The Peel Classroom In 2018: Four Views

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Figure 1 captures the key qualities—the future is already here. Six Cs form the agenda: character, citizenship, communication, critical thinking and problem solving, collaboration and teamwork, and creativity and imagination.

As we delve into the meaning of these concepts, it is important to stress that we should not launch into an abstract discussion. In the next period of development, these core priorities must be defined, operationalized in practice, measured to mark success and to clarify progress and next steps, and widely shared in terms of spreading what works. This process of specificity and dissemination is our strength. We must put it to good use for the next phase of success.

Figure 1. The capacity of educators in Ontario, as noted, is at such a high level as a result of the strategies of the past nine years that much of the leadership—what we might call leading from the middle—is already in the system. It needs to be cultivated and spread throughout the province, including establishing clarity of each of the six clusters and their interrelationships, learning experiences that develop the skills and dispositions in question, and the means of measuring and fostering progress. But the middle cannot lead in a vacuum. Focused leadership from the government will continue to be essential.

Michael Fullan. Great to Excellent: Launching the Next Stage of Ontario’s Education Agenda. (2013)
1. Flipping The Classroom
Brief Lecture or Group Discussion (~10 minutes)

ConcepTest (~1-2 minutes)

- Fewer than 30% of students answer correctly: The instructor revisits and explains the concept
- Between 30-75% of students answer correctly: Peer Discussion: students try to convince each other (~2-3 minutes)
- More than 75% of students answer correctly: The instructor explains remaining misconceptions

ConcepTest (~1-2 minutes)

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Modification
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2. The World As Classroom
Learning Environments

School

World

Home

Class

Homework

Contextual Search

Augmented Reality

Cloud Resources

Mobile Tools

Sensors

Recorders
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3. Running Before Walking
Fig. 2. Estimates by 160 gynecologists of the probability that a woman has breast cancer given a positive mammogram, before and after receiving training in how to translate conditional probabilities into natural frequencies.

Fig. 4. Lead-time bias. Even if the time of death in not changed by screening—and thus no life is saved or prolonged—advancing the time of diagnosis in this way can result in increased 5-year survival rates, causing such statistics to be misleading.
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4. Games For Thinking
An authentic connection between academic disciplines and real world experience

A framework and workflow to develop 21st century skills

The purposeful use of technology for researching, analyzing, organizing, collaborating, communicating, publishing and reflecting.

The opportunity for learners to do something important now, rather than waiting until they are finished with their schooling

The documentation and assessment of the learning experience from challenge to solution

An environment for deep reflection on teaching and learning

A process that places students in charge of their learning

These attributes enable Challenge Based Learning to engage all learners, provide them with valuable skills, span the divide between formal and informal learning, and embrace a student's digital life.

Key Components

The Challenge Based Learning process begins with a big idea and cascades to the following: an essential question, a challenge, guiding questions, activities, and resources, a solution, implementation, evaluation, reflection, assessment, and publishing.

The Big Idea:

The big idea is a broad concept that can be explored in multiple ways, is engaging, and has importance to learners, and the larger society. Examples of big ideas are Resilience, Separation, Creativity, Health, Sustainability, and Democracy.

Essential Question:

By design, the big idea allows for the generation of a wide variety of essential questions. Eventually the process narrows to one essential question that reflects the interests of the learners and the needs of their community.

The Challenge:

From the essential question a concise challenge is articulated that asks the learners to create a specific solution that will result in concrete, meaningful action.

Guiding Questions, Activities and Resources:

Generated by the learners, guiding questions represent the knowledge needed to successfully develop a solution and provide a map for the learning process. The learners identify lessons, simulations, activities, and content resources, to answer the guiding questions and set the foundation for them to develop innovative, insightful, and realistic solutions.

Solutions:

Each challenge is stated broadly enough to allow for a variety of solutions. The solution should be thoughtful, concrete, clearly articulated and actionable in the local community.
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