

21st Century Teaching and Learning

What We Heard at the 2013 Round Table...

CONTEXT:

Ontario is engaged in “next generation learning” in a focussed and intentional way, while maintaining a strong focus on the province’s core priorities of high levels of student achievement, reduced gaps in student achievement, and increased confidence in publicly funded education.

On October 29th, 2013, teams from all 72 Ontario District School Boards met to discuss, learn and share their ideas about effective 21st Century technology-enabled teaching and learning practices. This is “What We Heard”...

21ST CENTURY TEACHING AND LEARNING THEMATIC ROUND TABLE DISCUSSION GOALS

- To identify and build a common understanding of key supporting conditions and successful practices in classrooms, schools, and districts that link technology, pedagogy and 21st century competencies
- To apply the broader provincial and international research about 21st century teaching and learning to our work, and explain how our work contributes to the broader context

PEDAGOGY

Questions for Discussion

1. How are new models for teaching and learning integrating technology and fostering higher order 21st century competencies?
2. How are the new models enabling deeper learning outcomes? How do we know?
3. How can teachers be supported in adopting these models?

WHAT WE HEARD...

Collaboration is Key in supporting pedagogical change:

- Collaborating within classroom, school, board, and across the world; leaders are at the table learning
- Changing roles of teacher and student—becoming co-learners and collaborators
- Teaching students the *how* of collaboration, as well as how to provide appropriate feedback
- Using a Collaborative Inquiry approach is key in changing practice

Impact of Technology:

- Using technology is essential to provide voice to students with special education needs; “This is Differentiated Instruction at its finest”
- Utilising technology supports critical thinking—students analyse and make decisions about what they are reading, and make conclusions as to the validity of the source/information
- Deprivatizing of practice is occurring—technology is being used for teacher collaborative inquiry

- Technology-enabled practice is increasing student engagement and student output—they want to learn more, and do more!
- Technology allows for more timely descriptive feedback that can be implemented immediately

Deepening Learning Outcomes:

- 21st century learning is about changing the types of problems students solve (real-life and authentic); it’s about offering more opportunities to demonstrate learning in a variety of (student chosen) methods
- 21st century learning and technology-enabled learning is about shifting to a focus on student metacognition
- Students are driving the learning and taking it deeper; asking questions, finding answers, thinking critically and being creative
- Classroom-based social media use is increasing student collaboration—they are helping each other

Support for Educators:

- Technology and pedagogy need to go hand in hand; ensuring good pedagogy is in place first, followed by technology to enhance practice
- Support for educators by using a team approach (e.g. technology expert and/or curriculum consultant working together to troubleshoot and develop the pedagogy) leading to more collaboration
- Professional Learning Networks for educators across the board for support, and to assist with scaling-up
- Use of technology coaches and opportunities to explore the technology; create an “exploratory and it’s ok to make a mistake” professional learning culture
- Differentiated PD for educators at varying levels of expertise; on-line options are good alternatives
- Opportunities for educators to “earn” technology by attending a series of workshops

Challenges:

- Engaging all educators
- Equitable and reliable access to the technology hardware and software for teachers and students
- Need for a vision and focussed plan
- Issues in compatibility between technology platforms

“We’ve learned so much about how effective teaching and learning happens in the province of Ontario, and we need to hold onto that learning and figure out how technology makes it richer... We’re on a strong teaching and learning journey and now we’re incorporating technology into it.”

- Director of Education

SYSTEM CHANGE

Questions for Discussion

1. How do leaders (classroom, school, system, and provincial) elicit and empower the change required to accomplish sustainable whole system reform that integrates technology and pedagogy to optimize student learning?
2. What opportunities are there for leaders at every level to work together across the system to support change?

WHAT WE HEARD...

Making System Change Happen:

- Change the view of hierarchy—we are all learning together
- Create a plan for capacity building—e-coaches/technology coaches to support skill development
- Develop a digital learning culture—staff meetings using digital sharing methods etc.
- Build a shared vision—alignment is key
- Develop a culture of change; deal with the “fear” of the Internet/social media
- Create District School Board networks; meet regularly to share ideas
- Make 21st Century teaching and learning goals visible in improvement planning

Leadership Opportunities:

- Create opportunities to learn together; network
- Involve E-tech coaches to help build capacity
- Use on-line/virtual workshops; adobe connect; recorded sessions
- Develop system committees made up of all stakeholders
- Provide opportunities to visit “Exemplary Classrooms”

“We have a vision of where we want our children to be, and where we want ourselves to be as learners...it’s evolving as we go.”
- Director of Education

TECHNOLOGY-ENABLED LEARNING

Questions for Discussion

1. What have been your biggest challenges in supporting pedagogy-driven, technology-enabled practices for optimising student learning? How have you responded?
2. How are you planning for now and into the future?
3. What informs your plans for learning with technology to impact student engagement, learning, achievement, and 21st century competencies?

WHAT WE HEARD...

Overcoming Challenges:

- Use the Collaborative Inquiry Process to help open the discussion
- Keep the focus on the pedagogy and student learning outcome—how can it best be reached? Can technology support student achievement/engagement?
- Address the fear of technology—allow time to explore; provide coaching and create networks

- Ensure a stable infrastructure before beginning any initiative involving technology—“nothing kills ideas faster than frustration”—include a regular review of infrastructure as more devices are introduced

Forward Planning:

- Provide professional learning opportunities focussed on students with special education needs
- Use project-based learning to engage all students
- Ensure equitable access to technology, Wi-Fi etc. for all students; rethink funding priorities (for example, technology vs. photocopying/textbooks)
- Create student expert groups to support implementation

“With the implementation of the technology within my classroom, it completely transformed my teaching...as teachers in the 21st century we have to lead by example...so we have to embrace that change, and the change for me was embracing the technology within my classroom.” - Teacher

“What We Heard” from Ontario educators, aligns with current international research on whole system reform that integrates effective technology-enabled pedagogy (e.g., Hattie, Fullan, Puentedura), the features of strong districts (Leithwood), and Innovative Learning Environments (OECD).

Consider these effective practices voiced by Ontario District School Board teams as you “learn your way forward”...

- ✓ Establish a shared vision and focussed plan
- ✓ Use evidence to inform decisions by including digital learning as a focus for collaborative inquiry studies to determine the impact on student learning
- ✓ Develop a plan for building 21st century capacity at all levels
- ✓ Develop guidelines for safe and responsible use of new media, including social media
- ✓ Align resources with priorities including a focus on equity of access to resources (including technology, Internet, assistive technology)
- ✓ Involve all stakeholders in building an understanding of, and support for, effective 21st century teaching and learning practices
- ✓ Make Learning and Learner Engagement central (collaborative, social) and provide appropriate levels of challenge; it’s about good pedagogy first
- ✓ Promote connections across subjects and with the real world
- ✓ Use formative feedback often to improve and gather data about student achievement – apply the principles of assessment as, for and of learning

For more information about the 21st Century Teaching and Learning innovation projects visit: www.edugains.ca OR www.edu.gov.on.ca

For more information on the Ministry of Education’s 21st Century Teaching and Learning Initiative please see the Quick Facts Winter 2014 and www.edugains.ca