VISION 2000:
QUALITY AND OPPORTUNITY

A REVIEW OF THE MANDATE
OF ONTARIO'S COLLEGES

Measuring
What
People Know

1988

1996
Riel Miller

If school's over, what's next? A scenario for learning in a Learning Intensive Society

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By Riel Miller, www.expedox.com,
commissioned by Cisco Systems, Inc.

Education and Economic Growth: From the 19th to the 21st Century

Executive Summary
The research summarized in this article shows that schooling is necessary for industrial development. The form of schooling that emerged in the 19th century generates specific cognitive, behavioral and social knowledge that are critical ingredients for the way industrial societies organize:

- production and consumption
- daily life in cities and nations
- the size and fitness of the population for work
- the creation and use of knowledge

Therefore it is documented that:
- Schooling is a necessary but not sufficient condition for the spectacular feats of industrial development in the 20th century.
- The intricacy of the relationship between schooling and the industrial form of economic growth is confirmed by the technical economics literature.
- Economists have demonstrated that both individuals and societies gain from the investments made in schooling.
**Promethean Thinking Deeper Research Paper No.2**

**Learning Productivity:**
It is Time for a Breakthrough

**Series Director:** Riel Miller
**Authors:** Stefan Bergheim, Riel Miller, Ilkka Tuomi
**Date:** January, 2011
**Sponsored by:** Jim Wynn, Chief Education Officer, Promethean

Promethean Thinking Deeper Research Papers Series sponsors leading experts to conduct and report on cutting-edge thinking and state-of-the-art global academic/policy knowledge with respect to the role of new technologies (innovative tools and organisation) in meeting the challenges of learning in the 21st Century.
Can we think about changes in the conditions of change?

<table>
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<tr>
<th>Change within the system</th>
<th>Change outside the system</th>
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<td>Inside-in</td>
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<td>Outside-in</td>
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Embracing Complexity
What is Futures Literacy?
In the late 17th Century Anton van Leeuwenhoek discovered bacteria. The microscopes he invented revealed invisible worlds. But it took another two centuries to make sense of this discovery.
Substitution
Learning as production of knowledge

Living knowledge (stock)

Learning as doing
Practice
Community
Identity
Learning as belonging
Learning as becoming
Meaning
Learning as experience

Source: Etienne Wegner

Riel Miller, UNESCO 2014
Thinking Deeper Research Paper No.1 - Parts 1 & 2

Thinking Strategically About Education and Technology: Making Learning Happen Today for Tomorrow's World

Authors: Riel Miller¹, Janet Looney² and Jim Wynn³
Date: December, 2010
Sponsored by: Promethean Education Strategy Group

Promethean Thinking Deeper Research Papers provide sponsorship for global experts to conduct and report on cutting-edge thinking and state-of-the-art global academic/policy knowledge with respect to the role of new technologies (innovative tools and organization) in meeting the challenges of learning in the 21st Century.
How we anticipate matters it changes the present.

Thank you

Riel Miller

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