Learning in the 21st Century

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Editorial

This edition of *Curriculum Matters* presents a variety of perspectives on learners and learning today. The articles respond to that frequently asked question: ‘Who are our learners today?’

At the beginning of my own teaching career I used slate boards, chalk, paper, crayons and a couple of reading books to help students ‘learn’. Some readers may have been in the teaching profession sufficiently long to have had a similar experience! I do remember watching the landing of men on the moon and trying to comprehend the grandeur of science and the magic of telecasting in actual time whilst my class of Preps were simply in awe at the ‘magic’ of television itself. In contrast, the learning environment today, the resources, processes and experiences of students are very different. Technologies, science, communication and the knowledge explosion amongst other phenomena have enriched and changed the way we live, learn and interact with one another.

The articles in this edition of *Curriculum Matters* illustrate diverse ways in which students engage with information of various kinds engaging a range of communication technologies *embedded in the learning process*. Two central themes emerge. The first theme centres on the significance and establishment of relationships between learners. The second theme relates to ways in which ‘activities’ are *grounded in purposeful learning experiences*. Some of the concepts around each of these themes are radical and challenging, and others exciting and encouraging. It is encouraging, for example, to read how teachers and students adapt and utilise the technologies of ‘blogging’, ‘second-life learning’ and ‘podcasting’ as part of their pedagogy and learning.

I hope you enjoy reading this edition of *Curriculum Matters* and its focus on learners and learning in the 21st century. The relevance of the roles of the lifelong learner from our Brisbane Catholic Education Learning Framework are demonstrated in the discussions presented. Effective teaching for effective learning is always relevant but what is different today are the needs, experiences and skills of students - ‘learners in the 21st century’. The article writers - teachers and educators – have an openness to learn collaboratively, and to take risks in sharing their experiences and concepts with their peers as they respond to the learning needs of their students in our schools today.

In thanking the writers who so generously give their time to write for us on this challenging topic, I would also like to thank the Editorial Committee and especially Amanda Rablin and Paul Shaw who ‘sourced’ and encouraged writers for this edition, and who patiently provided advice with the topic of learning in the 21st century.

By the time you read this, the Christmas vacation will be nearly upon us. May I take this opportunity to thank you for your interest in reading *Curriculum Matters* and to wish you a happy and blessed holiday.

Fran Ralston,
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21st Century Learning – a reflection

Damien F Brennan
Director Religious Education and Curriculum Services

A changing work environment
I commenced writing this article in a coffee shop in St Kilda Road, Melbourne, prior to attending a nearby national meeting. To my left were two casually attired young men, engaged in a business meeting of some sort – they had a laptop open, obviously connected via wireless. Occasionally their mobile phones were answered and they brought the content of those calls to their deliberations and focus of the laptop information.

On the other side of me was a young woman talking animatedly on her mobile phone to a close friend. She was slicing up her sausage roll with her right hand, the phone affixed to her left ear and an electronic personal organiser open in front of her. In front of me was another young woman reading a newspaper – an old medium in a sense but for many a reliable source of information.

Many other business types from surrounding buildings were on the verges of the coffee shop. Most had laptops and were working from them – like me.

Prior to commencing this writing task, I viewed on my laptop a podcast that was recommended to me. There I was in Melbourne sitting in what is essentially a public meeting place viewing a podcast of an international conference via a wireless card in my laptop as part of the preparation and research for writing an article to be published in a Brisbane journal.

Welcome to the 21st Century and a new way of being and of learning.

……….

What the above demonstrates is the agility and flexibility that is experienced and demonstrated in the world of contemporary work. Mobile phones, laptops, personal organisers and sundry other devices mean that for many of us we can communicate from anywhere at anytime. This agility and flexibility can be a mixed blessing. We now have opportunities to keep workflow moving while we might be absent from our ‘normal’ place of work. However, we can also have the experience of always having our work dominating us wherever we may be.

The location of work has been redefined as has the manner in which we partner and collaborate with our work colleagues. There are many challenges to schooling and to schooling structures and processes in preparing students for a world of work and work outcomes that are continually being redefined by technological developments. Schools may be some of the few remaining places of work that have changed little in comparison with other 21st Century work environments. We have to ask ourselves how contemporary schooling is really and how well schools reflect 21st Century work reality?

……….

Three scenarios
1. Active investigation
Three years ago I needed to replace the 7 pin power plug on my trailer. The wiring was becoming damaged as the plug disintegrated. I purchased a replacement plug and prepared to affix it.

What I initially discovered was that the wiring diagram that accompanied the plug did not match in the wire colouring and design that which lay before me. Secondly the trailer plug and the fixture on the vehicle both represented only 5 of the 7 points wired. This was a puzzle and took some time to work through, unsuccessfully might I add. I tried many combinations of the wiring with lights flashing in all but the required outcome.

Eventually I made my way inside from the garage to discuss and negotiate the engagement of my son, Liam, in the project. He was then in Year 11, a student differentially engaged in school learning but with an inherited understanding and instinct about things electrical from his maternal grandfather. He accompanied me outside and asked me to explain what I had done thus far. His questions were penetrating and incisive. He then took over and tried
similar experimentation to the ones I have tried with a comparable lack of success. After a time he simply walked off stating that he would be back. I continued on with some other tasks.

After about thirty minutes I went looking for Liam, thinking to myself that he had done the great adolescent disappearing trick, especially when I found him seated at the computer. Was he idly engaged in computer games, messaging friends or avoiding helping me? Not at all, as I found he was searching for a solution. In fact what he showed me were comments from across many English speaking countries where consumers like us had encountered similar problems. More importantly he had just discovered an alternative solution posted on the net from a person in America, complete with a wiring diagram. He went back outside and fixed the problem in about 3 minutes.

For me this demonstrated a different way in engaging with problem solving, one that my generation would not have thought of immediately. Furthermore, what I found fascinating was that someone had taken the time to post a solution on the web. The trail of international comments also included insights for the company on how to improve their resource when auto electricians or manufacturers had wired trailers differently from the company’s assumptions.

Liam also demonstrated to me in a real manner three of the seven roles for lifelong learning that we espouse in our Brisbane Catholic Education Learning Framework: Active Investigator - Quality Producer - Reflective, Self Directed Learner.

2. Effective Communicator

Recently I was in conversation with a young father, Michael, of a very bright small boy, Josiah, who turns three years of age later this year. We were talking about the value, importance and joy of reading stories with young children. The Australian children’s writer Mem Fox suggests that children should have at least 1000 books read to them before they commence formal schooling. I happened to throw this piece of trivia into the conversation.

Michael became very animated as he calculated how often over a week he and his wife would read to their son and how they were also preparing him, through books and stories, for the approaching birth of their second child. He then went on to tell me how their story telling had developed. While still using books as the primary source, they now at bedtime make up stories based upon book characters. He shared with me how he would commence a story and how Josiah would then add details, and how together they would share the elaboration of a tale – usually involving a small boy named Josiah and many of the characters from children’s books which they had previously read.

This little vignette demonstrates the importance and value of the creative imagination and the importance of the oral tradition for people. Story telling and an introduction to its written and oral forms, ably assisted by the visual representation in children’s literature, helps to form the creative imagination that assists us to become an Effective Communicator – a further role for life long learning from our Learning Framework.

I hope that reclaiming the value of storytelling for all age groups, and particularly the young, is not lost in a potentially lop-sided understanding of 21st Century learning that may overzealously promote information and communication technology as the only manifestation for active learning in our time.

3. Designer and Creator

I am seated next to the Lord Mayor of Brisbane, Campbell Newman, in the Brisbane City Hall on a Friday evening along with the parents of students from 26 primary schools as they showcase the work they have been undertaking over the previous two days in Kids Connect – an event that integrates information and communication technologies into active engagement in learning. The whole event is convened, organised and promoted by students from one of the schools, Our Lady of Dolours, Mitchelton.

After the third presentation the Lord Mayor leans over to me and exclaims enthusiastically how fantastic it has been to have these primary students taking over City Hall, interviewing staff, investigating its history and bringing the place alive. He leans across again after about the fifth presentation. He appears to be blown away by the capabilities that the students have demonstrated, their confidence in standing up and presenting to a large room full of adults, even admitting where things went wrong in what they were planning to present “Will they be back next year?” he asks.

The students demonstrate, through this active engagement in learning and in planning for their
learning, what can be achieved when such learning is purposeful. They have also been supported in their learning by a number of teachers and support people from other Catholic schools and organisations. An event such as this is complex to organise.

I had popped in earlier in the day to observe the students in the final stages of their work. I was accompanied by one of the Year 7 organisers as I visited the many work stations. Her level of knowledge of what each group was undertaking, of the particular software programs they were using, and of what I might expect in the presentation that evening was outstanding. She left a lot of adults I have dealt with over the years in her wake with her level of detailed knowledge and aplomb.

The event had demonstrated to me the Learning Framework in action. The organisers on the day vividly demonstrated the remaining three roles for lifelong learning - Leader and Collaborator-Designer and Creator -Community Contributor.

The Climate Crisis is the Curriculum

I remain unsure if people at the beginning of the Nineteenth and Twentieth Centuries were being asked to ponder what learning might become at the dawn of these respective eras. What we do know, upon reflection, is how technology has transformed society for good and ill since then. Human kind has journeyed to the moon and back, we have photographic images of our fragile blue planet from outer space, we can send electronic images magically from a computer to a friend overseas.

Yet we still have poverty, malnutrition and lack of educational opportunity in unwarranted proportions. The technological advances so readily championed also have a downside of pollution, proliferation of armaments and a mentality of over-consumption by some.

While there are many positive aspects to the advancements that have been made there is also evidence in our contemporary society of a dependence upon drugs, alcohol and other methods of escapism. An educated 21st century learner becomes increasingly aware of such observations of human despair, perhaps more so than in any previous time – examples are transmitted via the electronic media daily.

I suggest that one of the greatest gifts we can offer to learners at this time is to provide for them a coherent philosophical framework for living. That is something which our Catholic Christian tradition can offer. As I contemplated writing this article I kept coming back to this point, not in a superior sense but from a sense of service – to the world.

The students who commenced Prep this year will graduate from Year 12 in 2019. They will graduate into a vastly different world, one where the environmental impact of our climate crisis will be potently significant. Who can foretell what other technological and societal advances they will be required to deal with on a daily basis? What I do know is that they will need skills and knowledge, and more importantly, a religious and spiritual compass in order to charter their path.

I keep coming back to our Learning Framework, its beliefs, its values and its roles for lifelong learning. I suggest unashamedly that it provides a charter to assist 21st century learners to thrive, especially if our schools take seriously the Framework’s overarching goal:

Empowering learners of all ages to shape and enrich our changing world, by living the Gospel of Jesus Christ.

To shape and enrich our changing world remains a timeless challenge commenced by the mission and ministry of Jesus of Nazareth. It as relevant today as in his time, especially as 21st century learners face more comprehensively than earlier generations, the increasing impact of our climate crisis – the curriculum issue of our time.

Reflective, Self Directed 21st century learners will read and interpret the signs of the times and actively engage in shaping and enriching positive solutions. I pray that we, as teachers and mentors, have the courage to support and empower our learners on their quest and not limit them through our biases or lack of commitment to helping them interpret the signs of the times, no matter how uncomfortable these interpretations may be to our current pedagogies and structures of schooling.

The Pharisees and the Sadducees came, and to test him, asked him to show them a sign from heaven. He said to them in reply, “In the evening you say, ‘Tomorrow will be fair, for the sky is red’; and in the morning, ‘Today will be stormy, for the sky is red and threatening.’ You know how to judge the appearance of the sky, but you cannot judge the signs of the times”. (Mt 16:1-4)
Learning Landscapes: exploring and imaging learning in the 21 Century

‘Conversation’ with Amanda Rablin
Education Officer Learning Management
Brisbane Catholic Education

Can you describe the purpose of the discussion paper on learning in the 21st century?
The discussion paper is designed to ‘provoke discussion’ about learning and teaching in the 21st Century. It raises questions about the opportunities for student (and teacher) learning instead of providing answers or ideas. While the context for the paper started from the perspective of online learning (elearning), the ideas and questions relate to learning and pedagogy in the broader sense. This is important as it means that teachers do not have to have a detailed understanding of online tools and environments in order to participate in the conversation.

What does the phrase ‘learning landscapes’ mean?
A main component of the document is the ‘learning landscapes’ metaphor that can be used by teachers and schools to reflect on current practice and to explore the possibilities for the learning in the future. This metaphor contains four different landscapes where learning experiences range from teacher-controlled to learner-managed and from specified tasks to open-ended and strategic activities. In each of the landscapes, learning experiences are reflected as a complex combination of many elements including: learner, teacher, context, resources and the environments in which the learning occurs.

The use of a metaphor as a tool for discussion and reflection is a bit like appreciating an artwork – each viewer brings a something new to the conversation and the conversation itself is richer because of it. I’ve seen this happen already with the metaphor through the reflections that others have brought to it – things that I hadn’t even begun to consider.

What are the challenges the paper might pose?
The challenges this paper poses are through the questions it contains. Today’s students seem to be comfortable functioning in a world where technologies are a pervasive part of everyday life and yet this is not so evident within schools. Some of the key questions within the paper are:

- What opportunities for rich and relevant online learning do our students bring with them to school?
- What impacts have the changes in technology had on the roles of teachers in schools?
- How can social and collaborative technologies enhance student learning and teacher professional learning?

One of the topics concern changes in online technologies. Can you explain how this relates to our work?
There have been some interesting developments in online technologies over the past 10 years (or even more). Rather than the web (or the Internet) just being
a place we go to in order to consume information created by others, people are now participating in complex social and collaborative environments where they can create new knowledge, share ideas, ‘hang out’, work and learn. Schools often block these sites and yet there is potential in exploring how these types of spaces work and what they can provide in terms of learner-initiated and learner-centred activities – to support our self-directed and reflective life-long learners. The growing use of these ‘virtual’ spaces by young people both outside and throughout school, challenges pre-existing notions of what constitutes knowledge, identity, relationships, community, learning and teaching. This raises important questions regarding what this could mean in schools both now and in the future.

From the ‘discussion paper’ to where?
In many ways the discussion is the most important part of the process as it allows the BCE community to build an understanding of the possibilities for 21st century learning and teaching together. The paper is to provoke discussion and is only the beginning. An online space is also being developed to support further discussion, the sharing of practice and the exploration of a variety of online tools and environments. After time to explore, play, discuss and challenge, the experiences and understandings that are generated will help inform the future implementation of online environments and tools as part of the learning management module through the iSAS (Integrated Schools Administrative Solution) project.

Muddling with Moodle
Diane Mackenzie, Kathryn Duncan, Janet Grice
Clairvaux MacKillop College

Science teachers at Clairvaux MacKillop College have been experimenting with the use of ICLTs for the past few years. In Junior Science and Biology data loggers have become everyday tools in the classroom. Our most recent learning and teaching experiment has been exploring online learning.

We were searching for a way to make “Mining and Resource Management” more relevant to teenage learners in Year 10. We decided to ask students to create a persuasive webpage focusing on recycling mobile phones. The students enjoyed this assignment; however, the processes of submission and assessment of projects raised some issues. We thought that there must be an easier way to collect and manage student work and it was in exploring our options that we discovered Moodle. This could solve our problems and provide even more opportunities that we had not yet imagined.

MOODLE is an acronym for Modular Object Oriented Dynamic Learning Environment. This open-source learning management system is available to teachers and students online both at school and at home. Moodle gives access to resources from any computer linked to the internet and also allows teachers to view students’ work and provide feedback at any time. The philosophy behind Moodle emphasises that learners [and not just teachers] can contribute to the educational experience in many ways. Moodle’s features make this possible as students are able to comment on entries in a database, contribute entries themselves, work collaboratively in a wiki or interact in group work online.

Embedding ICLTs in learning can be challenging and teachers sometimes feel as if they need to know everything about a technology before using it with students. Learning is about taking risks, and accepting the reality that there are situations where students are more familiar and experienced with these technologies than the teacher.

At Clairvaux MacKillop College, we set up a trial of Moodle for Semester 2, 2007 for the ICT and Year 10
Science classes. We jumped in boots and all without any detailed knowledge or planning but the risk was worth it. Year 11 and 12 Physics, Chemistry, Biology and IPT courses were added within days. Our Moodle has grown faster than we expected and students are now requesting access in other subject areas.

Some unexpected incidents we have encountered:

• A student joining a Moodle course for a subject that she wasn’t enrolled in and making valuable contributions to the discussion forum – a really positive experience for teachers.

• Having an unknown student named ‘big fat parrot’ in your class – an amusing situation?

• Teachers needing to learn urban slang and text language in order to understand how students communicate – OMG! LOL! This was frustrating until we cracked their code and crashed their party. WOOT!

• Enrolling students proved problematic with extra students on the system who had enrolled themselves in incorrect courses – a time wasting annoyance.

• Students actively using the messaging component for socialising – disabled after 24 hours.

• The server used for the trial now being too small for our needs due to high levels of interest – new server coming soon.

• Parents showing enthusiasm for the constructive and safe online activities for their children – good news!!

In our adventures with Moodle so far we have incorporated wikis, forums, databases, quizzes, assignment submissions and feedback, and glossaries into our courses - a mix of resources and interactive activities. At Clairvaux MacKillop College students in Years 10, 11, and 12 are actively using Moodle. From the initial responses of staff and students it looks like this will expand across subjects and year levels in the future.

Through implementing this system we became aware that it enables learners to have control of their learning. The students like being able to see the work of other students. Peer support, peer interaction and social networking have become part of the courses available to students. This new environment allows for informal teacher-student and student-student relationships that can be less threatening than in traditional classrooms.

Some worthwhile considerations for other Moodle muddlers:

• Courses - What will constitute a course? Is this a subject offering, a semester unit, a two year senior unit? Is this for academic work only? Should sports teams have their own area? Should houses and students activity groups have access?

• Appearance - What is the site to look like? Logos? Colour schemes? Layout of blocks? Is there a need for consistency across the different courses? Should there be different themes for different subject areas, and different activities?

• Blocks - Which sticky blocks should we use? Where should they be placed?

• Enrolling users - What is an appropriate enrolment procedure for Moodle and its courses? Can we link in or export from our student database or existing network? What happens when there are new students or changes to subject enrolments?

• Time to learn - How can teachers learn about the potential? What time is provided for teacher

“People who aren’t as socially skilled as others can go online and they feel more comfortable expressing themselves electronically rather than face-to-face.”

Ernad Ahangari, Year 11
People who aren’t as socially skilled as others can go online and they feel more comfortable expressing themselves electronically rather than face-to-face.

Emad Ahangari, Year 11

On Moodle, “when people ask you questions for help, you have to reassess what you’ve learnt and in doing so it consolidates what you know”

Yee Trinh, Year 11

What kind of learning experiences will work in an online context?

- Mentors to help – Who can help us get started? Technically? Pedagogically? Who can we talk to that has already done this?

Having conquered the initial mechanics and having learned what the program can do, we can see more possibilities for enhancing student learning. Moodle gives us ways to connect with students beyond traditional teaching practices. We have been very fortunate to have had the encouragement and support of Amanda Rablin in this venture. With our recently awarded BCE ICLT Innovations Grant, we plan to explore the use of GPS in Science, with Moodle playing a key role as a space for collaborative learning and interaction. So as life-long learners our adventure continues...

Podcasting in Learning

Liane Grant, St Bernardine’s Primary School, Regents Park

Audio podcasts, enhanced podcasts and vodcasts have become more widely known over the past few years, especially since the rapid rise of iPods and mp3 players. So… what exactly is a podcast? How do we create them? What purpose do they serve in teaching and learning? How can teachers effectively use podcasts and podcasting to motivate and engage their students? How can teachers use podcasts to address and improve student learning outcomes, and how can teachers plan for podcasting success?

This article aims to answer these questions and inspire you to delve into the educational possibilities of podcasting.

What is a podcast?

Podcasts are audio and/or video files which users can subscribe to and download onto their computers and media devices (mp3 players or iPods). Users can then listen to podcast episodes at their convenience.

There are three types of podcasts: audio, enhanced and video. Audio podcasts are simply vocals with background music or sound effects. Enhanced podcasts are audio podcasts with pictures. You can even add PDF pages and web links if you choose. Video podcasts or vodcasts contain video and audio.

Currently there are thousands of ready to download podcasts on the internet. The best place to search for them is through the iTunes music store. If you don’t have iTunes already, it is a free download [see Links at the end of this article for the website]. Podcasts are free and usually come with a content warning. My advice is to always listen to, or watch the podcasts before sharing with students. The following are some podcasts you can subscribe to in order to get started:

- Absolutely Wild Visuals – Animal Olympians
- National Geographic – Wild Chronicles
- NASA – “Ask an Astronomer” Videos
- KPE (New Zealand School Podcasts)

How do we create them?

You do not have to be an IT expert to create a podcast. In its simplest form, without the fancy stuff, an audio podcast is a recording of your own voice. It is then saved and uploaded onto the internet via RSS feeds, allowing computer users to subscribe to it. It may sound complicated, but please do not be fooled as there are programs which make this process very easy.

Obviously, the two main platforms used in our schools are Windows and Mac. When creating podcasts on these platforms you may need to download or buy podcasting software. Some of this software is listed here with websites for information listed under Links – at the conclusion of this article.
Windows
• Audacity – Free download
• Pod Producer – Free download
• Tool Factory – Free 30 day trial, approx $100 for one license

Mac
• Garageband – part of the iLife 06 suite
• Garageband – part of the newly released iLife 08 suite

Note: This software is standard on all Macs.

I have used Audacity and Garageband, and personally find Garageband to be the easier of the two products. The beauty of Garageband is that it has a wizard specifically for creating audio, enhanced and video podcasts. My students have also found Garageband to be easy to use and it comes with copyright-free sound effects and musical jingles. The added bonus of Garageband is that you can automatically share the file to iTunes or to a website at the click of a button.

I have been a Mac user for the past one and a half years and have found that for my purpose the most simple way of podcasting is through using Garageband. You could of course try both platforms and discover what works best for you.

What purpose does podcasting serve in teaching and learning?
These days, children in our classrooms have grown up with technology. They use computers, mobile phones, digital cameras, portable game devices (PSP, Game Boy) and mp3 players without blinking an eyelid. Their world is very different to the world in which we, their teachers, grew up in. Marc Prensky (2001) commented that:

Our students have changed radically. Today’s children are no longer the people our educational system was designed to teach.

So, with this in mind, we must experiment with new technologies as a way of keeping in touch with our students and the way they learn. Podcasting, as a teaching tool, allows for multifaceted learning experiences, which can address a variety of curriculum outcomes. It also provides teachers with an effective medium to motivate and engage students.

Using podcasts in teaching and learning
As a teaching tool, podcasts can be used:
• to motivate and engage students
• to introduce unit content
• as an assessment tool
• for teacher and student reflection
• as a way of keeping in touch with parents
• in the reporting process

The way you use podcasting in your teaching and learning is really only limited by your imagination.

During the past year and a half I have used podcasts in teaching and learning in a variety of ways. The following are some examples of how podcasts have been used in my classroom.

As part of a Year 6 Science unit, I subscribed to and used some episodes from Dr Carlson’s Science to teach my class about Newton’s Laws of Motion Theatre (refer to Links for the website). These short episodes were exciting and more interesting than some of the videos I found. I was surprised at the level of interest displayed by my class, as well as their understanding of the content.

This year I have used podcasting as part of the Literacy Block with my Year 3 class. Here are some examples of how I was able to use teacher-created and student-created podcasts to promote literacy skills

<table>
<thead>
<tr>
<th>Activity</th>
<th>Purpose</th>
<th>Created by…</th>
<th>Type of podcast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Origami Box</td>
<td>Follow instructions to create a box</td>
<td>teacher</td>
<td>enhanced</td>
</tr>
<tr>
<td>Recipe Podcast</td>
<td>Practice writing a recipe and practicing their speaking skills</td>
<td>student</td>
<td>audio</td>
</tr>
<tr>
<td>Dictation</td>
<td>Develop student’s listening and spelling skills</td>
<td>teacher</td>
<td>audio</td>
</tr>
<tr>
<td>Listening Skills</td>
<td>Develop listening skills and correctly complete a task</td>
<td>teacher</td>
<td>audio</td>
</tr>
<tr>
<td>Reading</td>
<td>Students hear themselves read, which helps them develop fluency</td>
<td>student</td>
<td>audio</td>
</tr>
</tbody>
</table>
As part of the Literacy Block, podcasting would also be helpful in editing writing as students podcast their piece of writing and re-play the podcast in order to revise or change their text.

I have also used podcasting as a medium for advertising. Instead of creating posters, students made audio podcasts focusing on the things people can do in their chosen state. These examples are still online, and the Queensland examples are very good. In this task the students focused on how they used their voice and the type of descriptive language they used (see Links for the website).

Using podcasts and podcasting to motivate and engage students

In each of our classrooms, we have students with a diverse range of needs. Some children naturally engage with teacher-directed lessons, but there are always those few who benefit from an alternative approach.

At one time I was struggling to keep a child on task in order to complete an information report. A significant amount of teacher time was spent scribing for this child and typing the material for a completed piece of work. The next time this type of task was undertaken, students were to present their report as a video podcast and I found this particular student to be motivated and engaged throughout the process, and able to independently complete the report. In fact the process motivated and engaged the whole class who impressed their teachers by their effort in completing the research, note taking and completing the first draft on time.

I have found podcasting to be a useful method for children who have had trouble completing tasks, and as a result have incorporated some of these aspects into my Literacy Block each week. By adding podcasting as part of my rotational activities, there has been less evidence of behaviour management issues. This is great, because now I am able to spend quality time with specific rotational activities, such as guided reading.

How can teachers use podcasts to address and improve student learning outcomes?

Podcasting allows teachers opportunities to assess and improve learning outcomes and is flexible to allow for a range of learning and teaching experiences. As an example, my teaching partner taught our class how to write ballads as part of a unit of work on Australia, covering English and SOSE outcomes.

To complement this, I organized for the students to create video podcasts of their ballads (see Links for the website). Below is a brief overview of the outcomes addressed as part of this video podcast.

<table>
<thead>
<tr>
<th><strong>ENGLISH</strong></th>
<th><strong>THE ARTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Reading a range of Australian themed ballads and their own.</td>
</tr>
<tr>
<td>Writing &amp; Shaping</td>
<td>Students write ballads, following the appropriate structure.</td>
</tr>
<tr>
<td>Speaking</td>
<td>Students use specific tone and expression for narration, voiceover and/or dialogue.</td>
</tr>
<tr>
<td>Music</td>
<td>Students create a backing track for their ballad. Students wrote the music and recorded this track using Garageband.</td>
</tr>
<tr>
<td>Drama</td>
<td>Students create a sequence of movements to complement their ballad.</td>
</tr>
</tbody>
</table>
| Media       | Students :-
|             | • define the purpose and audience |
|             | • zoom, tilt, pan or track with a camera to match music or soundtrack |
|             | • select or change sequence and order of shots (storyboarding and/or editing) |
|             | • storyboard |
|             | • combine props with facial expression, gesture, body stance and movement |
| Visual Arts | Students create props and select and/or create costumes. |
| Dance       | One group of students created a dance sequence as part of their video podcast. |

Through podcasting students practice speaking skills and in the process develop fluency and confidence.

How do you plan for podcasting success?

When it comes to making a podcast, creating the final product is only one step in the podcasting journey. To create quality podcasts, it is important to facilitate your students learning and scaffold their planning.

Likewise, it is important to provide quality examples as
models and allow opportunities for students to practice using podcasting software before you expect them to complete a polished piece of work.

In the past I have given students a simple task, such as creating a nursery rhyme, which allows them the freedom to explore the program. I would give each group thirty minutes to create their masterpiece. Some children simply sang their nursery rhyme, some figured out how to add music tracks and create music, and some even overlapped vocal tracks. I still remember how excited the children were when they learnt something new.

Remember if you want to use podcasting in your classroom there are teachers that have used or are using podcasting in our schools. My advice is not to be afraid to ask these people for advice or assistance.

In Conclusion
Using podcasts in an educational setting is only limited by imagination. Remember not to get caught up in being the expert and never be afraid to learn with your students.

Links
Audacity - http://audacity.sourceforge.net/
Dr Carlson’s Science Theatre
- http://sciencetheater.blogspot.com/
Ballads – http://web.mac.com/miss_grant/iWeb/6WG/Our%20Ballads.html
Places to Go/Things to do – http://web.mac.com miss_grant/iWeb/6WG/Our%20Podcasts/Archive.html

References

Blogging 2 Learn, Learning 2 Blog

"I never teach my pupils; I only attempt to provide the conditions in which they can learn" Albert Einstein (cited in Prensky, 2006).

Amanda Marrinan is a year one teacher at Saint John Vianney Primary School Manly. She has been interested in the use of technology in the classroom for some years but has this year begun blogging as a means of negotiating curriculum in the Early Years. In this article she answers questions about how she got started, what the children are doing now and where they might be headed in the future.

Why did you start a blog with your class?
It all started with asking my Year 1 students “Would you like to blog this year?” Their question “What’s a blog?” began this amazing learning journey into the world of blogging. I’ve always been intrigued by technology and interested in how I could embed it into my teaching and learning within an Early Years classroom. I attempt to utilize innovative teaching practices within my literacy blocks. A hands on approach that caters for a variety of learning styles has had a positive impact on the children’s reading ability, however this was not as evident in their writing. The nature of the Early Years learner means that children are frustrated when they can’t communicate effectively in written form. They love to be engaged in conversation, but the mechanics of writing can be ‘all too much’, especially for the boys. Social software like blogs, affords us the means of connecting with one another as writers so the intent of blogging was to provide an avenue for students to be Effective Communicators; giving the students a purpose and audience for developing their reading and writing skills. They were writers from day one, year one.
Getting started

Whilst my intent was to start a blog, actually ‘doing’ it was quite scary.

“What will others think? What if I got it wrong? Who could I turn to for help and inspiration? Is it possible to do this Term 1, Year 1?” were just some of the questions that I asked myself. I expect my students to be risk takers so how could I expect any less of myself?

After overcoming these initial fears, a basic blog was created using blogger.com. I explained to the children what a blog is and why people keep blogs. They made the connection between blogging and their journal writing. The children were very excited about the prospect of blogging and saw it as a way of sharing their learning - initially with their parents and each other. The concept of a blog and its purpose were discussed at the parent/teacher information night. Once parents understood the safeguards that had been put in place to keep our blog private, our class blog was officially launched.

What did you blog?

The next step was deciding what to blog. The students saw that it was important to communicate what was happening in the classroom on a daily basis. As it was the start of the school year and routines were being established, the children began a conversation with their parents about the new systems that operated in year one e.g. how to change homework readers, how to borrow from the library, before school routines, transitions in the classroom and so on. Then they wanted to blog about what they had learned and it wasn’t long before everything we did got the response of “we have to blog that”….. the children were in control! In the words of Barbara Ganley:

“The deeper into blogging I got, the more I couldn’t disentangle the pedagogy from the blogging – to talk about blogs means to talk about student centered learning, collaborative knowledge spaces and constructivist pedagogy. Teaching with blogs the way I do – which means not applying them piecemeal but integrating them fully in all their messy, flexible, fluid promise – means that you have to let go of control of the classroom, give up the stage and create opportunities for learning magic to occur. The trick is to weave the learning and the tool so seamlessly together that the blog is the class and the class finds the blog indispensable” (2005: Para 2).

Managing the blog

Students decided the content of the blog including the images but I was the typist. Parent volunteers helped students up to four mornings a week to read the posts and type the comments that children wanted to leave on a post. Without this support the blog would have been unmanageable in the early stages. We could have scaled back the number of posts but the sheer enthusiasm of the students and the richness of the conversation kept me going. Working with twenty first century learners meant that I had to remain one step ahead; hence I learned to embed code and to utilize social software like bubbleshare, glitter text, animated graphics and teacher tube videos to keep the blog engaging. The children’s idea of a sign on sheet was invaluable in managing who posted and when. Students quickly came to understand that the blog was not something that just occurred during school hours. The nature of the post changed to include questions or challenges to keep the discussion and sharing going 24/7. Some children started bringing photos from home in response to the questions posed in the posts. They were frustrated in not being able to share their responses instantly and so we set up a class email account. Parents began emailing photos that reflected the learning taking place in the classroom such as patterns using vegetables and cutlery from the dinner table. My evenings disappeared as I checked emails that included the words and images students wanted me to post on their behalf. Blogging had become such a way of life for the children that it continued over the holidays.

What learning was happening?

It was not only the children that were learning. I became the perfect example of a long life learner as everyday (through the use of the data projector) the children watched as I made mistakes or hesitated about how something should be done as we were posting. They celebrated when I got it right and were frustrated when I didn’t know how to do what they wanted me to do, for example, adding audio to the blog. As the children became more familiar with the process of blogging
they led me through the steps of what to do next. The children learned the language of blogging and it soon became part of their regular vocabulary. They developed the confidence to work with other adults who were unfamiliar to blogging yet could help them by typing their posts. The children showed the adults how to format and upload the posts. The children became the teachers!

How does an Early Years philosophy support blogging?
An Early Years philosophy is influenced by constructivist pedagogy that means:

• Learning should take place in authentic and real-world environments
• Learning should involve social negotiation and mediation
• Content and skills should be made relevant to the learner
• Content and skills should be understood within the framework of the learner’s prior knowledge
• Students should be assessed formatively, serving to inform future learning experiences
• Students should be encouraged to become self-regulatory, self-mediated, and self-aware
• Teachers serve primarily as guides and facilitators of learning, not instructors
• Teachers should provide for and encourage multiple perspectives and representations of content (Doolittle, 1999: Para 3).

In my classroom this means that context is negotiated on a daily basis so the content of the blog is constantly changing and can rarely be predicted.

Just when I was thinking the blog was working nicely as a conversation between children and their families, I discovered that it was not so private after all. I had linked to an educational website that focused on alphabet games and was amazed to find that the creator of that site left a comment on our blog. This concerned me at first – being new to the whole blogging process, I did not realize that when you make a link to other sites your blog becomes more visible. I researched the author of the alphabet site and decided to let her comments through. This led to an ongoing relationship with this writer/illustrator who works with Early Years classrooms in New York. She kept an eye on our blog and her comments led to new opportunities for learning. The students were writing poems and composing illustrations and titles for poems on her site. Initially we communicated via posts, comments on her blog and email. Eventually we learned to Skype so that we could talk with our new friend face to face. My focus on the students’ writing skills continued but the context for that focus, changed on a daily basis. In line with the children’s interests and motivations, we found ourselves writing for many different purposes – sometimes poetry or perhaps providing descriptions about our environment and our culture to someone in another country. At the end of the term the children realized that we had shared ‘everything’ that we could about our classroom, our routines and our learning at that time. Together we realized that we didn’t need to blog about everything and we became more critical about what conversations we chose to start.

What’s happening now?
My philosophy is to provide an environment in which students can learn. The discoveries I have made alongside the children, with them in the role of apprentices, have challenged me to further explore the nature of teaching and learning in the twenty first century. David Warlick (2006) discusses the need for a different kind of classroom that he calls a ‘flat classroom’. Students in a flat classroom exhibit the following characteristics:

• Curiosity
• Are Self Directed Learners
• Have an intrinsic need to communicate
• Have an intrinsic need to influence
• Are Future Oriented
They communicate more, construct original content more, and more often collaborate virtually with other people. This project aimed to engage students in a “conversation...from within the classroom to a wider audience...then brought back into the classroom for further discussion” [Utech, 2007: Para 8]. It is through students’ conversations and those with the wider audience that the teacher gains true insights into the students’ learning and in turn, plans the future learning that needs to take place. The 21st century learner learns from many sources and collaboratively makes meaning through communication with not only the classroom teacher but with others wherever they may be.

The children in my classroom are now managing the posts on our class blog by themselves and with the support of a buddy class have created and are maintaining their own digital portfolio using a blog. Some children are still experiencing frustration in communicating via the written form so I am undertaking a project to explore podcasting as another medium through which the children can continue a conversation about their learning. My students no longer see me as the only expert in the room – they seek out the expertise of others such as their peers or their buddies to assist them as the need arises. Some students are in such high demand to share their skills that they are posing the possibility of creating “movies” to instruct others in the finer points of blogging. The sky is the limit for these twenty first century learners and for their teacher too!

Find the blogs from Amanda’s class
http://1mgems.blogspot.com/

References


Maria Becquigny  
St Catherine’s School, Wishart

Imagine learning in a classroom without boundaries, alongside classmates from every continent on Earth. When you join the Rock Our World (ROW) project, this is exactly what happens. Rock Our World, now in its seventh round over four years, is an exciting international project involving students from over a dozen different countries working together to share stories, compose music, make movies and hold video conferences to learn about each other and their world.

The Community
Since the launch of Rock Our World’s first round in 2004, more than 40 schools on all seven continents have been involved in the project. St Catherine’s Wishart was one of two Australian schools involved in Rock Our World 6 (ROW6) earlier this year along with McDowell State Primary School and sixteen other schools from twelve countries. Round 7 begins officially on September 21st with 14 schools participating from Tasmania, Germany, Japan, Belgium, Israel, Italy, Hong Kong, Canada, and four schools from the United States of America.

The Concept
Rock Our World projects are held twice each year. Teachers can apply to join via a link from the ROW website to an online questionnaire. Teams also submit (on DVD) a two-minute video introducing themselves and their school community. Every student and teacher to be involved in movies or video conferences for Rock Our World must supply a signed release form (available for download from the website). Technical support and friendly advice from the international ROW community is offered but access to a digital video camera and an Apple computer running GarageBand and iChat is mandatory.

Throughout each round, participating teams from around the world are encouraged to hold video conferences using iChat or Skype to get to know each other, ask questions, share their learning and discuss ideas. They collaborate on musical compositions, make movies and share stories through multimedia technologies.

The Conception
The idea that was eventually to become the Rock Our World project was first conceived in 2004 during Camp Apple, an international ‘think tank’ at Monterey, California which is held annually to facilitate collaboration between Apple Distinguished Educators. Mike Anderson, initiator of “Kids Congress” and Principal of North Loburn Primary School in Rangiora, New Zealand showed a video clip from Telecom (NZ) which illustrated a musician creating a track and texting it to a friend who added to it. Carol Anne McGuire, teacher of Visually Impaired students from California was in the audience when Mike and Paul Shaw from Brisbane Catholic Education spoke about the concept of a collaborative music project.

Carol Anne McGuire adopted this concept and with boundless energy, passion and contagious enthusiasm ran (around the world) with it, winning the backing of heavyweight sponsors such as Apple, SmartBoard, Discovery Channel, NASA and The American Film Institute.

Collaborating globally on music projects using GarageBand remains a central part of every Rock Our World project and presumably it is this endeavour which provided the inspiration for the project title.

The Content
Each round of Rock Our World focuses on a different theme. ROW6 “Are You Game?” began in February 2007 and looked at games children play around the world, with a special focus on digital storytelling. Themes from previous years include ROW4 “What’s in a Lunch?”, which focused on foods around the world and ROW5 “Rockin’ Sol”, a science-based round involving experiments with melting ice and solar panels to learn about our Sun.

Teams involved in each round receive a “mystery box” in the mail containing objects or materials to be used in structured investigations or activities, to spark interest and discussion or to use to simply have fun.

Videos created during all of the ROW projects to date
can be accessed at the Rock Our World website. Classrooms not officially involved in the project can still join in the fun and access lesson plans, discussion forums and resource materials from all previous rounds by joining the ROW Moodle (see the links below).

The theme for ROW7 “Surf’s Up!”, will look at the world’s oceans - how we use them and how we can care for them. Fortunately this focus follows on beautifully from a year 4 literature-based unit we implemented this term using Wendy Orr’s “Nim’s Island”. This book strongly promotes marine conservation and provided an entertaining and engaging springboard for our study of at-risk marine animals and their habitats.

The Collaboration
Initially I tried to involve all three Senior Primary multi-age classes at St Catherine’s in the project. We had limited class time between specialist lessons, plus a planned curriculum unit that had no time for or connection to a digital storytelling component. Eventually, with questionnaires and qualifying tasks, the size of the group was reduced to a core group of seven creative and committed students, dubbed the “ROW Filming Team”.

The students became really focused and collaborated to invent an original game based on one of the items found in our mystery box. They created a three-minute movie to tell the story of the opening of our mystery box and the inaugural playing of their game. The students worked through most of their lunch times during term two to plan their detailed storyboard, to film and edit their movie, and create an original soundtrack.

Three students from this veteran ROW6 team now meet each Thursday morning as part of a newly formed senior primary extension group. They will form our core team for ROW7 and devote this weekly class time to the project. The year four “Nim’s Island” class whom I spend the same session with each week, will assist with the ROW7 film projects, participate in video conferences and take part in the lessons provided to further their learning about ocean environments. As well as being a collaborative effort, ROW7 is also connected to prior learning experiences.

The Communication
My work is in a part time capacity at St Catherine’s and thus we needed to establish effective communication processes with our ROW7 Team, for quick disseminate of information, project requirements and specific tasks as the project evolved. Think.com met our communication needs especially when physical face to face meetings were not possible. We established a space in the think.com projects area for ROW, and any senior teachers or students could access and contribute if they wished.

Time was of a premium – there were specific deadlines to meet and often surprises were revealed along the way, such as the time we were to pass our own storyboards on to a team from another country. Until that stage of the project we were blissfully unaware of the requirement to film another team’s storyboard before we were permitted to film our own. This proved an interesting diversion as we were challenged by the storyboard from a New Zealand school in which their large school swimming pool featured prominently. Our fellow students from across the Tasman were most amused when they viewed our interpretation of their storyboard, which included a blow-up kiddie wading pool on a small patch of grass beside the fire hose. The teaching materials provided for this project are excellent. Teams in ROW6 had access to videos and printable resources from the American Film Institute on topics such as creating storyboards and incorporating different camera angles. I could show the students clips from films such as Monsters Inc. and Ferris Bueller’s Day Off, accompanied by scripts and storyboards depicting the same segments of the films. Students could then make comparisons and arrive at conclusions about the film making process which really enriched the teaching and learning process.

The Compositions
The composition of music tracks in GarageBand remains a core activity in every Rock Our World project. In the first week of the round, each team needs to compose a 30 second drum track and post it to the ROW iDisk. For the uninitiated, this is a simple log in, drag and drop process to a central storage space hosted by Apple. Storage space on “iDisk” comes with a Dot Mac subscription, which is an essential requirement. A 30-day free trial is available. Every Friday for the following nine weeks, we download the track from another team (following a strict roster) and
added an instrument. The drum track from Belgium may gain bass guitar in Colorado, then keyboards in Peru. After ten weeks, our original drum track returns to us, with additions made from nine other countries across the globe. Now that’s worldwide collaboration!

I’m hoping to involve our music specialist in the ROW7 GarageBand tasks this round. You can imagine how difficult it becomes to match rhythm, key and timbre as the music tracks grow in complexity and we gather instruments like snowballs from the Italian Alps. My hearing can tell when a track doesn’t sound right, but explaining the reason and discussing ways we might amend it, is way beyond my limited musical talent.

The Chats
Probably the most exciting part of ROW for me is the video conferences. Amazingly, 21st century students seem to take this wonder of modern technology in their digital stride. During our many video chats, I could frequently be spotted rubbing goose bumps, clasping slack jowls and wringing hands with excitement, (thankfully well out of range of the built-in iMac camera). This would occur as the students casually chatted with the ROW team from Tokyo, played charades with the team from Hong Kong, watched a demonstration of a 600-year-old marble game in Sienna, Italy, or shared their favourite film stars with the team from Pennsylvania. Exciting stuff!

Our students prepared for these conferences by researching greetings or words of encouragement in Italian, flying over the other team’s school in Google Earth or listing questions for their fellow “Rockers”. The participating students often had to turn up at school by 7.15am or stay until 5pm to accommodate the various time zones. They brought in chocolate bilbies, board games, stuffed animals, damper and Vegemite to show off across cyberspace and revelled in entertaining American students with stories of the koala who regularly makes an appearance in our playground at lunch time.

The Celebration
The culminating event of each ROW round is “Family Night”. This is a two hour event involving video conferences with all of the international teams to showcase the movies they have produced and talk about the process. It is broadcast on television in California (hence the necessity for those rather daunting release forms) and webcast live. Differing time zones can make this a rather uncomfortable event to attend for those on this side of the International Date Line. The starting time of 11.30am Saturday in Anaheim, California made it an uncivilised 4.30am Sunday kick off in Brisbane.

The mandatory teacher conference and “Family Night” require a common conference platform for all teams so iChat was the order of the day. Due to firewall conditions at Brisbane Catholic Education, we joined the Family “Night” event from my home. Seven students and their parents, along with two dedicated teaching colleagues arrived on my doorstep at 4.00am that Sunday morning, much to the consternation of my uninhibited neighbours I’m sure.

I had spent the previous day purchasing two 500-watt floodlights and collecting every standard or reading lamp I could lay my hands on to light up the pre-dawn darkness of my dining room table sufficiently to be seen clearly across the world via internet. We had a very swish USB microphone on loan from Paul Shaw, a couple of handsome stuffed bilbies to attempt to demonstrate to the Americans that such a creature
actually exists, and a projector and screen set up in front of my couch so the parent audience could follow the action.

Our team was first on the program and all went smoothly for our four minutes of "on air" fame, during which our task was to talk about the storyboarding process. The students, all dressed in green and gold, were well-prepared, and answered our three pre-advised questions confidently for the international audience.

The four minutes seemed to pass in the blink of an eye, after all the hours of preparation and during the ensuing whoops and collective sighs of relief when we prepared to settle back and watch the rest of the show, someone switched on a toaster to start the shared breakfast...plunging the household into darkness when the domestic electrics decided enough was enough!

Consequently, we missed much of the show while floodlights were disconnected, safety switches coaxed back on and computers restarted, but a merry time was had by all as the sun rose on our new day, 18 hours ahead of the TV studio hosting the proceedings.

The Comments
When asked what they learned from the ROW6 experience, students were able to articulate some valuable observations about the digital storytelling process. They spoke about the need to communicate their ideas clearly, to plan carefully and be organised, to overcome individual differences and work together for the good of the group. Every one of the Film Team expressed their surprise that making a movie involved so much talking, writing, planning and storyboarding, before they could get their eager hands anywhere near a camera! They marvelled about the effect that different music and sound could make to the same piece of video.

We reflected that although we are all avid consumers of film and multimedia, not many audiences give much thought to its creation. How are the elements of the story assembled? How can suspense and excitement be built through use of different camera angles? How is the watcher affected by different music and sound? Are we being manipulated? We all agreed we would not watch movies in the same way again.

It is an exciting, though often anxious experience for a teacher to participate alongside their students in a project over which they have little control, and no prior knowledge of the direction they will take. I was literally learning alongside my students as a fellow participant. Student and teacher alike, however; loved the chance to create something for a real audience - an international one at that.

Year 6 student, Monique said of the project, "I am learning a lot about how to use a video camera to capture different shots, and how to make a storyboard. It’s been exciting and fun to talk to kids in other countries about their lifestyle and the games they play." Her classmate Shannon commented, "We are having great fun, meeting new friends all over the world and learning heaps at the same time."

The Care and Concern
One of the surprises for me about ROW has been the fellowship that has developed between this team of educators from vastly different backgrounds and cultures, teaching a wide range of age groups from middle primary to college students and who are physically scattered across the globe, never having met in person.

Since our initiation into this marvellous international community, when news breaks of an earthquake in Peru or Tokyo, or a mass shooting in Virginia, there is a sudden scurry to email and ask for news from our colleagues in those places to be assured of their health and safety. At those times we offer each other our fervent prayers for an end to misunderstanding and intolerance in our world. We share our hopes that our students, the future adult citizens of Earth, who are already learning, understanding and sharing stories with their peers from all corners of the planet, may help to realise the world peace and fellowship that we long for. It has indeed been an amazing experience.

Care to Find Out More?
The Website: http://www.rockourworld.org/
The Moodle: www.discoveryeducatorabroad.com/rockourworld
Need an online Project Space? ...see www.think.com
Using Computer Game Technology to Create Virtual Learning Environments

Chris Blundell

The use of computer games in learning is the subject of considerable interest and investigation by educators. Potential uses range from employing commercial titles as resources to support learning, through to utilising the technology for purely creative endeavours, such as machinima. One use of computer game technology is the creation of virtual learning environments suitable for the classroom context. This article describes a project - called ‘Exploring Ancient Wonders: The Parthenon’ - to verify the capacity of computer game technology to create virtual learning environments.

Project Background

The impetus for the project was an anecdotal observation that, in the absence of first-hand experience, students find it quite difficult to genuinely appreciate the significance of ancient architectural wonders. Virtual reality technologies have been identified as viable mechanism for providing students with immersive learning experiences to address a lack of first-hand experience (Dickey, 2005; Foreman, 2004; Moreno, 2002; Winn, 2002). The expense of traditional virtual reality technologies and the complex skill sets required to use them, however, have hindered their utilisation in the pre-tertiary education sector. Recent developments in computer game technology, specifically engines for the ‘first-person shooter’ (FPS) genre, have provided opportunities to create and run virtual learning environments (VLEs) using personal computers.

The FPS genre encompasses games that utilise a high-frame rate, first-person perspective to create the illusion of a three-dimensional environment. Often FPS games feature hand-held weapons, hence the genre’s title. While it is difficult to identify an educationally sound rationale for the direct utilisation in schools of games that feature simulated violent interaction in a game world, the capacity of FPS game engines to create immersive environments is recognised (Champion, 2006; Foreman, 2004; Jacobson & Holden, 2005). These environments can promote learning by creating a sense of presence that facilitates embodied cognition and immersive participation (Jeffer & Whitelock, 2000; Winn, 2003). Many FPS titles are released with tools that allow users to modify – or ‘mod’ – the game (Wellings, nd). Therein is the potential benefit for educators: the ‘mod’ tools can be used to remove questionable or inappropriate content, and then create virtual learning environments for specific purposes.

The aim of the ‘Exploring Ancient Wonders: The Parthenon’ project was to determine the viability of creating VLEs using computer game ‘mod’ tools. The Parthenon was selected because it is an iconic architectural structure, the scale of which is difficult to appreciate from images. The architectural elements are comparatively simple, facilitating effective representation using game technology.

Designing the VLE

Literature suggests that successful VLEs must facilitate immersion (Champion, 2006; Jeffer & Whitelock, 2000; Winn 2003) and have an effective pedagogical foundation (Chen, Toh, & Ismail 2005; Moreno, 2002). Immersion in VLEs is created by promoting a sense of presence (Winn 2003). For this project, this was achieved by accurately depicting the scale...
and architectural features of the Parthenon (refer to figure 1). Environmental effects, such as wind and other sound effects, coronas and shadows, were included to maintain the illusion of reality, and the in-game user interface typical to FPS titles, was not used.

To avoid the problems of becoming lost or aimlessly wandering in the virtual space, information markers were used to focus the user’s attention (refer to figure 2). Each information marker included an audio commentary with specific terms displayed as on-screen text, often as location-specific labels. Illustrative diagrams, photographic images and feature markers were included to help users understand specific features.

A pedagogical context was designed to facilitate exploration and cognitive engagement to learning. Users are provided with a worksheet depicting six artefacts from the Parthenon. They are asked to find each in the VLE, then gather and record information suitable for use in a museum display. This provides a mechanism to connect activity in the virtual space with cognition thus promoting a form of embodied learning (Winn, 2003).

Creating the VLE

For the purposes of project, Unreal Engine 2 runtime (Epic Games, 2004a) was used. It is a free version of the engine used by many popular games released over the last four years. It includes a comparatively easy to use, feature-rich application called UnrealEd which is used to create game environments (refer to figure 3). UnrealEd does not require knowledge of or an ability to write programming code to create environments. It is well-supported by on-line documentation (Epic Games, 2004b), a wide range of online tutorials, and a published technical guide (Busby, Parrish & Van Eenwyk, 2005). Importantly, the end-user licence (Epic Games, 2004c) allows the demonstration version of the runtime and any content created with it, to be freely distributed and installed.

Most of the assets required for the VLE were either three-dimensional objects or two-dimensional textures placed on surfaces of three-dimensional objects. All content not created in UnrealEd was imported and then placed in the VLE. Detailed three-dimensional objects, such the statue of Athena and the columns, were created with a specialist three-dimensional modelling tool – 3D Studio Max. Textures were based on digital photographic images that were manipulated and optimised with Photoshop. Similarly, audio files were created and processed externally using Audacity. Interactive elements, lighting and effects, and terrain were created in UnrealEd. It is worth noting that alternative modelling and texture applications are available and suitable for creating content for UnrealEd.

Implementing the VLE

‘Exploring Ancient Wonders: The Parthenon’ was installed in a computer laboratory and used by a class of Year 8 History students. The VLE ran at an acceptable frame rate and resolution on computers with a reasonably typical hardware configuration, though computers with 3D video cards are required. The students demonstrated a high-degree of competence navigating the virtual environment and data gathered suggested that both males and females found the VLE easy to use. Anecdotal feedback indicated that the students enjoyed the experience and were engaged by it.

Conclusion

The ‘mod’ tools for FPS games represent a viable and valuable application of computer game technology in learning. Indeed, they allow for the creation of quite specific VLEs and the removal of any doubt regarding educational integrity. The ease of use, quality and accessibility of UnrealEd along with the opportunity to freely distribute content created with it, makes Unreal Engine 2 runtime the ideal tool for teachers.

More information about ‘Exploring Ancient Wonders: The Parthenon’, including a download link, can be found online at: http://www.planetunreal.com/plutonic/eaw/
This article describes a Virtual Visits project involving Education Officers Curriculum from Brisbane Catholic Education and teachers at St Joseph’s Primary School, Nanango, a rural school in the Archdiocese.

A rationale for the Virtual Visits project
The Virtual Visits project was planned to enable more regular visits to remote schools by virtual means. The purpose of the project was to explore tools that could provide ways of developing and maintaining a professional learning relationship between teachers in physically isolated schools and centrally based Education Officers Curriculum. Distance hinders regular visits and interactions, and impedes just-in-time learning. To be effective, professional learning needs to be sustained over a long term (Downes, et al 2002). Consultation visits to schools that are in the country tend to be at a convenient rather than appropriate time. Also, as such visits are generally quite intense and have considerable time lapses in between them, maintaining the

ICLTs and Professional Learning – the Virtual Visits Project
Cath Grealy
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momentum of any new learning is not always as successful as it could be. This situation was clearly not as satisfactory for teachers and consultants and formed the catalyst to find a better way of providing teachers in isolated schools with access to the same level of professional learning as those from metropolitan schools. The Virtual Visits project centred on an identified and negotiated professional learning context for a particular school.

**A new model of teacher professional growth**

This is a different approach to improving the way to work with teachers from our more remote schools in the Archdiocese, and involves choosing particular digital tools and adapting these for collaborative teacher professional learning.

It was anticipated that the intentional use of interactive social networking digital tools would offer teachers successful learning experiences for themselves and increase their confidence in using ICLTs independently for their own continued professional learning purposes. However, there was also an awareness of research which found that when teachers are confident users of technology for their own use, they are more readily able to implement aspects of learning and teaching with ICLT in their classrooms. There were multiple levels of outcomes from the Virtual Visits project, but the prime purpose was support for teacher professional learning.

**A focus for professional learning**

There were two major professional learning aspects. The first was about a computer program (RMCM) and its use to report student learning by the end of 2007. This meant the teachers needed to use the program for planning and monitoring effectively in order to gain maximum benefit when using it for reporting.

The professional learning model used to prepare other teachers for the use of this program included face-to-face processes and the team wanted to be able to confidently translate these processes to a model supported by technology.

On another level, the professional learning was about how to facilitate adult learning. The Curriculum Support Teacher (CST) at St Joseph’s was new to both the position of CST and the school, and had to learn to facilitate collaborative planning sessions for the rest of the staff. Similarly, the ICLT lead teacher needed to facilitate monitoring sessions for the staff on the RMCM program. It was important that the modelling they received from members of the Curriculum Team gave them confidence to support other teachers in their professional learning. The team felt that this type of interaction between staff was best modelled initially in a face-to-face environment.

Finally, the teachers needed instruction about the how to operate the online synchronous technology that was to be the conduit for other levels of professional learning.

The project was to be collaborative where the responsibility for the professional learning emanated from inside as well as outside the school. Sustained, long-term support for the teachers was another primary consideration. After the initial face-to-face intervention from Education Officers Curriculum, it was planned that control of the project was to be handed to the school. The teachers were to be in command of the timing and duration of contact from central office. Finally, the project was designed to be about the teachers’ real work with the questions they had about their personal professional learning forming the basis of the interactions with Education Officers.

The goal of the professional learning model was to create an environment that enhances the practice of “group meaning making” based on the confluence of social practice theory and dialogical theories of learning (Stahl, et al, 2006 p9).

**The resources required**

The Learning Framework guided the planning and activities. For instance, the belief that every person in the educational community is a life long learner was a reference when designing an action plan with the teachers. Priority 6 in the Strategic Renewal Framework (BCE, 2006) outlines the Information, Communication and Learning Technologies intentions and expectations for BCE schools, and the project attempted to align any action with the expectations and
intentions of this priority. Then an appropriate digital tool or tools needed to be found for the project.

Choosing the appropriate digital tool
The search for the tool or tools to fulfil criteria for this model of effective professional learning had to take into consideration time, budget and technical requirements. It was imperative that what we chose could replicate face-to-face contact – that is, web conferencing, and we needed a synchronous collaboration tool with an online space for planning, sharing and reflection.

Many tools were considered and while some of them provided some of the requirements, none provided all. The final choice - Skype - was chosen because it was a low cost option providing flexibility of learning opportunities which were capable of sustaining staff development. Skype required minimal technical support and equipment. A webcam and echo cancelling microphone (total cost approx $100) was all that was needed at each contact point. As broadband access was already in place there were no infrastructure needs or cost affordances. Finally, the major reason for the choice of Skype was its ease of use by participants.

What factors did you consider in the choice of a school?
St Joseph’s Primary School was chosen for several reasons: it is isolated in terms of distance from central office as well as from other schools and it has a very small staff generally made up of early career teachers. Every few years the school experiences an almost complete turnover of staff, with the length of time most teachers remain at the school being on average two years. This has several implications including the lack of experienced school based staff to mentor or coach new staff members. However, staff at the school valued regular access to professional learning provided by central office staff, and they had identified a need, that is, to learn to use a computer program for planning, monitoring and reporting student learning.

How is it working?
This project had several levels of outcomes concerning teachers and their learning. These included learning about the effectiveness of this model for professional growth and ongoing support from a systems perspective for wider application. It is expected that implications for pedagogy and student learning may become obvious at a later point in time.

In a nutshell the expected outcomes were:

a) all teachers becoming confident in using the computer program RMCM
b) the CST practising and facilitating planning sessions involving the application of adult learning processes, and

c) all teachers becoming self-directed in their own learning and more confident and reflective about their use of ICLTs.

The project is not yet completed, so it is perhaps too soon to make conclusive statements about outcomes. However, some unexpected outcomes have been observed already. For example, during the live link up from central office, access was sought and gained for shadowing in the RMCM program. This has been a major advantage for all Education Officers when supporting any school within the system using RMCM, not just remote schools. Also, when testing the external links from a school at a nearby town, the second school requested support to set Skype in order to enhance existing collaborative planning networks. The access to Skype for Education Officers and for one other school has opened up possibilities for other uses. An important aspect to note is that many of the suggestions for alternative uses have been initiated from those outside the central project team.

Were there any constraints?
Preparation and planning time took almost as long as the actual contact time with the teachers and required a team effort. Preparation of the social environment as well as the technical environment required extensive coordination and management. However the teachers and school administration were very committed and wanted to meet the goals. They are to be congratulated on their professionalism and their attitudes and approach to lifelong learning.
The future
Changes in system practices have already been flagged and indicate the potential this project may have to move from a one school project to an operational way of working across the system. It is envisioned that using tools like Skype could mean that processes such as Consistency of Teacher Judgment may be held online and teachers from all areas of the Archdiocese would be able to compare student samples.

Their Space: Education for a digital generation

Hannah Green, Celia Hannon
Demos, UK

"Young people are spending their time in a space which adults find difficult to supervise or understand..."

This article presents some interesting challenges to education through research into young peoples’ usage of social networking sites and is an extract from a more comprehensive publication created by Demos in the UK. Demos is a think tank for ‘everyday democracy’. The article is printed here with the kind permission of the authors and Demos... The full version of this publication can be viewed online from: http://www.demos.co.uk/publications/theirspace and is well worth the read.

About this Report
There are some powerful myths that inform the way people think about youth culture. This report sets out to challenge some of those myths, in order to explore the real value behind the digital interactions that are part of everyday life.

The genesis of this project was Steven Johnson’s book launch at Demos for Everything Bad is Good for You. Johnson argues that over the past 50 years popular culture has become more complex and more intellectually challenging.1 Alongside Demos’s ongoing work and interest in creative production and learning this raised a set of important questions around young peoples’ use of digital technologies – what and how are they learning and is a new digital divide in terms of networks of knowledge rather than access to hardware emerging? Our partner, the National College for School Leadership, wanted to look for strategies that would equip school leaders to understand what young people are learning outside the classroom and how schools can build on it.

This report is the result of nine months of work that focused specifically on understanding how children and young people use new technologies. We carried out an initial stage of background research, drawing on existing academic literature, demographic data and policy documents. The methodology, approach and research questions were tested at a Demos seminar in May 2005 which brought together senior policymakers, academics, headteachers and commentators. The seminar and a series of expert interviews which
followed allowed us to test our hypothesis – that schools need to respond to the way young people are learning outside the classroom. It also provided invaluable feedback and suggestions for further research.

Over the next six months we undertook interviews, group discussions and informal conversations with children and young people around the UK. We asked interviewees to fill in diaries tracking their media consumption – what they used, what they used it for and how often they used it. These diaries were a starting point for a series of focus groups. We spent time in primary and secondary schools and youth groups with over 60 children and young people aged between seven and 18, speaking to them about how new technologies fitted into their lives.

Finally, we also polled 600 parents of children aged four to 16 across England to find out their views on learning and the role of digital technologies in their children's lives. Polling was not designed to be representative in a quantitative sense, but to enable us to view digital technologies from the perspective of parents as well as children.

Research findings
The baseline finding from our research was that the use of digital technology has been completely normalised by this generation, and it is now fully integrated into their daily lives. The majority of young people simply use new media as tools to make their lives easier, strengthening their existing friendship networks rather than widening them. Almost all are now also involved in creative production, from uploading and editing photos to building and maintaining websites. However, we discovered a gap between a smaller group of digital pioneers engaged in groundbreaking activities and the majority of children who rarely strayed into this category. Meanwhile, contrary to society’s assumptions about safety, this generation is also capable of self-regulation when kept well informed about levels of risk. Finally, many children we interviewed had their own hierarchy of digital activities when it came to assessing the potential for learning. In contrast to their teachers and parents they were very conscious that some activities were more worthwhile than others.

All these young people have something in common – they all use technology in a way that in the past would have labelled them ‘geeks’. But they are not all using it in the same way. Our research has pointed to a number of different user ‘types’, which we use throughout the report:

• Digital pioneers were blogging before the phrase had been coined
• Creative producers are building websites, posting movies, photos and music to share with friends, family and beyond
In an economy driven by

Most young people use technology to facilitate the kind of social interactions that we all recognise. However, there is a smaller group of digital pioneers that is pushing at the boundaries of conventional practice. For every focus group we ran there was a ‘leader of the pack’ who was one step ahead of the other children. These individuals have strong digital identities and are making the shift from consumption to creation. A range of characteristics is common to this type of activity – self-motivation, ownership, purposeful creativity and peer-to-peer learning. Chapter 3 examines these characteristics in more detail and explores examples of schools that are building on this type of learning. These schools and headteachers are transferring elements into the classroom without assessing or institutionalising informal learning.

**Start with people not PCs**

In order to see change across the system, there needs to be a shift in thinking about investment from hardware towards relationships and networks. In the last ten years we have seen a staggering change in the amount of hardware in schools, but it has not had a significant impact on teaching and learning styles. So what does this mean for schools? It means that they need to really listen and respond to their users. Schools often fail to start in the right place – with the interests and enthusiasms of their students. They also need to recognise the new digital divide – one of access to knowledge rather than hardware – and start to redress some of the existing imbalances. Finally they need to develop strategies to bridge formal and informal learning between home and school. They should find ways that go with the grain of what young people are doing, in order to foster new skills and build on what we know works.

**The world has changed so why haven’t we?**

The current generation of young people will reinvent the workplace, and the society they live in. They will do it along the progressive lines that are built into the technology they use everyday – of networks, collaboration, co-production and participation. The change in behaviour has already happened. We have to get used to it, accept that the flow of knowledge moves both ways and do our best to make sure that no one is left behind. Chapter 4 talks about a necessary shift in values to make this happen. Chapter 5 goes on to outline the practical changes that need to happen at every level in the system from policy-makers to practitioners in order to see real transformation.

**References**


For the full version of this publication go to: http://www.demos.co.uk/publications/theirspace
Second Life as an educational tool

Kerry Johnson
EdNA

Background:
This article is an extract of the transcript from an EdNA elearning insight podcast called “Second Life as an educational tool”. The full audio version of this podcast is available from: http://www.edna.edu.au/edna/go/news/podcast/eli/ELIEP9

This extract is used with the kind permission of EdNA and the interviewees: Lindy McKeown and Jo Kay.

3-D virtual worlds are bold new frontiers for educators who are looking for ways of making learning a more engaging, interactive experience. Of these, Second Life is the one getting the most press. But is the environment that Second Life provides really worth the time and effort it takes to learn how to use it? And with issues such as bandwidth limitations and limited access to up-to-date hardware - is it a viable choice as an educational tool?

Educators Lindy McKeown and Jo Kay (known “in world” as Decka Mah and Jokay Wollongong respectively) share their perspectives on Second Life and some of the discoveries they’ve made.

Introduction to the Interview:
Kerry: There are those who hail Second Life as a brave new world of possibilities. Others see just another multiplayer game, and others still, see a haven for those who really need a first life.

However, over the past few years there is a growing list of educators and librarians who have seen Second Life as a tool for bridging distances in ways that forums and online conferences just can’t deliver.

In this episode we will talk to two of those educators. Lindy McKeown, otherwise known as Decka Mah in Second Life, is a PhD candidate and educator. Lindy created Decka, and her island Terra Incognita, as a way to extend her face-to-face work in action learning to a distance learning audience.

Kerry: What made you decide to go with Second Life for your project?

Lindy: I had to get a program that would allow me to rapidly prototype an environment and then also to change it underneath us as we were using it because of the methodology I was using which is a design based participatory action learning model in itself.

So I looked at the various game engines and looked at my budget and Second Life would let me develop it myself on a very low budget but still had the kind of power that you would find in a sophisticated game engine.

Kerry: So Second Life isn’t the focus of your study as much as it is a reasonable platform for action learning.

Lindy: Absolutely. The focus of the study is What are
the social and technical possibilities of using a 3D environment for action learning? So the study is about the methodology of action learning in an online mode, and how you can use 3D environments to enhance that, because action learning is a very social learning experience.

It needs good social presence for participants in order to develop deep relationships where they can share their failures as well as their successes. Previously, I had tried various learning management systems and web2 tools but was always disappointed with the level of relationship and the depth of learning that people were getting and high dropout rate.

**Kerry:** So how many people are involved in your study and what can you tell us about them?

**Lindy:** The current group includes academics at universities, classroom teachers in secondary schools, and professional association representatives who are looking at how they could use this environment to provide better services to members and enhance meetings across their spread. There are also chapter groups across particular States and we’ve got people from the edna community - education.au [http://educationau.edu.au/jahia.jsp/index.jsp] It is a very diverse group and that’s another powerful quality of action learning. People in quite different contexts can work together on the same topic and they can help each other learn.

**Kerry:** What sorts of activities are people getting involved in?

**Lindy:** Each person has to select a workplace project and we then run our content delivery, which we call core learnings or electives to support the learning that relates to that project. Our theme is using 3D in education and we have had people explore Second Life looking through the search engines to find educational tools, locations, buildings and organisations. They find facts about how they are used in Second Life and return with photographs and notes. We use these photographs and the notes to make an education gallery which then becomes a resource for other people to explore Second Life for education purposes.

We have used the activity to build a resource that’s a physical building. This has helped immerse the group in education in Second Life as participants. This process is not a delivery strategy as I did not run a session where I said ‘this is how education happens in Second Life’. Participants had to actively seek the educational? using the tools in Second Life and then produce the materials that became a 3D object.

**Kerry:** Meanwhile on another island, just to the left of the huge pink flamingo, another educator is busy getting her section of Second Life in order.

Meet Jokay Wollongong. (Jo Kay is her name in first life). Jo is a resource development officer both at TAFE in the Illawarra and in Second Life. A professional designer and developer, she and partner Sean Fitzgerald conduct educational tours of Second Life for teachers and trainers. The day prior to our interview, I got to experience one of those tours, along with a 6-foot tall blue cat.

I started our interview by asking Jo what advantage she thought Second Life had over other online collaborative tools such as learning management systems or online conferencing software.

**Jo:** The first thing I’ll say is that every tool has its place. I do think that Second Life is fantastic, but I’m not disregarding other tools. Second Life offers us the opportunity to have a very rich shared experience, to be able to join together and meet with others, share ideas and discuss and explore together in a way that you can’t in a text based or even a voice based 2D chatroom.

As you and I found yesterday when we were playing drums in Second Life, there is a real sense of presence, and much more of a sense of connection. I think that as a starting point, it definitely has possibilities for addressing some of the needs that distance learners...
express in terms of not necessarily feeling so connected with their learning communities.

However, on top of that there’s a whole range of other opportunities in terms of experiential learning and being able to get out there into the world in Second Life and actually put your learning into practice.

A great example of that is the Gipps Place project where they had students doing both interior design and hospitality projects. Students were developing workplace communications skills and in terms of the interior design projects, they were looking at developing client relationship skills. This is just a couple of the possibilities. Of course there’s all sorts of opportunities for exploring identity, for developing very immersive resources, and extending the educational experiences for students to engage with, to use role-playing...the list goes on.

Kerry: I know for me, one of the most difficult things to master in Second Life initially was to get my avatar setup and get it moving around, and really get comfortable with the environment. I thought: how long does it take for people to get their avatars set up and to feel comfortable with navigating through Second Life.

Jo: Yeah. I think you’ve identified the two processes that are the hardest. Setting up your avatar is something that a lot of people spend a lot of time on and I think that’s partially because its wrapping your head around how to do this from a technical perspective. It also takes a while to figure out who you want to be and to actually create a sense of connection with your avatar (Editors note – the avatar is the second life character you create for yourself – such as ‘jokay wollongong’).

This is something people spend a lot of time developing, although I think in some ways it is not necessarily a struggle, but rather, its a pleasure. I know some people have a lot of fun doing this even as it takes a lot of time. Also I know in the first few weeks that many have almost an addiction as they go through that process of establishing their ‘self’ in Second Life.

I think you’re right in saying that the other key skill people will need to develop early on in the piece is the ability to move around and navigate, to see things and to be able to zoom in and out.

There are ways to pick up these skills. Linden Labs have recently been doing a major improvement on their orientation experience and it is actually much better. You can develop the ability to chat to pick up an object, to unpack a box - all the basic skills that are part of being able to get around in Second Life.

Some people pick it up very easily, particularly those who have done any gaming - young people in particular are very confident in these kinds of environments. In my experience they have spent so much time on play station and have played online games that it is very natural for them to move into these environments. The time this takes depends on the past experience of each individual. Although I picked it up very quickly, but have worked with people who have taken two or three weeks to really feel confident in moving around. There are a whole range of Second Life skills that build onto these two initial skills, and the learning really continues. I am learning how to script in Second Life at the moment. And spending a lot of time looking at how to actually make the objects being built more interactive.

Kerry: After new Second Lifers find their feet and learn how to move around a bit, you and your partner Sean Fitzgerald teach them a few more skills and you give them tours of Second Life. Tell us a little about that.

Jo: We have established a space in Second Life that is open for people to come and visit. We have created a range of spaces and tools that can be explored there. We use that as our base in Second Life for a number of different activities. We are connected to a bunch of projects that are just about to kick off, but in the past 12 months we have been doing some tours for the eNet networks project, and a couple of other educational organisations. This enables teachers to get into the space, to develop skills and to check out educational spaces.

We went on a tour yesterday. We looked at the island of ‘Fala’ which is a biological experiment where you can see virtual plants and animals interacting with each other. We also went to the ICT Library which is a space designed for teachers to pick up resources, scripts, and free teaching tools they can use in Second Life. It is also a bit of a community Hub.

What we are trying to do is create a fun experience that allows teachers to see the really positive possibilities rather than focusing on some of that negative stuff that we have seen in some press coverage. So far that has been a pretty successful experience.

Editor’s Note: For the purpose of this written article...some editorial changes have been made. The full transcript and podcast can be found on the following web addresses.


Printed with permission of the transcript author, Edna and the interviewees.
The following article is based on an interview conducted by Poppy Masselos (Courier Mail) with Professor Erica McWilliam (QUT). The context for the interview followed a presentation Erica made to Secondary English teachers and University English lecturers. She presented a view about learners and the way they learn and use language today, thus providing an opportunity for educators to reflect on purpose and need. Erica proposes that this may also require ‘unlearning’ of some long-held teaching practices. The interview questions and topics relate to learning in the 21st century and this abridged version is printed here with permission.

Erica is Assistant Dean Research in the faculty and Program Leader of the Creative Workforce Research Program within the QUT-based ARC Centre of Excellence for Creative Industries and Innovation.

What do you consider to be the important 21st century skills that need to be taught today?

It goes without saying that teaching has a moral and ethical work purpose just as parenting does, and that purpose is always paramount. In terms of the future of work in a much less predictable world than baby boomers grew up in, I would want to add to that purpose the fact that young people will need, as Guy Claxton puts it to ‘know what to do when they don’t know what to do’. This capacity will not come from sitting for more tests, or from memorising more information, but from being given opportunities to try out a range of strategies to achieve a learning goal, without blaming themselves when the strategy does not work, and from being prepared to try a different strategy. The ‘content’ worth learning will not be confined to the disciplines of Mathematics, Science and so on, but will combine function and aesthetics, print and digital capacities, schooling and social life. It will not be about easy success but about procedural knowledge gained from understanding why certain strategies work and others do not.

How acceptable is the ‘text type’ young people use in their communication with one another, in a serious essay assignment?

My first reaction to this question is to ask ‘How serious are we about 21st century education if essay assignments are the most recognisable form of assessment outside the multiple choice exam?’ The essay, an artefact of the days of Francis Bacon, is an anachronism and yet somehow we cannot imagine the social and human sciences without it. Its purposes (the cogent linear cumulative development of an idea into a relatively brief passage of formal prose) are not the same as those of ‘text type’ (fast interaction within an intimate social network), so we should not confuse these purposes. But we do have to ask ourselves why we cling to the essay like Linus’s blanket at a time when high speed Internet navigation and interactivity are becoming the dominant mode of communication for commercial enterprise. I have been a good writer of essays but have had to ‘unlearn’ much of what I know to write hypertext for the Internet. I think we need to ask ourselves whether all the skills that we demanded fifty years ago are as important today, with all the new modes of engagement that are part and parcel of 21st century living.

What about traditional literary skills?

I have become aware, in recent times, that many people see a stark choice between a curriculum focused on ‘digital literacy’ or on ‘traditional literacy’. It might help us if we did not use the term literacy in relation to digital capabilities – indeed, the ability to use digital tools to navigate seas of information effectively is probably more like oracy than literacy.
It involves an ability to share a dialect as much as anything else, and this fact will not be lost on all those readers who have spent time trying to talk to a computer buff about the latest problem they are having trying to get access to a website. Again I come back to the issue of purpose. Academic purposes are still very much centred on print-based forms of communication, and of course we still need to take them seriously. Certain sorts of work, eg, journalism, still demand high standards of print literacy. However, we should not be designing curriculum as though everyone needs the literary skills of a professor. Or put another way, we need to start rethinking the idea that every other literacy is just garnish to the roast of print.

New theories of learning
We are hearing consistent messages about learning in the 21st century, whether they are coming from social commentators on workplace and social futures, neuro-scientists or educational researchers. The message is about promoting and supporting a culture of teaching and learning that parallels an unpredictable social world in which labour is being re-shaped by complex patterns of anticipations, opportunities, time and space. So there will be few blueprints or templates to give us the script for what to do and how to do it. This means we need a disposition to learning in which error is welcome and instruction is minimised. So the broad message is very much a call to a more experimental culture of education – not about the right answers but about trying out a range of strategies and learning from their failure.

A further point is related to the capacity for fast communication. Our young people will not only be working in unprecedented ways, but they will be doing the work at a speed that is unprecedented in terms of the Product-Innovation-Diffusion-Stasis cycle of economic production. The fact that this cycle has shrunk from a period of over 50 years in the 1970s to a period of less than 4 years in 2007 means that all enterprise associated with global production is now faster and less certain, demanding more tolerance of ambiguity, risk-taking, and capacity devoted to experiment, variety and adaptation on the run. Put bluntly, writing essays have very little to contribute to this world.

Implications for the classroom
If we could continue good models of early childhood teaching through into our secondary schools and beyond, we might have more opportunities for building and maintaining challenging learning environments with messy but exciting problems to work on with children. However, the further we go up the school the more we find that knowledge hardens into disciplines and these become the focus of classroom work. This takes us away from the sorts of problems that we face every day [e.g. water quality, water shortage]. By secondary school we begin to map onto the way that universities organise their curriculum, rather than exploring real world issues and modes of social engagement. What this does is to elevate the time-honoured subjects like Mathematics, Science and English and make other more recent additions to the curriculum less attractive despite their greater real world relevance. We can and should be doing better than this.

The challenge of the “Conceptual Age”, as Daniel Pink describes our times, is not just the ability to work in high technology environments, but to utilise what he calls “high concept/high touch” abilities that serve both functional and aesthetic needs simultaneously. According to Pat Kane, author of “The Play Ethic”, this means getting serious about play. It also means valuing opportunities for adapting and recombining cultural forms in unanticipated ways to serve different purposes. This means that it is the link between disciplines like Mathematics or Science or English or Music or Art that is becoming the most valuable area of curriculum. It does not mean throwing away ‘content’ but being able to move in a very agile way across different domains of content and to make new connections between what seem to be disparate content areas. The way our secondary schools are structured is not very helpful in relation to this, but
Some things are slowly changing, particularly in post-compulsory schooling. Some time ago, a famous educational thinker, William Glasser, wrote a book called “Schools without Failure”. He identified failure as the fundamental reason that young people drop out of school, and a key reason for delinquency and criminality in youth. At school they were shamed by their failure. I know that many indigenous kids experience this still in schools and this is a shameful state of affairs. The point is not that every child should be protected from making mistakes but that every child needs to understand that learning is always about making mistakes and being confused. Those who are never confused are learning nothing. The old days of ‘put up your hand if you have the right answer’ ought to be long gone. We know that some schools reward kids for having better questions and for stick-ability when things don’t go as planned. If kids are taught to be ashamed of not knowing something, they will not be equipped for a world in which knowledge has outstripped our capacity to learn. If teachers can show young people what it means to be a learner, not a knower, then we will have a classroom culture in which it is possible for kids and teachers not to know things and to feel proud of their efforts.

‘Unlearning’

Unlearning is what we do when we fundamentally re-think the nature and purpose of something. That means, we change our thinking habits. If for example, we once thought that good teaching was all about crowd control and instruction, then this is something that needs ‘unlearning’ in the 21st century. In saying this, I am not advocating chaotic classrooms. I am saying that teachers who understand how to set up structure-rich, information-rich, conversation rich and challenge-rich environments are better teachers than those who talk all day. So the ‘telling teacher’ needs to be unlearned, just as the empty student needs to be unlearned. But it is hard to change the thinking habits of a life-time. All the evidence now tells us that young people simply do not learn best by being told things by adults – yet we persist in behaving as though they do. It is so hard to break these habits and most of us struggle with this problem. We would rather not rethink – much easier to stay on the firm ground of our ‘common sense’.

What are the implications for teachers if indeed the shelf-life of learning is extremely small?

In a script-less and fluid social world, ‘being knowledgeable’ in some discipline or area of enterprise is much less useful than it was in times gone by. In The Weightless Society (2000), Charles Leadbeater explains the reason for this by exploding the myth that we are becoming a more and more knowledgeable society with each new generation. His view is that we have never been more ignorant – that is, we have a much less intimate knowledge of the technologies that we use every day than our predecessors had, and will continue to experience a growing gap between what we know and what knowledge is embedded in our manufactured environment. In simple terms, we are much more ignorant in relative terms than our predecessors.

An effective teacher in the 21st century

We have seen in recent decades a shift in understanding effective teaching from an all-knowing instructor (often called ‘sage on the stage’) to teacher as facilitator of student learning (‘guide on the side’). While ‘guide on the side’ has served an important function in shifting the focus from the teacher to the learner, it does not really capture the full implications of what counts as effective teaching in the 21st century. I think we now need to move to another model of effective teaching - we need to see a further shift from sage-on-the-stage and guide-on-the-side to what I have called meddler-in-the-middle. A meddler teacher is highly active in the classroom (and outside it), setting up learning environments in which young people will not get an instant A plus, but they will get to learn from the instructive complications of strategies that do not work out. A meddler teacher rewards students for their capacity to remain resilient in the face of complications and disappointments, and their capacity...
to come up with great questions, as much as they reward them for coming up with solutions.

Co-creators of curriculum
Post-millennial patterns of consumption are no longer essentially passive in character and neither should learning be. After a generation or more of ‘couch potato’ inactivity at the end of a supply chain where the product to be consumed arrives as a final product, we are now seeing patterns of distribution and consumption being developed that allow consumers to add value or finalise and so value-add to the product. The user is becoming the producer. Likewise, we should be seeing a shift from teachers delivering an information product to be ‘consumed’ and fed back by the student, to a mode of ‘exchange’ where the teacher and student are mutually involved in assembling and dissembling ideas, images and cultural products. As co-creators, both would add value to the capacity building work being done through the invitation to ‘meddle’ and to make errors. The teacher is in there experimenting and learning from the instructive complications of their errors alongside the students, rather than moving from desk to desk, watching over their flock as they do the next worksheet or write the next essay.

A Myers or Ikea model for learning and schooling today
As a cultural phenomenon, IKEA represents an example of the shift away from passive consumers to active value-adding users. Their flat-pack innovations and different store design make it possible to keep prices down while offering high quality products. Of course, some of us make mistakes when trying to assemble their products and that is part of the deal – the customer needs to do something too. Together

IKEA and their clients co-create value, the former producing packages of materials, the latter assembling materials in cardboard boxes into trendy furnishings for funky pads. Scion.com is another good exemplar of an invitation to engage in this new sort of consumption. The message on the website “we relinquish all power to you” is an invitation not simply to buy a Scion car but to create one, to edit it, to assemble it according to your specific requirement and desires. This moves way beyond colour preference and ‘extras’ to numerous design features that count as ‘standard’ elsewhere. Moreover, the scion.com website is a multi-platform that hooks users up with a host of services not traditionally connected with the car industry – music, art, clothing, films and the like. Users of Scion don’t just buy, they co-create in order to manufacture a product and an identity. So I am saying that the next generation of schooling will need to reflect in some respects at least, new systems of exchange that now apply. It does not mean throwing out the finished package in its entirety – Myers continues to sell – but it means working with students not just on or for them.

References
Website: Scion.com
Kids Connect – is a two day conference organised by young students for students which also includes professional development for teachers. The activities which engage the students over the two days are project based using technology to problem solve. Theresa Sheen, APRE and Curriculum Support teacher at Our Lady of Dolours reflects on the preparation and the event this year:

Kids Connect for my students and I began 9 weeks ago and we were delighted to see all our efforts come to life at the City Hall on the 13 and 14th September. We developed and gained so many lifelong learning skills in the process. I was so proud of my students during the preparation time and the way they hosted the event over the two days.

Project based learning certainly allowed my students and I to reach for the stars. We undertook the challenge of managing and organising a two day technology event with enthusiasm and determination and presented to our friends and families, neighbouring schools, our community both local and beyond that ‘kids can do anything’.

The staging of such an event has impressed upon me a wonderful sense of school wide friendship and collegial support. The presenters in the breakouts are 21 examples of teachers and company personnel happy and willing to share their knowledge and expertise with students.

The sponsorship from the local community identifies the willingness of others to support students in their efforts to take on real life learning opportunities. The way in which companies interacted and communicated with my students really highlights that there are wonderful people out there more than willing to listen to students and allow their voice to be heard.
Most evident during the two days was that students from many different schools could build and maintain working relationships and true friendship with new people – so many examples of great working relationships were seen throughout the 2 days. Teachers who participated in the professional development activity also demonstrated a keen sense of being open to new ideas and ‘having a go’ especially when it came to tackling new technology.

What I really noticed was the way in which students, teachers and VIP’s were able to interact with one another; to share thoughts and ideas and to enjoy the company of so many different people. There was an openness to listen and to share.

I loved that technology was all around us but it was the conversations and the interactions that enriched all of us during the two days.

Theresa acknowledged the many sponsors and the support of the school community.

This link will take you to a website that gives you a great taste of what went on during the two days:
http://web.mac.com/pashaw/Kidsconnectbrisbane/Welcome.html

Dance Fever

A number of Brisbane Catholic Education Primary schools engage Dancefever to teach dance to their students. On 12 September students with parents and teachers travelled to Sydney for an Interstate Challenge organised by Dancefever between students from Queensland and NSW schools.

The majority of students from both states were representing Catholic schools. Whilst the audience enthusiasm reflected a State of Origin feeling, the event provided a wonderful exhibition of young people modelling the elegant skills, values and dance moves they had been learning over the past two terms. Judging took place in age groups by a team of adjudicators – great favourites of the students who recognised them from their appearances as judges from Dancing with the Stars TV show.

We know it was more about participating than winning, but Queensland won the Interstate Challenge this year. Dance was the winner on the day.