

Title of Session: Learning to Play with Squeak

Moderator: Randall Caton

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Room: Randall Caton's Office

RandallCa: What questions can I answer about Squeak?

BjB: how about giving an overview of what Squeak does and its purpose

RandallCa: Squeak is a playground for thinking, It is a multimedia authoring tool that allows young learners to simulate the physical world using mathematics. Because it uses programming tiles, it is very accessible to 10 year olds - but adults have fun with it also.

BjB: the purpose of squeak is to teach math in a different way?

PeggyG joined the room.

BjB: Hi, Peggy. Welcome!

RandallCa: Hi Peggy.

RandallCa: Squeak is a multimedia authoring and learning environment. Squeak is free and open source. Etoys is a part of Squeak that can be used to teach mathematics, science, computer science and more to young learners.

RandallCa: Peggy, do you have questions about Squeak?

PeggyG: Hi-I've been struggling trying to figure out how to join you. I just logged out and logged back in and am so happy it worked. I've been looking forward to this for a couple of weeks.

BjB wonders if Peggy was at the festival?

PeggyG: Actually I have a lot of questions. No I wasn't at the festival.

BjB: Randy, can we start with introductions?

PeggyG: I had previously downloaded Squeak and explored it but haven't used it.

RandallCa: Peggy - go ahead

RandallCa: Peggy. Did you see how the interface works?

PeggyG: I'm Peggy and am a very recently retired university professor, previously an elementary principal for 25 years. I am an avid tech user and want to stay current with the latest tools.

PeggyG: Interface--sort of. I viewed the sample projects and tried to create one months ago.

RandallCa: I'm Randy a soon to retire university physics professor who loves education at any level.

DavidW . o O (a good thing!)

RandallCa: Peggy - what is one of your questions

PeggyG: It's retirement that allows us to have time to explore these great tools!!

RandallCa: yes!

PeggyG: I could use some help/guidance about how to navigate. I'd also be interested in hearing more about how this is actually used in classrooms. It seems like a pretty big learning curve.

RandallCa: The best use of Squeak is to have students create their own projects because that is the deepest learning.

PeggyG: I also downloaded Scratch and would like to know the differences between Scratch and Squeak.

RandallCa: The Japanese are masters at this and have even had elementary students create games with Squeak.

PeggyG: What kind of instruction do you need to provide to elementary students to allow them to create their own projects? Do you just turn them loose and let them discover/explore on their own?

RandallCa: It is a bigger learning curve for adults. Kids pick it up in a snap.

PeggyG: I thought that might be true. :-)

RandallCa: It helps to go over an example and give them the Quick Start guide available at Squeakland.

PeggyG: If that's true then how do you entice teachers who aren't necessarily comfortable with new technology to try it with their students?

RandallCa: Once they see how the viewer and tiles work, they are very excited to explore

their ideas.

RandallCa: I am a step behind - sorry.

PeggyG: So do you just guide them through the example and quick start guide?

RandallCa: You have to convince teachers to not be afraid that their students may pick up things faster than them.

PeggyG: How do you talk to teachers about how to address standards using this tool? They are all worried about NCLB requirements for high stakes testing.

RandallCa: There are several good suggested projects at Squeakland and a teacher could just turn their students loose on them.

PeggyG: I think they would be worried that this will take too much of their instructional time.

RandallCa: I have created several learning projects that are standards based.

PeggyG: How do I find them?

RandallCa: I always try to leave challenges for students to go further, but the teachers and students have something to start from.

RandallCa: They are at www.pcs.cnu.edu/~rcaton/squeak.html

PeggyG: I think the students will love it. I'm just thinking teachers may feel it takes too much time to accomplish the math goals. How long would it take to create a project from start to finish--knowing that they can be simple to complex.

RandallCa: My approach is a compromise between teachers feeling comfortable and students having to start from scratch.

RandallCa: Simple projects can take a few minutes. More complex days.

PeggyG: When I clicked on the link, even holding down the control key it took me off your site and away from the discussion. I'm on a Mac. Does that make a difference?

RandallCa: A lot of my projects have graphics which aren't needed and take more time.

RandallCa: It shouldn't.

PeggyG: How do you select a different graphic than the cat that came up on startup?

BjB: you shouldn't have any problem with pop ups if you're on a mac, Peggy. Clicking

on the link opens a new window

RandallCa: Don't you have two windows? My URL and Tappedin?

PeggyG: It didn't open a new window. It went to a new tab on Firefox. I lost your Tapped In site when I did that.

RandallCa: Is Squeak installed on the computer you are using?

RandallCa: Can't you click back and forth between tabs?

BjB: ahhh...if you're using tabbed browsing, you'll have to look at Randy's url tab and then come back to the Tapped In tab

BjB . o O (just don't close the tabs or you'll lose everything)

PeggyG: Yes it's installed. Should I open it for our discussion?

BjB: <http://www.pcs.cnu.edu/~rcaton/squeak.html>

PeggyG: OK-I'm looking at the URL you gave. Any directions?

RandallCa: Once at my web site there are several choices. Get to a page with projects and click on one to open it.

RandallCa: Try the first link which is just playing with Squeak.

SusanR joined the room.

PeggyG: I opened the Introduction link.

SusanR listens

PeggyG: I'm on the mouse project page. Looks scary! I don't understand what to do with all of those boxes.

RandallCa: Peggy - are you in Squeak?

PeggyG: Yes I think so.

RandallCa: Peggy - those boxes are scripts.

PeggyG: Big grin! I did recognize that they were scripts but I didn't know what to do with them.

RandallCa: Peggy - hold down the apple key, grab the mouse and move him.

PeggyG: When I opened the Squeakland page it is all blank except for the two buttons on the bottom of the page-navigator and supplies. What do I do first?

RandallCa: Click the supplies tab.

PeggyG: Moved the mouse. :-) Now what??? :-)

RandallCa: Supplies pop up.

PeggyG: Yes I see lots of different colored buttons around the mouse.

RandallCa: Drag the ellipse out onto the blank area.

PeggyG: Should I be in the application or the mouse project?

RandallCa: Peggy - we are doing two different things. On my mouse project it should have drawn a line as you moved it.

BjB: the ellipse is in tools

PeggyG: Ahh--found it and dragged it onto the screen. :-)

RandallCa: Let's look at the blank page with the supplies. That will be more productive.

RandallCa: Good.

PeggyG: I'm there. :-)

RandallCa: Now hold down the apple key and click on the ellipse. What do you see?

PeggyG: Buttons :-)

RandallCa: Good. That is a called a halo. Click on the blue button on the left.

RandallCa: For the rest - Peggy and I are working on Squeak.

RandallCa: Chime in with questions you have.

PeggyG: If I'm the only beginner here I'm happy to listen and watch and learn from others.

RandallCa: Please continue - did you click on the blue button?

PeggyG: There seemed to be 2 blue buttons- one created a script box.

RandallCa: The blue button gives you the viewer.

PeggyG: Is it an Ellipse viewer?

RandallCa: It's the light blue button.

RandallCa: Good.

RandallCa: Do you see a category called basic.

RandallCa: Do you see a forward by tile?

PeggyG: When I clicked on that button I got a popup box. I see the basic tab.

PeggyG: I see forward by with a number 5 and pull down menu.

RandallCa: Yes! drag that tile out onto the big blank area

PeggyG: It's on the screen now.

RandallCa: The tile will have a red circle around it.

RandallCa: Good. Press the yellow exclamation mark.

PeggyG: Oh dear. The one I dragged onto the screen is the box that says Ellipse forward by "5"--no red circle around it.

RandallCa: It should go forward.

RandallCa: That is okay. The red circle was before you dragged it out.

PeggyG: When I click on the yellow circle on the screen it starts moving up to the top of the screen.

RandallCa: To run the script, press the yellow exclamation mark.

PeggyG: Each time I click on the exclamation point the yellow circle moves up. Is that right?

RandallCa: Yes. Drag the ellipse down to the center. Then get a "turn by" tile and drop it onto the script.

PeggyG: Ha Ha--I just figured that out!

RandallCa: The script area will turn green when you have the tile in the right place.

PeggyG: I now have 2 scripts on my window.

RandallCa: Get another "turn by" and drop it onto the "forward by" script.

RandallCa: Then you will have a two command script.

PeggyG: OK-it's starting to come back to me now. I actually bought the book over a year ago and loaned it to a student teacher and I've forgotten everything I knew!

RandallCa: What questions do the rest of you have? My name is Randy and I'm a soon to retire physics teacher.

PeggyG: I have 2 command scripts now.

RandallCa: What happens now when you run the script.

PeggyG: The ellipse moves in a circle around the screen.

RandallCa: Very good. That is a very powerful lesson in geometry!

PeggyG: I can use powerful. :-)

RandallCa: Students usually learn that a circle is the locus of all points equidistant from a point called the center.

PeggyG: I'm even struggling with the "language"--Please someone else jump in so you aren't bored to death with my beginning work!

DavidW likes to use "locus"

BjB: Peggy, I'm in awe of your progress!

PeggyG: Do students need to understand geometry to feel successful with Squeak? or is it the tool that will help them learn it?

RandallCa: In Squeak students can see a circle the way they would walk it out. It connects better to their experience.

PeggyG: Thank you so much for the encouragement!! I need it!

RandallCa: Peggy you did very well.

PeggyG: That helps a lot--they way they would walk it out.

DavidW: building things is a great way to ALSO learn the geometry

RandallCa: Squeak can be used for an unlimited number of ideas like the circle. It can be used to teach geometry and much more.

PeggyG: Can you give me an example of how you might explain what we have just done to students so they get the geometric principle?

PeggyG: I wish we had audio in this session. I'm sure it's easier to talk about than write about--especially when you don't know what to call things.

DavidW smiles

PeggyG: I can see our time is already gone. Can you give some next steps for me??? :-)

RandallCa: If you go forward by a certain amount and then turn by an amount and repeat - you will go in a circle. That is what a kid said and I can't put it better.

BjB wonders if Randy wants to try this again next month?

PeggyG: I understood that. I was wondering how you would explain that principle to students.

BjB . o O (and that way Peggy will have had some time to practice)

DavidW: This was what people would do in LOGO - you needed to understand the geometry to generate the geometric figures you would have the turtle draw

RandallCa: Peggy - open some of my NASA CONNECT projects. They have little books imbedded in the projects that give instructions. Also try my demo on my office page above in the Etoys and Scratch pane.

PeggyG: Yes--practice is definitely in order! I remember playing with logo 25 years ago and wasn't that great with it then.

RandallCa: squeak is logo on steroids

SusanR . o O (recalls being a big fan of logo)

PeggyG: Great! I'll use the demo and start practicing.

SusanR: and Turtle Geometry

DavidW smiles

PeggyG: Is this a right-brain kind of thing. I was always comfortable with algebra but not geometry. Is that left-brain?

RandallCa: Yes - Seymour Papert is a mentor of the creator of Squeak

PeggyG: Yes I remember reading about him when I first learned about Squeak.

BjB: Thanks for getting us started, Randy. Can you share your news about the OLPC?

PeggyG: There's a new book????

RandallCa: I think it is both because it is art and reasoning.

DavidW: Geometry gave me more trouble than algebra in school - I realized I had to think more

DavidW . o O (and think DIFFERENTLY)

PeggyG: Thank you so much for your patience, Randy. I'm sorry you had to take it to such an introductory level!

RandallCa: The One Laptop Per Child project just announced that you can buy their laptops if you also buy one for a kid in a poor country.

RandallCa: Peggy - you are welcome.

PeggyG: Randy, what do you have to do with OLPC?

BjB nudges Randy...tell them about squeak and OLPC!

PeggyG: Yes! Yes!

SusanR listens closely

RandallCa: Squeak will be on the OLPC and I will develop some projects for it.

BjB cheers

PeggyG: That's very exciting!

RandallCa: Eventually they hope to have millions of computers in the hands of poor kids the world over.

RandallCa: Brazil has ordered 200,000.

PeggyG: I have read quite a bit about the OLPC in the blogosphere. :-) I think it's a fantastic project and I hope it takes off.

RandallCa: They were designed from the bottom up and they are the coolest.

PeggyG: Yes! I think the kids will love them!

RandallCa: If you saw one you would want one.

BjB smiles.

PeggyG: I saw them demonstrated at NECC. :-)

RandallCa: On November 12 they will take one for two orders for \$400.

PeggyG: That's an incredible price!!

RandallCa: And it gets a kid in a poor country one!

PeggyG: Randy, thank you so much for your guidance and inspiration. I will definitely spend some time using both Squeak and Scratch over the next few weeks.

BjB: Three cheers for Randy!!!

RandallCa: Think of the possibilities with millions of kids having computers and Squeak. Some will do great things.

PeggyG: Absolutely!

BjB: Randy, may Peggy email you if she has questions?

RandallCa: Yes at rcaton@cnu.edu

PeggyG: Will Squeak help me to keep from getting turned around in shopping malls?

DavidW smiles

DavidW: Squeak + GPS

PeggyG: Thank you for the email. I'll try to do it on my own since I'm such a "slow learner."

SusanR . o O (I will have to place Squeak and Scratch on my list of etoys to tinker with!
)

RandallCa: The OLPC will help. It comes with an ad hoc network "out of the box"

PeggyG: GPS--yes another modern miracle. :-)

BjB waves goodnight.

BjB : Thanks again, Randy

RandallCa : With the OLPC you can connect to the Internet and use google to navigate shopping malls.

PeggyG : Thanks, Randy. I enjoyed getting started!!

RandallCa : You are welcome

SusanR waves goodnight

RandallCa : Good night BJ

PeggyG : Good night!

DavidW : Thanks, Randy.

RandallCa : You are all welcome