

1. (Optional) Enter your email address to be entered into the drawing: