

24 January 2010

Scratch Educator Conversation 1: Scratch Lesson Design

Ai Boon (Singapore), Frank (Spain), Karen (USA), Patrice (USA), Rana (Saudi Arabia)

Question: What is your design for Scratch lessons?

1. Introducing Scratch

We shared the way we introduced Scratch to students. Karen, Frank and Patrice used similar methods. They taught a little bit at the beginning and then left the students on their own to figure it out. Rana and Ai Boon did step-by-step teaching.

We talked about goals for some of our Scratch projects with students

- a. The end goal for Karen's students (in one class) was to create a computer game and through the process the students arrived at the solution with help from the teacher and each other.
- b. The end goal for Frank's students was to create a computer game and to teach their parents who were invited to the school for the final session where they had the opportunity to play the games their children created.
- c. The end goal for Patrice's students was for them to understand programming concepts.
- d. Rana and Ai Boon's students accomplished the task agreed upon.

2. Balance between learning technology skills and curriculum needs

We spent some time discussing the dilemma of balancing the needs of meeting curriculum goals versus the desire to teach more Scratch skills. It was discovered that the same problems surfaced in different countries – other teachers find it hard to accept that Scratch can be a great tool to complement the teaching of curriculum subjects. Time constraints and the need to complete curriculum in time for students to take standard tests may be the primary barriers to a more open acceptance of Scratch as a teaching tool.

The solution to the above dilemma may be the integration of technology lessons with curriculum lessons in such a way that Scratch can be used to teach the subject. For example, Math is a subject where Scratch can be used as an effective teaching tool.

3. Free-play vs direct instructions

It was hard for teachers to find a good balance between the amount of space to give their students to explore Scratch on their own against giving them direct instructions so that they can accomplish their work in a given time. Most of the time, students did not have that many technology hours in their time-tables. Some kids are also not used to thinking and the teacher has to decide whether to give them more direct instructions so that they can complete the work set for them. However, if the goal of the work is for the children to become creative thinkers, then they need to be given more space.

4. Peer teaching

Peer-to-peer teaching appears to be a more powerful method than teacher-directed instructions. Rana suggested that a question-based lesson would be good for the students. Kids love Scratch and giving them the opportunity to teach Scratch skills to others is good. They learn better from one another. The disadvantage is that some kids will just remain stuck in a groove and the teacher will have to be alert to spot these students and steer them towards their goals.

5. Younger vs older students

The younger students may not have the skills needed to do more demanding projects and Patrice and Karen shared the frustration of trying to balance the desire to allow them more time to explore drawing a sprite or background repeatedly vs the desire to direct them to move to the next stage of making a project. It was generally agreed that the goal of the lesson will help the teacher to focus and bring the student's focus to the work at hand.

6. Using the right vocabulary

Rana felt that it was important for teachers to use computer language vocabulary in their Scratch lessons so that students will find it easier to apply what they learn in Scratch when they are placed into a computer programming class in the future.