

Kincorth ASG Games Design Transition Project

consolarium
SCOTTISH CENTRE FOR GAMES AND LEARNING



ABERDEEN
CITY COUNCIL



About me:

Charlie Love, Teacher of Computing, Cults Academy in Aberdeen

Set the scene

From Feb 2010 to March 2011 – seconded to Learning and Teaching Scotland to develop Games Design

Developing resources to support games design, delivering training

So I worked with Derek Robertson, Brian Clark, Ollie Bray and Brian McLaren on developing Games Design and GBL.

We focused on developing a progression of games design tools. Gain in complexity from Simple 2D software such as the wonderful 2DIY from 2Simple Software for use in Early/First Level thru Scratch and Kodu which fit well at second and third levels to more advanced 3D tools like Corona SDK from ansacomobile which provides learners with tools to create and test their own mobile apps to the unreal development kit: a commercial level suite of software for game development which is given away free for everyone to use.

Our initial success with Kodu and a project in South Ayrshire, which we presented at last years SLF.

We know that learners are inventive, creative and see beyond the limitations of development environments they are using.

Our experience is that our learners are capable of producing wonderfully creative content if we provide the right stimulus and the tools.

Second

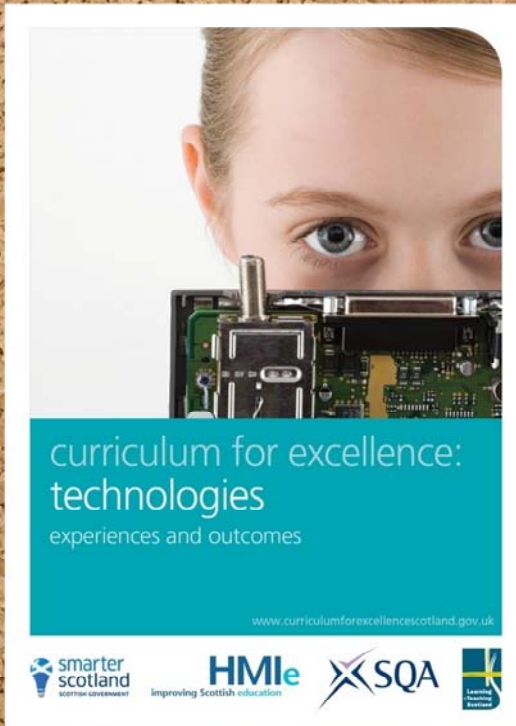
Using appropriate software, I can work collaboratively to design an interesting and entertaining game which incorporates a form of control technology or interactive multimedia.

TCH 2-09a

Third

Using appropriate software, I can work individually or collaboratively to design and implement a game, animation or other application.

TCH 3-09a



The Games Design work of the Consolarium draws on Curriculum for Excellence Es&Os. We want learners to work together to create game content and we want what is produced to be entertaining.

The key is for learners to create games which they have ownership of, where their ideas are transferred to the game and can be played.

And with Scratch we also have a tool which provides wonderful opportunities for animation as part of the game or in it's own right as an activity and some learners in this project did just that and used animation very successfully as we shall see.



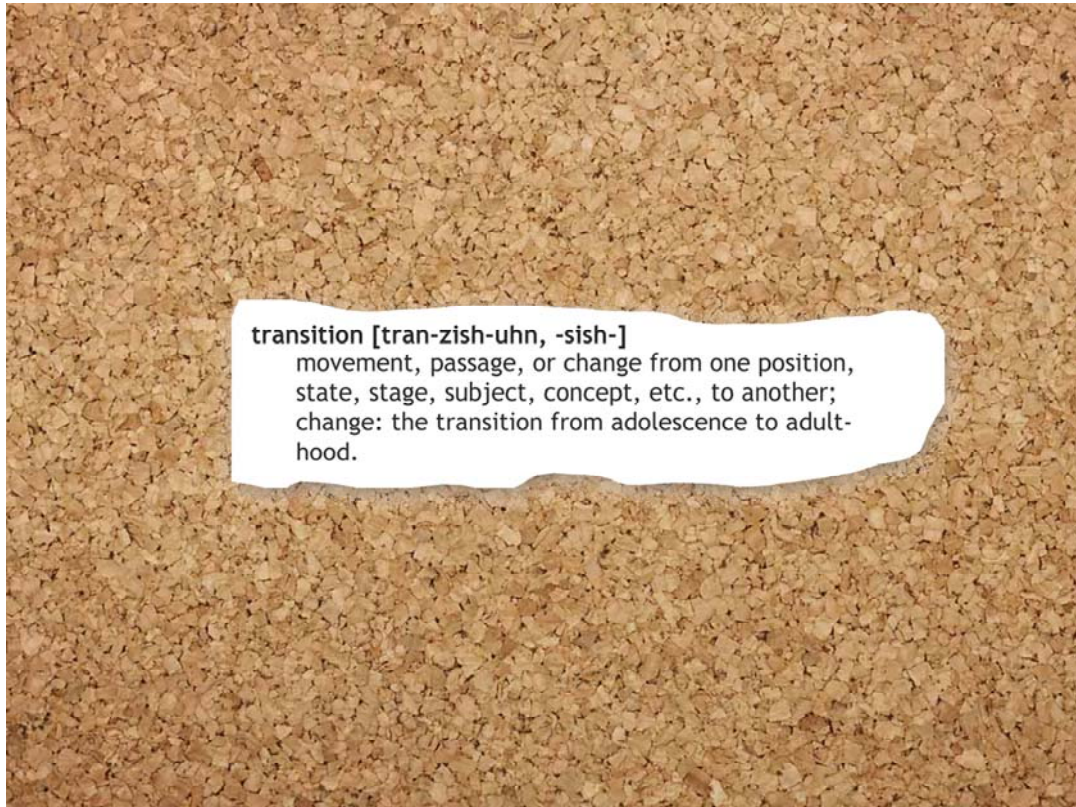
Our learners understand the language of games.

They are immersed in the content, the platforms, the metaphors and the mechanics of gaming.

In order to build capacity for games design and provide further exemplification how games design can empower learners to generate their own content we looked at our existing partnerships and how we could engage with a partner to take this work forward.

The Consolarium's work is spread around Scotland, in games design we have worked with 25 of Scotland 32 local authorities.

We approached Rosaleen Rentoul at Aberdeen City to see if there a suitable ASG could be identified for us to work with. And then we liased with Sheila Morrision, the ICT Development Office to set up training and support for the project.



The Kincorth Transition project using games design.

Kincorth Academy – ASG of Abbotswell, Charleston, Loriston, Kirkhill Primaries had an established transition programme focused on the curricular area of health and wellbeing and delivered through the media of technologies including significant use of Glow.

Why games design: current project didn't produce an artifact that was suitable for every pupil. Some just no interested in creating a Health and Wellbeing leaflet. The group, both secondary and primary felt that the single Health and Well-being newsletter which they produced wasn't appropriate for every learner and that the challenge of designing a game, based on the H&W theme, would stimulate learners and draw them into the process.

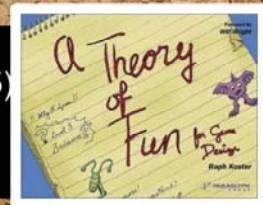
The games could be a focus for the transition visits to the secondary school and the basis for further work and development as the learners moved from P7 into S1.

Needless to say, it was a very exciting opportunity to bring a creative approach to games design to the ASG.

Fun is learning. Fun from games arises out of mastery. It arises out of comprehension. It is the act of solving puzzles that makes games fun. With games, learning is the motivation.



Raph Koster
A Theory of Fun for Game Design (2005)
Star Wars Galaxies, Ultima Online, etc



I like this quote because to me it says something about the games design process. Raph Koster is not an educationalist but he is a world class game designer.

We have to admit that good games are engaging, have challenge, reward, scaffold and support the players development – there is a lot about the design of good games which we can apply to design of good learning. Check out his book which is a interesting read.

A it's true for games design. Games design is about solving puzzles – working out how to complete an activity, how to specify and interaction, how to incrementally design build and test an entertaining game.



Prototype, Playtest, Iterate

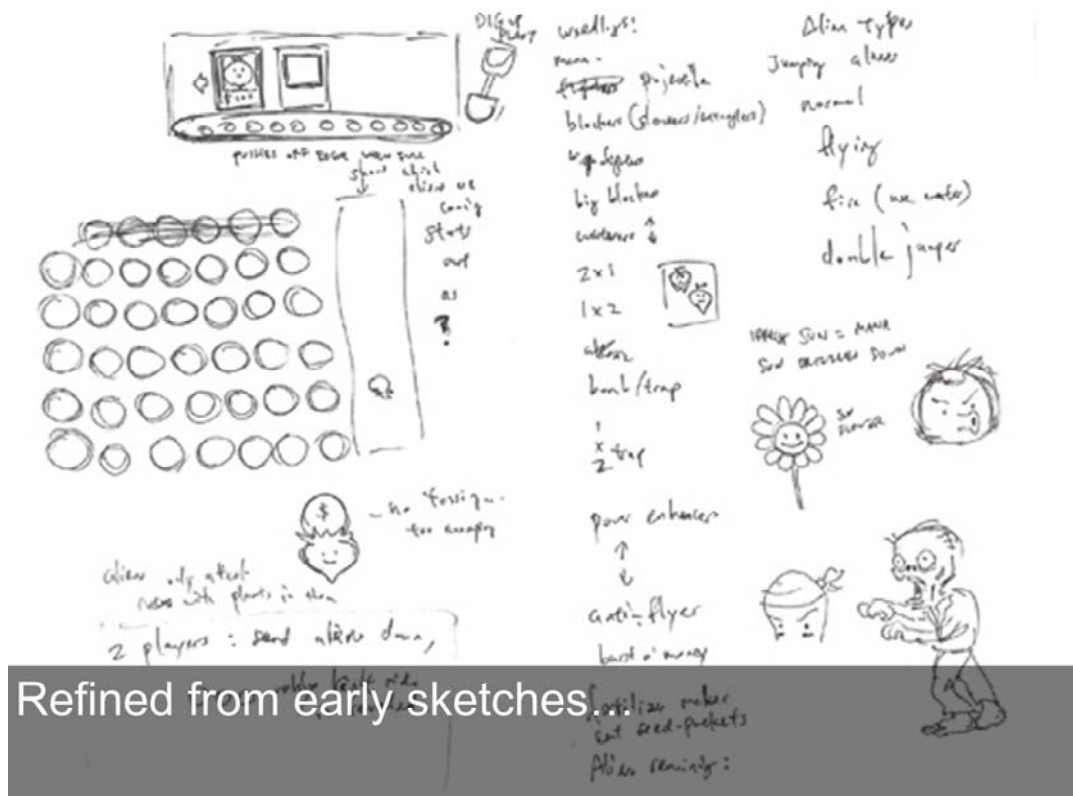
The process of designing a game (or an animation) is Prototype, Playtest, Iterate.

You build a part of your game, you test it to make sure it works as expected and then you add more.

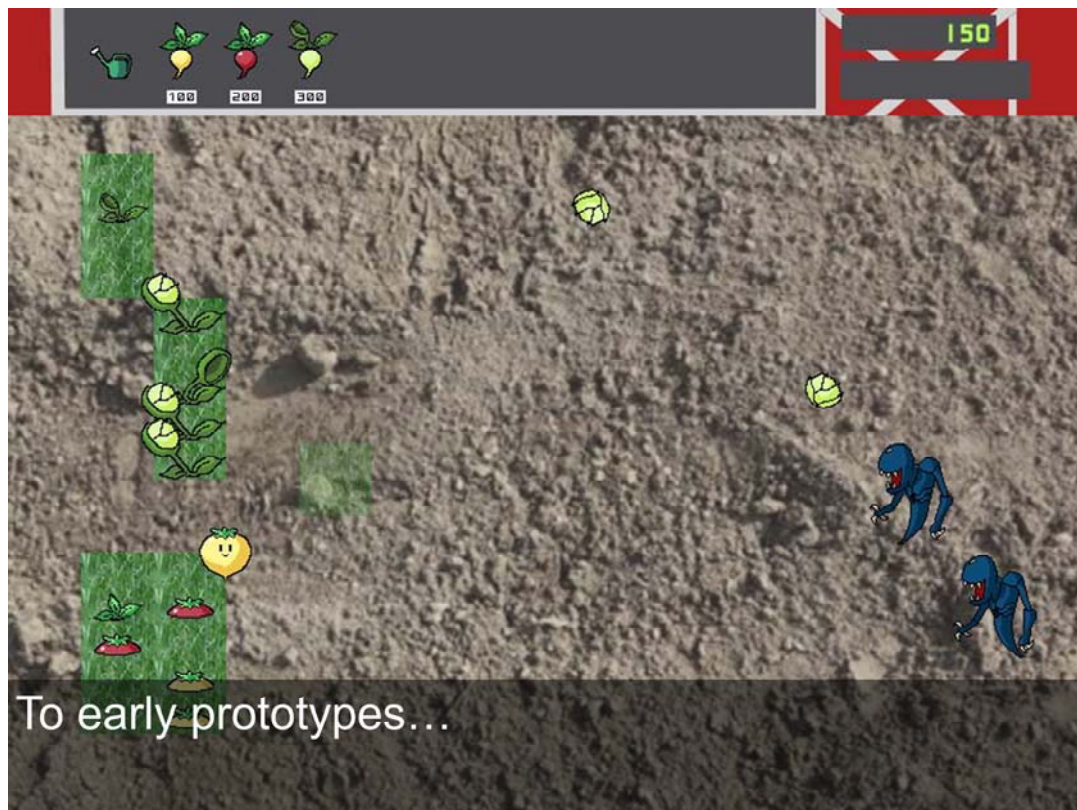
It's a cycle, a process which allows learners to explore the software, develop confidence and experiment. This is an Agile approach, where learners can respond to challenges quickly and in a short period of time have a working program on screen.



Take the best-selling casual game of 2009, »Plants vs. Zombies«, with more than 15 million. downloads and 1.5 million copies sold, over 1 million. US\$ in iPhone app sales on its first week in the iTunes store, and more industry prizes than there are Oscars. The secret? Three years of iteration and refinement ..



From initial sketches...

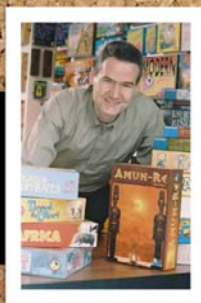






The entire games design process is to build, test and repeat.

The life blood of game design is testing...Why are we playing games? Because it's fun. You cannot calculate this. You cannot test this out in an abstract manner. You have to play it.



Rainer Knizia
Board Game and iPhone App Designer (2010)

<http://shiftrunstop.co.uk/2010/08/19/episode-40-reiner-knizia/>

And for games design the process has really focused on building and testing, building and testing. Yes there is a place for planning but much the planning of games design activities happens on "on the fly" as learners experiment with what works and try to create what is in their heads.

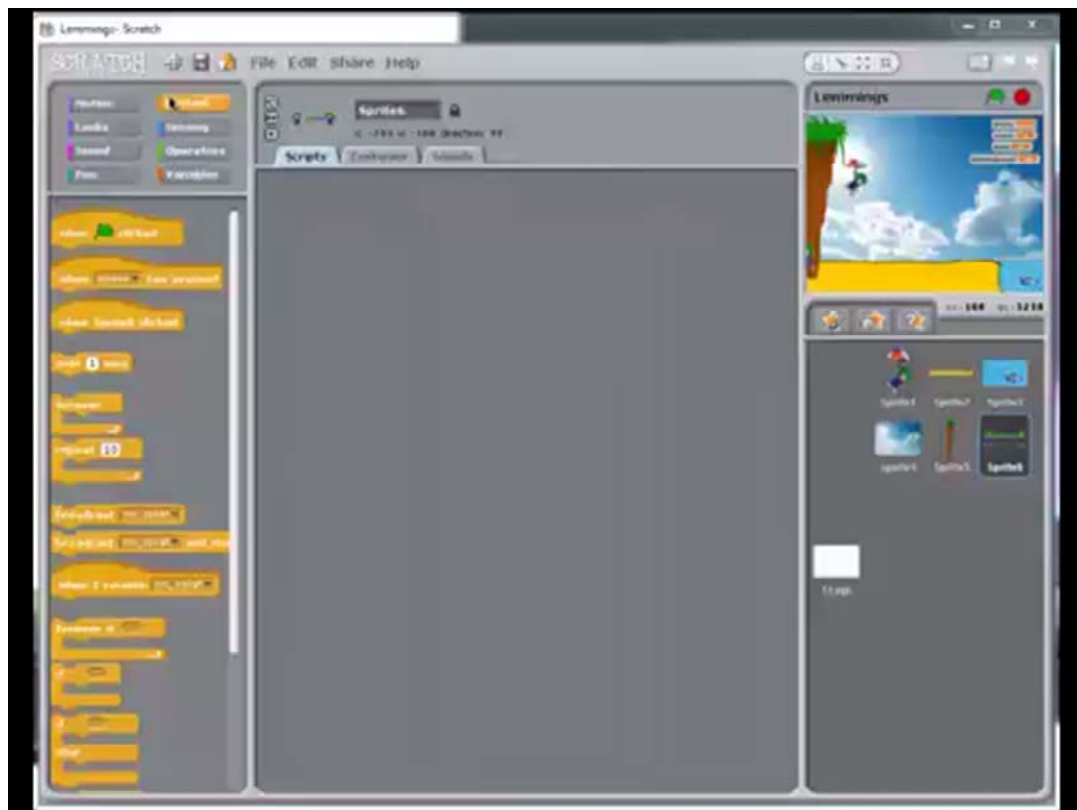
Training the teachers



To support the transition project we rolled out a three stage plan of support and based the “game development approach” on build, test and repeat.

Training the teachers

- ICT coordinators / deposes / head teachers in each school (2 twilights)
- delivered training to all P7 teachers in ASG cluster (2 twilights)
- focused on building confidence to explorer software, capacity to experiment
- need teachers to develop confidence with Scratch, range of expertise from those very confident to those needing support.



We used the Scratch language from MIT.
Blocks approach
Range of tools, easy to use
Colour coded and no syntax to follow



use of online resources from Glow (demo video of Glow resources for 3 mins)



Received positive feedback about the various online resources for Scratch. They gave the teachers more confidence to use Scratch and they could take their time going through them.

I visited each P7 class for a morning or an afternoon to work with them on Scratch and support the classroom teacher. In this morning, we covered the basics of movement using the keyboard, simple animation using the costumes of sprites, keeping scoring and, the main stay of so many games, collision detection.

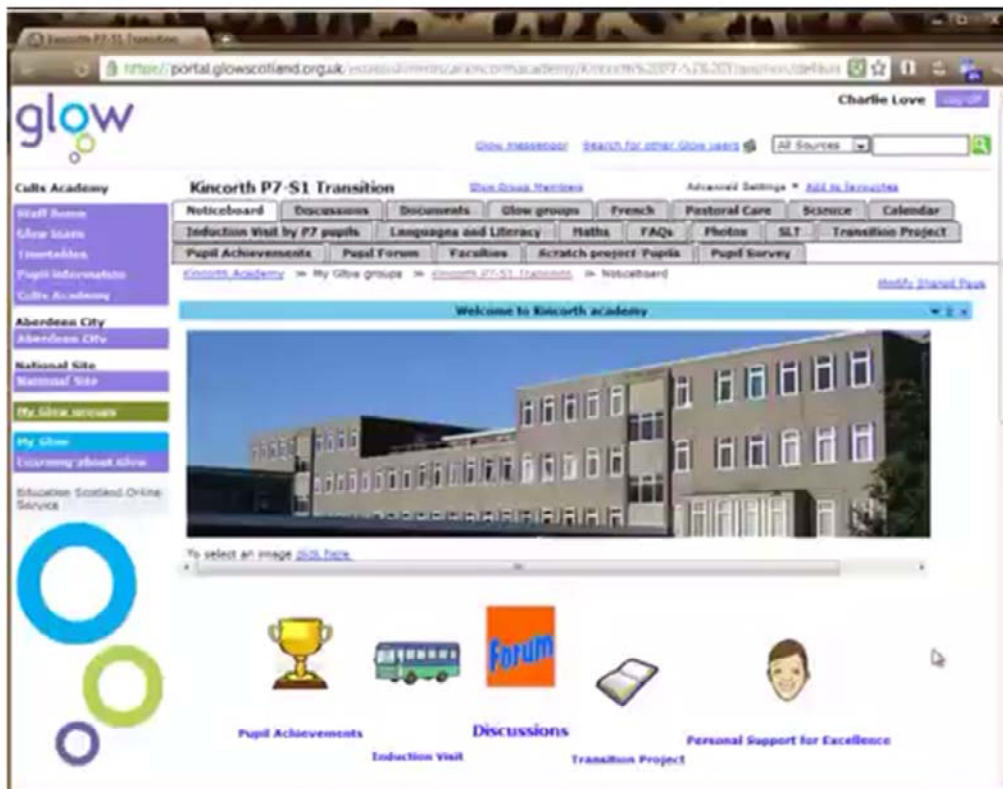
There are so many features in Scratch with its graphic editor, music tools, sensors, sounds recording etc. that it a morning really does fly by!

Scratch has a collection of predefined sprites (graphics) which we used on the “training days” to create a jet pack platform game.



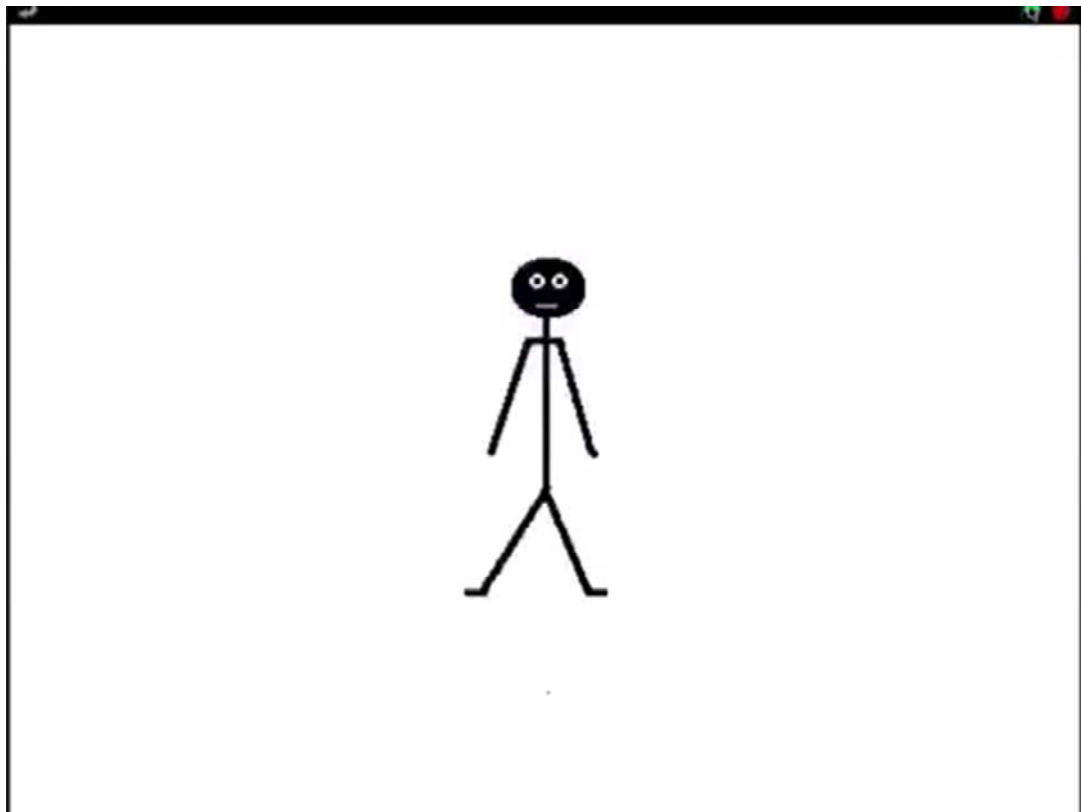
Because this project was the development of an existing Glow group we were able to use the already established space for the ASG and transition work.

Glow was instrumental in the success of this project. It provided the online storage for learner work, a focus for discussion across the associated schools group and a resource for help and support.

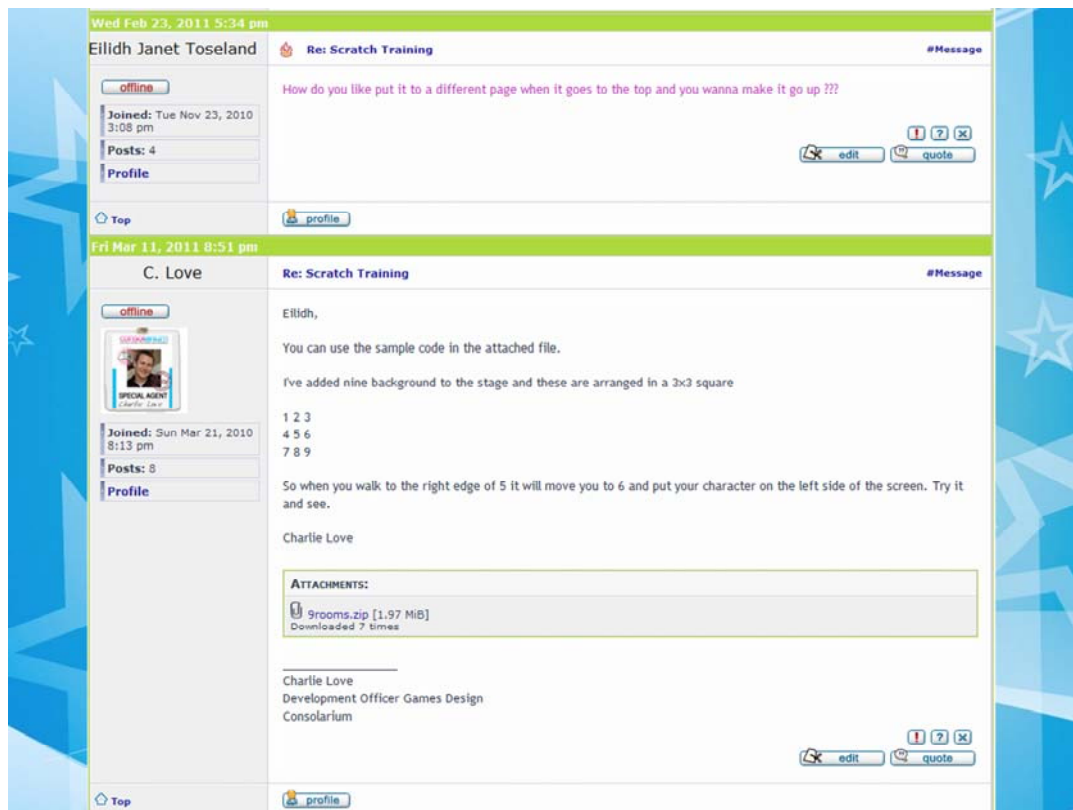


Existing transition group with a range of information about the secondary school.

Secondary and P7 pupils using the group

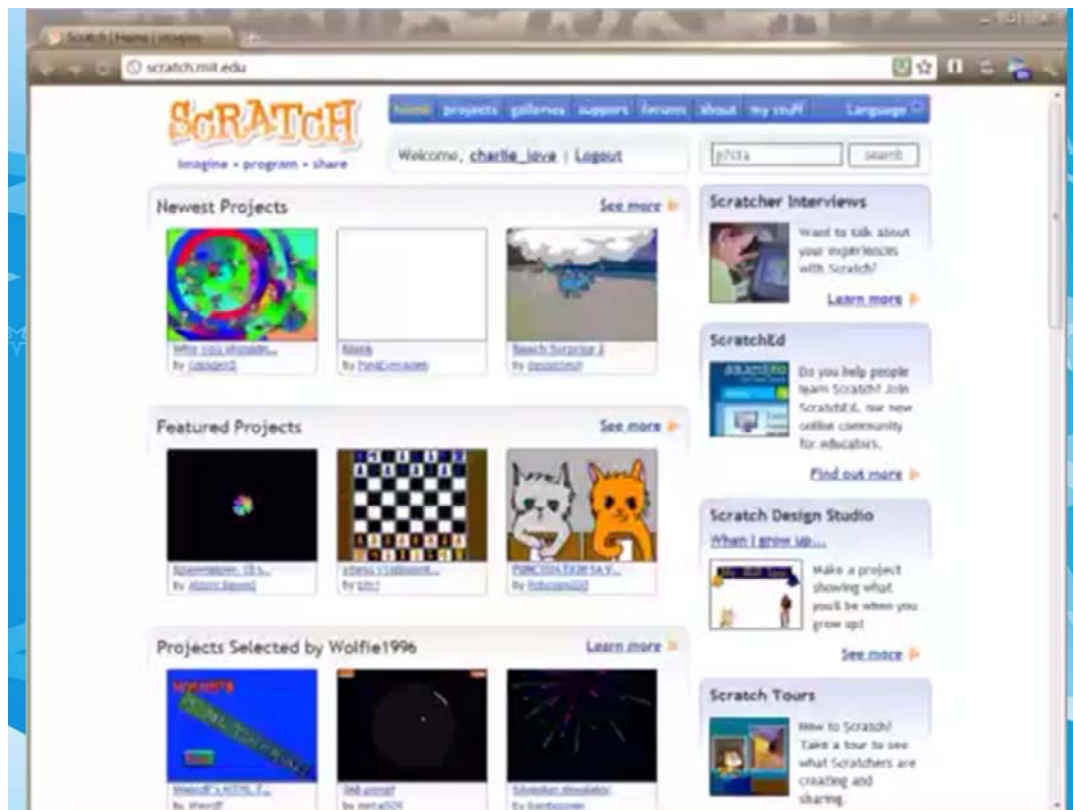


Drug Quiz Game



Use of forums to support learners remote.

I wasn't around to support pupils in the classroom and classroom teacher were still developing their skills. Support for learners was offered through the discussion forums on Glow but learners also established their own self-help groups with individuals who were confident with Scratch helping others in the class.



Scratch online sharing site is great resource and well worth a look. Learners can add their own games providing a global audience for their work.



Wed Mar 23, 2011 11:26 am

James Henry

offline

Joined: Wed Feb 23, 2011 11:26 am

Posts: 2

Profile

Top

Re: Upload your Scratch Games

#Message

it was intresting seeing the programing of the "TIM" game 🎮

edit

quote

profile

Wed Mar 23, 2011 11:37 am

Rebecca Spence Moore

offline

Joined: Tue Nov 23, 2010 2:58 pm

Posts: 5

Profile

Top

Re: Upload your Scratch Games

#Message

it was really good and quite fun! (Like the dance moves) 😊

edit

quote

profile

Wed Mar 23, 2011 11:48 am

Leanne Maria Beattie

offline

Joined: Tue Nov 23, 2010 3:04 pm

Posts: 6

Profile

Top

Re: Upload your Scratch Games

#Message

i liked the game tim it was cool like the dance moves and it's cool how u can change costume. 🎮🎮🎮

edit

quote

profile

Thu Mar 24, 2011 9:38 am

Declan Small

offline

Joined: Thu Mar 24, 2011 9:29 am

Re: Upload your Scratch Games

#Message

I really liked the game also love the costumes and it made me laugh 😂

edit

quote



it was really good and fun but it was complicated

Follow up in S1

Smooth Transition from Primary to Secondary

Shared experience of ICT on which to build



Success stories of the Scratch transition project

- teachers and senior management have commented on how smoothly the new S1 have adapted from Primary to Secondary school, showing little apprehension about the change, reasoning that projects such as the Scratch transition project were likely to be responsible for this.

- because all the feeder Primary schools were involved, the Scratch transition project gave a clear marker of the standard that pupils would be at in S1 Computing (almost all pupils had used the program and were familiar with basic concepts due to the project). This made it easier to build on the basics (of creating scenery and characters) and go on to teach them about programming logic.

Next steps

- develop projects within the S2-3 course that build on the experiences and outcomes gained thus far

- work more closely with Primary schools to discover what other things they are teaching that can be built upon rather than re-taught (as sometimes happens).

- encourage feeder Primary schools to work together so that all learners have similar experiences of ICT (not just with Scratch)

Some Great Links

- Plants Vs Zombies - The making of...
<http://glo.li/nAvWQb>



- Kincorth ASG Transition Glow Group
<http://glo.li/q7JaMI>



- Consolarium Games Design Glow Group
<http://glo.li/bexogN>



