

Playing at learning

Learning should be playful and technology is letting it be so

Attendance at Quest 2 Learn school in Manhattan, New York is high – according to the data, it averages at about 95 per cent, not to be sniffed at.

The children seem to like being there and it's likely that the school's pioneering use of video games, designing, building and playing them, as a basis for teaching has a lot to do with it.

Now in its second year, the school is education as interpreted by Katie Salen, a games designer and academic – she is a Professor of Design and Technology at Parson's the New School for Design.

More broadly though, Quest 2 Learn is at the forefront of a global movement among education academics and teachers who feel that education should resemble play as much as is possible.

Stephen Heppel, Professor and Chair in New Media Environments, Centre for Excellence in Media Practice, Bournemouth University and a leader in the field of making learning fun says that his own experiments in brightening up curricula and learning environments and listening to what students want has had a massive impact on how they are responding, he calls the process “jollyology”.

He says that technology is one very effective way of adding, or reintroducing, joy. “Secondary age children mourn the loss of play from their primary years and yet play is something that ICT has brought into learning from the very beginning.

“Playful learning is great fun and has re-energised classrooms, rekindled school parent relationships, re-engaged brains and provided at times a powerfully competitive space for problem solving, and at other times a place for real individual concentration,” Prof Heppel says.

Having looked at what was happening in schools with a fresh pair of eyes Katie Salen says much of what she saw seemed weird to her.



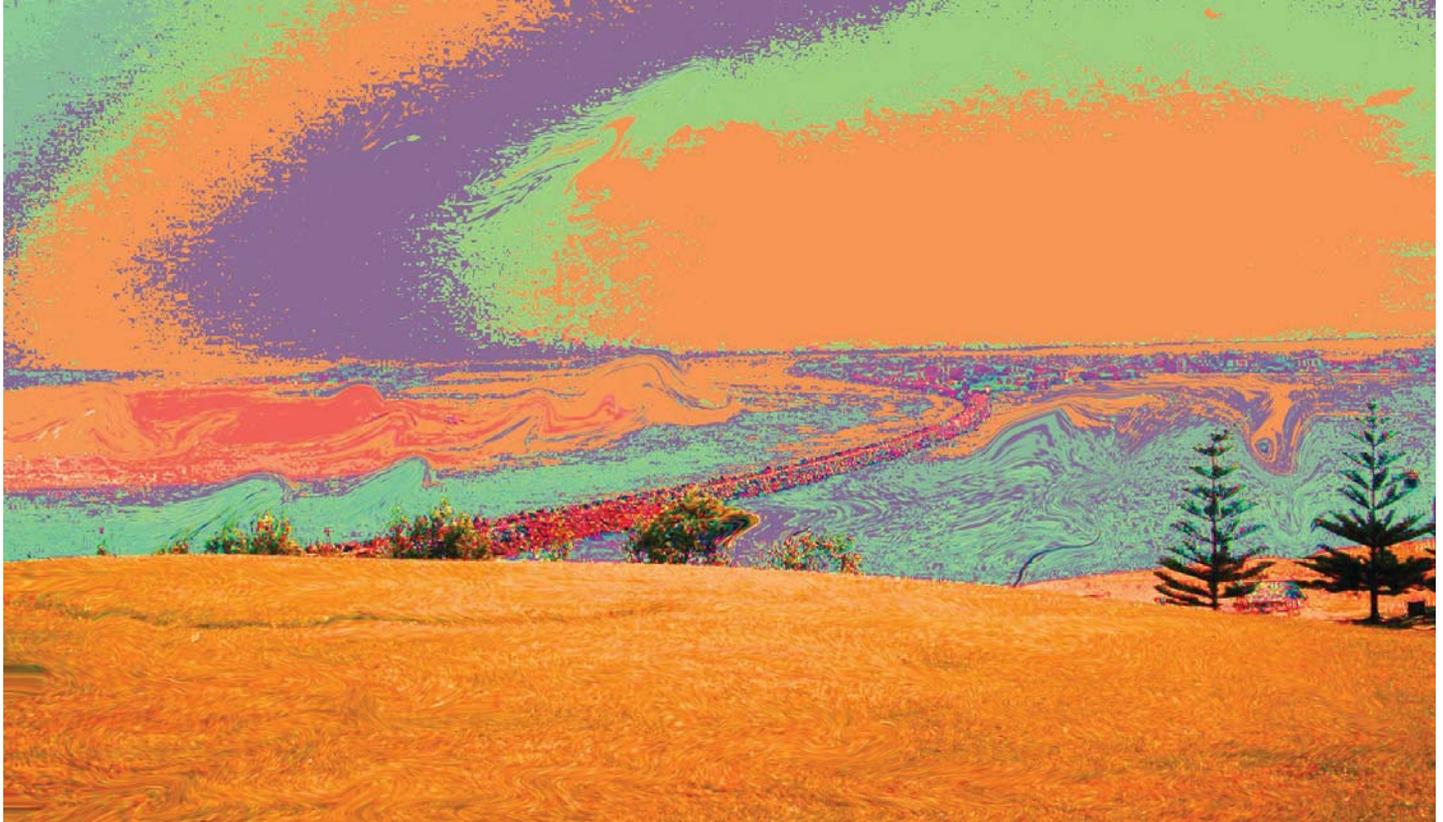
All images are winning entries from the Connected Learning Awards produced by primary and secondary students using industry standard graphics software

“You go to a math class and that is the only place math is happening you are supposed to learn math just in that one space... the fact is a lot of kids are doing a lot of learning outside of school. We acknowledge that and we are trying to bring that into their learning more.”

The MacArthur Foundation is a heavy

hitting supporter of the school – it manages an endowment of \$5.1 billion dollars – as is the Bill and Melinda Gates Foundation.

James Gee, a leading academic in the field of linguistics is driving the MacArthur Foundation's \$50 million donation earmarked for the development of digital media and



Katie Salen

learning says that it's about more than playing video games.

"This is not about delivering games to children, it is about learning and learning systems."

He says that the desired result "is not an academic theory but how we can implement new methods of learning".

Subjects have been radically reinterpreted and their breadth and ambition is apparent in the synopses on the comprehensive, if a bit wordy, Quest 2 Learn website. Take maths/science, which has been rebranded as *The Way Things Work*, students practice taking different kinds of systems apart and modifying, remixing, and inventing systems of their own.

A typical assignment at the school is to create a video game, refine it and then have other students play and assess it at home. Within that,

students are exposed to computer programming, English, by having to write a script and elements of collaboration by having to work together – a much richer experience than, say, writing an essay.

However odd Quest 2 Learn's approach might seem, undeniably there are some very clever people behind the school. Odd, perhaps, or could it be the shock of the new? Could it be that the way that things are taught and the way that learning is assessed need to undergo the same fundamental change that digitisation has caused everywhere else?

And making everything at the school resemble a video game does have a psychological upside; gradings are game-like; "novice", "novice apprentice" "senior" and "master" and go some way to addressing the fear of failure that a lot of kids face. Moreover, if a character in a video

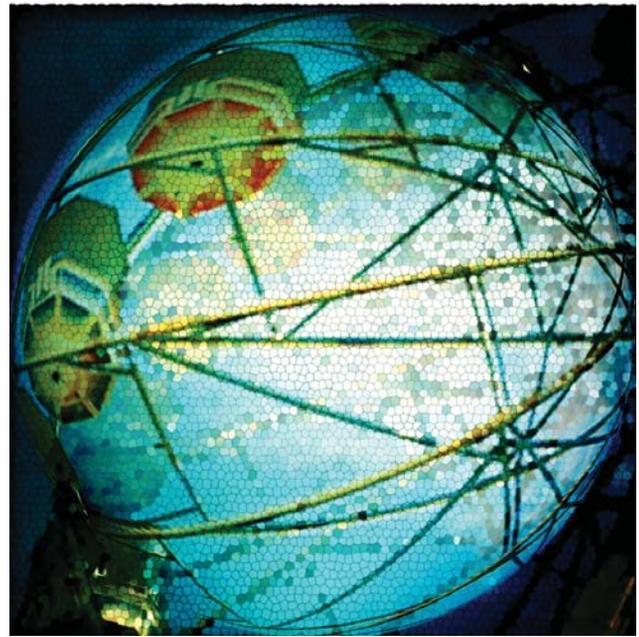
game dies, it seems it's motivational rather than disheartening.

"If the cost of losing is high, we found you won't explore, you will tend to act in very constricted ways," James Gee says.

The principles are similar to those used in problem based learning where students combine to take on broad open ended tasks with a teacher acting as a facilitator – long on guidance and short on instruction.

Other subjects at Quest 2 Learn include ELA/Social Studies, which are integrated in the subject Being, Space and Place, which looks to enable students to address culture and environment and their place within it.

In Codeworlds (integrated Math/ELA/Computer Programming) students practice decoding, authoring, manipulating, and unlocking meaning in coded worlds.



Winning entries from the Connected Learning Awards

Wellness combines integrated socio-emotional learning, PE, nutrition, health and Sports for the Mind looks to foster new media literacies, starting with game design platforms in the sixth grade, toward immersion in data visualisation and knowledge management tools in the ninth.

Quest 2 Learn is only in its second year of operation so it's early days, however, results have indicated that the school's academic performance is on par with the average school in New York. The students do tend to show up though. There is another Quest 2 Learn to be established in Chicago this year and it is guaranteed that applications will be high.

Whether the Quest 2 learn school in New York is a taste of things to come in Australia remains to be seen, but IT and education are now two sides of the same coin and, unsurprisingly, students like it.

In NSW and the ACT, there is renewed focus on producing the type of students that will be able to thrive in a digitised world.

Students must be given the ability to adapt, self direct and work in collaboration, not to mention having a good grounding in industry standard software. Towards that the NSW Department of Education has introduced

Adobe's Creative Suite software into 70 per cent of the schools across the state and in the ACT.

Judging by the students' response it's a move in the right direction and places schools in NSW and ACT in a regional context; schools in China and India are running similar programs.

Key is instilling a sense of relevance, says Peter McAlpine, Senior Director for the APAC region for Adobe. Because it's industry standard it's easy for the kids to make a connection between what is being learned in the classroom and the workplace he says.

"The department has made significant investment in NSW and the ACT which has put Adobe Creative Suite in the hands of 1.3 million students. Take up has been strong the region, Hong Kong and mainland China have been enthusiastically introducing Adobe Creative Suite into education but with a stronger focus on certification."

Further than the Creative Suite, he says Adobe products can enable rich, connected learning experiences.

"Connect (Adobe's video conferencing service) enables a virtual learning environment to facilitate resource management. Specialist teachers can reach more students through virtual learning, teachers can access their expertise directly. The

overall effect of technology is improved grades and reduced truancy, increased parental and community involvement and improved home-school communication," McAlpine says.

And it should be mentioned that it's a lot of fun. The quality of work produced and the enthusiasm shown for working in Adobe's software is attested to by the standards achieved by winners of the recent Connected Learning Awards, which are open to both primary and secondary students (see examples).

Dianne Marshall Program Direct Digital Education Revolution at the NSW Department of Education says that the effects have been pronounced and immediate. "Schools have appointed a student mentor who drives a class' use of a software product. If the class is working on a particular project using a program the student mentor is asked how to do it," she says.

There has to be good resources based on curriculum areas she says but boundaries between teacher and student are blurring, teachers are driving the content and the students, increasingly drive how it is delivered.

"We believe that we're preparing the first students who are prepared for a digital workplace," Marshall says.

And some joy in the classroom is always welcome as all too often it is absent during learning.

Stephen Heppel writes on his website www.heppel.net, "Survey after survey suggests that our UK schoolchildren may be some of the least happy in Europe. A diet of tests and chasing the elusive benefits of imposed incrementalism may be a part of that. Some schools can and do teach unremittingly to the tests, and the tests are frequent."

That would sound familiar to anyone that's been engaged in NAPLAN.

"We need ingenuity and imagination from new generations to create new ways of doing things. To do this requires a rapid movement away from the predictable and dull curriculum of the last century towards learning experiences that surprise, astonish and provoke our students.

"Learning, technology and surprise have never been so important. You have to be brave with learning, astonish your students and they will astonish you back," he says.