

# Helping Students to Learn and Think Outside the Box with Entrepreneurship Education

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**Liang, Chyi-lyi (Kathleen)**

**University of Vermont**

**College of Agriculture and Life Sciences**

**Department of Community Development and Applied Economics**

**Burlington, Vermont**

**(802) 656 0754    CLIANG@UVM.EDU**



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# What Are The Issues?

- ◆ **The focus of education has evolved from a singular discipline to multi-discipline and inter-discipline.**
- ◆ **Educators are not as prepared to transfer knowledge across disciplines.**
- ◆ **There is lack of incentive and motivation to promote entrepreneurship education.**



# Why Do We Care?

- ◆ **To build stronger and more competitive labor force.**
- ◆ **To develop more creative and innovative employees and employers.**
- ◆ **To break down the barriers in learning and sharing knowledge across disciplines.**
- ◆ **To help learners learn “how to learn”, instead “what to learn.”**



# Development of Entrepreneurship Education in the US

- ◆ **Business schools dominate in entrepreneurship education.**
- ◆ **Community colleges and technical centers are catching up.**
- ◆ **Limited educational programs are available in K-12.**



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## Theory Framework Links to Education *Community Entrepreneurship (CENT) at UVM*

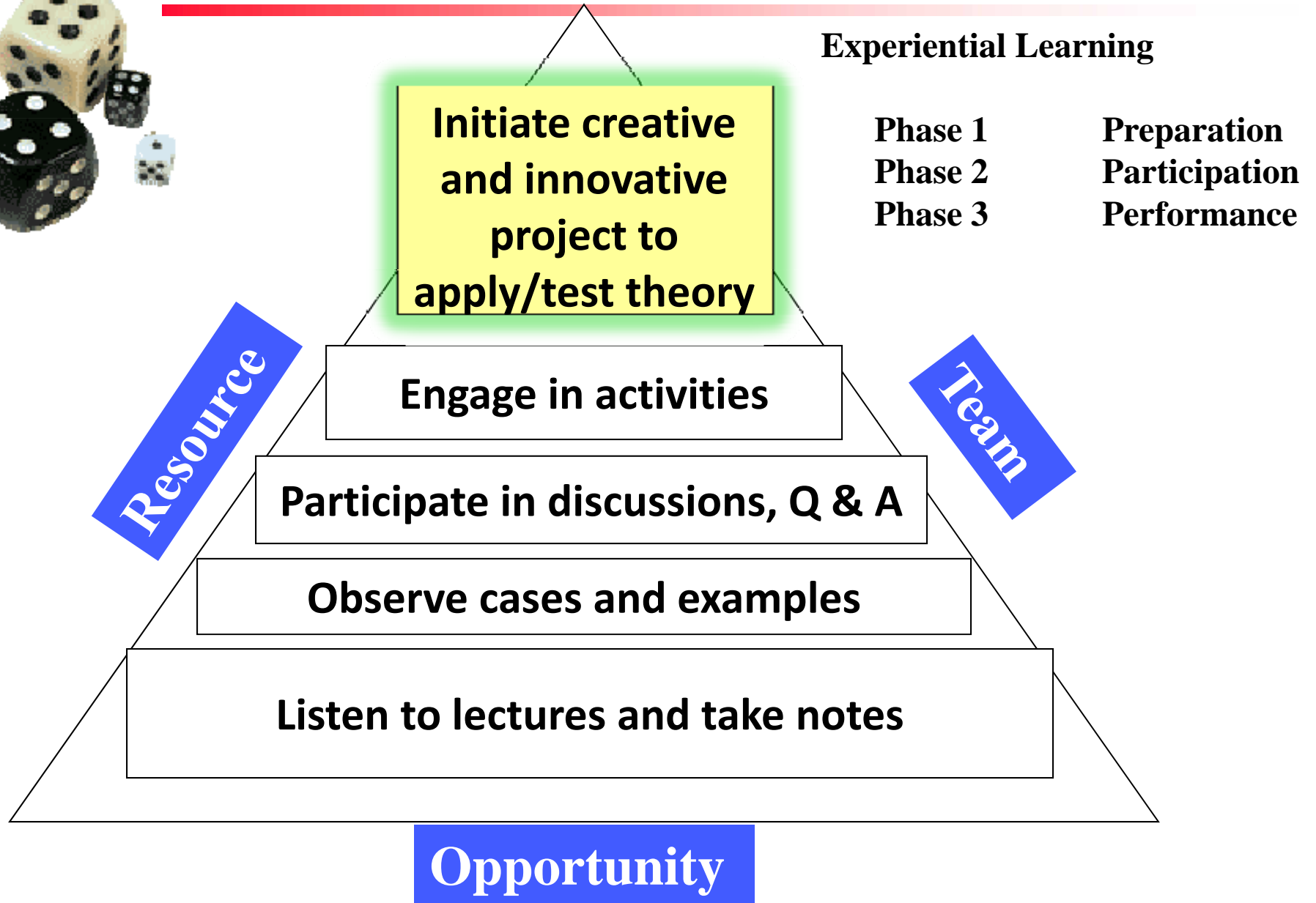
To answer the million dollar question “what should we teach in entrepreneurship?”, the faculty of CDAE developed a unique pedagogical framework that directly links to the heart of entrepreneurship – *opportunity recognition, resource commitment, and new venture creation through teamwork.*

This unique framework builds on the value of traditional classroom learning, by incorporating experiential learning as proposed by John Dewey.

*(Dewey, 1997; Liang, 2009, 2010)*



## Experiential Learning



Liang, C. (2009 , 2010, 2012 in print). Dollar Enterprise – From Theory to Reality, Kendall Hunt Publishing



# From A Dream Idea To Reality

- ◆ **1998-2002** design, plan, and implement the Community Entrepreneurship major and minor
- ◆ **2002-2005** modify and introduce new Community Entrepreneurship curriculum
- ◆ **2005** introduce Dollar Enterprise to the course, Introduction to Community Entrepreneurship (general introductory course for all years of students)



# Curriculum – CALS Competencies

## CALS Core Competencies

- **Communication Skills** (1 writing class, 1 speech class)
- **Information Technology Skills** (1 computer application class)
- **Quantitative Skills** (1 math class, 1 statistics class)
- **Critical Thinking Skills** (CENT curriculum requirement specific)
- **Interpersonal Skills** (CENT curriculum requirement specific)
- **Knowledge** (2 physical and life sciences classes – with or without lab; 2 social science classes – not including CDAE courses; 2 humanities and fine arts classes)
- **Values** (2 diversity classes – D1 and D2 for different aspects of diversity; environmental stewardship – CENT curriculum specific; personal growth – CENT curriculum specific)





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# Curriculum – CDAE Core

*General requirement for 3 majors  
(CENT, PCOM, CID)*

**CDAE 002 World Food Population & Development**

**CDAE 015 Visual Communication**

**CDAE 061 Community Development Economics**

**CDAE 102 Sustainable Community Development**

**CDAE 127 Consumer, Markets & Public Policy**

**CDAE 250 Research Methods**

**CDAE 191/291 internship or service learning**



# Curriculum – Community Entrepreneurship Core

**CDAE 157: Consumer Laws And Policy**

**[CDAE 166: Introduction To Community Entrepreneurship](#)**

**CDAE 167: Financial Analysis For Community  
Entrepreneurship**

**CDAE 168: Marketing For Community Entrepreneurship**

**CDAE 253: Macroeconomics For Applied Economists**

**CDAE 254: Microeconomics For Applied Economists**

**CDAE 255: Applied Consumption Economics**

**CDAE 266: Decision Making For Community  
Entrepreneurship**

**[CDAE 267: Strategic Planning For Community  
Entrepreneurs \(senior capstone\)](#)**



# Course Examples – CDAE 166

(3 credits, introduction course, across majors)

- ◆ Offered every semester, 140 students in each class.
- ◆ Organized teams with 10-12 members in each team.
- ◆ Combines lectures with experiential learning.
- ◆ Plan and operate *Dollar Enterprise following 12-step entrepreneurial procedures.*

Preparation and Planning

Final report and Assessment

Aug

Sep

Dec

Oct

Nov

Operation and Weekly Reporting



# Objectives of The Dollar Enterprise

- ◆ **Provide practices and exercises for individuals to apply business knowledge and personal skills**
  - Utilize unwanted wastes to create value added treasure
  - Build strong teamwork and work ethics
  - Exercise creative thinking
  - Enhance analytical skills from all business perspectives
  - Engage in entrepreneurial activities
  - Learn networking skills
  - Contribute to other organizations in communities
  - Have a lot of fun in learning!



# Steps of Dollar Enterprise

- ◆ **Brainstorm an idea**
- ◆ **Finalizing team (individual's responsibilities) and team building activities**
- ◆ **Finalize and assess products and services**
- ◆ **Identify resources and partnership**
- ◆ **Formulate work routines**
- ◆ **Preparing for an initial business plan and a business model**
- ◆ **Establish rules for team assessment and self-assessment**
- ◆ **Weekly reports and reflections**
- ◆ **Risk assessment and prepare for contingency**
- ◆ **Prepare financial analysis**
- ◆ **Prepare final business report and final assessment/learning reflections**
- ◆ **Arrangement for donations to charity**



# Reporting and Assessment

- ◆ **Foundation of the reporting and assessment –**
    - **Encourage members' involvement**
    - **Identify strengths and weaknesses of the team work**
    - **Provide warning to non-participants and reward over-and-beyond participants**
    - **Evaluate work ethic, professionalism, workload, and communication with other members**
- **Weekly reports and assessments**
  - **Final/overall report, assessment, and reflection**
  - **Instructor's evaluation and TA's evaluation**

# Types of Ventures



T Shirt

PopCorn

Tie Dye

Tag Sale

Tack Sale

**BURRITO**

Plant

Grilled Cheese

Drinks

Vegeburger

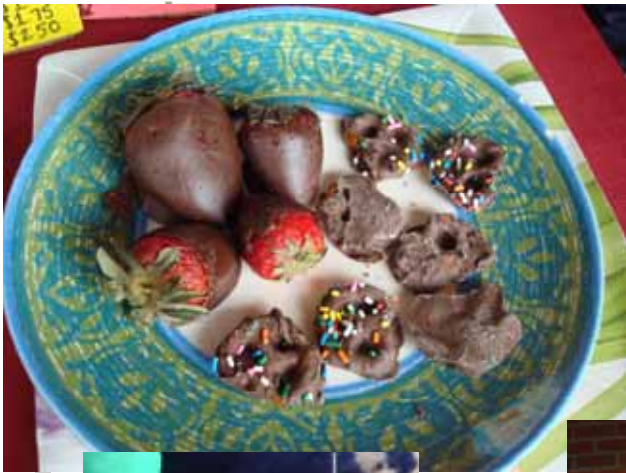
**Trail Mix**

**Baked Goods**

Music CD

Recycled Arts

Jewelry







## Number of Students Enrolled in CDAE 166

	Gender		Year			
	M	F	First Year	Sophomore	Junior	Senior
2005	88	87	14	61	45	53
2006	120	90	11	88	57	54
2007*	65	44	5	43	33	27
2008	101	108	6	86	64	50
2009	105	114	8	125	48	36
2010	109	112	25	100	56	38
2011**	59	78	14	88	20	11
<b>Total</b>	<b>647</b>	<b>633</b>	<b>83</b>	<b>591</b>	<b>323</b>	<b>269</b>



**All proceeds donated to charity and entrepreneurship education foundation**

<b>Spring 2005</b>	<b>\$1,140.82</b>
<b>Fall 2005</b>	<b>\$2,384.18</b>
<b>Spring 2006</b>	<b>\$1,261.65</b>
<b>Fall 2006</b>	<b>\$1,923.89</b>
<b>Spring 2007</b>	<b>\$1,648.10</b>
<b>Fall 2007</b>	<b>\$2,090.00</b>
<b>Spring 2008</b>	<b>\$2,000.00</b>
<b>Fall 2008</b>	<b>\$2,192.40</b>
<b>Spring 2009</b>	<b>\$1,930.03</b>
<b>Fall 2009</b>	<b>\$3,257.00</b>
<b>Spring 2010</b>	<b>\$1,985.70</b>
<b>Fall 2010</b>	<b>\$1,944.46</b>
<b>Spring 2011</b>	<b>\$3,966.16</b>
<b>Total</b>	<b>\$27,724.39</b>



# Course Examples – CDAE 267

(4 credits, capstone for CENT majors)

- ◆ Offered every semester, 30 students in each class.
- ◆ Organized teams with 2-4 members in each team.
- ◆ Combines lectures with experiential learning.
  - Teamwork, opportunity recognition, market, human resource, management, finance, etc.
  - 5 drafts of the business plan.
  - 5 presentations.
- ◆ Plan and operate *real ventures following 12-step entrepreneurial procedures.*



## Number of Students Enrolled in CDAE 267

<b>Semester</b>	<b>M</b>	<b>F</b>	<b>Semester</b>	<b>M</b>	<b>F</b>
<b>S2000</b>	<b>20</b>	<b>7</b>	<b>F2006</b>	<b>12</b>	<b>1</b>
<b>F2000</b>	<b>14</b>	<b>19</b>	<b>S2007</b>	<b>24</b>	<b>8</b>
<b>S2001</b>	<b>22</b>	<b>14</b>	<b>F2007</b>	<b>17</b>	<b>9</b>
<b>F2001</b>	<b>26</b>	<b>13</b>	<b>S2008</b>	<b>27</b>	<b>14</b>
<b>S2002</b>	<b>20</b>	<b>8</b>	<b>F2008</b>	<b>22</b>	<b>12</b>
<b>F2002</b>	<b>14</b>	<b>6</b>	<b>S2009</b>	<b>23</b>	<b>6</b>
<b>S2003</b>	<b>14</b>	<b>2</b>	<b>F2009</b>	<b>7</b>	<b>5</b>
<b>F2003</b>	<b>11</b>	<b>3</b>	<b>S2010</b>	<b>10</b>	<b>6</b>
<b>S2004</b>	<b>14</b>	<b>6</b>	<b>F2010</b>	<b>21</b>	<b>12</b>
<b>F2004</b>	<b>15</b>	<b>6</b>	<b>S2011</b>	<b>10</b>	<b>3</b>
<b>S2005</b>	<b>18</b>	<b>13</b>			
<b>F2005</b>	<b>13</b>	<b>3</b>			
<b>S2006</b>	<b>16</b>	<b>4</b>			
			<b>Grand Total</b>	<b>413</b>	<b>192</b>



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# Conclusions and Implications

- ◆ **Can we teach entrepreneurship?**
- ◆ **Is entrepreneurship an independent discipline?**
- ◆ **What should we teach in entrepreneurship?**
- ◆ **Who can teach entrepreneurship?**
- ◆ **How do we assess the impact of entrepreneurship education?**



*Let us think of education as the means of developing our greatest abilities, because in each of us there is a private hope and dream which, fulfilled, can be translated into benefit for everyone and greater strength for our nation.*

*John F. Kennedy (1917-1963)  
Thirty-fifth President of the USA*

