

## National Future Schools Conference & Expo



Fabian Mandrini (Head of Business and Economics) and I attended the [National Future Schools Conferences / Expo](#) held at the [Australian Technology Park Sydney](#) last week 3-4 March 2016. This newsletter summarises the [Future Leaders Conference](#).

Michael Eggenhuizen | Director ICT

## Larry Rosenstock (@HighTechHigh)



Larry Rosenstock – [CEO of High Tech High](#) – laments the fact that **schools are not keeping up with a changing world**. He begins his keynote with a [Socrates](#) quote, “*I cannot teach anybody anything. I can only make them think*”. He asks the audience to think about their school education and **who were those teachers that had passion that drew students into the subject and made them think – we should thank these teachers!** Rosenstock spoke of the ‘old education paradigm’ that still exists in schools today, sitting in rows, facing the front, compartmentalised subjects, teacher-led lessons, measuring student success on knowledge. **He says that schools need to break these old molds and move with a changing world!** Rosenstock gives us a glimpse of what takes place at [High Tech High](#), a school where **students are chosen by zip code rather than on ability**. He draws on a quote from Dewey, “*understanding derives from activity*”. **At High Tech High students learn through activity. Project-based learning** replaces compartmentalised subjects. Students work in collaborative groups in open spaces that on the surface appear to be disorganised. **Students work on real-world problems and solve them using real-world tools. Student work is displayed in public exhibitions and around the school.** He relayed a story about how Year 5 students at High Tech High, wanting to eradicate rats and mice from school classrooms, researched the problem and, wanting to steer away from traps, chemicals and dangerous predators, came up with a solution to use barn owls. Barn owls eat approximately 2000 rats and mice a year! **So the solution was to build a number of barn owl habitats around the school – problem solved!** Read [Claire Amos'](#) summary of keynote. Watch this [High Tech High video](#) created by students.

## Erin Weightman (@ezzaw8)



Erin Weightman – Assistant Principal – [Surf Coast Secondary College](#) – says **engagement & collaboration are key to learning**. She quotes Newman who says “*student engagement occurs when students make a psychological investment in learning*”. **Schools should invent the future rather than fixing the past.** She quotes [Ken Robinson](#) in saying that humans are different and diverse, inherently creative and that curiosity is the engine of achievement. Weightman says the same old same old approach to teaching and learning in schools is often the result of an “*it’s all too hard*” frame of mind. Excuses like, we need to teach the curriculum, what about NAPLAN, the students will be too hard to control, we can’t change the timetable, the principal won’t let us do that, **stifle creativity, engagement and collaboration in schools**. To overcome these barriers at [Surf Coast Secondary College](#), Weightman **says that they needed to educate the students, teachers and parents about what the school was doing and why they were doing it this way**. The school increased flexibility and choice in the curriculum, increased student-centred activities, problem-solving and creativity by [fusing](#) subjects together and teaching students in open spaces. This has led to integrated and in-depth learning and flexibility of involvement. **Technology is important with everything online and lessons focused on meaningful discussions and collaboration.** [Claire Amos'](#) summary.

## Anita L’Enfant (@anita\_lenfant)



Anita L’Enfant – National Learning Manager at Datacom. Datacom ran a **makers’ playground for Year 6 Students** from [Mount Sinai College](#). The students had to [work on solutions to four challenges](#) and in doing so **demonstrated authentic learning** through project-based problem solving. The boys above were using a programming language called [scratch](#) to program a number of sensors attached to a laptop.

## Murat Dizdar (@dizdarm)



**Murat Dizdar** – Executive Director – Public Schools NSW spoke about **building leadership capabilities at entry level**. Dizdar opened with a quote from [Dr Ginott](#), “I’ve come to the frightening conclusion that I am the decisive element in the classroom”. Dizdar highlighted a [2013 OECD research paper](#) that indicates that 42% of Australian teachers have never observed another teacher in class nor provided feedback. More recent [Australian research \(Mitchell Institute 2015\)](#) has highlighted the importance of the shared work of learning, importance of lifting educational achievement through collaboration. Dizdar spoke of NSW initiatives of teacher practicum/university partnerships, of allocating funding for mentoring/coaching, opening the doors to classrooms and teachers collaborating on best practice. Dizdar spoke of **transformational leadership rather than transactional leadership**.

## Darren Cox



**Darren Cox** – Principal [St. Philip’s Christian College Cessnock](#) spoke about **developing a school culture of professional learning**. Cox says that everything rises and falls on leadership, that **leadership is about winning with people**. A good leader motivates, doesn’t mislead and doesn’t exploit. Cox says that without vision the people perish. **Vision is caught not taught!** Vision motivates highly talented people and that **professional learning is key to tapping into talent**. Leaders should provide many professional learning opportunities for staff. 360 degree reflections (staff/students) provide good honest feedback and help a school to develop its culture and opportunities for staff mentoring/coaching conversations. **Leaders must provide leadership opportunities for staff and that failure is a part of this learning process**. Cox says that leaders need to model the courage that it takes to be a good leader. Read [Claire Amos’](#) Summary.

## Stephen Lethbridge (@stephen\_tpk)

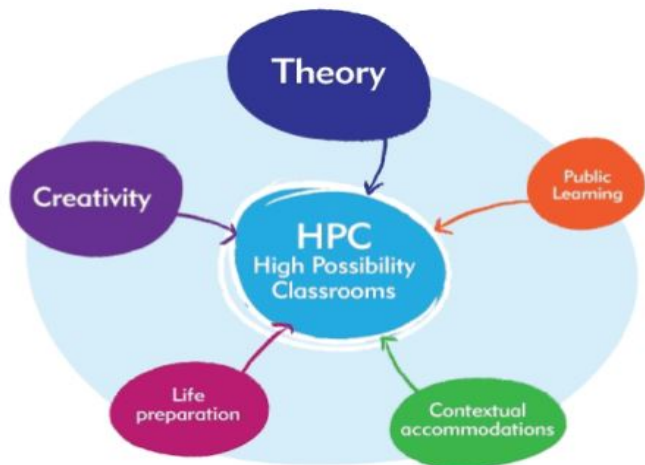


**Stephen Lethbridge** – Principal – [Taupaki School New Zealand](#) – spoke about **the race to makerspace**. He began his presentation with a [Hamal and Prahalad quote](#), “So the urgent drives out the important; and the future goes largely unexplored; and the capacity to act rather than the capacity to think and imagine becomes the sole measure of leadership”. Lethbridge, whilst a supporter of the ‘maker-mindset’ questions the race to build ‘makerspaces’ in schools. This maker-space proliferation is happening at speed as schools want to keep up with the school down the road. He questions: What is a makerspace? Does it need to be physical does it need to be contained within a room? What should be in a makerspace? Lethbridge challenges the audience to think outside the box. He says the **‘killer app’ is a thinking teacher that adapts to change. The only makerspace should be between your ears!** Lethbridge says that a makerspace allows amateurs to create real things! He asks: Do we need a dedicated space to build marshmallow towers? Lethbridge then moves on to the importance of a constructionist approach to learning. He refers to [Papert](#) and his [Constructionist Theory](#) whereby students learn by building, making and creating - a hands-on approach to learning. **The pervasive culture of tinkering, making and creating is in our DNA**. Lethbridge then played a [very funny YouTube video](#) highlighting the **DIY culture in New Zealand using New Zealand and Australian kids**. Lethbridge says that schools should be thinking **‘maker-culture not maker-space’**. **The ‘maker-culture’ should be in every school’s DNA!** Allowing students to be hands-on when required; giving students control; **creating student-centred rather than teacher-centred learning spaces**; give more say and more control to students in their learning; learning by doing, making mistakes, spending time on authentic tasks, **not just problem-based learning but provocation-based learning**. As teachers we know we don’t have all the answers, we are all control freaks. Lethbridge says that **there is a lot of unlearning needed for teachers and our education systems**. Lethbridge challenges all of us to be more passionate about what is going on in our schools and to use the resources at hand. **How can we create a maker-culture in our schools?** Yes, there is a place for tools, you do need spaces for tools and machinery, but tools will change! **It is the culture within our schools that needs to change to be worked on**. Lethbridge finishes by saying that **“we should not be limiting our students to the world that came before them”**. Read [Claire Amos’](#) Summary. **Maker resources:** [@MakeClub NZ](#); [Ministry of Make](#); [Maker-Culture](#); [Dilemmas of the maker-culture](#).

## Jane Hunter - Debbie Evans - Bianca Hewes



Dr Jane Hunter – Senior Lecturer – [University of Technology Sydney](#)  
Debbie Evans – Deputy Principal – [Wahroonga Public School](#) and  
Bianca Hewes – Head Teacher Teaching and Learning – [Northern Beaches Secondary College – Manly Selective Campus](#) presented on **Turning High Possibility Classrooms into High Possibility Schools**. Hunter's research found that HPC teachers focused their knowledge of technology integration in five ways: **theory, creativity, public learning, life preparation and accommodating context**.



Lessons typically accommodated in-depth writing, thick play, deep flow, building things, writing code, questions rather than answers, use of film, project-based learning, apps, blogs, wikis, engaging activities, discussions & rapid response feedback. **High-level teaching and learning takes place when learning is personally significant, where teachers let go and allow students control and where both teachers & students take risks**. Hunter refers to the [TPACK Model of Learning](#) which combines expert content knowledge, what is good for learning and use of technology (ICT). **Technology is used to shift student thinking, boost creativity and engaging students in different ways**. Technology is the vehicle of empowerment! Hunter says that students love their work to be on display hence they are drawn to social media. [Evans](#) and [Hewes](#) espoused the virtues of HPC as they put Hunter's research to the test in their schools. Read more about HPC by viewing these resources: [Doodle Summary](#) | [HPC Website](#) | [EducationHQ](#) | [Edutopia](#) | Read [Claire Amos](#)' Summary.

## Lane Clark (@laneclark\_)



Lane Clark – Pedagogical Expert & International Learning Consultant spoke on **what does real learning look like?** Clark says that **schools are teaching students to be good regurgitators of information**. She says schools should be helping students to use what they know and **apply this knowledge to make a difference in their lives and the lives of others**. Learning is a process and this process has stages and **students are wanting and waiting to learn**. Clark asks some pertinent questions: Is there a difference between knowing and learning? How does learning outside of the school compare with learning inside the school? Clark says that **in the real world we independently navigate in order to learn** and used the example of planning an overseas trip. Clark asked the audience to reverse engineer anything they have done and think about what they did to get to the endpoint. This is real and applied learning! Yes, **skills are important and we need to teach these but learning is a journey that students must co-create and own at a young age**. Everything students learn has the potential to impact their life forever. **We need to teach our students how to learn while infusing deep thinking seamlessly**. [Lane Clark's Website](#)

## Richard Gerver (@richardgerver)



**Richard Gerver** – International Advisor to Business, Education & Government gave the closing keynote. **Richard believes that transformational leadership & change is required in order to redefine school education**. Our children get it! **They are already working and learning within a new education paradigm**. It is our schools that are lagging!

Nothing has really changed in our schools! **Schools are working on efficiencies but not on transformational change!** He said in Shanghai, schools are banning student streaming, tutors and homework. **Schools need to be a catalyst for change, a culture shift of this magnitude will take years**. He said companies are no longer interested in employing university graduates because many don't have the skills required to drive innovation and change. The culture has to change, you learn nothing new by getting everything right, **we need to stop rewarding students for getting things right, we need crosses because that's where learning takes place!** Systems and structure change nothing, people do! [Richard Gerver's Website](#)