



Key places to learn more from NoTosh:

For how: www.notosh.com/lab

For stories and examples: www.facebook.com/NoToshLearning

For books: <http://astore.amazon.com/not066-20>

THANKS FOR LISTENING...

It was a pleasure to share some of what we've been learning around the world with such a lovely group of educators, school leaders, architects and parents in Christchurch.

But a lecture is not the best way to dive deep. I wanted to leave you with some links and viewing that can help you transfer some ideas to your practice in your own time.

Please take a look at our Lab (<http://www.notosh.com/Lab>) which is regularly updated with examples of practice, explanations of why the practice is good,

and some suggestions of what you might do next.

If you want briefer things you can be inspired by and borrow for your own classroom, then our Facebook page is the easiest way to tap into the adventures of the NoTosh Team: <http://www.facebook.com/NoToshLearning>.

Have fun! Happy learning.

**Ewan and the NoTosh Team
(Tom, Peter, Jo and Rachel)**

WHAT DID YOU DO IN SCHOOL TODAY?

TEACHING EFFECTIVENESS:
A FRAMEWORK AND RUBRIC

WHAT DID YOU LEARN IN SCHOOL TODAY? DESIGNING WORTHY PROBLEMS

"Why are you learning this?" - it's a tough question to ask youngsters, but invaluable. Ask it to 12 learners this week, then spend some time looking to the research behind coming up with worthy problems.

Start with Galileo education's research report for the Alberta Government, What did you do in school today? (<http://www.galileo.org/cea-2009-wdydist-teaching.pdf>)

You might also consider a staff reading of David Perkins' Making Learning Whole (<http://astore.amazon.com/not066-20/detail/0470633719>) or Guy Claxton's What's The Point of School (<http://astore.amazon.com/not066-20/detail/1851686037>) as a way to explore this issue with the research to hand.



GENERATIVE TOPICS

Take any topic or project you have in your current curriculum and think carefully about the titles you have given them. With a generative topic title we have a great opportunity to engage our student from the first words we present to them.

<http://notosh.com/lab/develop-a-generative-topic/>

PLANNING A RICH IMMERSION

Many Project-Based Learning examples provide students with 'essential questions' that require mostly convergent thinking to answer them. In order to gain more divergent thinking, the teacher has to think about planning a wider range of resources that relate to a genuinely divergent Generative Topic.

<http://notosh.com/lab/design-thinking-immersion-planning/>

HIGHER ORDER QUESTIONING

What can be done to raise the order of questioning from lower order, Googleable, recall and understanding questions, to more analytical and creative questions? Grab some thinking dice templates and other strategies:

<http://notosh.com/lab/encourage-students-higher-order-questioning/>



KEEP THE UNGOOGLEABLE THINKING VISIBLE AND TO THE FORE



In our travels through elementary and high schools we've been struck by one thing: the vast majority of questioning comes from educators and is based around recall. Yet we know that higher order thinking comes from being asked - and asking - higher order questions.

<http://notosh.com/lab/encourage-students-higher-order-questioning/>

Scott Belsky calls it a Done Wall, a physical space that is a continual reminder of the work that is going on, what has been completed. The space for your project will help keep ideas bubbling away and will create a point of interest to talk about and refer to. Having one physical space is a vital component in getting all the information from a project's immersion

phase into one space, meaning digital resources need to be made physical, too.

<http://notosh.com/lab/build-a-project-nest/>

It is important to be able to build a messy space that is able to display the "guts of the learning" in all of its jumbled glory during immersion and the first phase of a design thinking project.

What is also needed is a whole learning space that makes the distinction and purpose of these spaces very clear. You and your children need to be able to explain to visitors the role of the space in your projects. The space in your room should be able to clearly show the process, thinking and the development of learning.



HOW TO COLLABORATE, AND CREATING SPACE FOR INNOVATION



Collaboration is a key theme of the Christchurch story at the moment, but it's also one of the toughest activities to undertake *well*. I wrote a series of blog posts, inspired by Morten Hansen's book *Collaboration* and the educational lessons we can draw from that. Indeed, collaboration was discovered to be the key ingredient for successful innovation in education in the large-scale ITL Research study (ITLResearch.com).

How can you determine if you're trying to collaborate on hostile territory, where individual efforts might, at first, work best? (<http://edu.blogs.com/edublogs/2012/01/collaboration-2-collaborating-in-hostile-territory.htm>)

What are the dangers of over-collaboration? (<http://edu.blogs.com/edublogs/2012/01/collaboration-3-overcollaboration.htm>)

Overshooting the potential value of collaboration (<http://edu.blogs.com/edublogs/2012/01/collaboration-4-overshooting-the-potential-value.html>)

Misdiagnosing the problem in the first place is a regular occurrence (<http://edu.blogs.com/edublogs/2012/01/collaboration-6-misdiagnosing-the-problem.html>)

Underestimating the costs (<http://edu.blogs.com/edublogs/2012/01/collaboration-5-underestimating-the-costs.html>)