Director Innovation Tour Interim Report

Trillium Lakelands District School Board

May 2016

Tour 1

The Director of Education and a secondary principal participated in an Ontario Innovation Tour in Texas from March 1st-3rd. We visited schools in the Austin and Dallas areas.

Our tour involved visiting one elementary school and three secondary schools, all with a distinct focus on the effective use of technology to support the teaching and learning process. In the elementary school, we had an opportunity to see students working in similar ability groups with key learning outcomes being identified for each group/student. While the technology is seen a as a key contributor to student success, it is not the sole focus of the teaching and learning process. Students were clearly engaged in the use of technology, with the process of knowledge acquisition and demonstration of learning being more important than the tools being used. The learning environment in this school was definitely purpose-built, with the notion of pods and accessibility of technology being of primary importance.

The New Tech secondary schools were remarkable on a number of levels. First, the active use of technology by the staff and students was extraordinary in its scope. There are exceptionally high expectations of the staff and students alike in this regard, and a focus on Problem-Based Learning helps to support this active use. Secondly, the role of the educators as facilitators of learning was consistent in the New Tech schools, and is not only a novel idea, but one that the students were able to passionately articulate as one they have embraced. Students consistently described their learning environments as inclusive, challenging, engaging and dynamic. They spoke openly about their teachers as being supportive, flexible and process-driven in terms of what students are required to accomplish in their daily work.

Key learning from our time in Texas include a deeper understanding problem-based learning, the role of teacher as facilitator of learning, process-based use of technology, creating a culture of high expectations and inquiry as well as the role of technology as a tool to support learning, rather than the focal point of the teaching and learning process.

In our district, we have continued the investigation into problem-based learning strategies, and will be working in one of our secondary schools in September 2016 to implement an opportunity for a select cohort of grade nine students. These students will essentially be timetabled together, and will be provided with the technology and tools to participate in a series of credits that will be earned through problem-based inquiry topics over the course of the year. Additionally, we are continuing the conversation about the appropriate use of technology in our classrooms to support learning, with an increased focus on high expectations of staff and students to see the technology not just in terms of devices, but more

as tools to deepen our students' learning, ability to work together and to problem solve.

Tour 2:

As a superintendent I attended a conference in California entitled “Lead 3.0 Symposium: Leadership Technology Innovation”. The conference was focused on “Future Ready Leadership: Beyond the Pledge” and was directed at superintendents and system leaders in California and beyond.

Key Learning included:

- The importance of a framework when assessing your ability to move a system forward. While SAMR is popular, it is difficult to get beyond adaptation to working differently with the technology. Many system leaders referred to the 4 Cs (creativity, critical thinking, communication, and collaboration) as a more accessible way to think about student learning than the SAMR model. It was easier to frame the conversation around these and focus on student work and learning.
- You must lead with pedagogy and support with technology. Technology is not the curriculum or the learning. "Technology's primary effect is to amplify human forces, so in education, technologies amplify whatever pedagogical capacity is already there." (Kentaro Toyama) While it may work as rocket fuel to put technology in the hands of an effective teacher, in the hands of an ineffective teacher it will rocket them in the wrong direction.
- 1-1 project reflections were shared. One system suggested these steps based on their experience:
    - Step 1 - Foundation - bandwidth, routers, etc
    - Step 2 - The Vision - "Enhancing and inspiring the teaching and learning of the common core standards through the integration of technology."
    - Step 3A - Professional learning - coaching and mentoring is the only way to get items into the classroom
    - Step 3B - Student Devices - prepare the parents as well
    - Step 4 - Learning Environment - furniture & using economical options (70" TV as digital display, Apple TV, chrome cast)
    - Step 5 - Full Steam Ahead - Makerspaces (STEAM) - student centred; project based; design oriented; active learning as the criteria

Application in our school board:

- We need to think loose/tight. For example, access to apps for teachers and students. Is our philosophy open or closed? Caution vs censorship? What is the impact on the educators and learners ability to innovate and learn?
- There is a clear embrace of project-based learning (makerspaces, etc). How are we moving from Ken Robinson's observations of current education (rigidity, conformity, linearity) to innovation, intellectual curiosity, and the 4Cs? What are our opportunities to both engage and encourage schools to be innovative? We must lead with the pedagogy and does the technology in isolation actually work against our endeavours?
- How does the classroom environment contribute to the learning? Both Texas and California have invested millions of dollars into classroom furniture to support collaborative and innovative learning areas. One system leader professed it was the single most effective impact on changing secondary school teaching practices when students could no longer sit in rows or on the same height chairs. How do we integrate adaptive and technical change?
- The power of technology can provide efficiencies in the way we work. For example, in 90 minutes we walked through 7 different schools across the United States using FaceTime and had a very rich professional learning experience. A principal uses an app to send video and slide memos to staff and archives them for future reference. One has stopped emailing staff or committees and instead uses the sharing power of Google to set agendas, circulate minutes and set dates through a shared calendar to save time.
- The technology that kids are using today is the worst they will ever have so it is important to equip our students with skills, competencies, and thinking models that will support them no matter what lies ahead. The 4 C model or 21st Century Competencies will be an important framework to guide and support this work.

Tour 3

EdTech Teacher Innovation Summit, San Diego, CA 2016

The EdTech Teacher Summit was the most profound PD I have experienced in the last several years because of its direct connection to the seminal question "Who owns the learning and who owns the learner?" If we are to make significant changes to the educational agenda this is a question that must be addressed as the very foundation for charting the path forward.

My time at the conference was divided into sessional speaker/workshops and site visits to schools in the San Diego district schools, which is the third largest district in the US.

Some thoughts/reflections from the session that resonated with our work in TLDSB and where we need to strive to be:

Technology is not the innovation but a tool to drive innovation

The Internet is the innovation - the thing that has shifted the ownership of knowledge

There isn't 1:1 but 1:world if the tools and the interactive use of these tools r at the source of innovation

Communication, relationships, and multi media creation to address all learning styles so that all students r given the opportunity to show/express their thinking is the opportunity that we have at our disposal today - the real q is do we share this priority as teachers and administrators?

We must get beyond the $1000 pencil (iPad) and to do this I feel like we need to think about what we would ask if we only had one question to pose and it had to address "what has transformed in the learning from this new tool?" Because if it's just the old work with a new tool then we have just equipped our schools with very, very expensive pencils.

So I'm not going the ask "what r they using" because what they are using doesn't matter in comparison to what they are learning

My first thought is "how is what you are doing closing the equity gap to drive student achievement?" But the fundamental question that is easiest to spot is "who owns the learning - teacher or student?"

Another great question asked in our group was! "Are students being given the right info at the right time to be successful?" And this lead into an important conversation about feedback and neuroscience from Alan November.

His commentary that immediate feedback is actually counter to the intentional delay in assessment as it happens currently because to be efficient feedback needs to happen as close as possible to the task - because the brain operates best on half sec delay

This is immediate feedback, not waiting for the teacher to mark it and give it back the next day, week or month - by which time it is completely useless.

In terms of changing practice we also need to know has there been a shift that has come with the technology - that is, is the teacher talking less and listening more?

Because if the teacher is talking same amount of time then nothing different is happening. In fact, a recent study showed that questions asked in American classrooms by teachers never fell below an 85% threshold where the answer couldn't be accessed online. This is such a powerful example of the keepers of knowledge in the changing face of learning today

My reflections from my school visits to HTH:

High Tech High is a charter school in San Diego proper. It's entire curriculum is grounded in PBL or project-based learning. When I visited with staff and students on my walkthroughs over two days this is what is saw/participated in:

PBL in its truest sense has a gold standard from the buck institute see photo bie.org

I engaged in two days of what was a three week, 23 mile walk (gr 7) PBL.

Components I saw were student choice, student depth, student expression and student ownership.

- Student work - the versus project : ie thriving versus surviving, wealth vs poverty the dichotomy from a walking inquiry kids choose (others chose fast food vs healthy grocery store)

- Product : Book plus laser cut map

- Pbl vs giving students projects

- NewsLL is something that can change the reading level

- Equity means everybody gets what they need- sentence starters or a few sentences vs a beautiful 3 paragraph piece

- Qft - question formulation technique (look this up)

- 2-3 min speech on an injustice they connect w - exemplar text is Martin Luther kings "I have a dream" speech

- Project toonies - it's a teacher on boarding activities (see law on this) want to know more

- Unboxed - URL is site where Jamie goes for ideas

- HTH on the road

I've never experienced an environment like HTH. The commitment of teachers, the engagement of students, and the quality of learning and product is absolutely worth pursuing as a pilot or fledgling program in TLDSB - right conditions, right teachers, right support might be a very interesting path and I believe it would be valuable to access HTH On the Road to accomplish this or lead is along this path.