Evaluating Students’ Learning Experiences in a Pilot General Education Program in Hong Kong

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Introduction of Academic Structure Change

• Educational reform in Hong Kong
  – academic structure, curriculum, teaching and learning, assessment, and financing.

• In higher education
  – OBTL
  – Adopting four years undergraduate curriculum
  – Incorporating general education (GE) programs
Rationales for the Academic Structure Change

• Higher education of Hong Kong completed massification process in the early 1990s and moved on to pursue quality and excellence.

• Less than one in five surveyed opinion leaders are confident that Hong Kong’s university graduates possess sufficient and relevant skills.

• Hong Kong needs its higher education system to provide people who can participate in making Hong Kong a vibrant, economically powerful, cultured, civilized and socially active and responsible society.

• Aligning Hong Kong’s educational pipeline with those in the Chinese mainland, the United States, and the European Union will help Hong Kong to “play a facilitating role in linking the mainland and the world at large” and to become “the education hub of the region” (UGC, 2004, 5).
General Education at HKBU

• Prior to 2010, HKBU provided a wide range of complementary studies (CS) for students to broaden their vision and their structure of knowledge.

• Since Sept 2010, HKBU began to pilot general education program.

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Units</th>
<th>Distribution Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>University English</td>
<td>6</td>
<td>Arts</td>
<td>3</td>
</tr>
<tr>
<td>University Chinese</td>
<td>3</td>
<td>Business</td>
<td>3</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>3</td>
<td>Communication / Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>Information Management Technology</td>
<td>3</td>
<td>Science / Chinese Medicine</td>
<td>3</td>
</tr>
<tr>
<td>Numeracy</td>
<td>3</td>
<td>Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History and Civilization</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Values and the Meaning of Life</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research Questions

To have more insights in students’ learning experience in the piloting GE program and to track the progress of improvement

• What are the students’ learning experiences in pilot GE courses?
  – Constructive alignment
  – Learning approaches

• What are students’ likes and dislikes of the GE courses?

• How could HKBU improve the teaching and learning of GE courses?
Methods

• Piloting GE courses were invited to the study

• Quantitative: examining differences between students’ typical approaches to learning and their situated approach to learning

A pre and post test design
– Pre-test:
  • student’s typical approach to learning (study process questionnaire)
– Post-test:
  • Students’ learning experiences -- Learning Experience Inventory - course
  • Student’s situated approach to learning(study process questionnaire)

• Qualitative:
  – Focus group interview
Instrument 1 – Study Process Questionnaire (R-SPQ-2F)

• A 20-item questionnaire

• Higher score of “Deep Approach” implies in a particular course a student is more likely to be motivated by intrinsic interests and would like to maximize the learning by engaging in a search for meaning

• Higher score of “Surface Approach” implies a student is more likely to be motivated extrinsically and attempt to accomplish tasks with the minimum possible time and efforts.
Instrument 2 – Learning Experience Inventory -- Course

• A 20-item questionnaire

• Gain information on the degree of constructive alignment (students’ learning experience) on the following five aspects in a particular course:
  – Category 1 - What I am to learn?
  – Category 2 - How to go about learning it?
  – Category 3 - How well did I learn it?
  – Category 4 - How I feel about my learning?
  – Category 5 - Reflecting on my learning?

• Alignment Index
  – summation of the mean scores
  – measurement of the constructive alignment of the Course Intended Outcomes (ILOs), Teaching and Learning Activities (TLAs), and Assessment Methods (AMs) from students’ perspectives
# Quantitative Study: Sample size

<table>
<thead>
<tr>
<th>Academic Year and Semester</th>
<th>No. of Pilot GE Courses</th>
<th>No. of Valid* Courses</th>
<th>No. of Valid* Course Units*</th>
<th>Enrollment Size</th>
<th>Valid* Responses</th>
<th>% Valid Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11 Semester 1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>135</td>
<td>58</td>
<td>43.0%</td>
</tr>
<tr>
<td>2010-11 Semester 2</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>193</td>
<td>78</td>
<td>40.4%</td>
</tr>
<tr>
<td>2011-12 Semester 1</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>180</td>
<td>79</td>
<td>43.9%</td>
</tr>
<tr>
<td>2011-12 Semester 2</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>110</td>
<td>50</td>
<td>45.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>10</strong></td>
<td><strong>11</strong></td>
<td><strong>618</strong></td>
<td><strong>265</strong></td>
<td><strong>42.9%</strong></td>
</tr>
</tbody>
</table>

**Note:**

*Criteria of Valid Response:*

- Course Enrollment Size >20
- Course Unit Response Rate > 30%
- Do not answer questions in a particular pattern consistently
- With Student ID, Course Code, and Session Number

*Course unit: course with multiple sessions taught by same instructor*
Quantitative Results
Alignment Index by Academic Year and Semester

<table>
<thead>
<tr>
<th>Academic Year and Semester</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11 Semester 1</td>
<td>9.63</td>
<td>1.34</td>
</tr>
<tr>
<td>2010-11 Semester 2</td>
<td>11.08</td>
<td>1.40</td>
</tr>
<tr>
<td>2011-12 Semester 1</td>
<td>11.52</td>
<td>1.34</td>
</tr>
<tr>
<td>2011-12 Semester 2</td>
<td>11.37</td>
<td>1.43</td>
</tr>
</tbody>
</table>
SPQ1 & SPQ2 Comparison:
Deep Approach and Surface Approach by Academic Year and Semester

<table>
<thead>
<tr>
<th>Academic Year and Semester</th>
<th>Deep Approach SPQ1</th>
<th>Deep Approach SPQ2</th>
<th>Surface Approach SPQ1</th>
<th>Surface Approach SPQ2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11 Semester 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2010-11 Semester 2</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2011-12 Semester 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011-12 Semester 2</td>
<td></td>
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</tbody>
</table>
Quantitative Results

- Results suggest
  - an improvement of students’ learning experience in terms of constructive alignment over the last two academic years.
  - at the Semester 1, Academic Year 2011-2012, a significant increase of students’ deep learning approach was detected.

- Limitation: sample size is small

- Unit of analysis is student
Qualitative Results: Focus Group Interview
# Qualitative Study: Sample size

<table>
<thead>
<tr>
<th>Academic Year and Semester</th>
<th>No. of GE Courses</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11 Semester 1</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>2010-11 Semester 2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2011-12 Semester 1</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>
What Students Like Most about GE Pilot Courses

1. Useful knowledge and interesting content
   - I think the materials are quite realistic and related to our life.
   - Just like we learnt how the credit card to operate. Many people said that credit card will burden lots of things. You just know the fact but you don’t know the reasons. After learning this course, I know the reasons because I know how it operate. I also learnt knowledge about voting system and equality. I don’t think other courses will provide such materials to learn these things.
   - It is a great pleasure to do the assignment, and we can apply the aps from our assignment to our phones.
What Students Like Most about GE Pilot Courses

2. Diversified teaching and learning activities
   – The major teaching and learning activities include lecture, lab, and question and answer time.
   – Teaching is not traditional lecturing; but involves interactions of teacher and students.
   – The instructor is very humorous and approachable ... is very willing to answer questions and find information for us, very good attitude.
   – Professor shares about views about what happened in society and students know more about pop culture and religious value. One student said that “... can build our values into our mind”.
   – Guest speaker broadened students’ vision and brought authentic learning into this course.
What Students Like Most about GE Pilot Courses

3. Courses are interdisciplinary in nature
   – Every instructor gave very clear explanation of the intended learning outcomes and what they expected of students.
   – This course is taught by two instructors. One instructor teaches what you want to express, and the other one teaches how to produce what you want to express.
Areas for Improvement

1. **Depth or width**
   - The instructors sometimes put more emphasis on memorizing the facts in teaching and assessment
   - Adjust instructions to accommodate different students’ prior knowledge

2. **Interdisciplinary course vs. group teaching**

3. **Some gaps between learning and assessment**
Concluding Remarks

• Unlike its counter partner universities in the U.S., HKBU only started to pilot her GE program in 2010.

• We’ve started to make improvement in our intial attempts of offering GE course.

• The results of this project help provide initial data
  – On insights of current status of GE program at HKBU.
  – For Faculty development program on helping faculty members designing and delivering the GE courses.

• More extensive exploration required.
Q & A

Thank you!