INTERVIEWING STUDENTS ABOUT SCRATCH PROGRAMMING EXPERIENCES

One approach to assessing learners' development as computational thinkers is to engage them in conversations about their projects and processes. These interview questions can be used to engage learners in conversations about their programming experiences at the beginning, middle, and end of their Scratch experience.

AT THE BEGINNING OF THE SCRATCH UNIT

Defining Scratch
Ask the learner to define Scratch, and explain its functionality.
1. If a friend wasn't here today and asked you what Scratch is, and what you can do with it, what would you tell them?

Project Feedback
Share two Scratch projects with the learner and ask them to provide feedback to the project creator for one of the projects.
2. Is there anything you would want to ask the creator before giving them feedback?
3. What suggestions would you give the creator for improving the project? How do you think they could make it more interesting or fun to play with?
4. Any ideas for how you would do this?

Debug It
Present the learner with a Debug It! challenge from Scratch Curriculum Guide, available online at http://scratched.gse.harvard.edu/guide
5. What's going on?
6. How would you fix it?
7. Want to give it try and do what you told me?
8. Did it work like you expected it to work?
9. Can you tell me what you think is going on after your changes?
10. (*If the learner is not able to debug the project*) Before we move on, where would you go for help if you wanted to fix this?

Project Process
Now that the class has been introduced to Scratch, ask the learner about their planning and development process for future Scratch projects.
11. (*If the learner has had the opportunity to start building up a larger project*) I saw that you were making *X*. What do you hope this will eventually look like or do? What do you think you'll need to do to make this?
12. I know you've only just started with Scratch, but after seeing the kinds of things you can do with it, what kinds of projects could you imagine wanting to make?
13. What made you think of that?
14. What might you need to do to create the project you just described?
15. Where would you go to get help for doing different things in Scratch?

DURING THE MIDDLE OF THE SCRATCH UNIT

Defining Scratch
Ask the learner to define Scratch, and explain its functionality.
1. If a friend wasn't here today and asked you what Scratch is, and what you can do with it, what would you tell them?

Project Feedback
Share two Scratch projects with the learner and ask them to provide feedback to the project creator for one of the projects.
2. Is there anything you would want to ask the creator before giving her feedback?
3. How do you think the project could be improved? What suggestions would you give the creator to make the project more interactive?
4. Any ideas for how you would do this?

Debug It
Present the learner with a Debug It! challenge from Scratch Curriculum Guide, available online at http://scratched.gse.harvard.edu/guide
5. What's going on?
6. How would you fix it?
7. Want to give it try and do what you told me?
8. Did it work like you expected it to work?
9. Can you tell me what you think is going on after your changes?
10. (*If the learner is not able to debug the project*) Before we move on, where would you go for help if you wanted to fix this?

Project Process
Now that the class has been introduced to Scratch, ask the learner about their planning and development process for a current Scratch project.
11. Please show me a project you created or are currently working on. What is the project about? Why did you choose this project to share?
12. (*If the project is a work-in-progress*) What do you want your project to look like and do? What do you think you'll need to do to make this?
13. Where did you get that idea? What made you think of that?
14. Did you plan this project before you started programming? If yes, what did you do to plan for it? Did the plan change at all over time? How?
15. Can you share what you've done so far to make your project? (*Ask about specific project elements – e.g., how did you get the ball to bounce is a different direction every time it hits the wall?*)

AT THE END OF THE SCRATCH UNIT

Defining Scratch
Ask the learner to define Scratch, and explain its functionality.
1. If a friend wasn't here today and asked you what Scratch is, and what you can do with it, what would you tell them?

Project Feedback
Share two Scratch projects with the learner and ask them to provide feedback to the project creator for one of the projects.
2. Is there anything you would want to ask the creator before giving them feedback?
3. How would you extend or expand on this project? What suggestions would you give the creator to make the project more interactive?
4. Any idea how you would do this?

Debug It
Present the learner with a Debug It! challenge from Scratch Curriculum Guide, available online at http://scratched.gse.harvard.edu/guide
5. What's going on?
6. How would you fix it?
7. Want to give it try and do what you told me?
8. Did it work like you expected it to work?
9. Can you tell me what you think is going on after your changes?
10. (*If the student is not able to debug the project*) Before we move on, where would you go for help if you wanted to fix this?

Project Process
Ask the student about their planning and development process for a recently completed Scratch project.
11. Can you tell me how you got the idea for that? What made you think of that?
12. Did you plan your project before you started programming? If yes, what did you do to plan for it?
14. Can you describe what you did in Scratch to make your project? (*Ask about specific project elements – e.g., how did you get the character to disappear and reappear later in the story?*)
15. Were there things that were particularly challenging? How did you figure out how to do that? Where did you go for help?
16. (*Look for any borrowed or imported assets (images, sounds) in the project*) Where did you get those? What made you choose those?
17. What are you most proud of about your project? What did you enjoy most about the process? What would you change? Why?
18. Did you share your project with anyone? If yes, who did you share it with? How? If no, do you plan to share it with anyone? Why or why not?