

Post-Experiment Questionnaire

The questions below must be answered by the proctor before providing the survey to the participant. **If you are not a proctor, please ask the proctor for assistance.**

* Indicates required question

1. What is the participant identification number? *

2. Did you save the participant's solution in the FlexPendant using the participant's identification number as the filename?

If not, what is the file name? Write it down in the "Other" option.

Mark only one oval.

☐ Yes

☐ Other:

3. Did the participant complete the experiment following ALL the software requirements established?

Mark only one oval.

☐ Yes

☐ No

☐ Other:

4. Do you have any other comments regarding the execution of this experiment (e.g., problems, bugs, delays)?

Demographic Questions

Please answer the questions below about your profile as a software developer.

5. How many years of experience do you have in computer programming? *

Mark only one oval.

☐ No programming experience

☐ Less than 1 year of programming experience

☐ 1 - 3 years of programming experience

☐ 4 - 5 years of programming experience

☐ More than 5 years of programming experience

6. How many years of experience do you have with block-based programming languages (e.g., MIT Scratch, Blockly)? *

Mark only one oval.

- ☐ No experience
- ☐ Less than 1 year of experience
- ☐ 1 - 3 years of experience
- ☐ 4 - 5 years of experience
- ☐ More than 5 years of experience

7. How many years of experience do you have with robot programming languages (e.g., URScript, RAPID, KRL)? *

Mark only one oval.

- ☐ No experience
- ☐ Less than 1 year of experience
- ☐ 1 - 3 years of experience
- ☐ 4 - 5 years of experience
- ☐ More than 5 years of experience

8. Define your level of experience with robotics: *

Mark only one oval.

- ☐ No experience
- ☐ Limited experience
- ☐ Moderate experience
- ☐ Experienced
- ☐ Highly experienced

9. (If applicable) What year are you in college?

If you are not an undergraduate student, please use the Other field to indicate your status (e.g., Ph.D. Student, Masters Student, etc)

Mark only one oval.

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Other: _____

Learning Experience

Please answer the questions below about your learning experience.

Computer Programming

The questions below are about your learning experience with computer programming.

10. (If applicable) When studying computer programming, what types of learning materials do you use the most?

Check all that apply.

- ☐ Videos (e.g., YouTube, Udemy)
- ☐ Textbooks
- ☐ Audiobooks
- ☐ Online Communities (e.g., Reddit, Stack Overflow)
- ☐ Lecture Materials (e.g., In-Class Slides, Lecture Notes)
- ☐ Chatbots (e.g., ChatGPT)
- ☐ Technical Documentation
- ☐ Other: _____

11. (If applicable) What challenges do you typically face when consuming computer programming learning materials?

Check all that apply.

- ☐ The materials do not provide the sufficient or required information
- ☐ The information and resources are not always accessible
- ☐ The information and resources are not in a form that is readily useable
- ☐ The information and resources are not concise and clear
- ☐ The information and resources are not organized into logical and understandable components
- ☐ The information and resources provided are not up to date
- ☐ Other: _____

Robot Programming

The questions below are about your learning experience with robot programming.

12. (If applicable) When studying robot programming, what types of learning resources do you use the most?

Check all that apply.

- ☐ Videos (e.g., YouTube, Udemy)
- ☐ Textbooks
- ☐ Audiobooks
- ☐ Online Communities (e.g., Reddit, Stack Overflow)
- ☐ Lecture Materials (e.g., In-Class Slides, Lecture Notes)
- ☐ Chatbots (e.g., ChatGPT)
- ☐ Technical Documentation
- ☐ Other: _____

13. (If applicable) What challenges do you typically face when consuming robot programming learning materials?

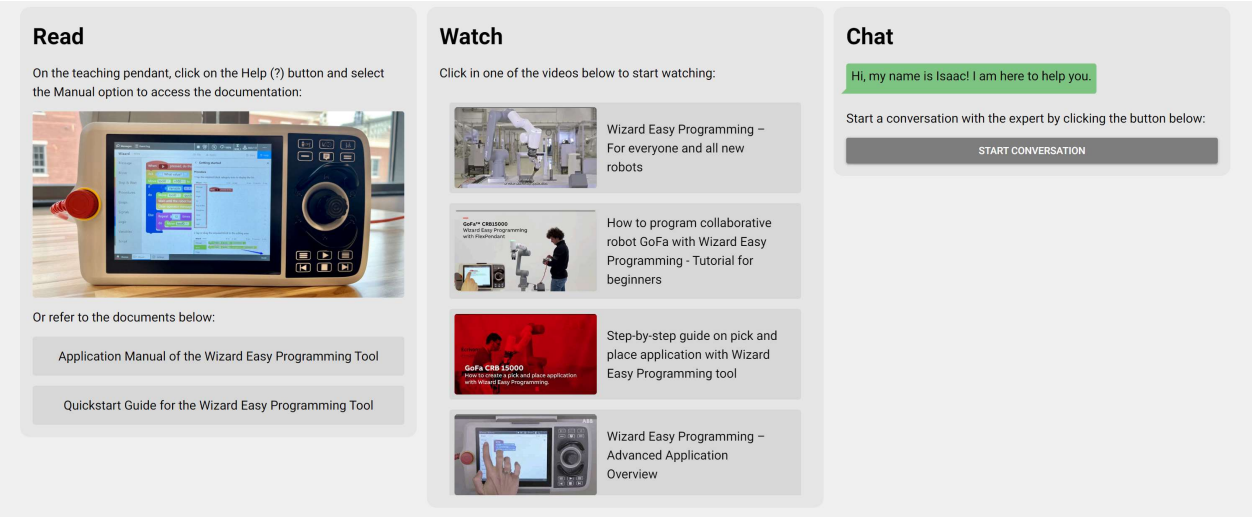
Check all that apply.

- ☐ The materials do not provide the sufficient or required information
- ☐ The information and resources are not always accessible
- ☐ The information and resources are not in a form that is readily useable
- ☐ The information and resources are not concise and clear
- ☐ The information and resources are not organized into logical and understandable components
- ☐ The information and resources provided are not up to date
- ☐ Other: _____

Feedback about our experiment

Please answer the questions below regarding your experience in our robot programming experiment.

Figure 1. Learning materials available on the desktop computer



14. What categories of learning materials available on the desktop computer were useful to solve the robot programming task? *

Check all that apply.

- ☐ Read
- ☐ Watch
- ☐ Chat
- ☐ No categories were useful for me
- ☐ I did not use the desktop computer

15. Do you have any positive or negative comments regarding the learning materials available on the desktop computer? List them below.

Based on your experience with the learning materials provided, rate your agreement with the following sentences:

16. A. “The learning materials provided me with sufficient and required information” *

Mark only one oval.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neither Agree or Disagree
- ☐ Agree
- ☐ Strongly Agree
- ☐ I did not use the desktop computer

17. B. *“The information and resources provided were always accessible”* *

Mark only one oval.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neither Agree or Disagree
- ☐ Agree
- ☐ Strongly Agree
- ☐ I did not use the desktop computer

18. C. *“The information and resources provided were in a form that is readily useable”* *

Mark only one oval.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neither Agree or Disagree
- ☐ Agree
- ☐ Strongly Agree
- ☐ I did not use the desktop computer

19. D. *“The information and resources provided were concise and clear”* *

Mark only one oval.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neither Agree or Disagree
- ☐ Agree
- ☐ Strongly Agree
- ☐ I did not use the desktop computer

20. E. *“The information and resources provided are well organized into logical and understandable components”* *

Mark only one oval.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neither Agree or Disagree
- ☐ Agree
- ☐ Strongly Agree
- ☐ I did not use the desktop computer

21. F. *“The information and resources provided are up to date”* *

Mark only one oval.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neither Agree or Disagree
- ☐ Agree
- ☐ Strongly Agree
- ☐ I did not use the desktop computer

22. If you disagree or strongly disagree with one of the sentences above, please list your reasons for choosing such rates.

Conclusion

23. Do you have any positive or negative comments about the block-based language you used in this experiment? Feel free to share as many details as you want.

24. Do you have any additional comments about your experience in our experiment? Feel free to share any positive or negative feedback about your experience.

25. If you are in a class where your participation in this experiment will give you extra points, feel free to provide your first and last name and the class you are attending below (e.g., CMSC 425), so we can notify your professor about your participation.

Keep in mind that by writing your name below, you allow us to save and share your name with your professor. Your name will not be used for research purposes, and will be deleted from our data once your professor is notified.
