

School Trek

Evolution of a Educational Technology Philosopher (!)

<http://wikieducator.org/User:Richardnz>



Website:

<http://richardnz.net/> 

Employer:

Self-employed consultant

- Geologist & Geophysicist in the 70's and 80's
- Teaching since 1989
- Early developer of support websites and Online Global PD for IBO – Deputy Chief Examiner
- eLearning and Moodle Specialist 2004 – 2013
- TSS 2010 – 2013

What I want to say today

Where we've been in educational technology



Maori concept "*ako*". Knowledge, learning
– reciprocal relationship teacher-learner



http://commons.wikimedia.org/wiki/File:Maori_carving.jpg
Author: <http://commons.wikimedia.org/wiki/User:Antilived>

Learner-centred teaching

- The Balance of Power
- The Function of Content
- Role of the Teacher
- The Responsibility for Learning
- The Purpose and Processes of Evaluation

Moodle and learner-centred teaching

Blog post:

<http://richardnz.net/mod/forum/discuss.php?d=101>

Instructor led

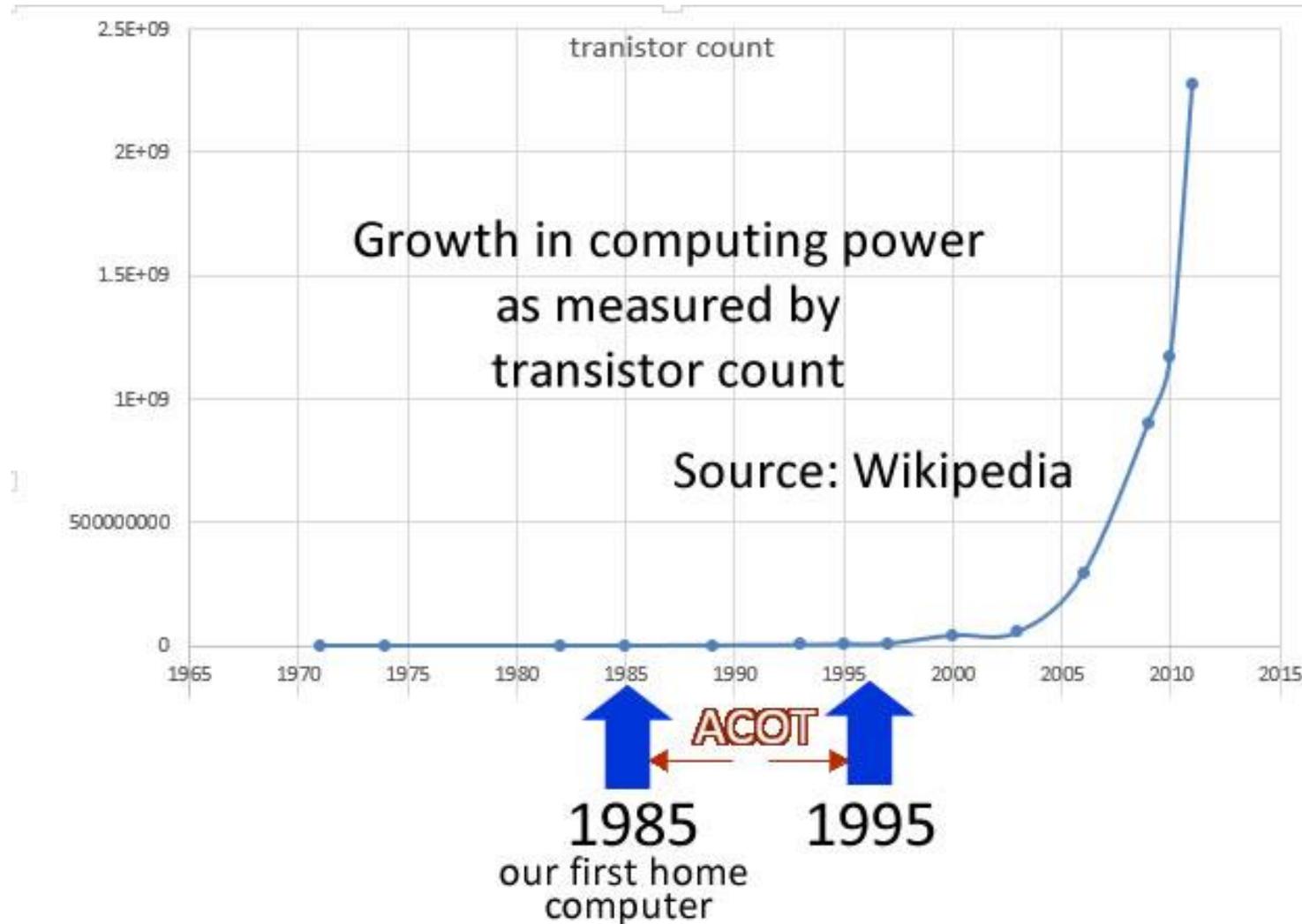


Teacher guided



Facilitator of social collaboration

From slow start to mind boggling advances



CPU	2 MHz MOS Technology 6502/6512
Storage capacity	100–800 kB (DFS) 160–1280 kB (ADFS floppy discs) 20 MB (ADFS hard disc)
Memory	16–32 kB (Model A/B) 64–128 kB (Model B+) 128 kB (Master) Plus 32–128 kB ROM, expandable to 272 kB
Display	PAL/NTSC, UHF/composite/TTL RGB
Graphics	640×256, 8 colours (various framebuffer modes) 78×75, 8 colours (Teletext)

Still going – CLAIT – Computer Literacy & IT



National Careers Service
Helping you take the next step

Home Career tools **Careers advice** About us Young People

Types of learning

Improve your computer skills

Studying for a CLAiT qualification

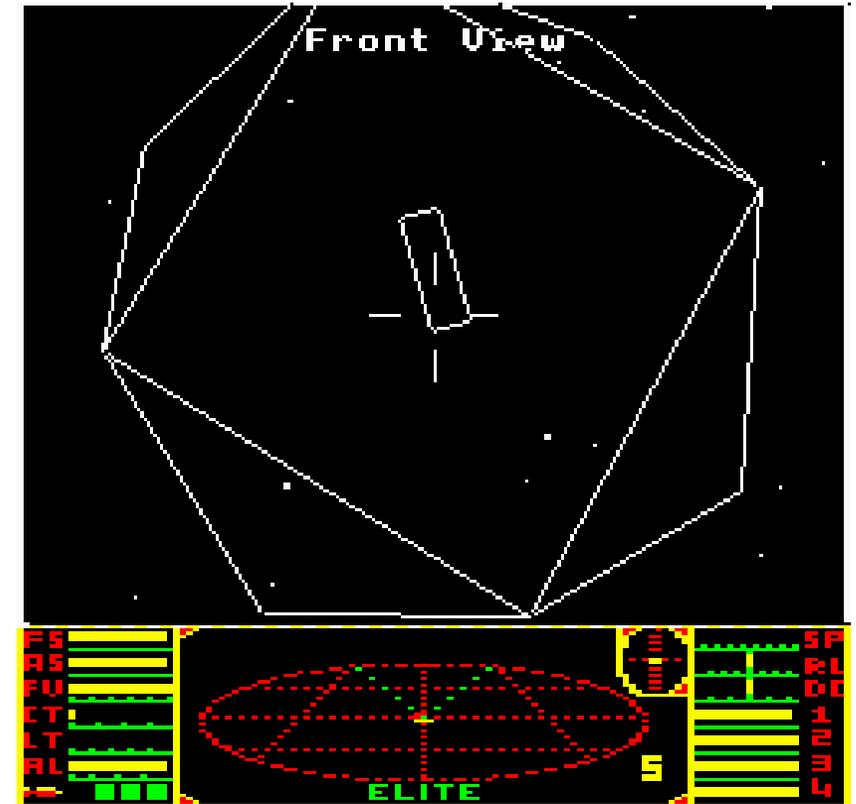
CLAiT stands for Computer Literacy and Information Technology and is an internationally recognised course. If you pass a CLAiT course it shows employers you can use the main applications on a computer.

CLAiT is available at levels 1 (New CLAiT International), 2 (CLAiT Plus International) and 3 (CLAiT Advanced International). If you're a beginner, Level 1 may be suitable for you; if you're an advanced computer user Level 3 may be more suitable. Level 3 is equivalent to NVQ 3 (National Vocational Qualification) and A level standard. You can move through the levels to increase your skills.

What does CLAiT involve?

At each level, there are different units. One of these is compulsory (you have to do it) but you can choose some of the other units. You can work towards an Award, Certificate or a Diploma depending on how many units you choose to do.

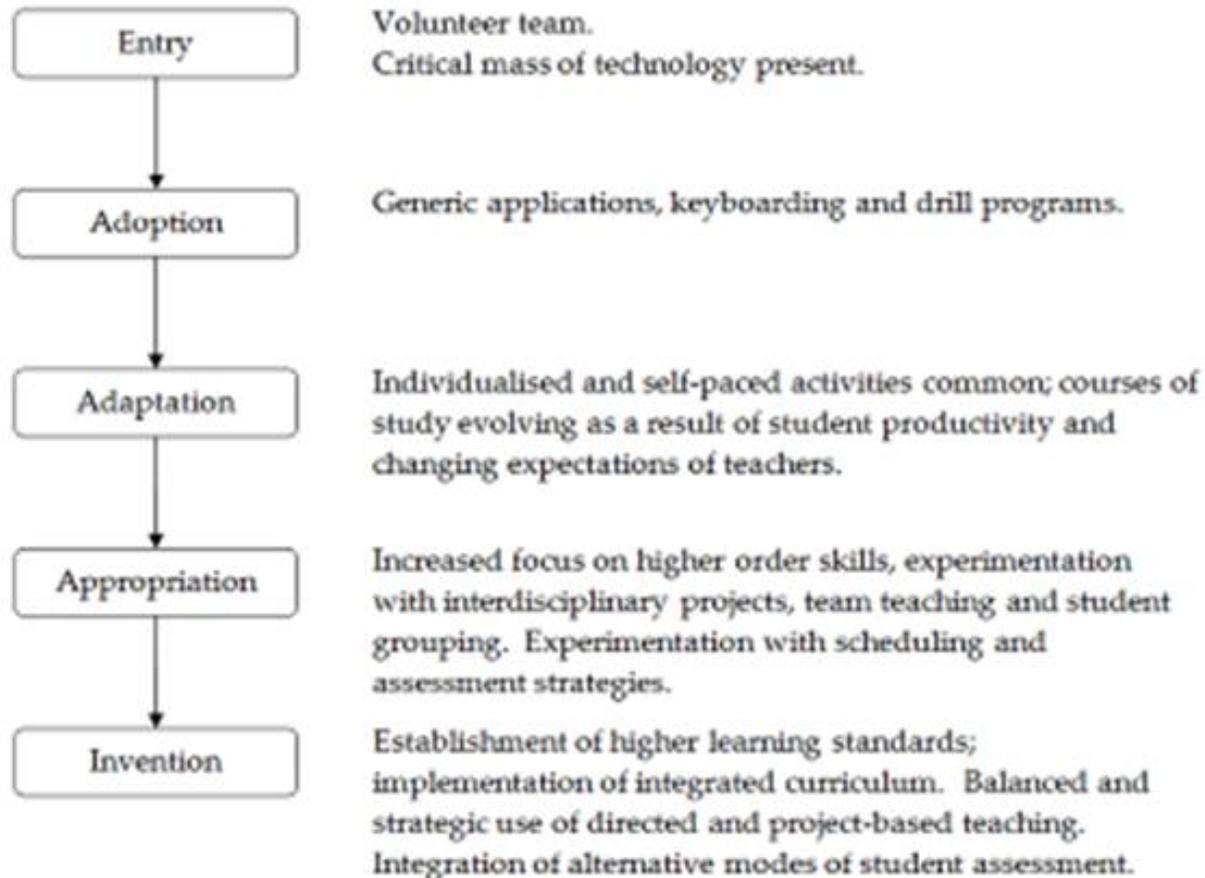
Many happy hours from harmless to elite



With funding from Kickstarter, the team is back together...

What we knew in 1996 – it would work

ACOT's Stages on the Road



Sandholtz, J H, C Ringstaff and D Dwyer, 1996. Teaching with Technology, Teachers College Press, New York.

- Entry
- Adoption
- Adaptation
- Appropriation
- Invention

We couldn't set them free



http://www.pikiwiki.org.il/?action=gallery&img_id=13802

Public domain



John Erikson's journey with ACOT

“First year of the project:

I lectured no more than 10 minutes in science today. For the rest of the period the kids worked on a project. What effect will this have on their learning?

Two years later:

As the kids are presenting their computer projects I'm able to allow them to assume the role of teacher and I assume the role of the student ... I kind of become the final person that can give information rather than the initial person in class”

From skills to embedded practice (sort of)



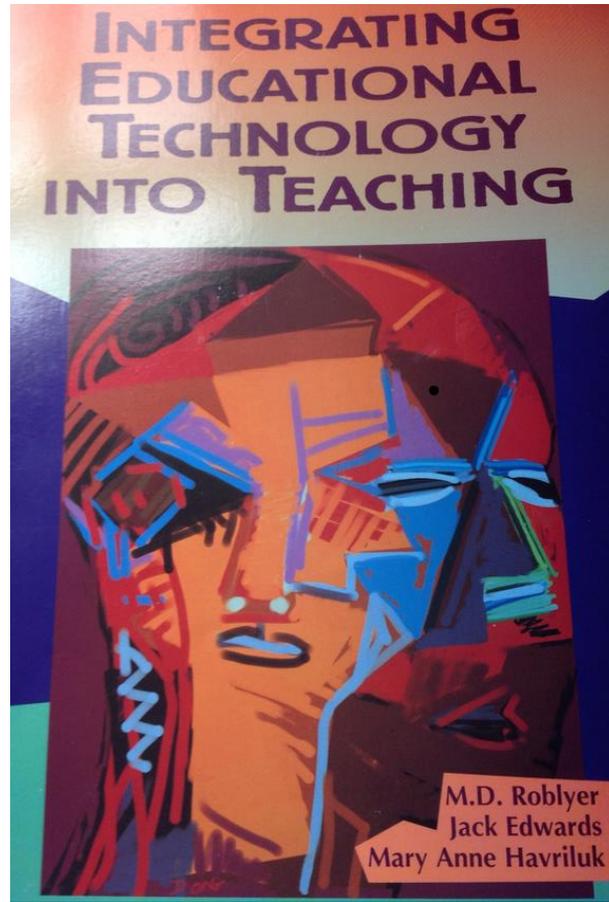
By picture man [GPL
(<http://www.gnu.org/licenses/gpl.html>)], via
Wikimedia Commons

St Julian's School, Portugal
12th century palacette

Computer lab was up here (nice)



Except that technology was still in the driving seat...



Prentice Hall, New Jersey, 1997.
ISBN: 0-02-402608-5

A Class Poem

Joan Hamilton, Emerson School (Bolton, Massachusetts)

Grade 8

A connection between reading and writing is built by having students write a class poem modeled after Walt Whitman's "Song of Myself."

Instructional Activities. After students read the original poem, the teacher set up six stations in the computer lab. Each was labeled with a beginning line from the poem: I hear ..., I understand ..., I saw ..., I want ..., Injustices ..., and Who are you? Students were asked to move from computer to computer adding one idea to each category. For example, at the "Who are you?" station, students were encouraged to add words, phrases, or ideas that describe a typical 8th-grade student. The resulting lists were then saved, printed, and made available to all students for use in writing their own poems. When the individual poems were completed, students had the option of combining their efforts into a class poem. Groups of students decided which parts of individual poems should be included and in what order. The final poem was printed, used as a choral reading, and displayed on bulletin boards.

Put this one in the *"Seemed like a good idea at the time"* box.

Noughties – our Asia Pacific decade...



To the Gold Coast

The Southport School (TSS)



From my mid 90's thesis

In a detailed case study of the use of computers in a US High School, Schofield found that “computers were actually very little used” and identified the major barriers as:

- a) teacher mistrust in the “value” of computers in education
- b) disruption of “normal” classroom organisation
- c) lack of familiarity and initial training of teachers
- d) ongoing training needs
- e) threat to teacher authority (via lack of competence)
- f) computer anxiety

Schofield, J, 1995, *Computers and Classroom Culture*, Cambridge University Press, New York

Moodle/Mahara added as a strategic priority

1. Maintain our strong academic ethos and further develop our learning enabling IT systems and Learning Management system 'learning@tss'.
2. Create and implement a world-class Years 7 to 9 'Learning to Lead' program aimed at developing our boys' academic abilities, 21st century leadership skills and intelligent dispositions. This program will include positive psychology courses, thinking skills, Habits of Mind and the Chinese living, language and culture program.
3. Implement the recently developed and piloted Model of the Ideal TSS Teacher to invest in our staff and to continue to build TSS as a 'learning organisation where all staff seek feedback, reflect on practice and are continually learning.
4. Maintain TSS as a school for Boarders, with a continued strong commitment to Country Boarding.
5. Construct the three stages of the Academic and Leadership Centres, including the Leadership Centre, Year 7 Transition Centre, Creative Visual Arts Centre, Lecture Theatre, staff facilities and learning spaces for Drama and Robotics.

Details can be found at:

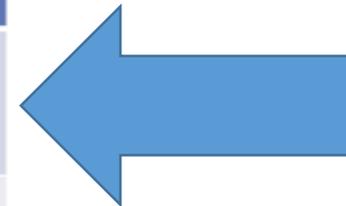
<http://richardnz.net/mod/forum/discuss.php?d=100>

The journey



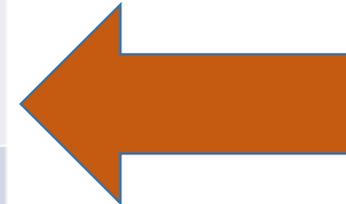
Highlights on the road

2010	Moodle 1.9, Mahara 1.2 moderate take up. eLearning Coordinator appointed – “work with the willing”
2011 Year of eLearning	<ul style="list-style-type: none">• Courses auto-created from SMS• Switch to Moodle 2 – very early adopters• Strong focus on “internal marketing” and PL
2012 eLearning Leaders	<ul style="list-style-type: none">• eLearning leaders in faculties• Push to PL delivered by staff• Mahara 1.5 – greater use across the school• More emphasis on pedagogical change (Pedagogical framework)
2013 BYOD & Audit	<ul style="list-style-type: none">• BYOD, mobile Moodle 2.4 and <u>Mahara 1.6</u>• Moodle and Innovation (Action Research)• Full Moodle course/teacher audit started• Transition from eLearning Director to internal capability



The iPad Trial

“Jo was right”



Boys begin to bring devices out of choice.

Pedagogical Framework - 2012

Browseable Online Document, Posters for classrooms

The Teaching@TSS Framework

This is the big picture of our Teaching@TSS framework. Based around the work of [Eric Frangenberg](#), The Queensland Curriculum & Assessment, various thinking skills and tools, the [Maths of Mind of An/One](#) as adapted to TSS, [Noelie's Classroom Instruction That Works](#) and Learning@TSS our Moodle Makers system. You may also [browse the framework](#) in order to read online, organised by thinking skills.

Thinking@TSS Framework <i>Source: Framework</i>	Progressive Verbs	Progressive Stanzas	CCEs	Thinking Skills & Tools			Learning@TSS course design, tools & strategies	MEdEd: Classroom Instruction that works	Crest Model
				Traditional	Application	Mobile App			
Higher order Thinking Skills	<p>Create Create: Assess</p> <p>Creating, deriving, understanding, explaining, forecasting, formulating, generalising, synthesising, improving, creating, modifying, planning, predicting, proposing, synthesising</p>	<p>Design an improved... for... Formulate a set of criteria to judge... Compose a song, jingle or rap to... Identify... in order to create a fairer... Develop an argument to persuade... Generate key questions for... Create a role play/experiment to... Create a new code for...</p>	<ul style="list-style-type: none"> • Extrapolating • Hypothesising • Synthesising • Creating compelling writing • Visualising • Drawing • Sketching/drawing 	<p>1-4 P.C.B. T-chart NAEL Rowed Robin Not-Not Rowed Robin Not-Not Image Associated Ideas Three Association</p>	<p>FormPoster FormPoster Animate Storyline Storyline Storyline Storyline</p>	<p>Power Creator Garage Bead One Sheet PhotoPad Doodlekit Storyline Storyline Storyline Keynote</p>	<p>Using video, forums, glossaries in a Moodle course. For example to encourage creative writing. Keeping a Journal or creating a web page in Moodle that includes original audio or video files.</p>	<p>Cooperative learning</p>	<p>Be creative. Imagine new ideas and elaborate them in detail. Look for ways to make things your own. Share ideas with your classmates. Use what you learn in a new situation. Move out of your comfort zone. Take risks in activities, accepting challenges and finding ways to overcome them.</p>
	<p>Evaluate</p> <p>Arguing for/against, assuming, concluding, deciding, choosing, defining, determining, grading, judging, justifying, prioritising, rating, recommending, selecting, reviewing</p>	<p>"Which of the two... would be better for... Choose and justify a theme song for... Evaluate the decision of... Evaluate the effectiveness of... Select which is the best option... Rank the following from... in order... Choose the issue</p>	<ul style="list-style-type: none"> • Defining/clarifying • Analysing/evaluating extended written text • Structuring/organising a mathematical argument • Explaining to others • Expanding a response • Reasoning • Comparing, contrasting • Classifying • Interpreting ideas/arguments • Reaching a conclusion which is necessary but provided a given set of assumptions is true • Reaching a conclusion which is consistent with a given set of assumptions • Drawing • Judging/evaluating • Justifying 	<p>Decision-making Matrix Rowed Robin Not-Not Judge Jury POC Diagrams T-Chart</p>	<p>Google Flipgrid Padlet Storyline Storyline Storyline Storyline</p>	<p>The Goodbooks Padlet One Sheet Storyline</p>	<p>Arguing your case in a forum... Evaluating posts of others. Peer review in the workshop module. Keeping a Journal or creating a web page in Moodle</p>	<p>Identifying similarities and differences Cooperative learning Being objective & providing feedback</p>	<p>Understand your thinking. Think about a plan to ensure the quality of your thinking. This is not an additional achievement. It leads to... Think of different ways of solving a problem... Practice commitment and persistence. Understand what people. Listen and try to understand what they mean.</p>
	<p>Analyse</p> <p>Analyzing, arguing/about, categorising, comparing, contrasting, critiquing, defining, deducing, differentiating, discussing, distinguishing, examining, explaining, identifying, inferring, investigating, interpreting</p>	<p>Point out at least 4 people's responses... Discuss the similarities and differences between... Compare and contrast... Investigate all the factors that could influence... Summarise the reasons for... Reduce your text into a paragraph... Conduct research on the use of... in order to gain a deeper understanding of... List the pros and cons of...</p>	<ul style="list-style-type: none"> • Interpreting the meaning of words or other symbols • Interpreting the meaning of pictures/Diagrams • Interpreting the meaning of tables or diagrams or maps or graphs • Summarising/condensing written text • Explaining numerical magnitude • Approximating a numerical value • Deriving patterns 	<p>Decision-making Matrix Rowed Robin Not-Not Judge Jury POC Diagrams T-Chart Diagrams</p>	<p>Excel (charts) Word SmartArt One Sheet Storyline Storyline Storyline</p>	<p>Numbers One Sheet One Sheet Flipgrid POC Storyline</p>	<p>Using a Moodle database to classify materials or other things. Doing up your own group database page in Moodle</p>	<p>Identifying similarities and differences Generating and using hypotheses Cooperative learning</p>	<p>Be curious. Ask questions and seek solutions. Cooperate together. Try to figure out how to solve the mystery, wonder and see in the world about the world and enjoy figuring things out.</p>

↑ Bloom's

↑ Strategies

↑ QLD CCE's

↑ Tools, tech & non-tech

↑ Classroom Practice

↑ HoM

Culmination of previous years themes

Ties it all together:

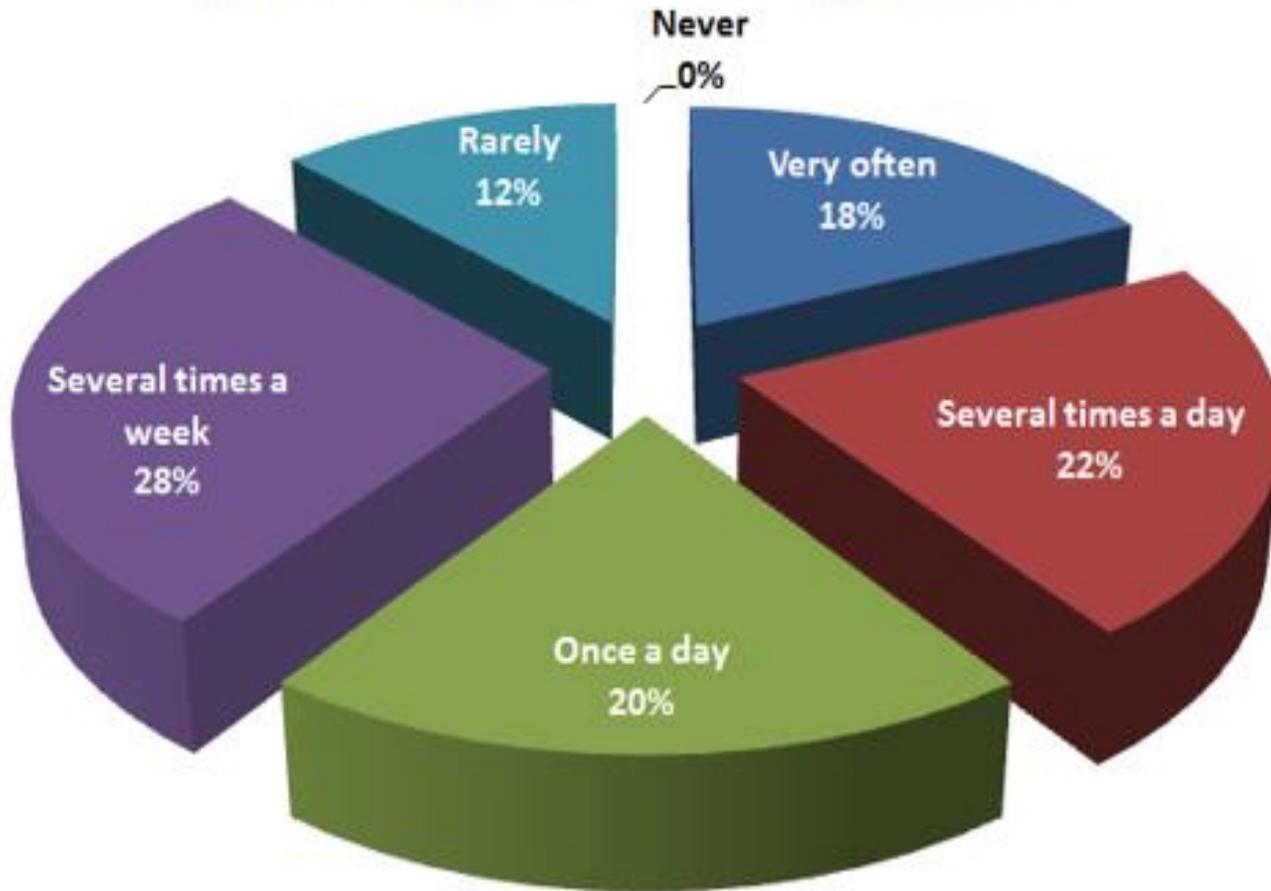
- Habits of Mind
- McRel
- Frangenheim

Our own work on tools for iPad, PC and non-technical tools

Incorporated into our curriculum planning system (Atlas)

The results

How often do you use Learning@TSS?



"It's on Moodle"

Was heard frequently

These were the main uses specified:

- Checking on homework to be done (66%)
- Uploading/completing homework (65%)
- Doing other work set by the teacher (60%)
- Looking for resources (58%)

Stages of Tech Adoption

ACOT (Sandholtz et al)

- Entry
- Adoption
- Adaptation
- Appropriation
- Invention

TSS in
2012

SAMR (Ruben R Pantedura)

- Substitution
- Augmentation
- Modification
- Redefinition

What they thought...

Student:

"I believe that Learning@TSS is an extremely useful tool for uploading assignments and homework. It also lets me communicate to my classmates about work."

Teacher:

"And with the webcam, every time I've used webcam, I've had feedback from either a boy or a parent saying, "Thank you," or "Great." It was good to get that. Also with Moodle, the same. You get this feedback saying, "Oh, it's great to know what the boys are going to be doing." And when you put examples in, an exemplary piece of work, they know exactly what the expectations are.

It's a marvellous tool for learning."

BoysV8EnglishClip-large



“Teaches us the good virtues of teamwork”

“We post a draft and get immediate feedback, not like, a week later”

“I think it was fun because we were learning while we were doing assessment”



Mahara

Log in Account settings Send message Request friends

About PLin

This is the profile page for [redacted]. Believe it.

About PLin? Uh... PLin is a person that goes to T.S.S. The existence of this page is due to GST, a class which PLin attends a few times a week. PLin finds it hard to write about himself, hence this speaking in third person.

Personal blog [redacted]

Shameless Self Promotion

VIDEO

The G-Log

Out to GST. It's great. Really.

Positive Psychology

This week Mr. Wan, the school headmaster, came to speak to us about positive psychology. Being such a large subject, he only covered how positive psychology ties in with our character strengths and weaknesses.

Prior to our meeting with Mr. Wan, the GST class underwent a personal strengths test designed by Dr. Martin Seligman of Pennsylvania State University. Dr. Seligman is a psychologist, educator, and author of self-help books and is the founder of positive psychology; this is a branch of psychology that focuses on the empirical study of such things as positive emotions, strengths-based character, and healthy institutions. "The test showed us our list of strengths from 1-24 (there are 24 strengths), with 1-5 being our most prominent strengths and the others being ones we need to work on.

Mr. Wan discussed our strengths with us and asked us to give examples of how we used this strength. Mr. Wan provided us with his strengths and went on to explain how being a school headmaster incorporated all of his top strengths. Apparently, finding a job with all your strengths incorporated and that you enjoy is rather difficult. After some more discussion on our strengths (of which I remember none too much in detail), Mr. Wan said that a person would be happier living their life to their strengths, rather than just working on their weaker strengths (notice how I didn't say "weaknesses").

Another part of the discussion about positive psychology was bullying. Being the headmaster, he was bound to bring this up. At TSS, while physical bullying is minimal there are many cases of verbal and psychological bullying. Sometimes, the bully doesn't know that he's "putting down" or even intimidating the victim. Branching from that is the Positive Negative comment rule. (This morning's comment is also mentioned in my blog post.)

Play it

I enjoy being blatantly honest!

BluE's Friends

AksarGamer Kobby BluE123 [redacted]

1 friends

BluE's Wall

Maximum 1000 characters per post. You can format your post using BBCode. [Learn more](#)

Student:

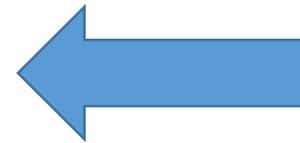
“Now, Mahara was really good. It was like a social networking site but solely for our classroom. We could really engage with each other and comment on each other's posts and have a look at what other people are doing and their perspectives on certain issues. So, I found that to be really interesting.”

Angela Foulds-Cook Year 10 optional course
– they keep a Digital Journal in Mahara

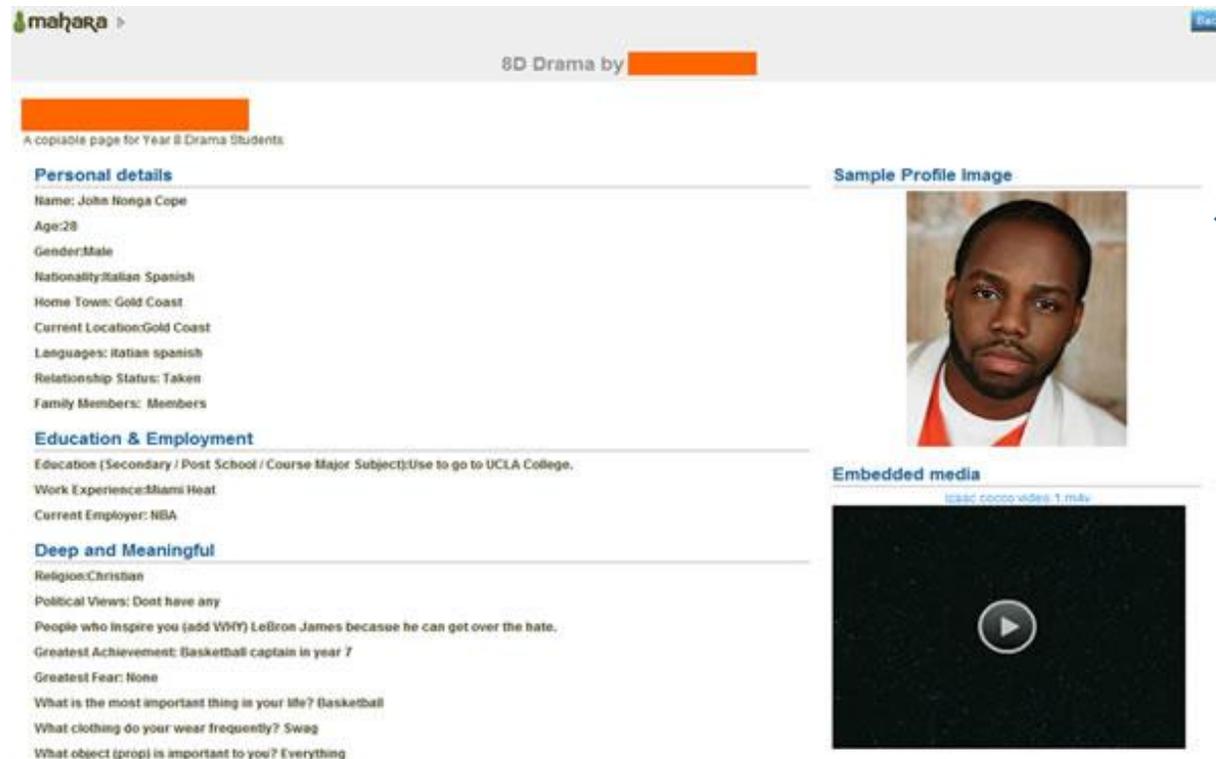
Mahara integrates well with Moodle

Semester 1 CHARACTERISATION Rotation 3 (8A and 8D)

-  Learning About the Elements of Drama
-  8D Assessment Task Sheet Ms Francis
-  8D Submit your Mahara Page with Profile and Short Film Ms Francis
-  8A Submit your Mahara Page with Profile and Short Film Ms Miller



Mahara Pages as assignments



8D Drama by [redacted]

A copiable page for Year 8 Drama Students.

Personal details

Name: John Nonga Cope
Age: 28
Gender: Male
Nationality: Italian Spanish
Home Town: Gold Coast
Current Location: Gold Coast
Languages: Italian Spanish
Relationship Status: Taken
Family Members: Members

Education & Employment

Education (Secondary / Post School / Course Major Subject): Use to go to UCLA College.
Work Experience: Miami Heat
Current Employer: NBA

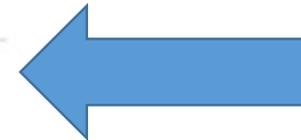
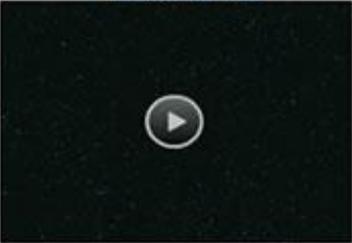
Deep and Meaningful

Religion: Christian
Political Views: Don't have any
People who inspire you (add WHY): LeBron James because he can get over the hate.
Greatest Achievement: Basketball captain in year 7
Greatest Fear: None
What is the most important thing in your life?: Basketball
What clothing do you wear frequently?: Swag
What object (prop) is important to you?: Everything

Sample Profile Image



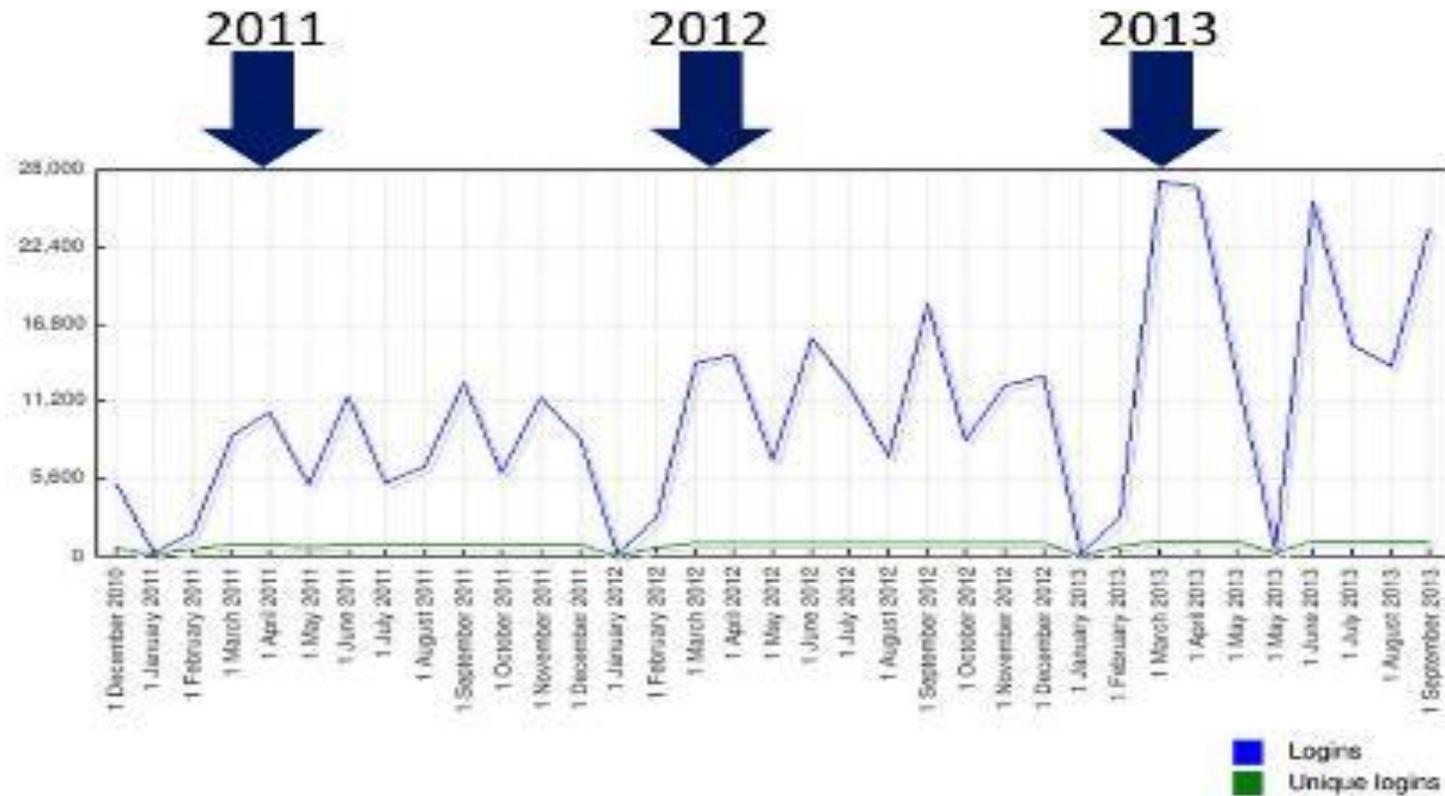
Embedded media



Pages as rich resources

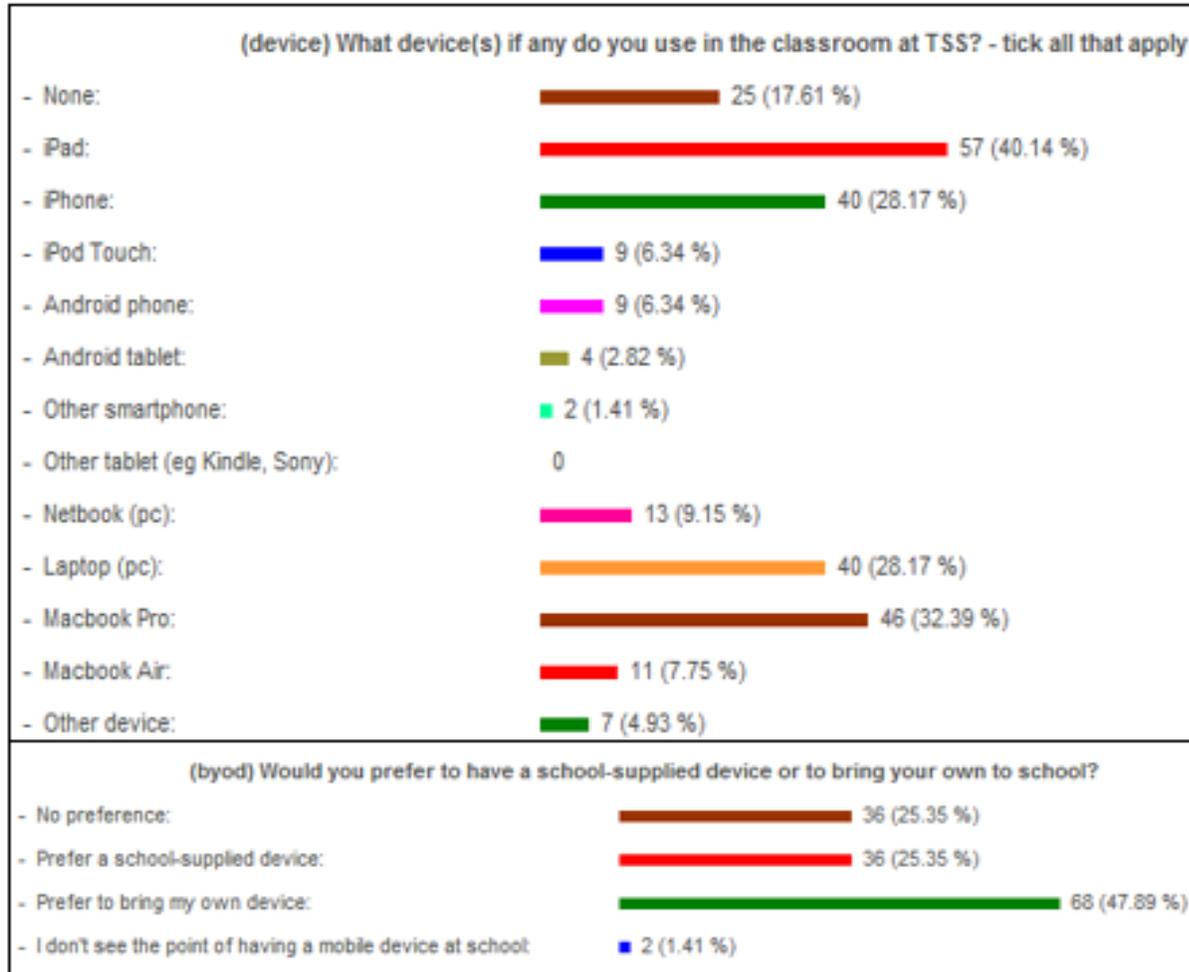
Export options from Moodle
Boys can take assignments to it
Parents can see pages

Working together we can make a change



This represents a year on year increase of 83%.

The Road to BYOD



- iPads and Netbooks trialled in 2011
- 2 cohorts funded by DER in 2012 (Rudd Money)
- Y9 – iPads, Y12 – netbooks
- BYOD 2013 hardly any iPads or netbooks loaned out
- Labs cut back 75% but 250k AUD spent on network upgrades

What BYOD means to me



Interviewer: What about devices? How do you find that? Have you found it easier than, say, working in a computer lab, or?

Y9 student: Yeah, much easier because you can direct yourself by yourself. You can start research on your own. You don't have to use a computer that everyone else is using. If you have your own device, you probably know it better as well.

Interviewer: Okay. So you can make more use of it.

BYOD

School devices are far more likely to be mistreated, forgotten and misused.



BYOD with a school specified device is not BYOD at all but a 1 to 1 program!

Opinion...

Own the device, own the learning

A Different Dynamic

Dear Dr. Margerison and

At the start of my horror story, my character is alone and feels uneasy as he lays in his bed at night.

I personally think that the reason why making the character feel alone is because it makes the reader think. 'Is there a man behind the door!' 'I was alone, or was I!' It creates a great feeling of tension and suspense.

Thanks for reading my post. **Student initiates a discussion**

[Show parent](#) | [Edit](#) | [Split](#) | [Delete](#) | [Reply](#) | [Export to portfolio](#)



Re: Final Question for Discussion on Horror
by - Monday, 13 May 2013, 8:48 PM

**Can take to Mahara
as a personal record**

That is very true That's exactly what came to the top of my head when I read the question for the first time. You also explained it very well. Thumbs Up!!! I really like the way you how you wrote the phrases 'Is there a man behind the door!' 'I was alone, or was I!' Keep up the excellent discussion. **Positive reinforcement from peers**

[Show parent](#) | [Edit](#) | [Split](#) | [Delete](#) | [Reply](#) | [Export to portfolio](#)



Re: Final Question for Discussion on Horror
by - Tuesday, 14 May 2013, 7:07 AM

I really like the way how you say your character feels **uneasy** when he lays in his bed. This is a great word choice but why does he feel 'uneasy' ? **Comment builds and promotes reflection**

I thought that your last paragraph was really good. I believe that the point you brought up about your character being able to find the true meaning of life is a very valid point. I think this is how authors are most effectively able to reach the readers deepest fears that we were talking about at the start of this assesment. To answer the question you opposed I would say what I find scary is apart from the loneliness during the story I would say the unknown or unexpected happening to the character especially if he is confronted by this alone. This is what I am trying to develop in my story to make it even more scarier.

I like how you are opposing a question as well . Keep this up.

**Others contribute and the
class builds collective knowledge.
70 posts just in this thread.**

"It's a very different process to what we may previously have experienced with handing in homework to a teacher in a linear A to B and then teacher back to student, B to A dynamic." TSS Teacher.

This is from my colleague Dr Jill Margerison

4 Principles of Blended Learning

<http://blogs.kqed.org/mindshift/2013/08/four-essential-principles-of-blended-learning/>

- 1. EVERY SCHOOL NEEDS A VISION**
- 2. ONE SIZE DOES NOT FIT ALL.**
- 3. DON'T LET SOFTWARE DICTATE LEARNING GOALS**
- 4. SUPPORT TEACHERS AND INCLUDE THEM IN THE DECISION-MAKING
PROCESS**

In Transition

Social learning for students - **more PL required**

Resources for students - **completed**

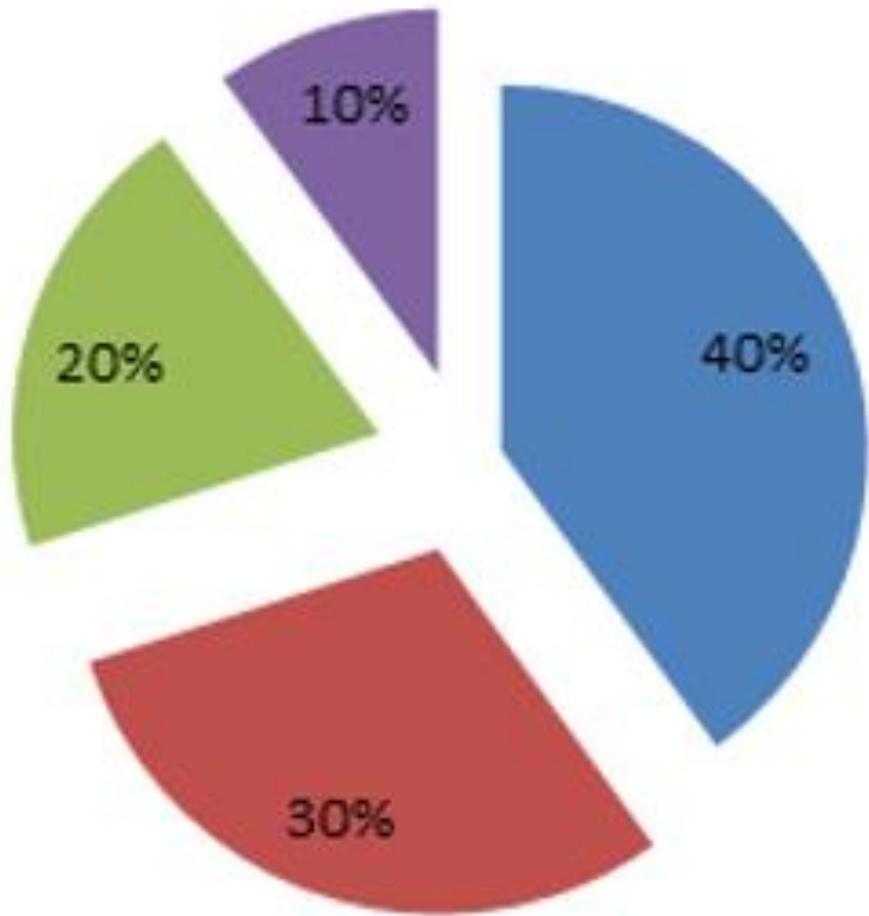
Web pages, journals, teacher reflective practice - **growing organically**

Moodle

Mahara

Learning@TSS

Audit



Level	Descriptor
1	Mostly for content management – resources like word docs and PowerPoints
2	Resources plus some interactivity such as a quiz, forum or glossary
3	Some degree of social learning is evident – peer reflections in forums, multiple activities, use of Mahara ePortfolio where appropriate
4	Moodle Advisors – able to manage enrolments, categories, course settings, Gradebook, rubrics. Good working knowledge of Mahara.

The Concept of Ako

<http://tereomaori.tki.org.nz/Curriculum-guidelines/Teaching-and-learning-te-reo-Maori/Aspects-of-planning/The-concept-of-ako>



Ako

The concept of ako

The concept of ako describes a teaching and learning relationship, where the educator is also learning from the student and where educators' practices are informed by the latest research and are both deliberate and reflective. Ako is grounded in the principle of reciprocity and also recognises that the learner and whānau cannot be separated.

Ka Hikitia, 2008, p.20

“There is more in you than you know”

"I regard it as the foremost task of education to insure the survival of these qualities: an enterprising curiosity, an undefeatable spirit, tenacity in pursuit, readiness for sensible self denial, and above all, compassion."

Kurt Hahn 1886 - 1974

Eye to the future

Activity monitoring

The screenshot displays a dashboard titled 'Activity monitoring' with a table of student activity. The table has columns for 'First name / Surname', 'ID number', 'Email address', and several activity categories. A red vertical bar highlights the 'War Diary of a French ...' activity, dated '18 March 2013'. The 'War Diary' column shows progress for several students, with some having completed the activity (indicated by a blue checkmark) and others having viewed it (indicated by a blue arrow). Other activities include 'Turn it in details', 'Slideshare link - Speech ...', 'Tips for writing a great ...', 'Experiences of War - Week 7/8', 'Term 1', 'Wednesday Week 5 Writing ...', 'Persuasive Speech Practice', 'Poetic Devices Revision', and 'Poetic Devices Quiz Friday ...'. The 'Poetic Devices Quiz Friday' column shows progress for several students, with some having completed the quiz (indicated by a blue checkmark) and others having viewed it (indicated by a blue arrow).

First name / Surname	ID number	Email address	Turn it in details	Slideshare link - Speech ...	Tips for writing a great ...	War Diary of a French ... 18 March 2013	Experiences of War - Week 7/8	Term 1	Wednesday Week 5 Writing ...	Persuasive Speech Practice	Poetic Devices Revision	Poetic Devices Quiz Friday ...
[Redacted]	110284	110284@student.tss.qld.edu.au	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
[Redacted]	111373	111373@student.tss.qld.edu.au	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
[Redacted]	106849	106849@student.tss.qld.edu.au	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
[Redacted]	109928	109928@student.tss.qld.edu.au	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
[Redacted]	109524	109524@student.tss.qld.edu.au	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
[Redacted]	109553	109553@student.tss.qld.edu.au	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

At a glance - who has viewed or completed which resources and activities

Detailed data (big data) on each and every student, where they are, what they've done and what they need next.

This example is from my colleague Paula Henry.

The Changing Role of Secondary Education

Where we've been

- Test centred
- Text centred
- Teacher centred

- Age-based schooling

- Control of content

What we need

- Better assessment methods
- More audio and video
- Student centred

- Needs based schooling

- Open content

Thank you

