

Using Scratch in Multiple Settings: Productive Intersections for Learning and Identification

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An Accidental Story

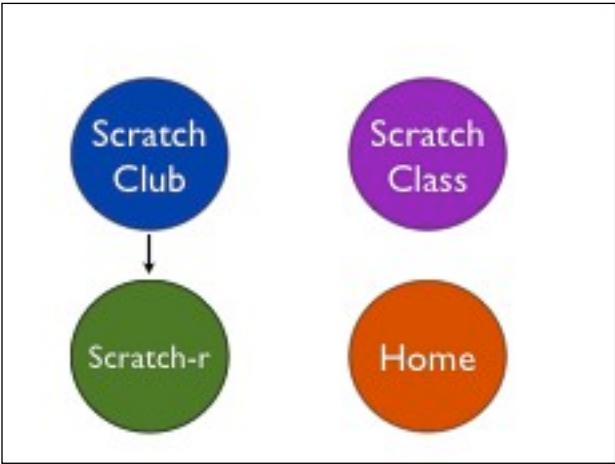
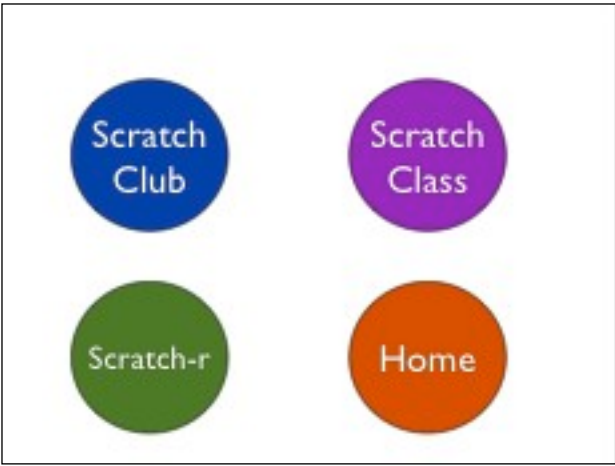
- An accident of using Scratch in two settings in the same semester
- What positive effects did this have?
 - Why did it work?
- What inherent challenges are there in using a common tool in multiple settings?



Free choice
Individual projects
Movies, games, stories, art
Everyone new to Scratch
What's programming?
10 kids
February - March 2008

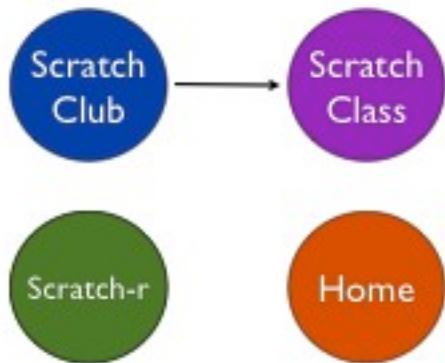


Structured
Group projects
Geometric art projects
Experts/Novices
We're programming
40 kids
April 2008





Ninja Showdown II (Remix)
by Tyrone



Opportunities to Be Experts

- Teacher framed Club members as "experts"
BUT...
- Not initially accepted by peers
 - Low level questions asked by novices (accepted)
 - Higher level comments ignored
- The more you know, the more you realize you don't know
- The power of peers to construct each other

The problem of being recognized as an expert

DAY 3 of small group work:

[00:14:04.09]

Tyrene: You're supposed to take "hide" out of this. (Standing and pointing at screen.) ... [20 seconds]

(Tyrene stands and points at the screen again.)

Tyrene (Suggested): That's a "STAMP"! Take "hide" out!

Diana: Okay.

Carissa (Annoyed): Where!

Tyrene (standing up again to point): Here! Take "hide" out!

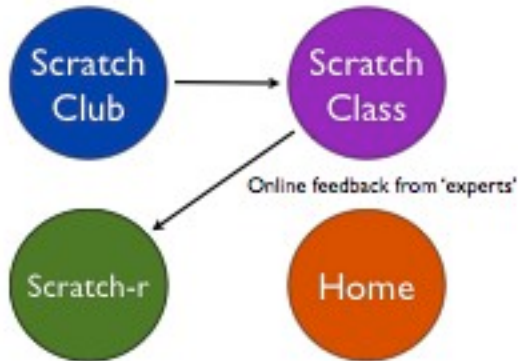
Diana: No, take "stamp" out...

Tyrene (suddenly calm voice): Yeah, take "stamp" out too.

Carissa: 'Cause we don't need this.

Tyrene: Right!

(The girls look at the screen, heads on hands. Tyrene sits back and is quiet.)

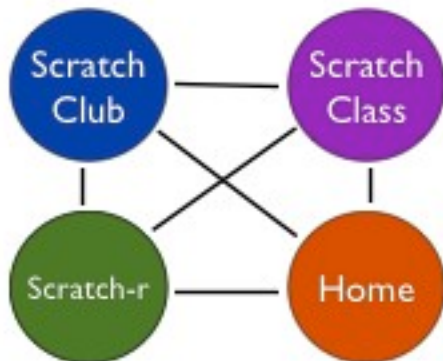


Using the Online Environment

- Exposure to a broader community
 - Exposure to different kinds of projects,
 - Opportunity to use this at home
- 'Authentic' feedback from the community
 - Revised projects!

Opportunities from Club to Class

- For the 'experts':
 - Be framed as an "expert"
 - Go deeper into Scratch
 - Use new kinds of scripts
 - Use new kinds of strategies
- For the 'novices':
 - Exposure to using Scratch in other ways than the Class (i.e., personal interests)
- For the teacher: Local experts (peer pedagogy)



Brokering a Narrative to Get Respect at Home

Tyrone: "So I passed the ISEE, I got better at basketball. **And I became the fifth best Scratch user at [school].**" (Looking steadily at his parents at the end).

Tyrone: So on math, the big idea was the system of patterns, patterns and rhythms. And the item I selected, items were Scratch and geometry. And here is our Scratch project. (Deploying his project on the smart board.)

Teacher: While it's loading, can you explain what Scratch was and how you were using it... just give your parents a little background.

Tyrone: Well, **we were using Scratch to. Well, uh do geometry.** So we put our projects on, and yes.

Father: **What is Scratch?**

(Mother grinned at Dad as James got ready to start the Scratch project.)

Tyrone: **It's computer programming.**

Father: "Kay."

What are the opportunities for identity and learning when we use Scratch across different spaces?

When Scratch Acts as a Boundary Object

- Scratch as a "Boundary Object" (Star & Griesemer, 1989)
 - 'plastic' enough to be used in multiple settings with different meanings
 - 'robust' enough to maintain a common identity across sites
 - "... different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation." (p. 393)

Narratives that can travel across boundaries

- "I'm a Scratch Expert"
 - Abstract, narrative that can travel
- In order to travel:
 - Needs to encompass multiple values (personal, parents, class, peers...)
 - Needs to be brokered (e.g. Hargis, 1998) (by self, teacher, parents, club leader...)
 - It's going to look a little different...