Oakleigh State School

Technology Supporting Learning

BYOT/BYOD/BYOiPad

The Essay – YouTube

http://www.youtube.com/watch?v=5-83iHtKGv4

This is the first generation of people to work, play, think and learn differently than their parents……

They are the first generation to not be afraid of technology. It's like the air to them.

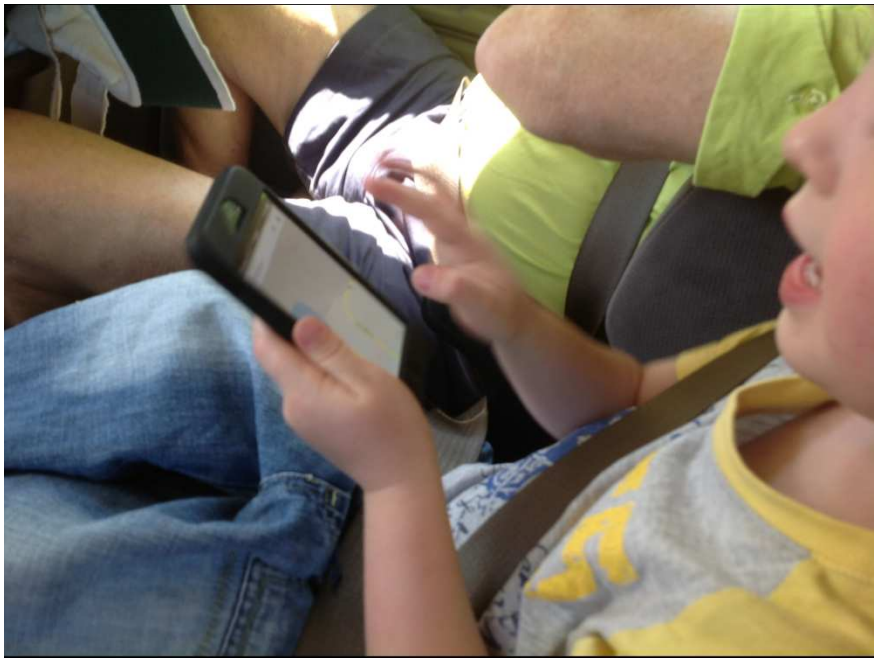
Don Tapscott

Rate of Change

2009

Today's kids have never known a time without technology

2011



2013

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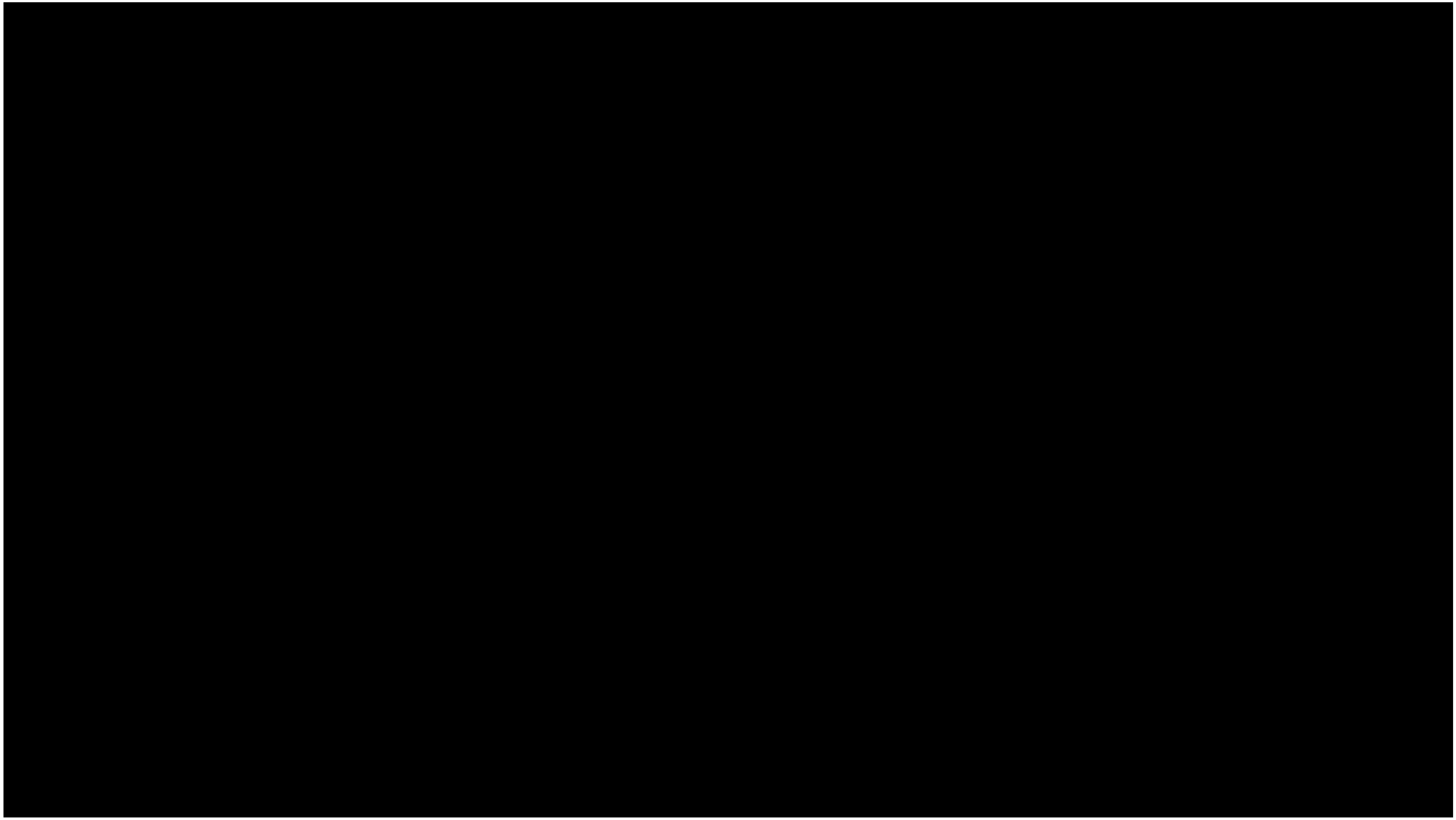
Ken Robinson

http://www.youtube.com/watch?v=UYk91jzv1jg



What do kids think/want?

(collected by Marc Prensky in the course of 100+ panels)

You guys think of technology as a tool. We think of it as a foundation – it underlies everything we do.

When I go to school, I have to power down.

In olden days, you had to memorise phone numbers.

There is so much difference between how students think and how teachers think.

Outside of school I think and make decisions. In school I just follow directions.

Kids grew up around computers. They love them. Their computers are their second teachers at home.

If it's (technology) the way we want to learn, and the way we can learn, you should let us do it.

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The Research

- A disparity exists between students' use of technology at home and what they are allowed to do at school (Cullingford 2009)
- A disparity exists between the types of devices allowed and used at home and those allowed and accessible at school (Lee 2012, Sweeney, 2012, Walling, 2012)
- "Digital normalisation" (Lee 2012) – the normalised use of the digital
- Evolution of schooling (Lee, 2013) – Schools should be progressing towards Digital Normalisation. "Schools, to remain relevant, must adopt a form when they become an integral part of a networked world, that sees them collaborating 24/7 with their homes, able to evolve at pace, continually meeting society's expectations and where the digital, like in every other facet of life and work, is naturally infused into every operation."
- BYOT (Lee 2012) - It is not a question of if but when your school will make the move towards BYOT

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The Cisco first report on Equipping Every Learner for the 21st Century (Cisco, 2008) identified skills required by students in the 21st Century and an update was provided in its second report on The Learning Society (Cisco, 2010):

- Gathering, synthesising and analysing information
- Working autonomously to a high standard with minimal supervision
- Leading other autonomous workers through influence
- Being creative and turning that creativity into action
- Thinking critically and asking the right questions
- Striving to understand others' perspectives and to understand the entirety of an issue
- Communicating effectively, often using technology
- Working ethically, firmly based in both your own society and the planet as a whole (Cisco, 2010, p. 7)

Horizon Report

The New Media Consortium, The Consortium for School Network and the International Society for Technology in Education, with the support of HP

- Examines emerging technologies for their potential impact on and use in teaching, learning and creative inquiry
- Six emerging technologies identified across three adoption horizons over the next one to five years – meant to give educators and administrators a guide for strategic planning.

Time-to-Adoption Horizon: One Year or Less

BYOD

Mobile Computing

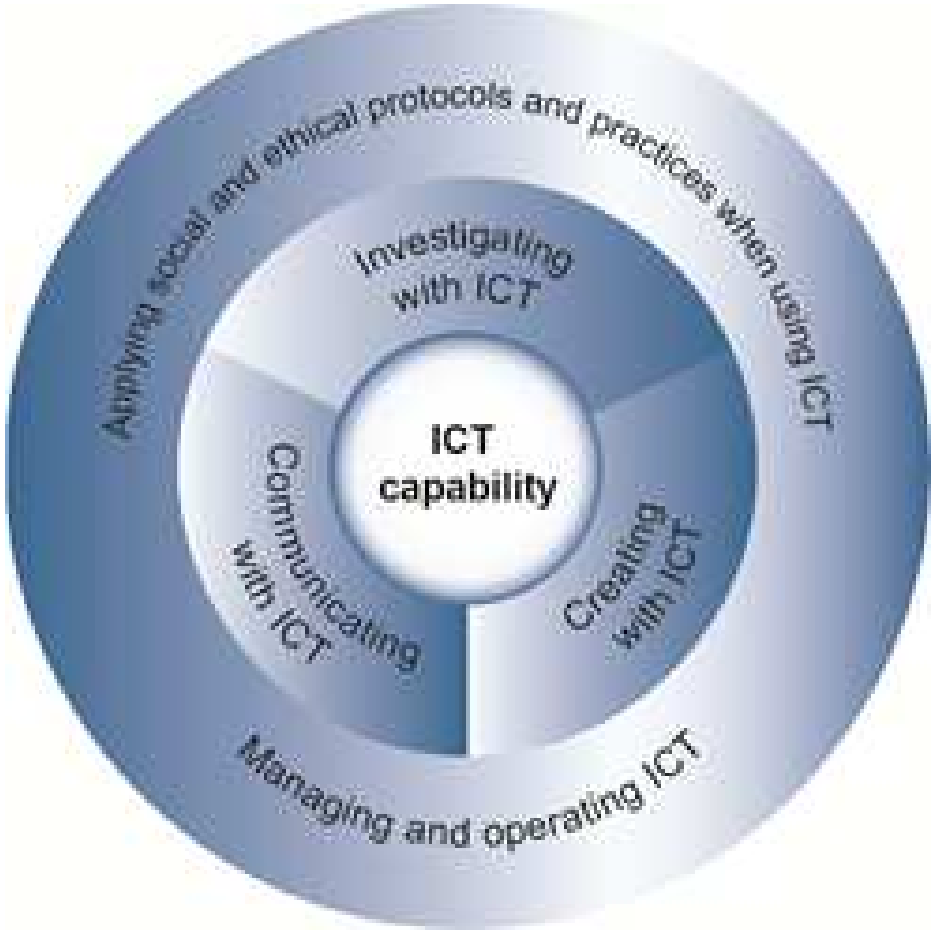
Online Learning

MCEETYA 2008

The *Melbourne Declaration on the Educational Goals for Young Australians* – recognises that in a digital age, and with rapid and continuing changes in the way that people share, use, develop and communicate with ICT, young people need to be highly skilled in its use.

"Information and communication technologies are fast and automated, interactive and multimodal, and they support the rapid communication and representation of knowledge to many audiences and its adaption in different contexts. They transform the ways that students think and learn and give them greater control over how, where and when they learn."

Australian National Curriculum



acara AUSTRALIAN CURRICULUM, ASSESSMENT AND REPORTING AUTHORITY

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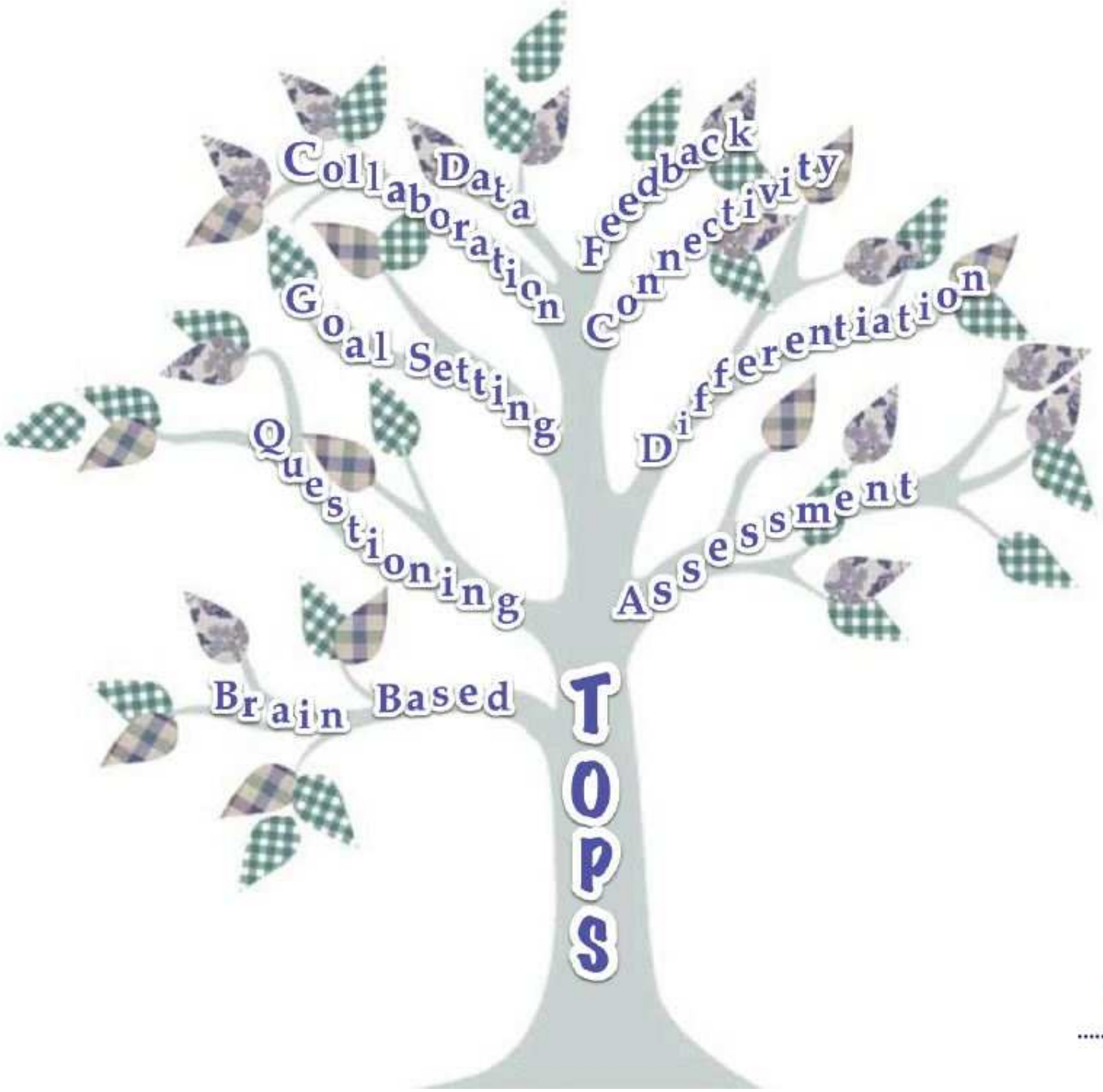
A Contemporary Effective Learner

C2C – ICT Expectations

- Inquiring with ICT
- Creating with ICT
- Communicating with ICT
- Ethics, issues and ICT
- Operating ICT



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Why BYOD

- A personal device has the potential to support the teaching and learning at Oakleigh State School as underpinned by the priorities of TOPS by personalising learning and differentiating the curriculum.
- The devices are a significant part of students' lives (Lee, 2012, Clifford, 2012, Sweeney, 2012)
- Oakleigh State School's ICT Vision: *Oakleigh State School is committed to using technology to enable and transform learning in all curriculum areas. We aim to engage and empower our learners, skilling them to contribute confidently, effectively and innovatively within a global community*
- The research highlights that the personal ownership aspect is key to success (Lee, 2012)
- BYOD puts students in a position of power over their learning (Cullingford 2009)
- BYOD can afford seamless learning opportunities that bridge the formal learning in schools with the informal, outside of classrooms and schools *(Alberta Education, 2012)*

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Research - BYOT

- The trend line is very much suggesting that in time every school in the developed world will use some form of ‘bring your own technology’ (BYOT) school resourcing.
- It is not a question of if but when your school will make the move.
- The BYOT ‘tsunami’ is rapidly coming over the horizon.
- You can be proactive, note the trend and seek to shape the largely inevitable development to the best advantage or try to surpass the deeds of King Canute and prevent the wave from swamping your school.

Mal Lee 2012 *The Evolution of Schooling, The Evolutionary Stages of Schooling, BYOT*

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Research 1-1

Summary of research – six states of USA – of 1-1 programs

- Students became more self-directed
- Students more engaged and motivated
- Teachers shifting to more student centred practices
- Some of them found increased peformance in a number of curriculum areas.

(Argueta, Huff, Tingen and Corn, 2011)

On development of 21st Century Skills:

- Significant gains to digital literacy, creativity, innovation skills, critical thinking and problem solving skills, communication, collaboration and self directed learning

(Argueta, Huff, Tingen and Corn 2011)

NSW Dept of Ed (2013)

- Changes to teachers' pedagogy
- Significant gains made with regard to 21st Century skills

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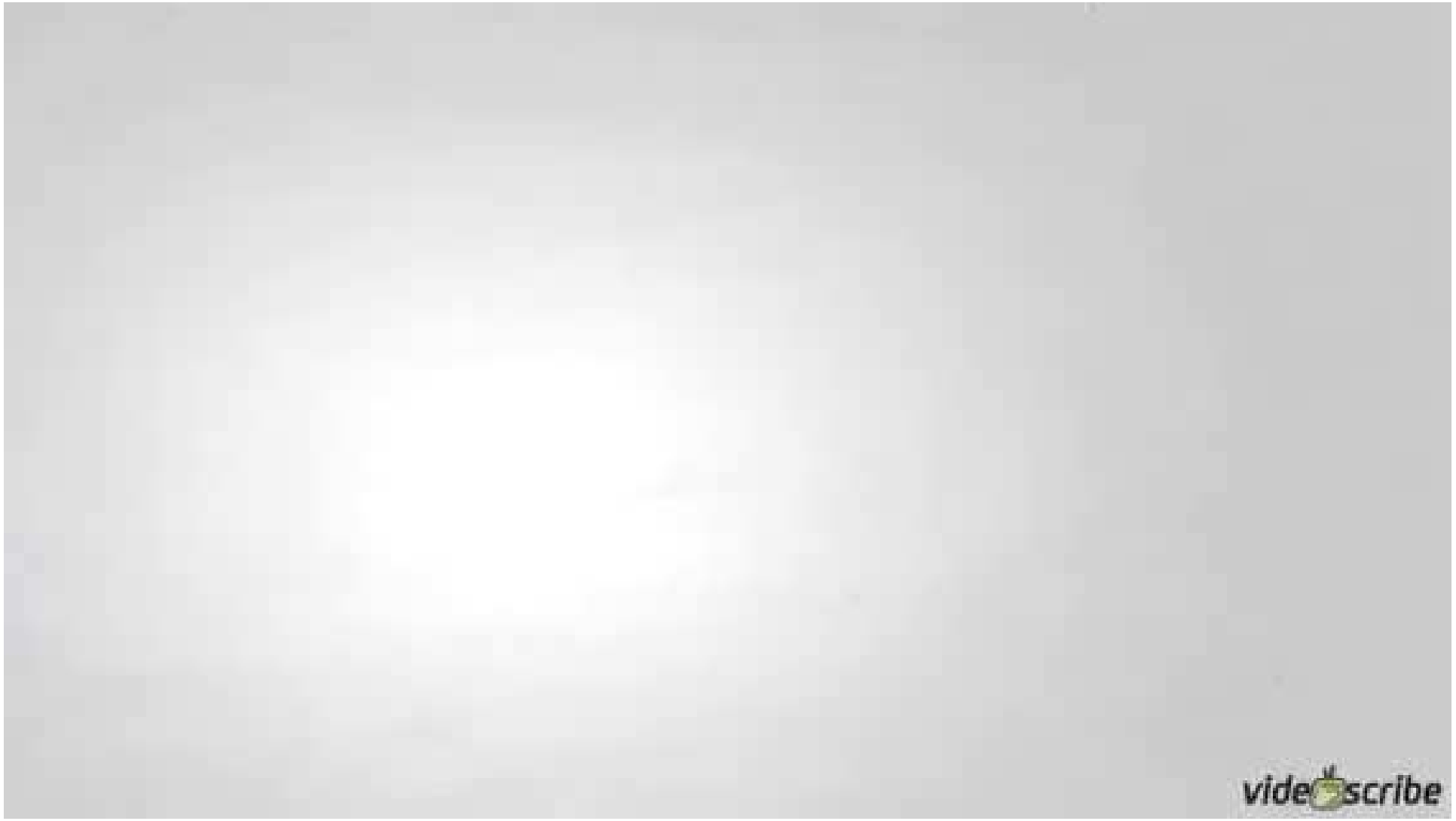
Why iPads?

http://www.youtube.com/watch?v=Bq9yss1KRwE



Research

- iPads combine a variety of pre-existing educational technology tools into one device – many pragmatic and pedagogical benefits, including audio and video being controlled by the student rather than the teacher and the potential for the student to author his/her own material *(Ireland and Woolerton 2010)*
- The use of the iPad has the potential to change the pedagogical approach, making the learning experience simpler and yet deeper. Results of this study showed that students learn best when technologies are seamlessly integrated into the curriculum to enhance their learning experiences *(Manuguerra and Petocz 2011)*
- Cohen (2011) and Bill and Melinda Gates Foundation – the iPad is just a device and it is the combination of the iPad with effective teachers and pedagogy that allow for the true benefits of the technology for students
- Vic Dep of Education – extensive 2011 trial – extends learning beyond the classroom
- Education QLD Trial (2013) "The outcomes of the trial included increased student engagement, production of a school implementation advice guide, demonstrated teacher confidence in using new technologies and a greater awareness of operating ethically online. Teachers blended the iPad and an assortment of available apps into lessons to engage the students, resulting in greater topic understanding and task completion."

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ICT at Oakleigh State School

Our Vision: Oakleigh State School is committed to the use of technology to enable and transform learning in all curriculum areas. We aim to engage and empower our learners, skilling them to contribute confidently, effectively and innovatively within a global community.

Discover, share, create and transform…..growing Oakleigh

Our Journey thus far

- 2011 - Laptop trolleys (3) – 2011
- 2012 - 8 iPads: 4 were used in Prep and Year 1 and 4 were used in the Library
- End of 2012 – each staff member assigned an iPad as part of the TOPS Project
- 2013 – 4 sets of 8 iPads
- 2013 – 7B: BYOD iPads and iPods, Year 3 eBook creation task invited children to bring their own device, 5/6 Legacy children ivited to bring their own device.

- http://blogs.kqed.org/mindshift/2013/09/for-schools-implementing-ipads-the-importance-of-being-patient/

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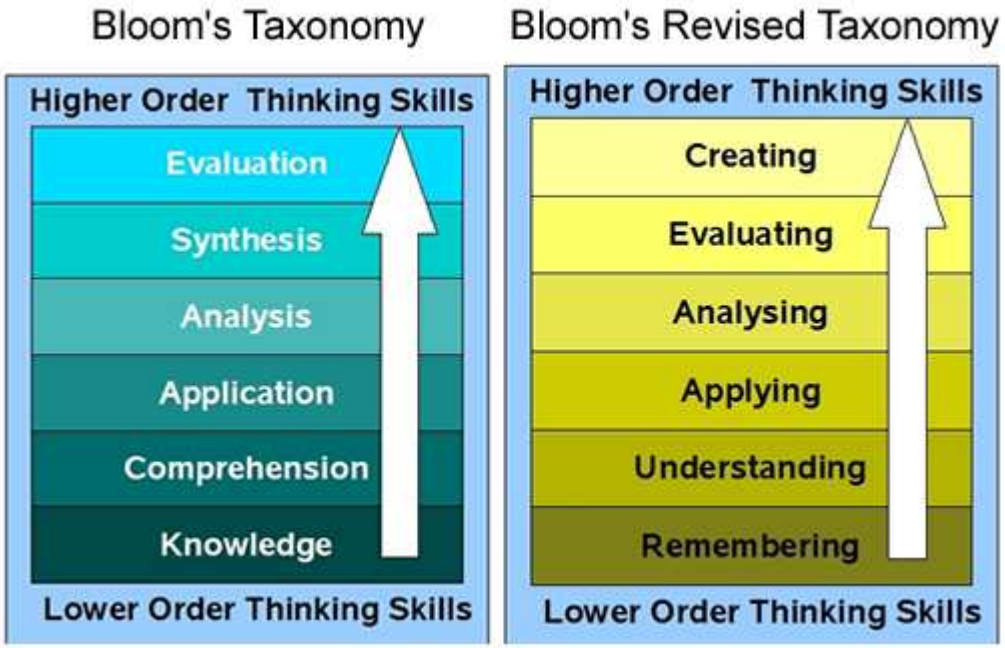
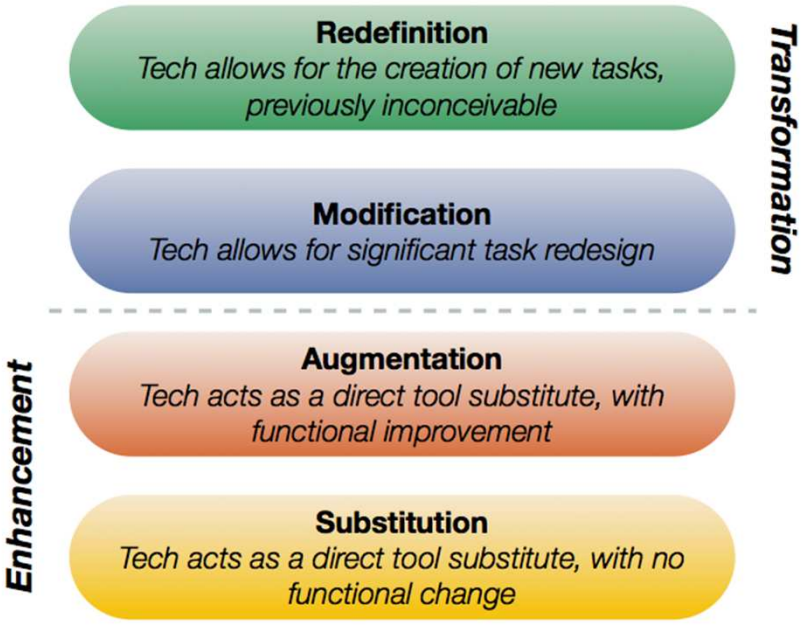
Examples

Consider Blooms and SAMR





Classification of learning objectives– 1956
Revised in 2000

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History and Maths – Our School

Year 2

Book Reports – an eBook

Year 1/2

SOSE Project – Our School

Prep

Maths – Year 4

Making Learning Visible

Maths – Positional Language

Federation – Research a Key Person

Year 5/6

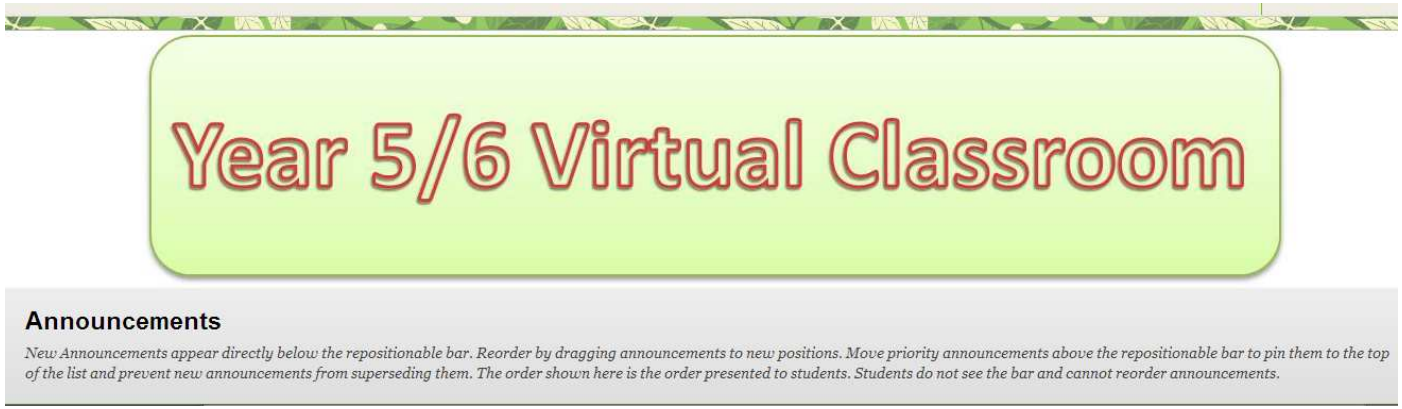
iPad 1:19 PM 28%

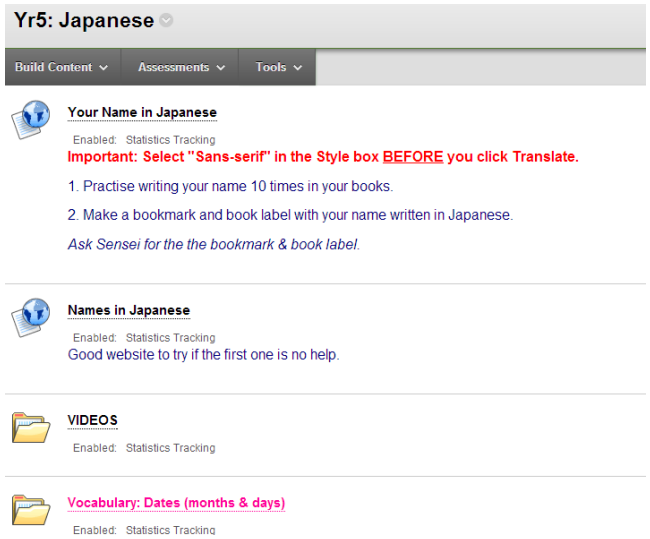
In the beginning of time there was cunning, mischievous Echidna and Kangaroo which were totally different from each other. Kangaroo was extremely poor and Echidna was rich and greedy. They were always fighting for food.

Unexpectedly, poor, generous Kangaroo's favourite food was honey ants, but unfortunately for greedy fat Echidna, Kangaroo could easily lick delicious honey ants out of their holes.

Online Learning

Year 5-7





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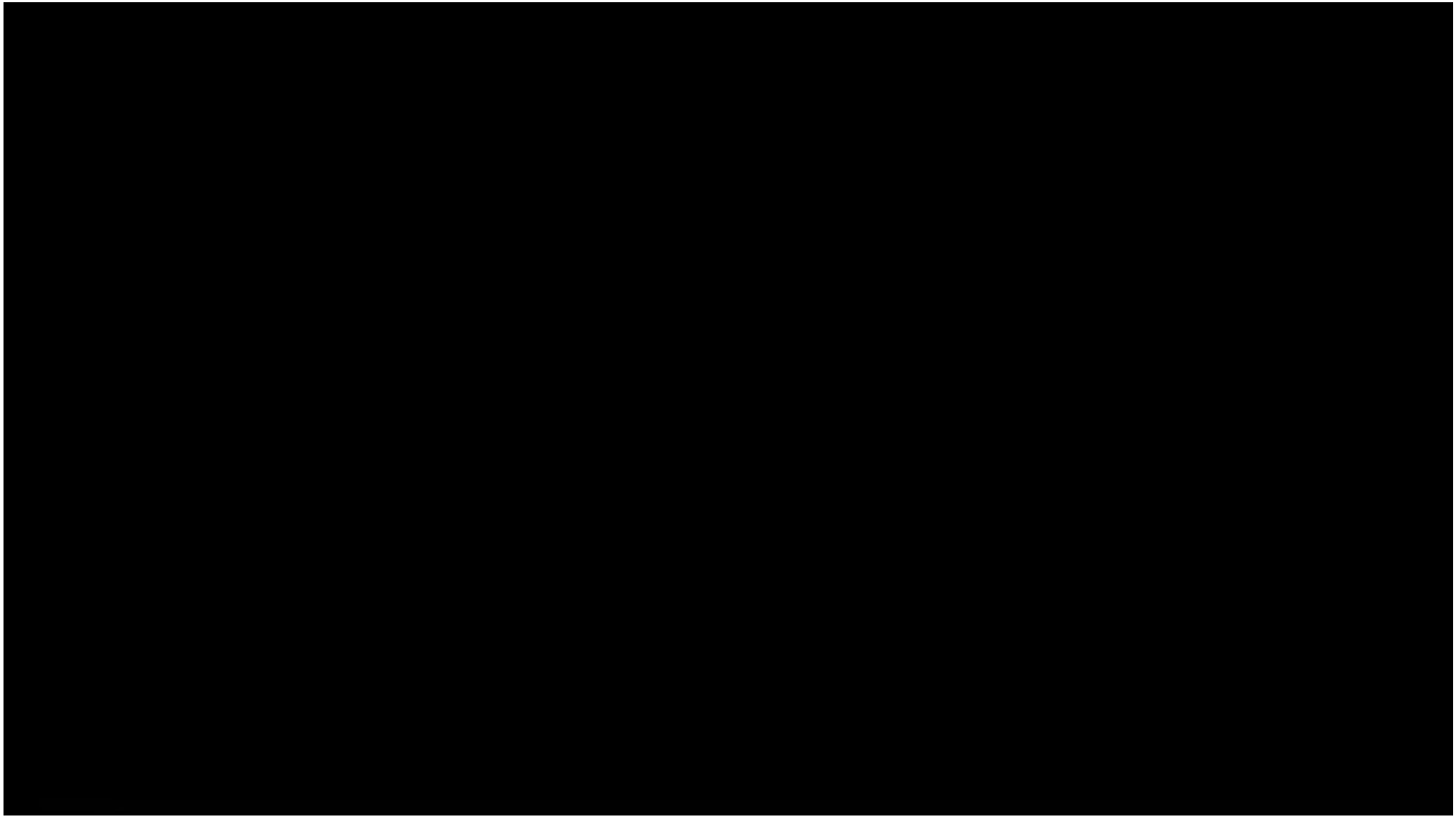
A Final Word

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