Reimagining

Post-Secondary Education

• Inessa Chapira
• Master of Design in
• Strategic Foresight + Innovation
• 2015
<table>
<thead>
<tr>
<th>Technology</th>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>The Internet</td>
<td>1982</td>
<td>Enrollment in distance education increased in late 2000s</td>
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<tr>
<td>Macintosh</td>
<td>1984</td>
<td>Desktop computers introduced in universities in 1990s</td>
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<tr>
<td>Google</td>
<td>1998</td>
<td>PSE institutions start introducing Learning Commons Libraries in early 2000s</td>
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<tr>
<td>iPhone</td>
<td>2007</td>
<td>Digital, mobile technology is a norm and is an expected standard with the current generation of students</td>
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Disconnect between PSE institutions’ offers and students' expectations due to industries' offers

“You have to attend classes. You can’t just follow me on Twitter.”

“2 + 2 = 4”

“How can I trust your information when you’re using such outdated technology?”
• All students are treated the same regardless of their status or learning styles

• Universities systems are complex and difficult for students to navigate

• Square Peg, Round Hole.

• Standardized Testing

• You are here

• You are supposed to be here

• Campus Map

Search ID: aton4421
• No job prospects after graduation
• The Canadian youth (age 15-24) unemployment rate is 14.5 %
• 67% of unemployed teachers

• More than 400,000 students graduate with an average debt of $27,000
• Students’ lack of practical skills;
• Not many internship opportunities

• Needs for continued education courses;
• Continue education courses provided by Industries: Autodesk, Lynda.com + Linkedin, MOOC …
PSE linear system

IVORY TOWER
OF KNOWLEDGE

FINISH SCHOOL

APPLY TO UNIVERSITY OR COLLEGE

RECEIVE KNOWLEDGE

KNOWLEDGE

GRADUATE
The only thing that interferes with my learning is my education.

- Albert Einstein
**Research Questions:**

- What is the future of the post-secondary educational system?

- Is the centralized, linear university business model the best model to integrate digital technology and efficient financial resources?

- How might the higher educational system be developed into a long-term, holistic, adaptable business model?

- What are the viable user-centric methods that can be applied to a new educational model?
Transform PSE to a student-centered multifaceted, holistic system
PROJECT PROCESS

TRENDS AND DRIVERS

STUDENT SURVEY

EXPERT INTERVIEWS

CRITICAL UNCERTAINTIES

SCENARIOS

3 HORIZONS PREFERRED FUTURE

STRATEGIC APPROACHES

A CALL FOR RADICAL APPROACH

BUSINESS MODELS
ENVIRONMENTAL SCANNING
STUDENT STATUS AND DESIRED OUTCOMES

How do you imagine the post-secondary environment in the future?

- 86% of students would like to see a blended delivery method of face-to-face and digital education.

Which are the most important courses in your program?

- 30 out of 39 students feel that in-class learning and a studio or lab environment is best suited for their studies.
STUDENT STATUS AND DESIRED OUTCOMES

- 59% of students would like to participate in a mandatory internship or mentorship program if available.
- 63% would like to be a part of an internship program if available through their school.

- Overwhelmingly, 76% of students believe that they would benefit from obtaining practical skills.
Online Versus In Person Learning

“Those who are born in the 90s or later are immersed in technology from day one”

-Sylvia Link

“The millennials have been brought up with the Internet. They will find information on their own for how to do things just by the motivation of their own power”.

-Vincent Hui
“Some evidence shows that finding the right balance becomes some form of a blended environment of both the use of technology and a face-to-face model. With online learning, technology is going to be part of ecology, an essential part, but it is not a matter of replacing, as it is more of a supplementing and enhancing element. Students are so immersed in technology that this is one of the touchstones, the ways they operate, so there is an expectation that much of it will be accessible through technological modes”.

-Mark Robertson
“People who have access to information will know what exists and find ways to improve themselves. That drive is independent and fosters learning”.

-Vincent Hui
“The main driver is the democratization of learning. The students have a choice in whether to follow a university-offered learning program or fulfill their desire for a broader spectrum of what they want to do by developing their own learning”.

-Nabil Harfoush

“The topic that you are studying should be of interest to you. Intellectual curiosity is driving the independent investigation of the topic and drives your motivation to study. That then becomes the pivotal skill that helps you become innovative and self-directed because you are just genuinely interested in learning and motivated to learn”.

-Sylvia Link
“I think the most effective way to learn is to help students discover their purpose and this purpose will evolve over time. From the purpose you can then derive passion / interest and that can drive effective learning. We learn most if we are interested in something”.

-Nabil Harfoush

“…universities and colleges should train these /professionals to teach; rather than relying on their knowledge of the subject matter. They may know the subject but they may not be able to teach”.

-Patrick Saavedra
“Everything is changing so quickly that one degree might not last your entire life”.

-Mark Robertson

“Why not allow those people to perhaps change their career or upgrade themselves to get educated at a significant discount at 50 or younger for them to be able to re-immerge with the most current information. These people can move up in the ranks if they know computers or get more versatile in technology”.

-Vincent Hui
• Reduction in public funding;
• Increase in tuition fees;
• Technological delivery of education as a disrupter to conventional PSE institutions;
• Lecture content moves online;
• Availability of cost-effective prescribed educational modules online;
• Students’ new educational experiences through virtual classrooms and wearable technologies.
• Affordability of new personal devices through 3D printing
• New online forms of teacher-student advising and mentorship;

Virtual Classroom
Learning Oasis Technology Aside

- Surplus of university students;
- Increased frequency of cyber attacks;
- Constant connection through technology becomes a nuisance;
- People disconnecting from personal technological devices;
- Abandoning online learning and turning to studio-based education;
- Preference of face-to-face interaction;
- Students direct interface with industry professionals;
- Mandatory internship programs;
- Collaborative and group works in the natural settings of green lounges and lecture halls;
- Peer-to-peer learning;
- Learning through case-studies and analogue examples;
• Importance of time, flexibility and mobility;
• A significance of personal choice;
• Service-driven, user-centric PSE system;
• Self-directed learning process;
• Self-directed portal;
• Life-time learning.
• Delivery of education through personal technological devices.
• Personalized career navigation and tracking portal;
Square Peg, Round Hole

- High cost of PSE tuition;
- PSE non-changing environment of rigid and bureaucratic system;
- Administrative control;
- Prescribed theoretical knowledge of PSE curriculum;
- Lack of experience and no experiential education;
- PSE institution disconnection from industries;
- Students treated equally;
- No choices for courses offered;
- New alternative courses offered by smaller private organizations;
- Students diverge from PSE environment to seek new alternatives;
• Awareness of global economic issues;
• Increase in population, migration and urbanization;
• Surplus of graduates and high market competition;
• Need for diverse education;
• New innovative technologies;
• Training based on real cases;
• Increased peer-to-peer learning;
• Self-directed learning;
• Life-long learning;
• Holistic education;
• Increased support for students and faculty;
• Implementation of foresight into PSE curriculum;

Re-imaginary Education
Three Horizons

- **H1**: Declining Conventional Knowledge Based Administration Centric
- **H2**: Transition Online and In-Person Learning Decentralized
- **H3**: Preferred Holistic, Blended Education + Experience Student Centric

Strategic Fit vs. Time (2015 to 2030)
Three Horizons

- **H1 (Declining)**: Conventional knowledge-based administration-centric, administration controlled, disconnected from industries, intermittent learning, lack of support, banded approach, planning based on historical data, complex system, inert, rigid and ineffective system.

- **H2 (Transition)**: Online and in-person learning decentralized.

- **H3 (Preferred)**: Holistic, blended education + experience student-centric, student empowered, integrated with industries, continuous learning, enhanced support, custom approach, foresight and better planning, transparent and clear system, flexible and efficient system.

Strategic Fit:

- **High**
  - Administration controlled
  - Disconnected from industries
  - Intermittent learning
  - Lack of support
  - Banded approach
  - Planning based on historical data
  - Complex system

- **Low**
  - Inert, rigid and ineffective system

Timeline:

- **2015**
- **2022**
- **2030**

Time
Strategic Approaches

**Individualized**
approach

**Integrated**
Education + experience
Online & in-person learning

**Service Oriented**
Model
New Approaches:

**Individualized**
- Mentorship and Advice
  - On-line faculty advising;
- Smaller Class Size
- Choice
  - Through Unbundled Programs
- Personal Student Portal (PSP)
  - Plan your career;
  - Find desired courses at a convenient time and location worldwide;
  - Track your progress and credits
- Life-Long Learning
  - Through University Membership

**Integrated**
- Blended On-line and In person Learning
- Education + Experience
  - Receive Quality education;
  - Internship placement in industry or community;
- Collaborate
  - Through Peer-to-peer Learning
- Balanced Teaching & Research

**Service-oriented**
- Instant Access to Course Materials (online)
- Increased Support
- Clarity & Transparency
  - University’s information is clear and accessible via PSP
- Efficient PSE Institution
  - Receive fee discount for courses;
- Well Planned
  - Link to universities’ events;
  - Listen to testimonials of industry professionals;
- Forecast personal progress with PSP
How can we make this happen?
A Call For Radical Approach

- Disrupt the current PSE system with a smaller scale, unconventional educational model that is independent of the existing PSE system

PSE Business Model Innovation

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<tr>
<th>VALUE PROPOSITION</th>
<th>CUSTOMER SEGMENTS</th>
<th>REVENUE STREAMS</th>
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<tbody>
<tr>
<td>Blended face-to-face &amp; online education</td>
<td>High-school graduates</td>
<td>Students’ reduced tuition fee based on</td>
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<tr>
<td>Credentials</td>
<td></td>
<td>cost cuts for online courses paid by</td>
</tr>
<tr>
<td>Personal Educational Portal (PEP)</td>
<td>International students</td>
<td>industry ads</td>
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<tr>
<td>Online advising</td>
<td>University or College graduates</td>
<td>Savings on students’ self-directed</td>
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<tr>
<td>Unbundled courses &amp; virtual classrooms</td>
<td>Professionals after 50</td>
<td>administrative service</td>
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<tr>
<td>Experience in industry or community</td>
<td></td>
<td>Small advising fee for retired faculty</td>
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<tr>
<td>Life-long learning</td>
<td></td>
<td>Revenue from larger number of students</td>
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<tr>
<td>Research &amp; commercial students’ projects</td>
<td>Industries</td>
<td>interested in unbundled &amp; distance</td>
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<td>learning courses</td>
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<td>Savings from maintainance of physical</td>
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<td>University’s membership</td>
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<td>Research funds &amp; students’ commercial</td>
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<td></td>
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<td>projects</td>
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Teaching should be such that what is offered is perceived as a valuable gift and not as a hard duty.

A. Einstein
Reinvent P.S. Education, don’t settle for the status quo.

Thank you