

# The Next Generation: What to Expect



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Jointly presented by  
CPhA, AFPC, PAS



**PAS**  
The Pharmacists' Association  
of Saskatchewan  
**APS**  
L'Association des pharmaciens  
de la Saskatchewan

# The Next Generation

## GENERATIONAL PROFILE: MAJOR CONSUMER GROUPS IN U.S.

	MATURES	BOOMERS	GEN XERS	MILLENNIALS
Years Born	1945 and before	1946 - 1964	1965 - 1977	1978 - 1995
Age in 2014	69 + years old	50 - 68 years old	37 - 49 years old	19 - 36 years old
Cultural ethos	Uncertainty; Conformity	Prosperity; Counterculture	Disillusionment; Information	Globalization; Social Responsibility
Population	33.0 million	74.6 million	53.4 million	78.3 million
Median income	\$36,743	\$57,844	\$58,271	\$44,946
Outlook	Practical	Optimistic	Skeptical	Hopeful

Who's  
next?

Population source: Census Population Estimates, December 2013

Income Source: Estimate based on Census Population Estimates, December 2013, US Census Bureau 2012 American Community Survey

# What We Know So Far



Their whole world is **technology** in the palm of their hand (and the outside of their wrist or the back of their eyeglasses).

Digitals, iGen, Selfies,  
Tweenials, Hashtagers,  
Evernets, Plurals,  
Globalists, and 20firsters

# Generation “WE”



“... due to technological advances, this cohort is wired and **constantly connected**.

They’re rarely alone, even if they’re hanging out with buddies via text message, through gaming consoles or on social network sites.

Their every moment is a **We** moment.”

Mary Meehan - Forbes

LOOK UP

The debate

LOOK DOWN



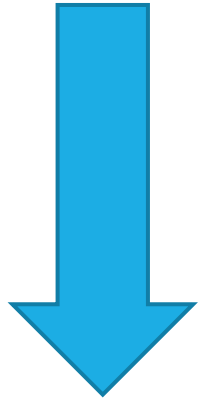
# What are the implications for teaching and learning?

- Learning Consultant
- Instructional Designer
- Curriculum, Instruction, and Assessment
- Technology Enhanced Learning
- Online Master's Student
- Mother



My lenses

Changes at K-12 Level

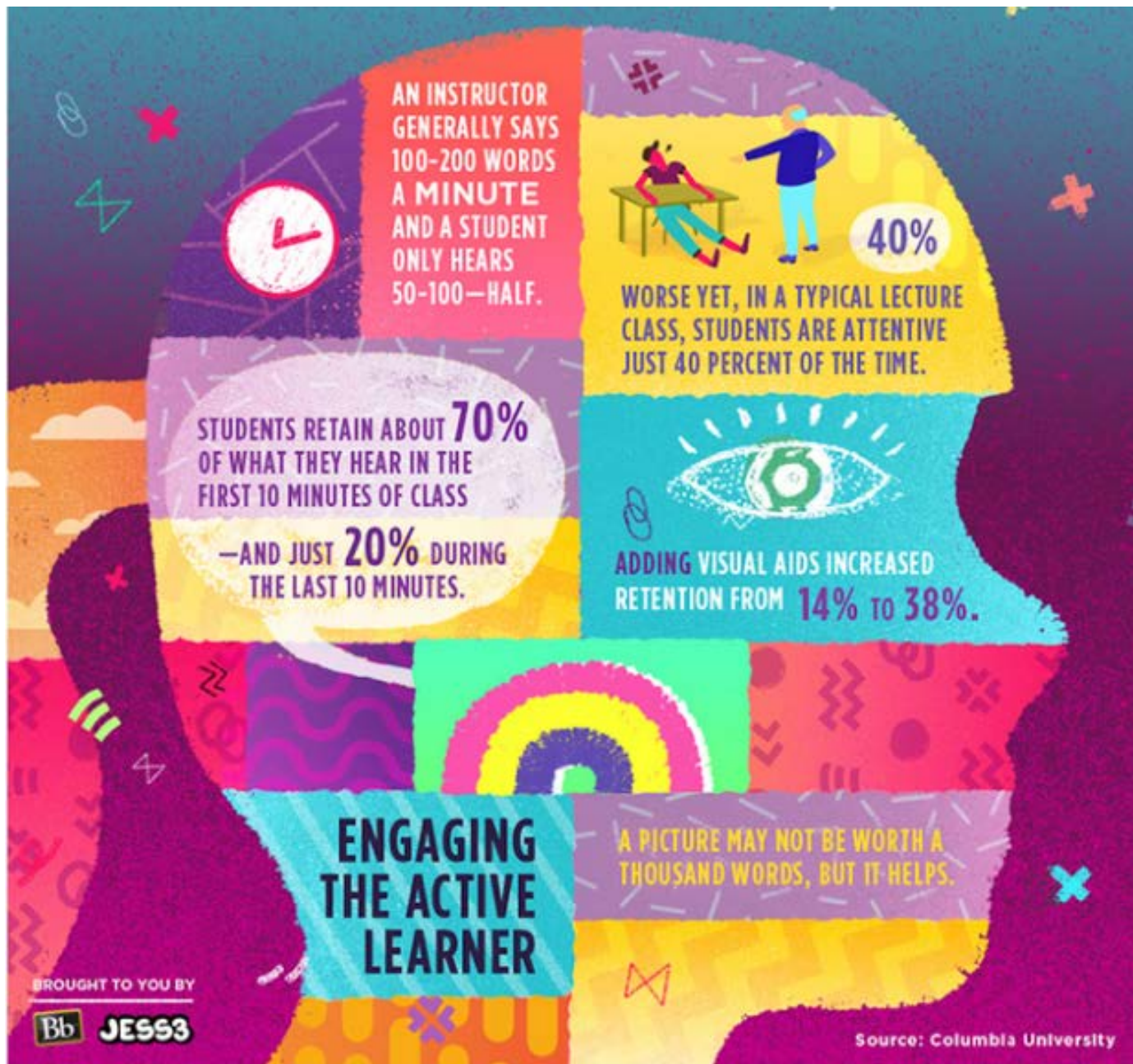


Impact on Post-Secondary  
Learning

# Meeting the Needs of the Next Generation

- ▶ Research Based Decision Making
- ▶ Access to Technology
- ▶ Changes to Teacher Professional Learning
- ▶ Responding through Curriculum
- ▶ Shifting Instruction - Inquiry
- ▶ Changes in Assessment Practices
- ▶ Personalized Learning
- ▶ Online Software
- ▶ Global Connections





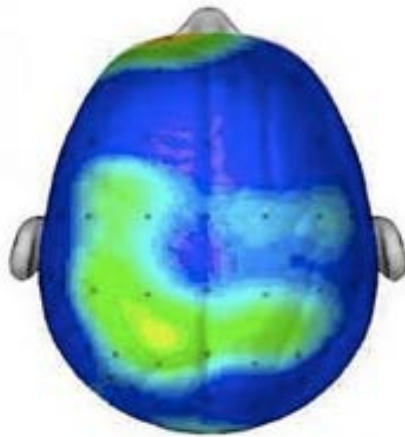
<http://edutech4teachers.edublogs.org/category/infographic-of-the-week/>



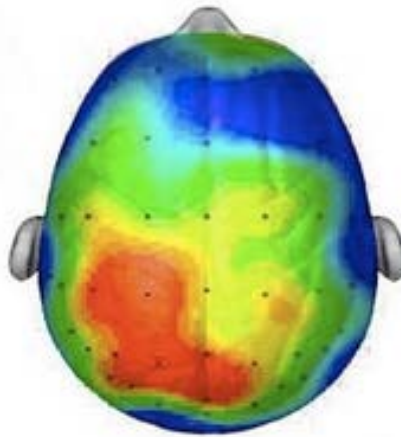
**Dr. Justin Tarte** @justintarte · Oct 18

If you want to boost your test scores, simply have students walk for 20 minutes before the test. #edchat #unionrx [pic.twitter.com/dbtUP2dNWQ](https://pic.twitter.com/dbtUP2dNWQ)

Composite of 20 student brains taking the same test



After sitting quietly



After 20 minute walk

Research/Scan compliments of Dr. Chuck Hillman University of Illinois

Connecting  
brain research  
and classroom  
practice

If our classrooms look the same way today as they did in the past, we are doing something wrong.





We are  
moving into  
the spaces in  
which our  
learners live.

# Increasing Access to Technology

- ▶ 1:1
- ▶ BYOD - Smartphones
- ▶ LMS/CMS
- ▶ Skype
- ▶ 3D Printers

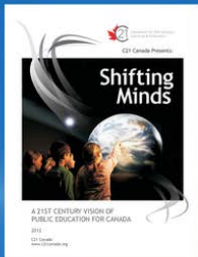
Leads to Changing Learning Environments



# Changing Teacher Professional Development



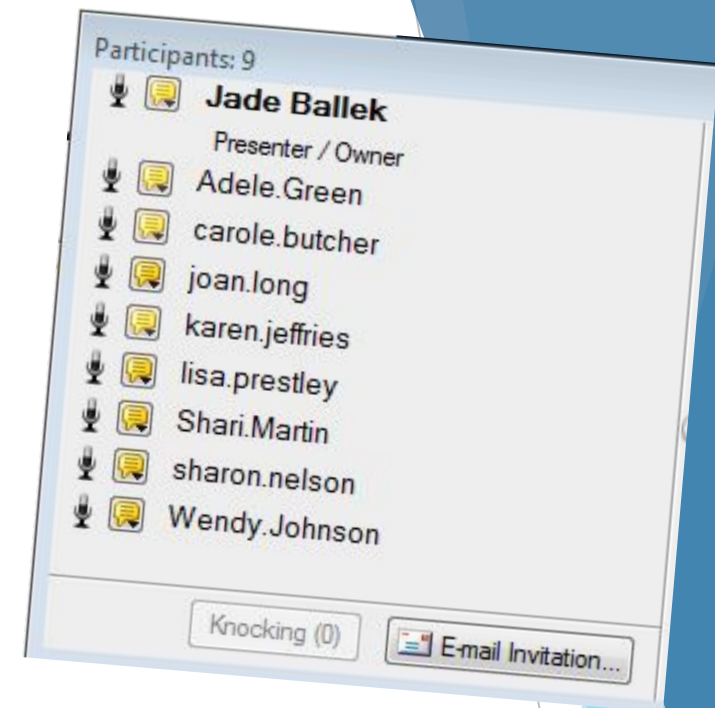
## 21st Century Competencies



C21 Canada Presents

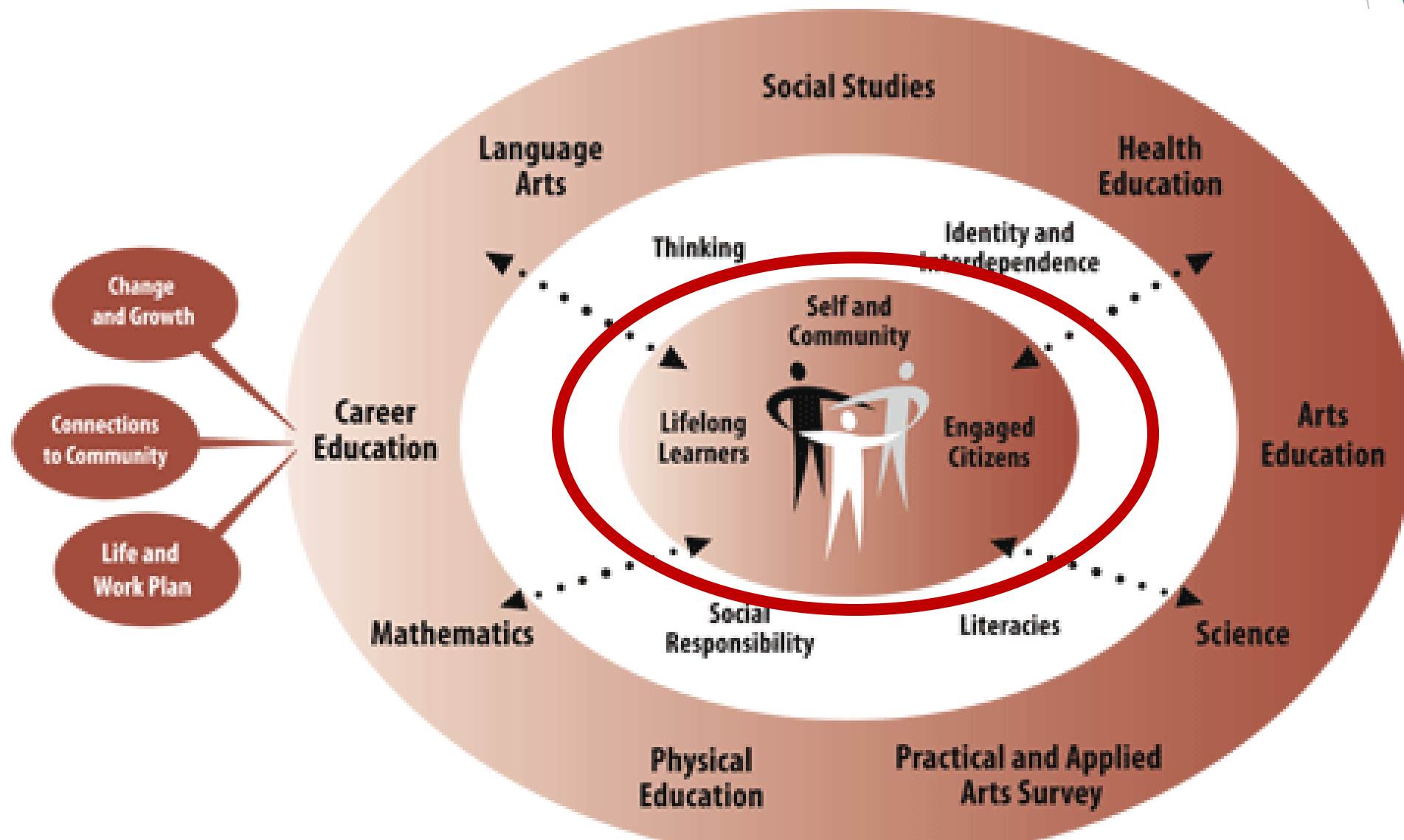
**Shifting Minds: A Vision and Framework  
for 21st Century Learning in Canada**

[DOWNLOAD](#)





# Changing Curriculum



*“ If students are to become lifelong learners, develop a sense of **self** and **connection** to others, and become **engaged citizens** ... , students require **meaningful, authentic contexts for learning**.*

*Students need many opportunities to **explore** questions and concerns about themselves and the world.*



# AFPC

Association of Faculties of Pharmacy of Canada

## AFPC Mission Statement for Pharmacy Education in Canada

The mission of pharmacy education is to provide programs of excellent quality which by their content and presentation produce graduates who contribute significantly to societal, professional and patient care responsibilities, and who are committed to life-long learning.

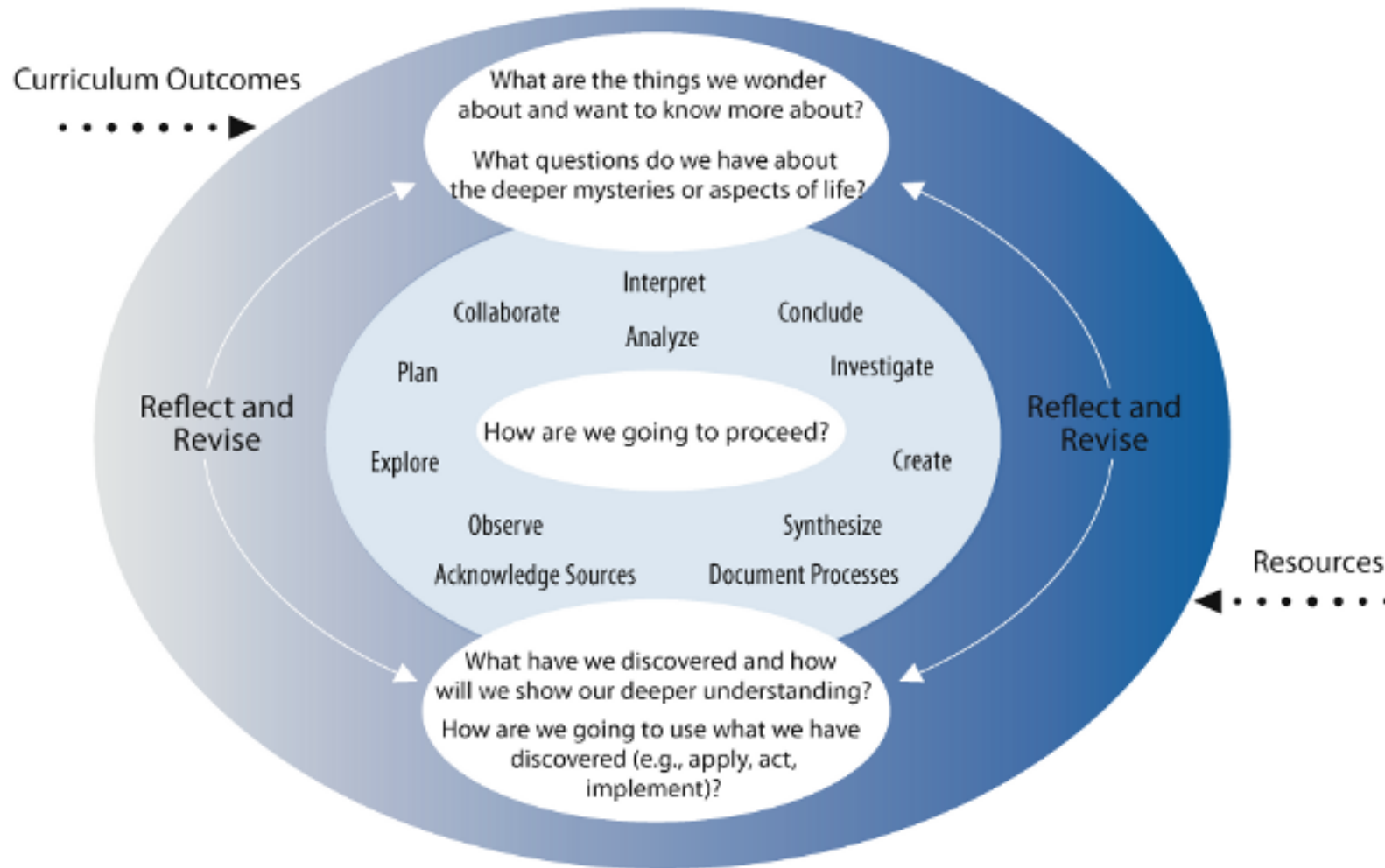
# Determining What is Essential

- ▶ Focus on the outcomes – what students need to **know, understand and do**
- ▶ Deeper understanding of content
  - ▶ Science 20 renewal

# 40/40/40 Rule

- ▶ What is essential for pharmacy graduates to know, understand and do so that patient health is not at risk?
- ▶ What is the best way to ensure that students the essentials?
  - 40 years
  - 40 months
  - 40 days

# Learning through Inquiry

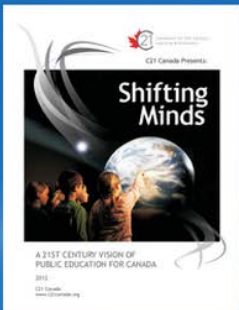




# Focus on Competencies



## 21st Century Competencies



C21 Canada Presents

## Shifting Minds: A Vision and Framework for 21st Century Learning in Canada

[DOWNLOAD](#)

### Critical Thinking Summative Project



As our year is winding down, the rush of all the "need to be done before June" thoughts are swirling in my head. The last seven

### Module 3 Reflection - Questioning

Sunday, February 09, 2014

I found the information very interesting in the articles and videos in this module. To also be able to share things we have found and look at others findings was beneficial. I know now how to add something to a wiki and have become more comfortable in navigating the wiki coming from being lost in the first module!

Some of the questioning things I had already been doing - like opened and closed questions. I also had the students think about the questions they were asking each in other in discussions and I worked with small groups in an end of novel discussion to think of the deeper questions to ask. I find the Socratic method very interesting and it didn't fit in with my last month of work in the semester, so I have it on my list to do in second semester. I find ELA is a little more difficult to come up with the questions that start inquiry projects or Socratic discussions, but after more reading I've started to see some of the things I've done in class as potential. An example would be in Gr. 10 we study legends and they write a legend. Instead of me giving the students the definition of a legend at the beginning, I could have asked "What is a legend?" and then provided them with activities to come up with the answer in the end. I've made a note of this for next year!

## Some Challenges With Project Work

Every year doing projects I find there are new challenges that arise. I choose to look upon this favorably, in hopes that means I have successfully solved issues in the past to make way for new challenges! This year, I thought that I would blog about some of the current puzzles my class and I are experiencing! First of all, when doing projects (be they big PBLs, smaller PBLs, or just mid-size projects) I have noticed that the number of students in a group really affects the outcome and collaboration. Too many



Our **next generation** of learners are being engaged through **inquiry, hands-on learning** and are **connecting globally** as part of their educational experience.

What will these learners ask of their post-secondary educators?





MAY  
26

## Professors, Do You Use Social Media For One or More of Your Classes? Please Take Our Survey #congreSSH #highered

Academic, Announcements, survey

by Philip Mai



#489905205 / gettyimages.com Dear instructors, teachers, faculty (in higher education) ... If you use social media for one or more of your classes, we would like to invite you to participate in an online survey. The survey should take you no longer than 35 minutes to complete. This survey is being conducted as part of ...

[Continue reading »](#)



## [New Study] Enabling Community (of Healthcare Professionals) Through Social Media | Journal of Medical Internet Research

There are many approaches to study community and online communication, here at the Social Media Lab, we primarily approach this from a social network perspective. This perspective looks at group or community interactions to determine who the actors are in the network and the kind ties that bind them together. In a recently released study, ...



# Changing Assessment Practices

NOV

15

## Student Centered Learning: Assessment of Problem Based Learning

I've been researching a bit on the assessment of problem based learning since this is a concrete implementation of student centered learning. The issue for me has always been that our curricula usually have fairly concrete outcomes/indicators (with the latter being more so), but the learning achievements of our students going through pbl can be radically different and loosely defined at times. For example, PBL is often used to model a professional environment where a student may be mimicking the processes employed by someone in the given field. Here's a quote illustrating the general philosophy behind assessment of PBL given its nature:

The essential feature of a teaching system designed to emulate professional practice is that the crucial assessments should be performance-based, holistic, allowing plenty of scope for students to input their own decisions and solutions.  
(Biggs, 2003: 237)



Our **next generation** of learners are being given **multiple opportunities** to show what they know, including through the use of technology.

Given this reality, what changes might be needed for post-secondary education?













# Personalized Learning – Online Learning



## Rise in online learners

Barbour, M. – *State of the Nation*, 2013

### Medical Knowledge Systems and Ethics

-  MKS and Ethics Unit Overview
-  1.1 Ethics and Immunizations
  -  1.1 Discussion Board
-  1.2 Types of Medical Knowledge Systems
-  1.3 Ethical Principles
-  1.4 Ethical Decision Making
-  1.5 Challenges
  -  1.5 Student Created Cases

#### Discussion

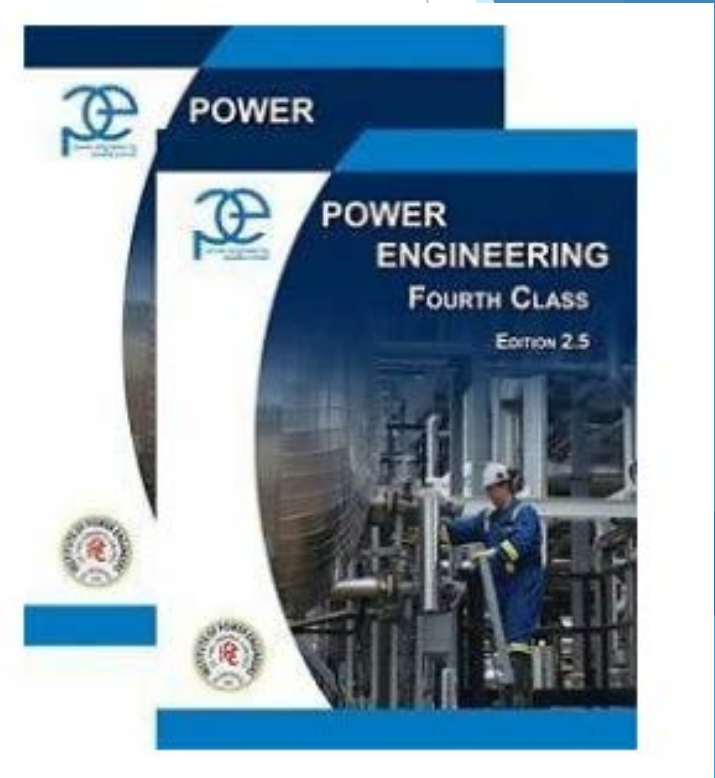
Opting Out

Your Responsibility

Your Responsibility

Homeopathic Vaccines

# Partnering with Universities and Colleges



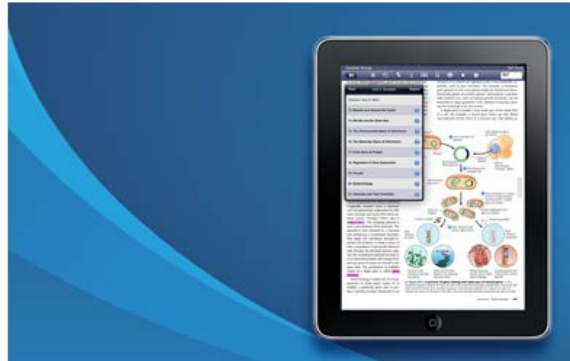
Our **next generation** of learners are setting their own educational path which offers **flexibility and choice**.

What might these learners look for in selecting post-secondary institutions?



# Online Software - E-Texts and Electronic Resources

## Pearson eText



 Learning Bird

LOG IN SIGN UP

HOME HOW IT WORKS I AM ▾

**EMPOWERING STUDENTS  
TO LEARN THEIR OWN WAY**  
INDIVIDUALIZED LEARNING FOR SCHOOL & HOME

LEARN MORE




Our **next generation** of learners are using **online software** to extend their understanding of curriculum content, to practice skills, and to learn with others.

Will post-secondary institutions provide these same opportunities for learners?






# Taking Learning into Their Spaces - Connecting Globally


 **Rossville School** @rossville2014 · Apr 11  
Dividing a Decimal by a Whole Number Using Base Ten Blocks - Rossville S...  
[youtu.be/JBT2JEJgL\\_Y](https://youtu.be/JBT2JEJgL_Y) via @YouTube

⬅ Reply ↻ Retweet ★ Favorite ... More

▶ Hide media

 YouTube

Dividing a Decimal by a Whole Number Using Base...



0:00 / 2:53

Dividing a Decimal by a Whole Number Using Base Ten Blocks - Rossvi...  
via YouTube Capture

 **Thompson Grade 4** @thompsongrade4 · May 20  
@SkScienceCentre @jdeballek @ambert80 What is the most abundant habitat? @oes4smartbluebirds

Expand

⬅ Reply ★ Favorite ... More

 **Sask Science Centre** @SkScienceCentre · May 20  
@thompsongrade4 @jdeballek @ambert80 @oes4smartbluebirds Hmm. Rainforests are very diverse. Also, think about our oceans!

Expand

⬅ Reply ↻ Retweet ★ Favorite ... More

 **Thompson Grade 4** @thompsongrade4 · May 20  
@SkScienceCentre @jdeballek @ambert80 Thanks for the ideas. We'll have to check that out! @oes4smartbluebirds





**Tanya Avrith** @edtechschools - Mar 27

"@misterwashburn: QR codes which take students to their websites. Over 300 of them GR 2-8. #ettipad #edtech [pic.twitter.com/iJSecZlq74](https://pic.twitter.com/iJSecZlq74)" wow!



**Emily Roth** @EmilyRothie2 - 10 May 2012

1st **Skype chat** with our new **Grade 4** friends at ISB today! Looking to start a new photo project with more **grade 4** classes-interested?[#edchat](#)

# 12th Grade Quantitative Physics Student Projects

By Jeff · May 22, 2014 · Student Work [Leave a comment](#)

In Ragini Narasimhan's 12th Grade Quantitative Physics class, students have been researching and presenting their own applied physics projects and blogging about their work. Ms. Narasimhan calls it

"A home-brewed cure for senioritis:

- A topic of their choice,
- Wrapped around with lots of Physics,
- Some saws, screwdrivers thrown in for builders (eg trebuchets, guitars, maglevs, generators)
- Some explosions (rockets, coil guns, 3D printer-built airplanes)
- And the most important ingredient: *lots of encouraging comments and questions on their blogs.*"

Please take a look at some of our seniors' work, and comment or ask questions on the blogs for the students!



**Jeff Tillinghast** @jefftillinghast · 1h

12th Phys proj: Phys of Ult FrisB, building rockets & coil guns . Plz lv  
**#comments4kids** and RT! [ow.ly/xa2XG](https://ow.ly/xa2XG)

## Generator

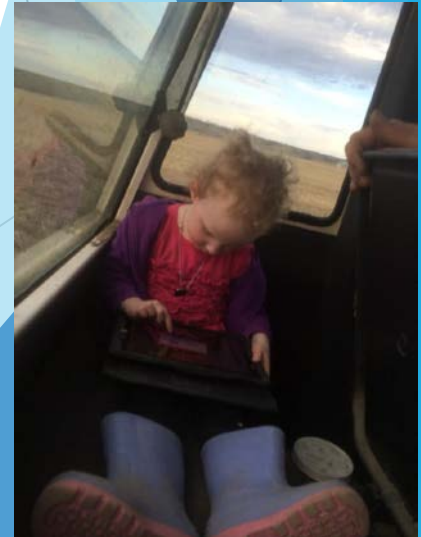
May 20, 2014 Uncategorized

We are almost done with the generator. This week we are putting the last pieces on for our presentation Friday. The last pieces being the spatula heads that will spin the generator around. We will also possibly have some minor changes in the wiring. Here are some photos of our work:



Our next generation of learners are creating digital identities and connecting globally. They are living in online spaces.

How might post-secondary institutions meet learners in the same spaces?



# More Changes to Come

- 1:1 Schools
- Blended Learning
- Creativity
- Digital Citizenship

What impact will this next generation have on you?



Thank you!

@jadeballek

Jade.ballek@sunwestsd.ca

# Resources

- ▶ [21<sup>st</sup> Century Competencies - Wikispaces](#)
- ▶ [C21.org](#)
- ▶ [Connect 2014 -](#)
- ▶ [Grade 12 Physics Projects - Blogs](#)
- ▶ [Look Up](#)
- ▶ [Look Down](#)
- ▶ [Learning Bird](#)
- ▶ [State of the Nation - Barbour](#)
- ▶ [Sun West DLC](#)