New Thinking, Better Results - project-based learning.

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I love books with catchy titles. *If you want to be rich and happy, don't go to school* … riches and happiness and school in the one sentence? How could a teacher resist getting it sent to their home address in plain wrap - I mean, not the thing to land on the staff room table with one's name all over it. And how about: *What video games have to teach us about learning and literacy* …video games teaching us anything after all we have said about them? Catchy titles, and very interesting content.

As it turned out, I had been out of school for several years, rich, happy, and playing video games. No, seriously, out of school long enough to reconsider what different approaches I would use if I were to take up the game again. Then from a local school came an offer I could refuse but didn't – taking the kids that didn't want to be there. I made it clear at interview that whatever these kids had known for the last ten years hadn't worked, so what happened next had to be very different. I also told the panel that I was an old dog with some new tricks, a dog that needed a long leash. They hired me, forgot about the leash, and the tricks are looking very interesting indeed.

Robert Kiyosaki's book: *If you want to be rich and happy don't go to school,* talks about the failure of a system that was never designed for the present needs and expectations of education stakeholders. He also describes methods that can make a difference, and while these methods are best suited to the training organisation Kiyosaki runs, they appeal to teachers looking for new approaches. In short, the book gave me confidence to ditch the stuff that doesn't work and try some new thinking for getting better results.

It has long baffled educators, how kids - including functionally illiterate ones - can get the required information on new video games, process it, and apply it with obvious success. According to popular thinking, if they haven't read the instructions they will not know what to do; what the strategies are; and how to play to win. Popular thinking – or should we say our generation thinking – is wrong on each count. James Paul Gee, Professor of Linguistics, Madison University in Wisconsin, opens up lots of new thinking in his remarkable book: *What video games have to teach us about learning and literacy.* He describes about thirty learning principles in detail, and three are worth considering here: 'stealth' learning; virtual identities; and thinking as a social activity.

I want you to be alert but not alarmed with this notion of 'stealth' learning. And before you start thinking you need flak jackets and night vision eyewear for the model, consider this definition:

> *…when the learners are so caught up in their goals that they don't realise they are learning or how much they are learning or where they actively seek new learning.*
>
> Professor James Gee,
> *What Video Games Have to Teach Us About Learning and Literacy* (Palgrave Macmillan, 2003)

How, then, you might ask, do learners get 'so caught up in their goals' that they don't realise they are learning. Stealth learning works best when the various learning activities (or 'subjects') are embedded into a single project. This allows learners scope to face the tasks without any pre-conceptions from the labels of 'maths' or 'English'. It also provides for the two agendas of stealth learning to function. One agenda is overt, the nature of the project as understood by the teacher and the learner. The other agenda is covert, specific learning tasks – such as visualisation – embedded into the project work.

Now before I describe the project work, let's look at the second learning principle from Professor Gee's book, the identity the game-player takes on. They play with a whole set of skills, attributes and resources they don't have in real life.

> *Taking on a virtual identity constitutes a form of identification with the virtual character's world, story, and perspectives that become a strong learning device at a number of different levels.*
>
> Gee (2003)

And the third principle helps explain why many young people get left behind in the learning process; thinking is essentially a social activity, not an individual affair. Gee's study of electronic games confirm that brain function is interactive with its environment (in this case a virtual one), not isolated from it. So our challenge as educators is to create a learning environment in which young people can take on all the characteristics of a successful person, someone not carrying the limitations - real or otherwise - of past learning.

The question becomes: "Can students be encouraged to take on an identity for the purpose of learning better?" My answer is yes. I start with images of success – sailing around on a yacht, airline travel, house, car, family – some I propose, some they propose, all embraced at an emotional 'this-can-be-me' level. I use visualisation and guided imagery, manipulation of digital images, and constant application of the question: "What would I look like if I were very successful at this task?"

I use two projects that integrate four discreet 'subjects' - Maths, English, Personal Development and Work Related Skills – into a single real-world activity. The way this activity is undertaken creates the learning environment conducive to new thinking.

- Design Projects - creating and presenting a design to a review panel, a response that has maximum effect with a minimum of construction and equipment involved. Uses image manipulation to show finished design in full size context.
- Information Communication Technology Project - builds on skills this generation already have - computer fluency. Involves the preparation of teacher resources for online delivery and automatic correction. Young people provide instruction for the teacher in the process on a fee-for-service basis. This funds their travel.

The young people have to 'apply' to join the projects and undergo a 'selection' process involving several psychometric tests. They are taught to relax and visualise the task and various solutions, as well as seeing themselves confidently explaining their work to visiting teachers or a news reporter.

My role is split between a classroom teacher and a 'project manager'. The former is providing some instruction and lots of assistance to the young people in completing, on time and on standard, the tasks set by their 'project manager'. This latter role is done online. All my contact in this role is by emails written as a person managing the project and coordinating the expectations of the client with the performance of the 'professional'. Sounds confusing, but not to the generation raised with the new forms of interacting with their environment – real or virtual.

Let me give you an example. Last term, there were clear signs that the development of a positive work ethic was not taking place. I was disappointed, and told them so, pointing out the specific areas of concern. I also told them that I would be reporting my concerns to the 'project manager'. The next day each student received an email from the project manager (me) detailing the specific concerns, and asking them to show cause why their contract should not be terminated. The kids took it very seriously, and asked me to help them prepare their replies. Were they confused? Not at all. I asked one of them later if it was confusing getting me to help him write a letter to myself. His response was: "I didn't think about it."

Let's look at the Design Projects. There are eight on offer but we can look at this example here. The young people respond to this advertisement:

EXPRESSIONS OF INTEREST
Survival/Storage Modules

Finchley Pomeroy & Associates has been contracted by a major international aid and development organisation to seek expressions of interest from individuals or organisations for the design of modular panels that could be used for emergency and long-term housing, livestock shelter and fencing, water storage, and erosion control.

Expressions of interest are invited from interested persons for the design, manufacture, and presentation of module prototypes. A complete description of the design project will be forwarded to those persons who register online before 17 February 2005.

http://www.plasform.com.au/projects/register.html

Finchley Pomeroy & Associates
Aid and Development Consultants
Locked Bag 93602
Canberra ACT

The 'registration of interest' includes the writing of a 'vision statement' – what skills/attributes they could offer the team – and project information including a Project Specification is sent to them to consider. This message thanks them for their interest, and includes the statement that they have been shortlisted. They are later sent the URL's for two online personality and learning style questionnaires with a request that they summarise the results and forward them to me. Pretty real stuff, and the amazing thing (to those of us who have not 'played' a range of roles in computer games that is) is the extent to which the young people take the 'selection process' very seriously. It is clear they don't want to 'miss out' even though they realise they are all doing the projects anyway.

Teachers who were involved in the project last year were convinced the kids would not take it seriously. "Why apply for a place on a team when they know they are all going to be doing it anyway?" they asked. Well, the teachers learned a good lesson – the sweat on the brow of the young people as they presented their designs to a panel of strangers or prepared to teach teachers, was very real. The current generation is used to playing all sorts of roles as if they are real. Playing video games often requires someone to take on a persona and think like a drug runner, a soldier, or a special operations team. This is thinking and pattern matching at a pretty sophisticated level, and we do well to recognise the value of duplicating this virtual environment for the development of other skills.

The Design Projects are unique in a number of respects. One is the focus on process, not product. Few classrooms can facilitate the construction of full size projects such as these panels. If, however, the finished result is an image presented to a review panel, the project can be part real and part digitally manipulated image. This overcomes the issue of storage, because the several modules manufactured for the

above project would not fill a shoe box, even though the images show hundreds of them assembled as houses, fences, and water storage units.

Another aspect is the use of simple plastic forming equipment, an oven and a vacuum cleaner can turn any ordinary classroom into a facility capable of producing quite amazing design options. And before you start thinking about the skills you think you lack, remember this project work is being done in primary and secondary classrooms all over Australia by teachers who claimed to have no hands-on skills. Supported by an extensive set of online resources, they have surprised themselves, and discovered the benefits of learning by doing.

In a recent interview with David Lipman, producer of the movie *Shrek 2*. He was asked the formula for achieving such record-breaking ($129 million in the first 5 days) success, not to mention the acclaim from film critics as well as children:

> *We're not about making a critically successful movie or entertaining 10 year olds ... we're looking to entertain ourselves as much as the kids.*

David Lipman
The Age A2 19.06.04 p11

The reason I refer to it here is to help you see your role in a new light. It is possible to try too hard to please our various masters and finish up pleasing none, not even ourselves. When I think of my career highlights, like taking young people to sea, to Disneyland, to the Whitsunday's, to remote indigenous communities, I recognise they each began with what could be seen as a selfish passion – essentially something I wanted to do. Passion infects people, and before long you are surrounded by people sharing the vision. I believe there is good reason to grasp an idea that appeals to us, like chartering a yacht for a week, going overseas, making a movie, not as a 'retirement' project but as part of your present involvement with people who are waiting for that something and that someone to fire them up. You might even write a book – with a catchy title.

NOTE: The original article describes the student enterprise aspect of the *avec esprit* curriculum project. This allows for the students, proficient in Moodle and other online learning programs, offering their skills on a fee-for-service basis. Students from one regional catholic college have funded snow skiing at Mt Buller as well as a week's yacht charter on the Gippsland Lakes for each of the past four years.