## In-Class Problem-Based Learning with Industry Partners

Presenter 1:
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## **Waterloo ExL Symposium**

#### Presenter 2:

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# Part 1: Bringing participatory decision making into the classroom [multiple stakeholders]

Presented by:

Sean Geobey, Assistant Professor, School of Environment, Enterprise and Development (SEED)

Faculty of Environment, University of Waterloo



## **Overview**

- Course Overview
- Integrating Community
- Outcomes



## **Course Overview**

- INDEV308
- Introduction to Social Entrepreneurship
- 35-70 undergraduate students
  - ~2/3 International Development
    - 2 terms before 8-month international placement
  - ~1/3 Environment and Business
- 3 hours \* 12 weeks

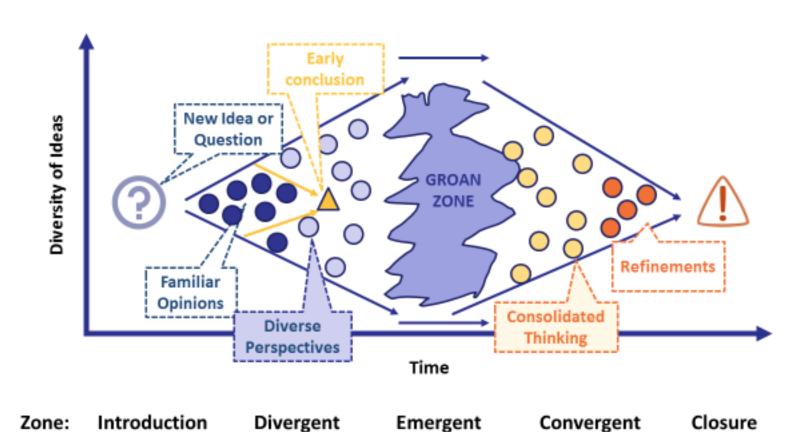


## **Pedagogical Philosophy (1st slide, 1st class)**

- Philosophically
  - Experiential
  - Constructivist
  - Peer-Based
- Practical application
  - Problem-based learning
  - Colleague-to-colleague feedback
  - Public by default



## **Diamond of Participatory Decision-Making**



**Source: Kaner et al. (2014)** 

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## **Social Innovation Lab model**

### **Mapping**

Workshop activities will focus on understanding the problem, identifying relationships between elements in the system, and focusing on key leverage points.

### Design

Workshop activities will focus on designing an alternative system and selecting the features that system would possess.

## **Prototyping**

Workshop activities will focus on developing pitches for prototypes



## **Bringing in Community**

#### **Mapping**

Workshop activities will focus on understanding the problem, identifying relationships between elements in the system, and focusing on key leverage points.

#### Week 2:

Students interview community members

#### Design

Workshop activities will focus on designing an alternative system and selecting the features that system would possess.

#### Week 7:

Student teams propose initial interventions

## **Prototyping**

Workshop activities will focus on developing pitches for prototypes

#### **Week 11:**

Student teams pitch final interventions



## **Community Members**

- Domain-Specific Industry Partners
  - Steckle Farms, Unifor, Miovision,
- Domain-Specific Researchers
  - ENV, AHS, ENG
- Repeat Partners
  - Kindred Credit Union, Sustainable Waterloo Region, St. Paul's GreenHouse, Region of Waterloo



## **Class Portfolios**

**Social Innovation Lab** 

#### WATERLOO SOCIAL INNOVATION LAB

**International Development 308:** Introduction to Social Entrepreneurship Class Portfolio The Future of Youth & Work

A compilation of student work including promotional posters, opinion editorials, briefing notes and business model pitch decks.

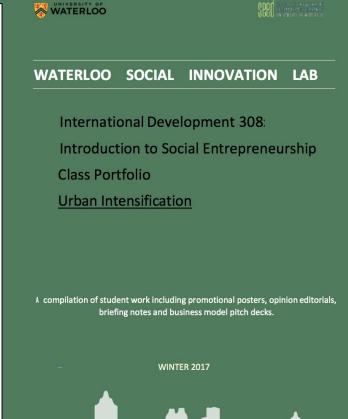
Winter 2016





#### Class Portfolio | Sustainable Food Systems

INDEV 308: Introduction to Social Entrepreneurship A compilation of student projects, including promotional posters, opinion editorials, briefing notes and business model pitch decks



**Waterloo ExL** 







## **Outcomes**

- Students have used assignment formats in placements
- Student interventions form basis of theses/directed studies
- Students have pitched interventions through Velocity
- Students have pivoted from interventions to others in the domain space
- Community members have hired students (and a TA)
- Community members have piloted interventions



# Part 2: Bringing a specific organizational challenge into the classroom (single stakeholder)

Presented by:

Jennifer Lynes, Associate Professor, School of Environment, Enterprise and Development (SEED)

Faculty of Environment, University of Waterloo

## Waterloo ExL

## **ENBUS 211: Marketing Principles for Sustainability Professionals**

Second-year course Theme elective for Env & Business students Open to all students Limited to 50 students Class time: 2 x 1.5 hours per week, limited 'lectures'



## **Assessment items**

Greenwashing awards

Group

Video and written 2 pager

25%

Participation & e-portfolio

Individual

Written reflection and blog

25%

Marketing Strategy

Pairs

Weekly worksheets (6 weeks)

Report of recommendations

25%

Anything Assignment

Individual

Choice of topic covered in course

Choice of medium

25%

## **Industry Partner:**



## Sustainable Thinking

Living sustainably made easier



#### Toilet Paper

Cascades 24 rolls

Double rolls made from 100% post consumer recycled paper

Learn More

Buy

Regular Price: \$19.20

Care Package: \$17.76 Service fee required (\$0.74 per roll)



#### Foaming Hand Soap

method 300 ml

Sweet Water scent, naturally derived, mechanically foaming hand soap.

Learn More

Buy

Regular Price: \$5.20

Care Package: \$4.15 Service fee required



#### Bloom Warm Light Bulb

Nanoleaf 1 bulb

LED, E26, 75W equiv.using just 10W, upto 1200 lumens, warm white 3000K and self dimming! Designed...

Learn More Buy **Regular Price:** \$38.00 Care Package: \$32.50

Service fee required

## Integrating Avocado Co-op into the course content

#### Weeks 1-4



Introduce concepts; discuss 'big picture'

#### Week 5a



Let students explore publicly available material on the organization (Worksheet 1a)

#### Week 5b



Have one or more members of the organization come into the classroom to talk to students about their business and the challenge(s) they are facing (Worksheet 1b)

#### Weeks 6-10



Continue with weekly worksheets (giving qualitative written feedback) (Worksheets 2-6)

Students put together report of recommendations and written 'pitch' to organization

#### Week 12















## **Example of Weekly Worksheet**

#### Avocado Worksheet 4- Green Marketing Strategies

This week, describe the brand of the product(s) or service(s) the organization offers consumers by answering the following questions. You will want to refer to Martin & Schouten's Five principles of sustainable branding. Refer to notes on Martin & Schouten's Five Principles of Sustainable Branding (separate attachment). They can also be found in Jenn's Marketing Notes (along with other information on branding)

Question/Task	What we know (the facts)	Insight/Analysis
What is the story Avocado is trying to tell and what tools does it use to achieve this?	Avocado is working towards bringing sustainability home. They want sustainability to be more attainable and a goal for households. The story they are trying to tell is the story of community and how important customer loyalty is to the success of the brand.  To achieve their story, Avocado uses eco-friendly,	Sustainable development is an industry that is rapidly growing and Avocado is making the most of this trend. They know that many consumers have a growing awareness and appreciation of sustainability and Avocado is trying to focus in on this awareness and build it into their company's story.
	member-tested products that will satisfy their customers, highlighting how enjoyable sustainable products can be. Memberships are used as well that allow customers to have voting power and a share in the company demonstrating Avocado's commitment to their customer community/loyalty.	

Final step of each worksheet: "Synthesize the information presented in 3-5 bullet points"



## **Example of final report**







## **Considerations**

Selecting industry partner based on relevance to the course content and assessment item(s)

Developing clear expectations with industry partner their role? How should students communicate with them?)

(i.e. what is

Determining how much of the 'problem' or 'focus' is defined for the students prior to starting the project

Deciding to what extent industry partner is presented with ideas/recommendations that are developed by the students



## Other ways I have integrated industry issues into the classroom

#### Blended course:

Pre-taped interview with industry partner paired with case study

#### Online course:

Students watch a series of video clips then participate in an online discussion with an industry partner

#### Online course:

Each student selects an organization and writes a weekly discussion post about the org. in the context of the weekly theme of the course material/readings.

#### Capstone course:

Students work in teams with a 'real' client on a specific problem the client has identified



# WATER LOO

