Curriculum Mapping

I. Introduction:

A. “We hold these truths to be self-evident…”
   1. Long Beach City College is an institution of higher education.
   2. LBCC is dedicated to:
      a. Student success
      b. SLOs serve as objective measure of this success
   3. Higher education is more than learning facts:
      a. It is acquiring a breath of knowledge
      b. It is being able to grasp within that breadth a wide spectrum of fields of understanding
      c. It is being able to integrate what we know
      d. It is being able to project that integration into new areas of creativity
      e. It is being to link literacy with computation to engage in critical thinking
      f. And it is being able to create, from our educational background, something completely original
   4. If done properly, SLOs opens the way to self-study to see if:
      a. We fulfill the educational goals stated explicitly stated in our Mission Statement
      b. We produce educated individuals as described above
      c. We accomplish what set out to do in all our courses, programs, GE requirements, and major areas of study

B. GEOs function as LBCC assessment General Education at the Institutional level
   1. Historical background:
      a. The development of GEOs began in 2008-2009
         i. The ASLO subcommittee reconfigured the college’s Core Competencies
ii. The new configuration of core competencies comprised five categories: critical thinking, communication, civic engagement, aesthetics and creativity, and wellness.

b. Fall of 2009:
   i. ASLO subcommittee linked with members of the AD/GE subcommittee to form the GEO Work Group
   ii. GEO Work Group began developing GEOs
   iii. The GEO Workgroup produced a comprehensive overview of each discipline as they aligned with the Core Competencies
   iv. The GEO Work Group developed within this comprehensive overview the areas of expertise a student should acquire from completing a course
   v. These areas of expertise linked the course to the Core Competency as a legitimate category on LBCC’s Plan A

c. Spring of 2010:
   i. The GEO Work Group mapped all the courses on Plan A
   ii. The product of this mapping is the body of this report
   iii. The purpose of the mapping was to determine if each course outline of record justified placing this course on Plan A

d. ASLO, AD/GE, and the Curriculum Committee approved each step above as they occurred from the fall of 2008 to through the spring of 2010.

C. Methodology: Curriculum Mapping
1. Before beginning course mapping, the GEO Work Group determined that its labor could only be justified if:
   a. It was the product of full faculty participation
   b. All departments at LBCC engaged with the Work Group to answer questions that arose during its inquiries
   c. All courses on Plan A could justify their location on this plan through their course outlines
   d. Whenever a question arose over ambiguities within these outlines, the GEO Work Group consulted the appropriate department for clarification

2. The goals of the GEO Work Group are as follows:
   a. Link existing courses on Plan A to the LBCC’s Philosophy of General Education and its Missions Statement
   b. Make sure every member of the instructional faculty understood why her/his course is on Plan A
   c. Develop curriculum maps based successful patterns in use at other community colleges
   d. Use these maps to evaluate all the courses on Plan A
   e. Make the heart of this evaluation assessing the explicit link between:
      i. The stated SLOs on the course outlines of record;
      ii. The week-by-week content outlines as they supported the SLOs;
      iii. And the manner in which both matched the appropriate Core Competencies.

   e. Each course mapped revealed:
      i. If that course made the Core Competency it claimed to serve central to its content;
      ii. Secondary to the content;
      iii. Or merely introductory to the content;
iv. Thus, the GEO Work Group hoped to establish objectively whether a course fit within its claimed competency

f. Throughout the process of mapping each course:

i. Divide the GEO Work Group into teams of two and have each evaluate course outlines to determine if all course on Plan A demonstrated mastery [M], development [D], or introduction [I] of a Core Competency

ii. Minimum justification for retaining a course in one of the Core Competency categories required at least one “M” designation for each of several content areas approved for a discipline

iii. These content areas belonged the comprehensive overview developed by the GE Work Group, and approved by the ASLO and AD/GE subcommittees, and the Curriculum Committee in the Fall of 2009.

iv. Whenever a course outline, or that courses stated SLOs, generated ambiguity concerning its role in a Core Competency, the Work Group requested clarification for the appropriate department

v. In all cases, every department complied with these requests save one: Physical Science

vi. This omission left several issues with Geology course outlines unresolved.

D. Supplemental Evidence:

1. The need for this evidence surfaced after the GEO Work Group completed curriculum mapping

2. Separate members of the GEO Work Group took on different tasks
   a. One group studied peer institutions to understand their “Plan As”
b. This group then contrast the peer institutions with LBCC

c. Another contacted the Institutional Research Office for data on GE course selection linked with AA/AS degrees earned

d. This groups then developed frequency charts to study what student chose the satisfy Plan A

3. The goal was to develop an internal analysis of Plan A LBCC

4. Steps taken:

a. Peer Institutions:
   i. Determine how peer institutions interpret Article XII Section I of the 2006-2009 Master Plan and the California Intersegmental Articulation Council [CIAC] Region membership
   ii. Compile course requirement in Peer Institutions for their Plan As
   iii. See how regional institutions develop web sites for their AA/AS degrees
   iv. Develop a comparative table for all the above

b. Course selection and the Associates Degree:
   i. Understanding student selections from Plan A
   ii. Cross referencing these choices on the frequency chart with Plan A
   iii. Linking students seeking a degree with courses selection
   iv. Contrasting self-declared degree seekers with those who actually completed an Associates Degree

E. Overall results for the Core Competency Critical Thinking:

1. Curriculum mapping reviewed 103 courses
2. 98 of these courses received an “M” rating in their GE category
3. 5 courses did not: GEOL 4, 5, 7AD, 16, and 17
4. 41 courses earned two “M” ratings for their category
5. 6 courses earned three “M” ratings for all available SLOs in their category
6. 97 courses in the “critical thinking” category received an “M”
7. 44 courses in “science literacy” category received an “M”
8. 4 courses in the “numerical literacy” category received an “M”

F. Key Findings for the Core Competency on Critical Thinking:
1. Only five courses need review
2. The critical thinking category held the majority of the courses
3. Numerical literacy held the fewest
4. The section of Plan A provides the second highest number of course options

H. Overall results for the Core Competency on Communications:
1. There are 44 courses on this map
2. All these courses earned an “M” rating in one category
3. 25 courses belong to the “reading” category
4. 28 courses belong to the “writing” category
5. 4 courses belong to the “speaking” category
6. 0 courses belong to the “listening” category
7. 0 courses belong to the “teamwork and collaboration” category
8. 10 courses belong to the “information competency” category
9. 22 courses in all categories earned two or more “Ms”
10. 19 courses earned have three categories with at least one “M”
11. 8 courses have three categories with two “Ms”
12. 1 course has three categories with 3 “Ms”

I. Key Findings for the Core Competency Communications:
1. Most courses belonged to the reading and writing categories
2. No courses fell into the listening and teamwork-collaboration categories

J. Overall results for the Core Competency on Civic Engagement:
1. There are 62 courses in this category
2. All these earned an “M” rating in one category
3. 45 courses focused on the “citizen preparation and democracy” category
4. 17 courses focused on “cultural sensitivity/diversity” category
5. 0 courses met both categories

K. Key Findings for the Core Competency on Civic Engagement
1. The “citizen preparation and democracy” held the majority of courses
2. The two descriptors in this Core Competency deny the possibility of any one course satisfying both.

L. Overall results for the Core Competency on Aesthetics and Creativity:
1. There are 108 courses in this Core Competency
2. All earned an “M” in at least one category
3. All courses in the “cultural expression” category earned an “M”
4. All courses in the “original ideas” category earned an “M”
5. All courses are identified in both categories

M. Key Findings for the Core Competency on Aesthetics and Creativity:
1. All courses earned an “M” in both categories
2. Both descriptors permit all the courses to appear

N. Overall results for the Core Competency on Wellness:
1. There are 147 courses in this category
2. All earned at least 1 “M”
3. All courses belong to the physical health category
4. 0 courses belong to the mental health category
5. 0 courses belong to the social health category
6. 0 courses belong to 2 or more categories

O. Key Findings for the Core Competency on Wellness:
1. All courses belong to the physical health category only
2. No courses aligned with mental health or social health
3. This portion of Plan A has the highest number of courses

P. Overview:
1. California faces several problems:
a. The college population is growing
b. The number starting and finishing college is declining
c. California’s economy requires better-educated workers

2. LBCC faces several problems:
   a. LBCC will have a greater number of students
   b. The cost of education will climb
   c. Finishing college will require balancing:
      i. The most efficient pathway through the school taking an appropriate number of courses to be educated
      with
      ii. Developing a curriculum that thoroughly prepares the student for a complex economic, social, and political community
      iii. The objective data collected from SLOs and GEOs will provide LBCC information needed to balance these two conflicting challenges

Q. Results of Supplemental Evidence for Plan A

1. Analysis of course selection for those earning an Associates Degree from Spring 2003 to Spring 2009 using threshold numbers: 2,500 and above, 2,000, 1,500, 1,000, and 500
   a. 2,500 and above: Polsci 1, Learn 617, Engl 1
   b. 2,000 and above: Psych 1, Math 130
   c. 1,500 and above: Socio 1, Engl 105, Math 110, Couns 1, Hist 10, Hist 11, Bio 41, Bio 41 L
   d. 1,000 and above: Stat 1, Sp 10, PGeog 1, Film 1, SP 20, Learn 650, HLED 3, Engl 3
   e. 500 and above: Sp 60, CDECE 47, Math 45, Bio 60, Phil 12, Read 82, Span 1, Econ 1B, Phi 6, Geog 40, Sp 30, Phil 7, Human 1/SDocsc 1, PEPF 54 AD, F_N 20, HLED 40, Math 37
2. Student Selection of Course from Plan A: see pages 10 through 12 in the Report entitled *General Education Outcomes Assessment: Curriculum Mapping Report*

a. Key Findings:
   
i. English 1 is the only course offered in the English Composition area and requires more units than required for the area

ii. Communications and Analytical Thinking is somewhat complex:
   • 3 courses have a higher unit value than required
   • 2 of these are among the top five chosen
   • Students select 11 courses from among 38 that meet minimum unit requirement
   • Students select these 11 so frequently that they each rise above the 500-threshold

iii. The Natural Science Area is complex:
   • 2 courses fall below the minimum units
   • These 2 are not linked to another course
   • Students selected 7 courses most frequently from the 51 listed
   • 2 lab courses are linked to lecture courses
   • Many students take the lecture course without the lab

iv. Of the 9 courses offered in the History graduation requirement, only 2 rise above the 500-level of student choices

v. Only 1 course is offered to fulfill the Political Science graduation requirement

vi. In the Physical Fitness/Wellness, only 1 course rises above 500 but this is a new area

vii. Humanities is also somewhat complex:
• 1 course has a higher unit value then required for the Humanities category
• Students select 3 courses above 500 out of 136 classes offered

viii. Social Science is also somewhat complex:
• 1 course requires more units then the minimum for this category
• Students select 3 courses above 500 out of 61 classes offered

xi. Health Education:
• 1 course rises above the minimum unit requirement
• Students choose 4 courses most frequently from among 13 offered

b. Course options that student select from LBCC and in Peer Institutions offers a comparison and a count disciplines of course GE offerings that note an abundance of choices.

c. See pages 13-14 in General Education Outcomes Assessment: Curriculum Mapping Report for a comparative analysis and review of course options for LBCC and local Peer Institutions

d. Key findings:
   i. 3 colleges categorize the American Institution Graduation Requirement differently
   ii. 3 colleges include this requirement in the social science category
   iii. 10 colleges separate this requirement out as does LBCC
   iv. Nearly half the colleges reviewed separate out Health Education and Physical Fitness
   v. LBCC does the same
vi. LBCC has over 100 course options in the Physical Fitness/Wellness category from less the 10 disciplines

vii. No other Peer institution comes close to this number and lists 12 disciplines

viii. Most institutions offer 50 courses per category

ix. LBCC tends to offer the most course options in 4 areas: American Institutions, Communications and Analytical Thinking, Humanities & Arts, and Natural Science

x. The most course options in one area: Humanities (47 to 144, with LBCC offering 132)

xi. The lowest course options: Written Communications (1 to 3 with LBCC offering 2)

R. Conclusions:

1. Courses on Plan A:
   a. The majority of courses on Plan A match the unit requirement for each category
   b. The curriculum maps for these courses also met the minimum “M” rating for GEOs
   c. Numerous courses often exceeded this minimum
   d. Thus, the Work Group supports the standard that each course listed should at least demonstrate mastery in one of the three categories for its Core Competency

2. In Aesthetics and Creativity, the two criteria listed in the Core Competency come so close together that all courses meet the minimum in both

3. Civic Engagement demonstrates the opposite conclusion from Aesthetics and Creativity, but all courses met the minimum in one or the other criteria for this Core Competency
4. For all of Plan A, the GEO descriptors approved by the Curriculum Committee served well for curriculum mapping, but not all courses met the minimum these descriptors require: listening and teamwork/collaboration did not register a single course.

5. Furthermore, social and mental wellness did not produce a single course for the wellness category.

6. Each of the descriptors that failed to produce a class seemed to list listening, teamwork, mental, and social wellness as a secondary or introductory quality within a course.

7. The three levels of curriculum mapping, “Mastered, Developed, and Introduced,” worked well in reviewing the course outlines of records and their participation in their relevant Core Competencies.

8. Only Geol 4, 5, 7AD, 16, and 17 demonstrated the minimum to meet the GEOs.

9. Since the 3-unit standard meets the Title 5 requirement for satisfying and subject area in GE on Plan A, courses that fall below this number require students to take extra classes.

10. LBCC course offering in Physical Fitness is anomalous when compared to Peer institutions.

11. LBCC low course options categories such as Written Communications matches comparable selections form Peer Institution.

12. Course outlines are critical to the process of Institutional Outcomes Assessment, which requires rigorous maintenance of the quality of these documents through the future review process.

S. Recommendations:

1. The GEO Work Group recommends the Communication GEO should reevaluate teamwork/collaboration and information competency.

2. The same in true for the Wellness GEO in the areas of social and mental wellness.
3. The GEO Work Group recommends that since listening, teamwork/collaboration, and social and mental wellness contain no courses, they should be deleted.

4. The GEO Work Group recommends that since Geol 4, 5, 7AD, 16, and 17 failed to register an “M” in any category, they should be removed from Plan A.

5. The GEO Work Group recommends that low units courses on Plan A should also be removed since they require students to take extra classes to meet the Title 5 requirements: Fren 8AD, Ger 8AD, Span 8AD, Bio 18, 22, 28, 31, 37, 61, Geol 7AD, and 17.

6. The GEO Work Group recommends that the high standards imposed by the Course Evaluation Subcommittee toward course outlines be maintained.