PURPOSE
To improve understanding of application of some web 2 technologies and related implications with reference to primary schools.

The rate of change is rapidly increasing within and across the whole of society, with significant impact on the education sector. A significant impact of this change and our response to it is the ever increasing development and use of a complex range of technologies in the areas of communication, collaboration and creativity.

Developments in Web 2 (3 and beyond), “cloud computing” and e-learning have brought about new ways for people to engage not only with each other, but in their learning both locally and globally.

During my sabbatical I spent much time immersed in the web. I looked at various types of social media; I perused many school websites, lurked in class, teacher, principal and other educational blogs and wikis, investigated podcasts and a variety of other tools and applications. It’s an amazing world, full of potential, but with more than a few challenges for us all and possibly way more questions than answers.
Challenges
For schools (and other learning institutions) the challenges are not just to incorporate these technologies to improve teaching and learning, but also and probably more importantly:

- to develop our pedagogy to provide improved and more creative ways of engagement and learning for staff, students and by implication, the wider school community
- to develop understanding of the protocols for ethical behaviours in the application and use of the various technologies
- to develop and teach skills for effective and safe outcomes particularly for students
- to encourage and support creative, purposeful collaboration with others
- to ensure that new technologies, practices and ways of engaging with others through varied learning opportunities ensure progress and achievement for our students
Expectations
Expectations of and for learners have developed over recent years. Schools are more participatory and all stakeholders certainly have more input than in the past.

The time for fixed, controlled learning in our schools is no longer appropriate. Increasing a more effective use of the web should facilitate development and change in teaching and learning. The breadth of this development is often shown as both incorporating and moving between:

- teaching ↔ learning
- subject based ↔ inquiry based
- curriculum focus ↔ learner focus
- fixed ↔ flexible
- compliant ↔ creative
- standardised ↔ personalised
- individualised ↔ collaborative
- repeated facts ↔ creatively produced response
- national / local ↔ global
- accepting ↔ questioning
- closed ↔ open

Staff understanding and belief in the required shift is vital. A wealth of support information is available. U Tube has some worthy clips. Two other providers of thought provoking speakers are: Core Education’s Ed Talks – Educators talk about Learning and Sapling Foundation TED Talks – Technology, Entertainment and Design.

- http://www.edtalks.org/ I found The Ten Trends to be of particular interest.

Students will of course always need to read and write, but in a broader form than currently. The student voice may have more purpose and focus. Research tells us that our students need to be engaged in different ways in authentic learning situations. It follows that they should be applying e-learning skills and technologies, not just recording visually and aurally to share their findings and learning, but to engage with other people, including their peers, parents and the wider community, students in other schools, (within NZ and further afield), experts in particular areas of interest.

Web 2 tools provide this opportunity and can enhance learning: blogs, wikis, websites, the various “ Tubes”, collaborative documents, virtual field trips, skype, video conferencing, podcasts, digital scrapbooks, e portfolios and so
forth are all here and easily accessible. All that Google offers is almost limitless. There some interesting implications there.

The classroom finally has moved beyond the walls and the school day! There is growing evidence of utilizing this fact occurring throughout the country, but it doesn’t seem as yet as particularly widespread as it could be.

There are also purposes or outcomes to be considered and decided upon for schools. Is this technologically enhanced student engagement to be about:

- a purposeful process of learning, with feedback and ongoing development
- a determined product, well produced and polished, with praise provided
- a combination of the two dependent on the learning situation

### Cloud Computing

The increasing use and reliance on cloud based technologies also pose some points to ponder

<table>
<thead>
<tr>
<th>Consider the Cloud</th>
<th>Plus</th>
<th>Interesting</th>
<th>Minus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• 24/7 anywhere</td>
<td>•24/7 anywhere</td>
<td>• 24/7 anywhere</td>
</tr>
<tr>
<td></td>
<td>• Enables variety of devices</td>
<td>• connection speed</td>
<td>• connection speed</td>
</tr>
<tr>
<td></td>
<td>• open and closed access - available to all or to a specific community or individual</td>
<td>• cost</td>
<td>• cost</td>
</tr>
<tr>
<td></td>
<td>• instant communication</td>
<td>• data amount</td>
<td>• data amount</td>
</tr>
<tr>
<td></td>
<td>• collaborative</td>
<td>• privacy</td>
<td>• privacy</td>
</tr>
<tr>
<td></td>
<td>• cost</td>
<td>• security</td>
<td>• security</td>
</tr>
<tr>
<td></td>
<td>• creativity</td>
<td>• validity</td>
<td>• validity</td>
</tr>
<tr>
<td></td>
<td>• data storage</td>
<td>• reliability</td>
<td>• reliability</td>
</tr>
<tr>
<td></td>
<td>• data access</td>
<td>• permanency</td>
<td>• permanency</td>
</tr>
<tr>
<td></td>
<td>• data back up</td>
<td>• may need moderation</td>
<td>• may need moderation</td>
</tr>
<tr>
<td></td>
<td>• multi media</td>
<td>• transformed pedagogy</td>
<td>• transformed pedagogy</td>
</tr>
<tr>
<td></td>
<td>• email/messaging</td>
<td>• changed personal approaches</td>
<td>• changed personal approaches</td>
</tr>
<tr>
<td></td>
<td>• mobile and static</td>
<td>• variety of devices</td>
<td>• variety of devices</td>
</tr>
<tr>
<td></td>
<td>• can be moderated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sensible and Safe

With students increasingly accessing a wide range of web activities, (including an increase in use of social networking sites not just at home or school, but increasingly on the move), more than ever there is a necessity for schools to include components of digital citizenship and cyber safety into staff professional development, school programmes and home-school partnership activities.

There are many sites worldwide pertaining to internet safety which cover online dangers, correct ways of behaving and almost everything in between.

Some of the sites covering safety aspects and citizenship:
http://www.netsmartzkids.org/
http://www.woogiworld.com/
http://pbskids.org/webonauts/
http://www.thinkuknow.co.uk/8_10/cybercafe/Cyber-Cafe-Base/
https://schools.wiredsafety.org/
http://www.netsafe.org.nz/
http://www.hectorsworld.com/island/index.html
http://www.digitalcitizenship.net/

Google has some safety tools targeted for family use, but also links into NZ’s Netsafe and Hector’s World.

While there will always be the need to ensure children’s safety, educationally the emphasis seems to be moving more towards digital citizenship. This is demonstrated by Netsafe New Zealand, which has over recent years taken a slightly different tack, targeting a range of audiences, but with more of a focus on how to be digitally aware and become a cyber or digital citizen.

With reference to the NZC Key Competencies and Values and ever evolving research, NetSafe NZ, in consultation with New Zealand teachers has produced this definition of a **NZ digital citizen**:

- A confident and capable user of ICT
- Uses technologies to participate in educational, cultural and economic activities
- Uses and develops critical thinking skills in cyberspace
- Is literate in the language, symbols and texts of digital technologies
- Is aware of ICT challenges and can manage them effectively
- Uses ICT to relate to others in positive, meaningful ways
- Demonstrates honesty, integrity and ethical behaviour in their use of ICT
- Respects the concepts of privacy and freedom of speech in a digital world
- Contributes and actively promotes the values of digital citizenship

World Web
the following sites you'll know from TKI.
http://elearning.tki.org.nz/
http://softwareforlearning.tki.org.nz/
http://educationalsoftware.wikispaces.com/

There is a multitude of other sites filled with amazing information and opportunities. Just google Web 2 or e learning!

it's not what the software does.
it's what the user does.

@hugh

After the luxury of the time to investigate and explore I believe that the success of e learning in making a difference in our schools is dependent upon

Terrific Teachers - Super Students - Changed Classrooms
For
Stunning NZ Schools

Thank you to:
- Ministry of Education for the opportunity provided for me to take time to investigate, experiment and ponder;
- Cardinal McKeefry School Board of Trustees for their support;
- Cardinal McKeefry School staff, especially our Deputy Principal, and our students for making the time away so easy for me.

I hope ideas and challenges from some of the things that I’ve learnt will take us successfully further along our learning pathways into this new era.

Colleen Restieaux  Cardinal McKeefry School  December 2011