2012-2013 Annual Program Assessment Report

Please submit report to your department chair or program coordinator, the Associate Dean of your College and the assessment office by Monday, September 30, 2013. You may submit a separate report for each program which conducted assessment activities.

College: Humanities

Department: Liberal Studies

Program: BA Multiple Subject/SPED Teacher Preparation

Assessment liaison: Tineke Scholten

1. **Overview of Annual Assessment Project(s).** Provide a brief overview of this year's assessment plan and process.

The Interdisciplinary Advisory Committee for Liberal Studies (IDC) decided to assess in 2012-13 the extent to which BA students in the major "demonstrate proficient knowledge in the range of disciplines that relate to K-6 education …" (SLO1), and "to reflect on and … apply their knowledge and skills acquired in the major … to teaching in the K-6 classroom." (SLO6) The two SLOs assess related although not identical skills. The assessment procedure involved use of embedded questions in one section of MATH 210 (Spring 2013) and multiple sections of GEOL 406 LRS (Fall 2012 and Spring 2013). Both are core courses in the Teacher Preparation Curriculum and both strive to make an explicit connection between conceptual knowledge in the field and pedagogy. Student responses were rated by the instructors of the courses in question with help of rubrics that specified the sub skills involved. The results and its implications were discussed in the first Fall meeting of the IDC.

2. **Assessment Buy-In.** Describe how your chair and faculty were involved in assessment related activities. Did department meetings include discussion of student learning assessment in a manner that included the department faculty as a whole?

Assessment is a regular item on the agenda of the Interdisciplinary Committee. The committee members wish to ensure that Program SLOs are assessed in the most effective manner and are also willing to help with data collection and analysis. One of the members of the IDC and the Program Coordinator of Liberal Studies were instructors in the courses from which the data for assessment were derived and they provided the expertise and extensive time commitment to process and analyze the results.

3. **Student Learning Outcome Assessment Project.** Answer items a-f for each SLO assessed this year. If you assessed an additional SLO, copy and paste items a-f below, BEFORE you answer them here, to provide additional reporting space.

3a. Which Student Learning Outcome was measured this year?

The Department measured aspects of BA SLOs 1 and 6. The data collection and evaluation for the two SLOs informed both SLOs and the assessment procedure for these SLOs are therefore described together.

- LRS SLO1: Students will demonstrate proficient knowledge in the range of disciplines that relate to K-6 education and advanced level knowledge in their area of specialization.
- LRS SLO6: Students will be able to reflect on and, for ITEP students, apply their knowledge and skills acquired in the major and in their specialization to teaching in the K-6 classroom.

3b. Does this learning outcome align with one or more of the university's Big 5 Competencies?

Reaching these SLOs requires the student to have competencies in the following areas:

- Critical Thinking
- Written Communication
- Quantitative Literacy
- Information Literacy

3c. Do these learning outcomes align with University's commitment to supporting diversity through the cultivation and exchange of a wide variety of ideas and points of view? In what ways did the assessed SLOs incorporate diverse perspectives related to race, ethnic/cultural identity/cultural orientations, religion, sexual orientation, gender/gender identity, disability, socio-economic status, veteran status, national origin, age, language, and employment rank?

3d. What direct and/or indirect instrument(s) were used to measure these SLOs?

Data were collected through embedded assignments in MATH 210 and GEOL 406 LRS:

For MATH 210, an embedded question targeted the notion that complex math operations are a composite of more basic math operations. To demonstrate their understanding of this concept, students had to describe the basic operations (such as place value, the

law of distributivity and single and multi-digit addition) that an elementary student would need to understand in order to not only execute but also grasp the concept of multi-digit multiplication.

In GEOL 406 LRS, the Science Experience Capstone, students teach professionally produced hands-on science lessons throughout the semester. The overall goal of the course is to review science content from all three branches of science (Life, Physical, and Earth) and to introduce science pedagogy. After teaching 3 lessons, students reflect on their final lesson by answering specific questions. Two of these questions were used for the purpose of this assessment.

3e. Describe the assessment design methodology: For example, was this SLO assessed longitudinally (same students at different points) or was a cross-sectional comparison used (Comparing freshmen with seniors)? If so, describe the assessment points used.

Performance was measured toward the end of each course. For MATH 210, all 23 responses from the Spring semester course were evaluated and for GEOL 406 LRS, responses from 110 students over two semesters and from multiple sections were collected. The data were intended to evaluate the extent to which students meet SLOs 1 and 6 in the areas of math and science. They were also intended to serve as a baseline for comparison with performance in Math and Science Capstones in future years.

For MATH 210, a rubric provided a means to log how many basic operations students were able to reference, with 7 basic operations constituting a complete answer. The rubric also evaluated whether the students' responses reflected a purely procedural appreciation of math operations or an ability to draw meaningful connections between basic and more complex math operations. The latter was evaluated based on a 4 point scale with 4 representing conceptual understanding and 1 a purely procedural approach.

For GEOL 406LRS, student responses were evaluated based on two subscales -- one based on students' ability to articulate the key science concepts that they taught in their lesson ("content") and a second subscale based on their ability to articulate effective techniques to transfer their knowledge to elementary students ("teaching methods"). Each subscale went from 1 to 4, with level 3 corresponding to responses that met expectations.

3f. Assessment Results & Analysis of this SLO: Provide a summary of how the results were analyzed and highlight findings from the collected evidence.

For MATH 210: The average number of basic operations that a student identified was 2.83(out of 7); 4 students (=17%) were able to identify 5 or more basic operations; the highest scoring student identified 6 basic operations. Students' responses received an average

grade of 1.43 on a scale from purely procedural (1) to insightful, conceptual understanding (4). There were 3 responses (=13%) that received a score of 3 in terms of the level of conceptual understanding exhibited. No student received a score of 4.

For GEOL 406 LRS, 27% scored three or higher on both scales (the ones relating to content and teaching methods, respectively). A full 50% of the students had scores of 2 or lower on both scales.

These results provide useful benchmarks for future comparison. Note that the core SLOs of the LRS Program are expected to be met when the students complete the LRS curriculum. The LRS Program hopes to reassess student performance in a few years, once the first group of students is expected to graduate from the newly approved program that has launched this fall. Assessment at that time should target performance in the capstone courses of the program, especially those in the Math and Science specializations.

These results also highlight the considerable challenge of developing a profound understanding of Math and Science concepts/methods and their application to K-6 teaching. Students often come to Math and Science courses with preconceived notions of these fields that are quite contrary to what the faculty wishes to convey. The results indicate that it takes more than one course to instill a fundamentally different perspective.

3g. Use of Assessment Results of this SLO: Describe how assessment results were used to improve student learning. Were assessment results from previous years or from this year used to make program changes in this reporting year? (Possible changes include: changes to course content/topics covered, changes to course sequence, additions/deletions of courses in program, changes in pedagogy, changes to student advisement, changes to student support services, revisions to program SLOs, new or revised assessment instruments, other academic programmatic changes, and changes to the assessment plan.)

Because the first stage of countering misconceptions may be to make students aware of their existing conceptions, the instructors of GEOL 406 LRS have added instructional activities to their course intended to raise students' awareness of their own vocabulary-centric approach to Science and to recognize this approach in their note taking.

The IDC has expressed an interest in reevaluating student performance at the Capstone level (as previously mentioned). Moreover, to ensure that central concepts of Math and Science are consistently targeted throughout the curriculum, the program is exploring the possibility of organizing symposia or brown-bag meetings that enhance collaboration among faculty teaching related subject matter or core competencies.

4. Assessment of Previous Changes: Present documentation that demonstrates how the previous changes in the program resulted in improved student learning.

In 2011-12, the LRS Program assessed its students' reading comprehension. It was acknowledged that our students (1) come into the program lacking the necessary skills to thoroughly comprehend much of the assigned readings in the courses that they take and (2) that many students do not actually attempt to read the materials that are assigned in their courses and that (3) reading skills should ideally be developed in all classes irrespective of course content. The committee proposed to bring together faculty teaching in the program for a workshop/meeting to share ideas on how to:

1. Provide stronger support when assigning readings. This was also suggested by the instructors of the LSLA Program. It would require "doing more in-depth modeling, guided reading, and discussion of sample course readings with a focus on understanding, interpretation, evaluation, and critical analysis." (cf. CHS 480 report)
2. Make course readings an integral part of the learning experience through carefully crafted prompts.

The LRS Program is currently reexamining and modifying its Gateway course (LRS 300) in order to align it more closely with related content courses in the curriculum and to ensure continued focus on reading comprehension and other core competencies. The LRS Program was unable to devote time and resources to thematic workshops targeting reading comprehension during the 2012-13 academic year. It remains committed to organizing thematic meetings that enhance collaboration among instructional faculty and ensure consistent instruction in core competencies such as reading comprehension and – time permitting – aims to start implementation during 2012-13.

5. Changes to SLOs? Please attach an updated course alignment matrix if any changes were made. (Refer to the Curriculum Alignment Matrix Template, http://www.csun.edu/assessment/forms_guides.html.)

In the process of revising the program, all courses that are currently part of core and specialization specific curriculum have been aligned with Core SLOs as well as with Specialization Specific SLOs, respectively. They are attached here in a separate document.

6. Assessment Plan: Evaluate the effectiveness of your 5 year assessment plan. How well did it inform and guide your assessment work this academic year? What process is used to develop/update the 5 year assessment plan? Please attach an updated 5 year assessment plan for 2013-2018. (Refer to Five Year Planning Template, plan B or C, http://www.csun.edu/assessment/forms_guides.html.)

The Liberal Studies Program hopes that the currently proposed and attached 5-year assessment plan will provide a useful template to ensure that the department assesses essential competencies within a 5-year period. Future modifications should be expected as the faculty develops concerns or questions about strengths and weaknesses of the program offering.

7. Has someone in your program completed, submitted or published a manuscript which uses or describes assessment activities in your program? Please provide citation or discuss.

Matthew D'Alessio, one of the instructors of GEOL 406 LRS, has published the following article that relates to this past year's assessment activities in his course:

d'Alessio, M. A. (2012). Learning by teaching: Microteaching in geoscience content courses for preservice elementary teachers. Geological Society of America *Abstracts with Programs*, 44 (7), 574.

Abstract available online at https://gsa.confex.com/gsa/2012AM/finalprogram/abstract_208357.htm.

Poster available online at http://www.csun.edu/~mdalessio/files/GSA2012_microteaching.pdf.

8. **Other information, assessment or reflective activities or processes not captured above.**

Now that students are entering the newly designed Multiple Subject Teacher Preparation Program, it becomes important to gauge whether the new curriculum allows students to meet its SLOs. As mentioned above, to that purpose, a 5-year plan has been attached. Liberal Studies has also taken on a separate 'Interdisciplinary Studies' program with six tracks. This program was approved in Spring 2013. LRS intends to develop a separate assessment plan for this BA in the next two years, as students start to choose this major.