

**Experiences in
classroom success
with CE for
sustainability.**

***One approach:
Understand
sustainability to be
greater than green
and connected to
empowerment.***

**Thomas C. Esakin
(MA, Sustainable
Development).**



THE CHANG SCHOOL

RYERSON UNIVERSITY
CONTINUING EDUCATION

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Interactive Peer Workshop - Context

- With *Educating for Sustainability* being a relatively new field, we join together as peers to learn from our diverse instructing experiences.
- We will use our workshop as a living example of how to apply various of the ideas covered in this session.

Proposed Agenda for Our Workshop

- 5 mins: Group review about our knowledge of sustainability / sustainable development as a concept.
- 15 mins: *Let's Discuss* the importance of stories: A context.
- 10 mins: The sustainability story - A new paradigm that is “Greater than Green”.
- 15 mins: Making our classrooms a living-example of a new sustainability story.
- 15 mins: Your own stories as *Educators for Sustainability*: Experiences and Best Practices.
- 5 mins: Primary competencies identified for learners to acquire out of the Certificate in Sustainability programme at The Chang School of Ryerson University.
- 5 min: Conclusions.
- 5 mins: Q&A.
- Close.

Group review about our knowledge of sustainability / sustainable development as a concept (5 mins.)





Let's Discuss the Importance of Stories (1)

(15 mins.)

- ✓ From Anthropologists to Artists and Politicians to Theologians, there is an oft understood importance to stories and their connexion to the human experience.
- ✓ Human cultures, traditions, languages, myths, foods, identity and more are rooted in (mostly forgotten) stories.
- ✓ Canada's own Wade Davis, former-Massey Lecturer and Explorer-in-Residence at the National Geographic Society, speaks to the importance of human stories.
- ✓ As did Jane Jacobs:
 - ❖ “Early human civilisations “got along through stories. Stories are about everything being connected to everything else. But we don't think stories are important anymore. In fact, they have been downgraded even by scientists themselves who call them anecdotal evidence. [Yet] much of science is founded on anecdotal evidence.”
 - ❖ “every story only has a middle, because the beginning is forgotten and the end is unknown.”
(Jane Jacobs, 2004).

Let's Discuss the Importance of Stories (2)

- ✓ Sustainable development / sustainability is the beginning of a new human story about how our species lives on and relates to Earth, relates to all Earth's species, and relates to our fellow human beings.
- ✓ Your classroom is an important starting place for the telling, creating, building, and evolution of humanity's new sustainability story.



Let's Discuss the Importance of Stories (3)

And the Sustainable Development story is
nothing less than:

*“...a profound rethinking of a dominant
paradigm.”*

(Berghofer & Schwartz, 2007; p.66.)

Let's Discuss the Importance of Stories (4)



Alberta Tar Sands

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Toronto, Canada



Humanity's Old Story.

“It is difficult for economists, whose important theories originated during a time of resource abundance, to understand how the decline in ecosystem services is laying the groundwork for the next stage in economic evolution.”

(Paul Hawken, 1997)

Let's Discuss the Importance of Stories (5)

In tribute to CAUCE 2011 being held at University of St. Michael's College, we consider the thoughts of...

-Fr. Thomas Berry:
- The *soul* of the global Sustainability field.
- Berry spoke to how humanity's chosen story helps determine our own fate.
- Identified humanity's need for a *New Story*.
- Called for a story to reconnect humans and nature, including nature as understood through science.
- Cosmology: humans are consciousness looking at itself.
 - "After Darwin, the physicists...[and] scientists suddenly became aware that... science was ultimately not the objective grasping of some reality extrinsic to ourselves. It was a moment of subjective communion in which... the universe... became conscious of itself." (p.128).

Let's Discuss the Importance of Stories (6)

Or to put Berry's understanding in to Albert Einstein's own words:

"A human being is part of a whole, called by us 'universe,' a part limited in time and space. He experiences himself, his thoughts and feelings, as something separated from the rest - a kind of optical delusion of his consciousness. The striving to free oneself from this delusion is the one issue of true religion. Not to nourish the delusion but to try to overcome it is the way to reach the attainable measure of peace of mind." (Albert Einstein, 1950).

Let's Discuss the Importance of Stories (7)

The Nuu-chul-nuth First Nations of B.C. were so intimately aware of this fact of interconnexions – unity - that, prior to European contact, the story of their cultural identity included this special expression in their traditional language:

"Hishuk ish ts'awalk"

or

"everything is one and interconnected."



- ✓ *At its core, the new story for sustainability is about interconnectivity (of the social/environmental/economic), not about artificial silos nor about separation.*
- ✓ *Even 2,500 years ago, The Buddha spoke to life being akin to a spider-web: a web of interconnexions.*

Let's Discuss the Importance of Stories (8)

For context, Tom's story in Educating for Sustainability...

- ✓ Early background in engaging stakeholders in the political sector.*
- ✓ A UNESCO - MAB (internationally) grounded education in a 3BL sustainable development versus North American tendency to greening.*
- ✓ Canadian experience in developing a Sustainable Development-like Strategy (SDS) for the Clayoquot - a once conflicted CDN region - and working alongside senior elected and unelected government and First Nations leaders, and alongside senior corporate and NGO leaders, in development of this strategy. This experience demonstrated to me the direct benefits of the 3BL approach.*
- ✓ Overseas education in UK further influenced my outlook in sustainability.*
- ✓ Education Professor Michael Barbour at Wayne State University provided me guidance on educational pedagogies that might be compatible with sustainability practices (pedagogical links in References).*
- ✓ Impact of overseas work experience (corporate and education sectors).*
- ✓ CIELAP and engagement with corporate sector.*
- ✓ A personal interest in world religions and different cultural ways of being....*

.... With all of these interconnexions leading to my story on how I came to understand the importance of a 3BL over mere green approach when Educating for Sustainability.

The sustainability story - A new paradigm that is “Greater than Green” (1) (10 mins.)

Key parts of the sustainability story to convey:

- ✓ Historical context (at least since Rachel Carson and the 1960s).
- ✓ International in scope, local in action (the now old adage: “Think global, act local”).
- ✓ Importance of its three interconnected and mutually-reinforcing pillars: the social, economic and environmental. It is not just “a green thing.”
- ✓ Entails new values and ethics (consider: Patrick Curry).
- ✓ Systems thinking: Holistic Interconnexions (consider: Donella Meadows).
- ✓ Inter-disciplinary.
- ✓ Extended time: Earth time-scales over human time-frames.
- ✓ Action- and solutions- oriented (importance of: *Agenda 21* and metrics).
- ✓ Requires citizen empowerment and active citizen engagement.
 - ❖ Recall the “major groups” identified in Agenda 21:
 - *Women, children & youth, indigenous peoples & their communities, NGOs, local authorities [local governments], workers & trade unions, businesses & industry, the scientific & technological community, and farmers.*



Remember the Importance of Agenda 21:

An “Action plan for sustainable development”, which covers more than greening and is a good reference tool.

The sustainability story - A new paradigm that is “Greater than Green” (2)

Group discussion:

Consider...What may be strengths in expanding sustainability to its fullest 3BL potential versus narrowing it to a green thing?

Making our classrooms a living-example of a new sustainability story (1) (15 mins.)

Consider:

- ✓ “Democratic Classroom” (exemplifying democracy and empowerment);
- ✓ “Responsible Thinking” (connecting actions & consequences);
- ✓ Actively-create a participatory classroom environment;
- ✓ Emphasise opportunities for self-reflexion (a necessary precursor to any behaviour change);
- ✓ While actively using knowledge, focus on students learning ‘how’ to think critically *about* knowledge over ‘what’ to think *in* knowledge;
- ✓ Your classroom as an Action Research opportunity (feedback loops);
- ✓ more.

Making our classrooms a living-example of a new sustainability story (2)

Rooted in sustainability principles around citizen empowerment, participatory processes, an action-orientation, being solutions-centred, and responsible thinking; the format I generally follow in courses is:

- ✓ Learners gather chairs in a circle at the start of each class (Oxford Seminar Style).
- ✓ A focus on group dialogue that leads to understanding.
- ✓ “Class Covenant” (Class Constitution) developed in very first class and shared with all learners. This guides a course and helps learners to take and share responsibility for their class.
- ✓ Learners are expected to complete all homework assignments in advance of each class for discussion in a given class.
- ✓ 1-3 learners take responsibility in each class for leading their class, including in group discussion toward a better understanding of the homework. In their leadership, class leaders are required to use techniques that appeal to 3 identified learning styles: i) visual, ii) auditory, and iii) tactile/kinesthetic. This also prepares them for real-world participatory processes.

Making our classrooms a living-example of a new sustainability story (3)

Format I follow in many of the courses in which I instruct, cont'd:

- ✓ Emphasise that, for sustainability, we are all students and teachers.
- ✓ No lectures given by me, with my acting more as a 'servant leader' in the class by facilitating activities and interjecting observations as required to enhance learning opportunities.
- ✓ Intentionally do not use the words "right" or "wrong" and advise learners that all ideas shared in class will be considered as potentially good ideas for this new field of sustainability.
- ✓ Course assignments, completed by all students, are designed around different learning styles and approaches, and also with empowerment principles in mind.
- ✓ The course assignments I commonly use include all of: 1) individual project; 2) group project; 3) team leadership of a class; 4) one in-class quiz (for those learners who like memory work); 5) attendance; and (for the purposes of self- and collective- reflexion), a 6) self-evaluation; and 7) group evaluation.

Making our classrooms a living-example of a new sustainability story (4)

Format I follow in many of the courses in which I instruct, cont'd:

- ✓ All assignments are co-evaluated by learners (who tend to be harder on one another than is an instructor) based upon mostly quantifiable metrics established for each assignment (there are a very few subjective metrics around quality and creativity of work). Grades are tallied, divided by the number of graders, and a mark given. Afterward, using an assignment's quantifiable metrics, as instructor I then double-check each assignment to ensure that all grades are reflective of a given quantifiable metric having been met.
- ✓ Each class ends with learners asked the same 3 questions about a class: 1) What did you like?; 2) What didn't you like?; and 3) What would you have done differently?
- ✓ At the end of the course, the sense of collegiality and comradery amongst learners, and their clear sense of responsibility in becoming "Leaders for Sustainability", has been highly evident.

Making our classrooms a living-example of a new sustainability story (5)

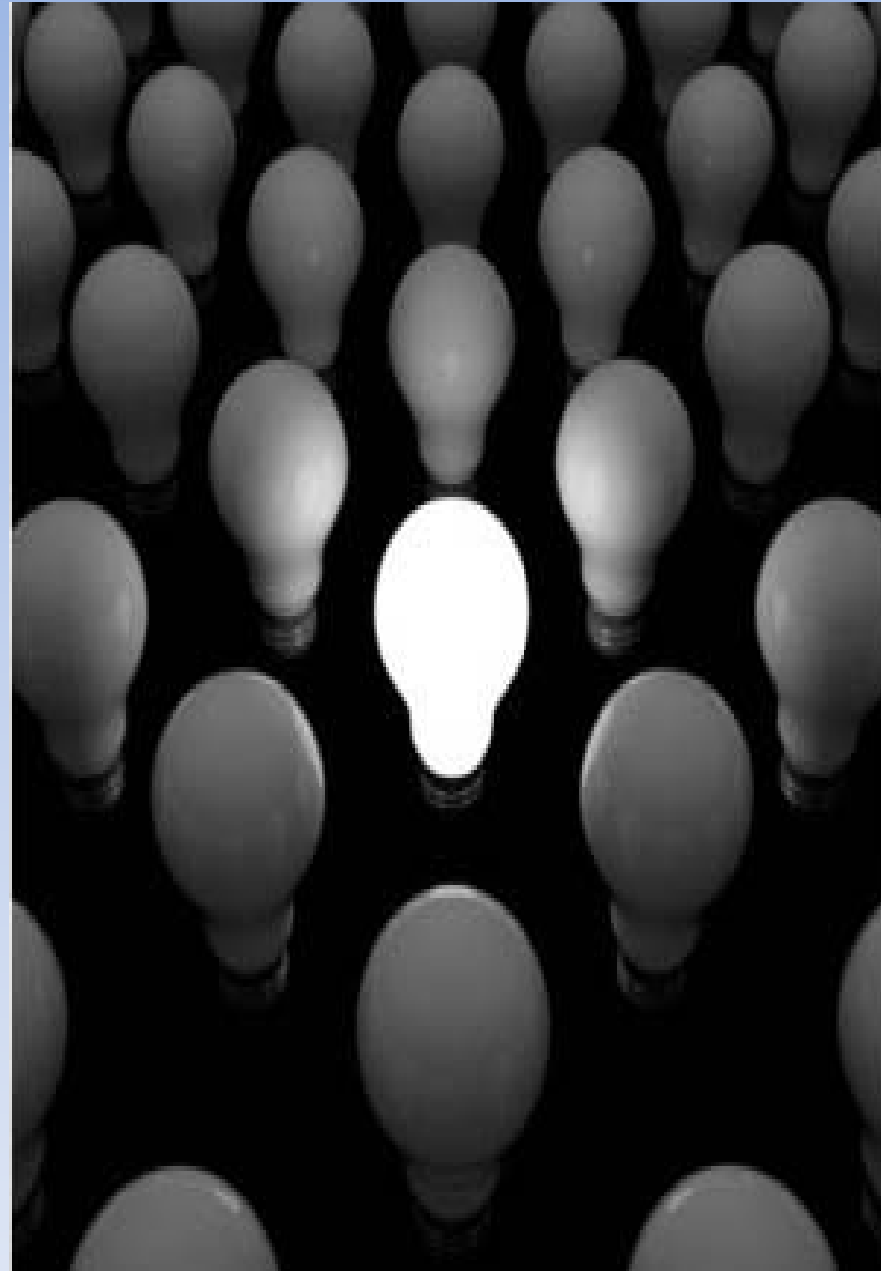
In groups, let's:

- ✓ Take a few minutes to try our hand at developing a “Class Covenant”.
- ✓ Some hints.....
 - ❖ cell phones
 - ❖ class lateness
 - ❖ food and beverages
 - ❖ scents
 - ❖ breaks
 - ❖ Speaking in class
 - ❖ Washroom
 - ❖ Whispering
 - ❖ A mid-term and end-of-term class party
 - ❖ Colourful language
 - ❖ Use in-class of languages other than English
 - ❖ Contact numbers
 - ❖ More

**Your own stories as
Educators for
Sustainability:
*Experiences and
Best Practices (1)***

(15 mins.)

We are interested in
your own classroom
experiences and best
practices. *Please
share....*



Experiences and Best Practices (2): “Newfangled teaching techniques being promoted by Nobel Prize winner Carl Wieman”

“The popular professor was confident he could trump the newfangled teaching techniques being promoted by [2001] Nobel Prize [in physics] winner Carl Wieman and his disciples.

He agreed to pit his traditional physics lectures against their new approach in a "learning competition" involving more than 500 first-year engineering students at the University of B.C.

The results were dramatic. The students learned more than twice as much in the new "interactive" classes than they did in the lectures by the tenured prof with more than 30 years of experience, according to a report on the experiment published in the journal Science...

The study, which has prompted UBC to completely revamp its giant first year physics classes, suggests that academics have a lot to learn about effective teaching.

Wieman says it is "high time" to abandon long lectures and PowerPoint presentations in favour of more lively, stimulating interactive classes.”

(Margaret Munro, 2011).

Primary competencies identified for learners to acquire out of the Certificate in Sustainability programme at The Chang School of Ryerson University (1) (5 mins.)

At the macro-level the sustainability programme will:

- Have an integrated focus on the Triple-Bottom-Line (3BL or TBL), this being the equal and mutually-reinforcing social, economic, and environmental spheres of sustainable development; *and*
- Speak to economic issues with a focus on “development” instead of “growth.”

Primary competencies identified for learners to acquire out of the Certificate in Sustainability programme at The Chang School of Ryerson University (2)

Through our programme in sustainable development, learners will:

- 1) Through an international lens and starting with Rachel Carson, gain a clear understanding of sustainable development and its history, and keep aware of the current situation in sustainability.
- 2) Realise that sustainable development requires a re-examination of our longstanding and deep-seated values and ethical standards.
- 3) Understand the basic models of systems theory and be able to apply them in different contexts, particularly in developing the habit of making dynamic interconnexions between the social, economic, and environmental spheres of human life and systems on Earth.

Primary competencies identified for learners to acquire out of the Certificate in Sustainability programme at The Chang School of Ryerson University (3)

Through our sustainability programme, learners will:

- 4) Become aware that human actions entail environmental, social, and economic consequences; and so humans need to learn to think and act responsibly by becoming Leaders for Sustainability.
- 5) Know that sustainable development: is “solutions-oriented” within the context of arising challenges; entails Triple-Bottom-Line (economic, environmental, and social) aspects of development; and requires actions, including those guided by the “Sustainable Development Strategy” (SDS) planning framework and needed sustainability metrics.
- 6) Be encouraged to actively participate in each course of our programme, through instructors adopting a training-the-trainer approach in their teaching style used in the classroom setting.

Primary competencies identified for learners to acquire out of the Certificate in Sustainability programme at The Chang School of Ryerson University (4)

Through our programme in sustainable development, learners will:

7) Become familiar with Agenda 21, an international “Action Plan for Sustainable Development”, and its call - as stated in Section III - for “broad public participation in decision-making” and the “need for new forms of participation”.

8) Develop personal skills in: work organisation; project planning and management; oral communications (public speaking); teamwork collaboration; research and resource identification and utilisation; the use of graphics and visual aids; and both critical and constructive problem solving.

Conclusions (1) (5 mins.)

Within your classroom, consider following Mahatma Gandhi's advice and, for sustainability, exemplar that you will:

“Be the change you want to see in the world.”

Conclusions (2)

For as Joseph S. Nye, Jr., one of earth's leading experts on leadership theory, has noted:

“Humans, like other primate groups, focus their attention on the leader. Closely watched CEOs and presidents are always conveying signals, whether or not they realize it.”

(2008; p.70.)

As a sustainability instructor, you are akin to the watched CEO of your classroom.

Conclusions (3)

For, as Berghofer and Schwartz advise, to achieve change:

“Begin with oneself. To engender trust a leader must be trustworthy. To promote justice, one must be just; to engage enthusiasm, be enthusiastic. In other words, a leader must model all the qualities and characteristics he or she expects of others.” (P.53.)

And so, logically flowing from this... To engender sustainability, as an instructor you must model the behaviour of sustainability in your classroom.

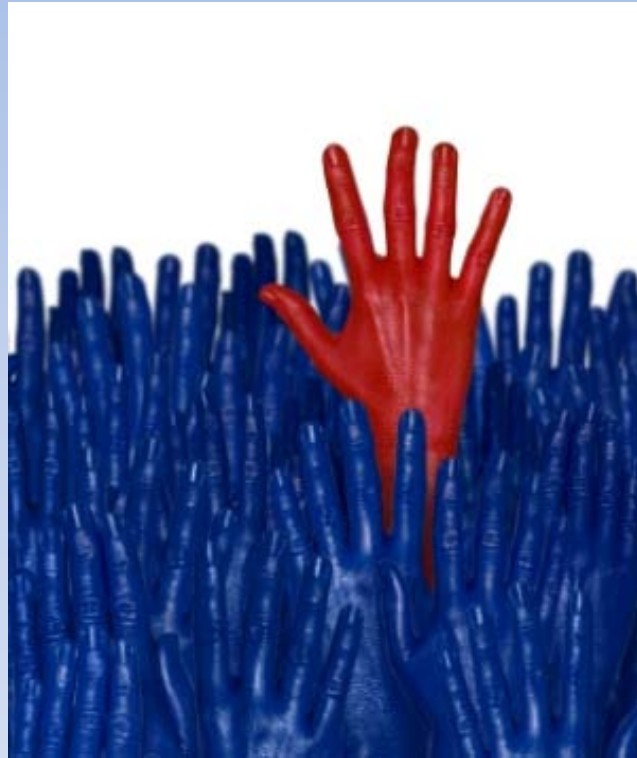
Conclusions (4)

Principles of Sustainable Development Leadership:

- Grounded in an inherent respect for all:
- An awareness that learning about the collective whole through individual parts is an essential part of our discussions:
- We recognise each and every person, no matter their station in life, has valuable knowledge to share related to the advancement of Sustainable Development:
- Every human being is understood to be both a student and a teacher of life, thus we do not accept any false separation between teacher & student:
- Each and every person is identified as a leader in their own right, an affirmation which recognises that all of humanity can - even must - contribute to the advancement of Sustainable Development on Earth:
- Active listening is essential for us, as we intuitively know we can learn more by listening to others than we can ever learn through hearing our own voice:
- Actively seek or facilitate other peoples' participation in our discussions on Sustainable Development, for the more people who join together with us in learning, then the more we can, both individually and collectively, be active learners for Sustainable Development:
- All ideas are good ideas, and so will be listened to and acknowledged: and
- Right and wrong are constructs of thought, which often have personal or cultural value but may not have universal meaning or applicability.

(Esakin, 2008)

Q&A (5 mins.)



Thank-you!



Certificate in Sustainability at Ryerson:

http://ce-online.ryerson.ca/ce_2010-2011/default.aspx?id=2913

E-mail: tesakin@ryerson.ca

Web-site: www.thomasesakin.com

References (1)

1. Barbour, Michael K. (2008). *Personal Web-site* [online]. Available from: <http://www.michaelbarbour.com> [Accessed: 04 June 2011].
2. Berghofer, Desmond and Schwartz, Geraldine 2007. *The Ethical Leadership Scales*. Victoria, Canada: Trafford Publishing.
3. Berry, Thomas. 1988. *The Dream of Earth*. San Francisco, USA: Sierra Club Books.
4. Curry, Patrick. 2006. *Ecological Ethics: An Introduction*. Cambridge, UK: Polity Press.
5. Einstein, Albert (February 12, 1950). (Source: Einstein, Albert (1950). *Personal letter written to Dr. Robert S. Narcus* [online]. Available from: <http://blog.onbeing.org/post/241572419/einstein-sleuthing-nancy-rosenbaum-associate> [Accessed: 05 June 2011].
6. Esakin, Thomas C., ed. (2008). *Principles of Sustainable Development Leadership* [online]. Available from: <http://www.thomasesakin.com/personal/publications/Principles.pdf> [Accessed: 04 June 2011].
7. Hawken, Paul (1997). "Natural Capitalism." *Mother Jones*, March/April 1997 issue [online]. Available from: <http://www.motherjones.com/news/feature/1997/03/hawken.html> [Accessed: 04 June 2011].
8. Jacobs, Jane. 2004. Personal notes taken from Jacob's speech at: *Jane Jacobs Award for 'Ideas That Matter'*, Hart House, University of Toronto.

References (2)

9. John Hopkins University – School of Education (2010). The Democratic Classroom [online]. Available from: <http://education.jhu.edu/newhorizons/strategies/topics/the-democratic-classroom/> [Accessed: 04 June 2011].
10. Kearsley, G. (2011). *The Theory Into Practice Database* [online]. Available from: <http://tip.psychology.org> [Accessed: 04 June 2011].
11. Korn, Bob (2011). *Responsible Thinking* [online]. Available from: <http://www.truthpizza.org/main.htm> [Accessed: 04 June 2010].
12. LdPride.net (no date). *An Explanation of Learning Styles and Multiple Intelligences (MI)* [online]. Available from: <http://www.ldpride.net/learningstyles.MI.htm> [Accessed: 05 June 2011].
13. Meadows, Donella H. 2008. *Thinking in Systems: A Primer*. White River Junction, VT, USA: Chelsea Green Publishing.
14. Munro, Margaret ,(2011). New teaching techniques earn top marks for UBC professor. *The Vancouver Sun* – www.vancouversun.com, Saturday May 14, 2011 [online]. Available at: <http://www.vancouversun.com/technology/teaching+techniques+earn+marks+professor/4784415/story.html#ixzz1MTKN1LPN> [Accessed: 04 June 2011].
15. Nye, Joseph S. Jr.. 2008. *The Powers to Lead*. New York, New York: Oxford University Press.
16. UN Department of Economic and Social Affairs - Division for Sustainable Development (2004). *Agenda 21 [online]*. Available from: <http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm> [Accessed: 03 June 2011].
17. Webb, Carolyn and Esakin, Thomas C. (2011). *A Green Economy for Canada: Consulting with Canadians* [online]. Toronto, Canada. CIELAP (Canadian Institute for Environmental Law and Policy). Available from: http://cielap.org/pdf/CIELAP_GreenEconomy.pdf [Accessed: 05 June 2011].