To Block or Not to Block Part 2

CS Education Week 2

Slides: 🗖 To block or not to block

Preparation

Goals and Outcomes: PACE-internal

- Introduce students to block based programming and tools that are available to facilitate learning this way
- Facilitate a productive discussion that allows students to think critically about the benefits of block based programming versus text

Goals and Outcomes: Student-facing

- I will learn block based programming and interact with a fun tool that utilizes it to teach computer science
- I will engage in a discussion that allows me to think critically about what the benefits and drawbacks of block based programming are for all ages

Script

Last week recap (5 minutes)

- Recall last week we discussed:
  - What does code look like?
    - What are some common components of code?
    - What do you think of when you think of code?
  - Block Programming
    - What is nice about block programming?
    - Do you like the colors?

Looking into the Research Discussion (10-15 minutes)

- Facilitate a discussion around the following question(s), pick ones you see fit, feel free to add others:
  - Text vs. block based programming for…
    - English language learners
    - Visually impaired programmers
    - Other uses?
  - Do you have a preference for either? Why or why not?
    - Possible use cases?
- 📄 Abstracts Week 2
  - Have the students skim the abstracts
    - Some sentences have been highlighted
  - Facilitate a discussion around the following question(s), pick ones you see fit, feel free to add others:
    - What are some of the differences when thinking about block based programming for students versus with industry level tools?
  - ~~Other examples that might come up in conversation:~~
    - ~~Product design~~
    - ~~Stock images for websites~~
    - ~~Ads / marketing~~
    - ~~Someone trying to learn new artistic styles~~
    - ~~Someone who can't draw but has a vision for a design and wants to share it with someone else…~~
  - ~~Consider having people try out some of these uses by putting them into DALL-E~~

Activity (10-15 minutes)

- Have students explore some more block based coding tools:
  - https://developers.google.com/blockly
  - https://scratch.mit.edu/
  - https://www.codeforlife.education/
  - https://www.vexrobotics.com/vexcode/vr
- Thought questions while exploring:
  - What are some common patterns in block based coding tools?
  - Which of the tools we have explored do you like most?

Post-session

- Check in with the student(s) who you noticed might need more support during session (e.g. Looked overwhelmed/lost etc)
- Fill out the [LINK]
    - What activities did you do
    - How did they go
        - Could ask what their favorite part of the session was
    - Any concerns