The Liberal Studies Program at SDSU is committed to an on-going process of assessment. Assessment is directed toward answering three questions:

- What do we want students to learn?
- How well are they learning what they need?
- How can we help them learn more efficiently?

Assessment of learning outcomes requires collection and analysis of data for the purpose of modifying and refining educational objectives, curriculum, and instructional methods to better meet student needs. Student success also includes evidence of program effectiveness, such as graduation rates and continuation to graduate or credential programs. These topics will be discussed in the order shown:

I. The Program Mission Statement

II. Evidence of Program Effectiveness

   A. Graduation Rates
   B. Continuation into a Graduate or Credential Program

III. Assessment of Student Learning Outcomes

   A. Goals and Outcomes
   B. Measuring Success
   C. Results 1: LIB S 498 Pass Rates
   D. Results 2: Good News about the Writing Quality of the Capstone Papers
   E. Results 3: CSET-Style Linguistics, Science, and Math Tests
   F. Improvements

I. Program Mission Statement

   The Liberal Studies major is designed for students who intend to teach at the elementary or middle school levels. The literacy, mathematics, and science foci allow students to pursue specific career goals, including special or bilingual education and middle school teaching.

   Individuals learn to think critically, analyze evidence thoughtfully, and write clearly and effectively. Graduates develop a rich understanding of the major subject areas—literature, history, mathematics, science, and the visual and performing arts—including why and how practitioners create new knowledge. They learn to identify and understand the developmental stages of children and to observe, interview, and tutor children effectively in classroom settings.

II. Evidence of Program Effectiveness

   Two lines of evidence indicate institutional effectiveness: the increase in four-year, five-year, and six-year graduation rates and the percentage of students continuing into a post-baccalaureate credential program, in spite of the on-going news (Oct. 2012) about a dearth of teaching jobs due to California’s extreme budget crisis.
A. Graduation Rates

The following table shows the average graduation rates for Liberal Studies first time freshmen who matriculated at SDSU during the indicated two year periods:

<table>
<thead>
<tr>
<th>Period</th>
<th>4-year</th>
<th>5-year</th>
<th>6-year</th>
<th>Key New Features of the Indicated Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-99</td>
<td>16.4</td>
<td>40.5</td>
<td>49.8</td>
<td>Baseline</td>
</tr>
<tr>
<td>2000-01</td>
<td>32.1</td>
<td>63.5</td>
<td>68.6</td>
<td>SDSU impaction criteria; LIB S tracking students</td>
</tr>
<tr>
<td>2004-05</td>
<td>39.3*</td>
<td>59.5</td>
<td>66.7</td>
<td>SDSU registration requirements and degree audits</td>
</tr>
<tr>
<td>2006-07</td>
<td>38.1^</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*4-year graduates in 2008-09. ^4-year graduates in 2010-11.

Starting in 2001, the CSU Chancellor’s Office granted SDSU the right to impact its most popular majors; students were no longer allowed to enroll in upper division major courses if they hadn’t met certain criteria. For the LIB S Program, impaction provided a mechanism for identifying students who would never be able to pass the two upper division math courses. By identifying these students early in their junior year, our assistant dean was able to get them to rethink their goals and choose a major in which they could graduate on time. A number of changes at both the LIB S major and the campus level have resulted in higher graduation rates and shorter times to graduation.

B. Continuation into a Graduate or Credential Program

In summer 2012 SDSU’s multiple subject credential programs became concerned about enrollment trends. Unusually low admissions to the credential programs for fall 2012 prompted a request by SDSU’s Associate Vice President for Academic Affairs to the National Student Data Clearinghouse for data: “The reports provide a list of institutions in which these students first enrolled after their graduation term. For both degree years, SDSU topped the list with 58% of NSDC-matched students attending SDSU as their first enrollment. As a percentage of all Liberal Studies Bachelor’s degree recipients, 40% attended SDSU as their first institution after graduation.”

<table>
<thead>
<tr>
<th>Graduation Year</th>
<th>Total Graduates</th>
<th># and % Enrolled in an SDSU Credential Program</th>
<th># and % Enrolled in a Graduate School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2009-summer 2010</td>
<td>279</td>
<td>112 40%</td>
<td>193 69%</td>
</tr>
<tr>
<td>Fall 2010-summer 2011</td>
<td>272</td>
<td>109 40%</td>
<td>188 68%</td>
</tr>
</tbody>
</table>

The Liberal Studies leaders were pleasantly surprised to find that such high percentages of students were continuing into graduate school, although both the percentage and number continuing into the SDSU credential programs were lower than a few years ago. The Clearinghouse data shows that a higher percentage of these graduates attending outside the San Diego area, presumably returning to their home or other area to earn their credentials in order to network better with future employers.

In response to its 2009 program review and the depressed job market for elementary-level teachers, the Liberal Studies Committee voted to change the 2011 curriculum so that all students could easily add a middle school authorization to their credential, thereby make them more attractive candidates for jobs.
III. Evidence of Student Learning

A. Goals and Outcomes: “What do we want students to learn?”
The overall goals for the San Diego State University Liberal Studies major were decided by faculty consensus in 1990 when the Liberal Studies Program designed the new 1991 major. The state of California had passed legislation requiring that future teachers complete subject matter preparation as part of a four-year, interdisciplinary, liberal arts bachelor’s degree followed by a fifth-year, post-baccalaureate credential program. Goals one through four listed in the SDSU General Catalog and the mission statement above were expanded in 2011 to include specific outcomes at the time SDSU instituted the WEAVEonline assessment management system.

By the end of the major, students will
1. Appreciate why and how practitioners in the five major subject areas—the visual and performing arts, literature, science, history, and mathematics—produce new ideas and confirm new knowledge.
   a. Succinctly explain what types of issues or topics practitioners in the different subject areas explore and the products they produce.
   b. Explicate the purpose(s) of literature, art, history, science, or math from the perspective of the viewer or user, with supporting examples.
   c. Differentiate between the processes and habits of mind of authors, painters, historians, scientists, and mathematicians.
2. Use basic concepts of the core subject areas—literature, the visual and performing arts, history, science, and mathematics—in new situations.
   a. When confronted with a need for new understanding, draw upon a depth of knowledge and skills to solve it, distinguishing what is relevant from what is irrelevant.
   b. Discuss concepts from a given subject area and show how they apply to real-world situations.
   c. Apply the principles of problem solving to a wide variety of situations.
3. Communicate information and concepts clearly and effectively:
   a. Organize and present an argument supported by examples from multiple sources.
   b. Use standard spelling, grammar, and punctuation.
4. Work effectively with elementary and middle school students.
   a. Recognize similarities and differences between the SDSU student’s learning at the university level and children’s learning of the same subject at the elementary and middle school level.
   b. Devise effective lessons based on what they have learned in their content courses.

B. Measuring success: “How well are students learning what they need?”
The fundamental purpose of assessment in the Liberal Studies Program is to improve student learning. Good assessment provides students with multiple opportunities to demonstrate understanding of content and skills. Good assessment requires collection and analysis of data for the purpose of modifying and refining educational objectives, curriculum, and instructional methods to better meet student needs.
The senior-level portfolio assessment begun in 1991 was replaced in 2003 by the much more manageable LIB S 498, Assessment in Liberal Studies, course. This course currently includes three assignments:
(1) a two-part capstone project,
(2) a California Subject Examination for Teachers (CSET)-style test or reflection with samples, and
(3) an in-class essay.
These assignments have evolved over the last eleven years as the leaders of the program asked different questions to assess the degree to which students were attaining the major’s outcomes. The three current assignments have proven especially useful in assessing student achievement because they can and have been focused on different subject areas.

The capstone builds on students’ work in the major’s junior-level core course, LIB S 300, Introduction to Liberal Studies. During this course students compare and contrast the purposes and habits of mind/processes of practitioners in the five major subject areas: literature, the visual and performing arts, history, science, and mathematics. They use as their guide the Subject Area Statements created in the early 1990s by supportive faculty from each of these disciplines.

Part 1 of the capstone project is usually a 10-page paper on the nature of one of the disciplines, most often the purpose and sometimes also the habits of mind/processes used by practitioners. In spring 2010 and summer 2011, for example, students considered the purposes of literature from the perspective of the reader. They used as their foundation an article that suggests that people gain 1) an understanding of history and culture, 2) entertainment, 3) a better idea of how to write themselves, and/or 4) psychological understanding when they read fiction and short stories. Students were given a list of five short stories. They had to argue that literature has two of the above purposes, using evidence from the first story they chose to support one purpose and evidence from a second story to support a second, different purpose. Five faculty readers used a rubric with the following criteria to judge how well the students dealt with content (Goals 1, 2) and organizational (3a) issues:

___ For each short story, the purpose is clearly identified.
___ Examples from the short stories are well-chosen & fully support the point being made.
___ Element of personal connection or insights into value of the works are clear.
___ Discussion as a whole is incisive, logical & thoughtful; there are no weak or undeveloped areas.
___ Works chosen are clearly very different; analysis of each provides some good contrasts.
___ Introduction is interesting & effectively sets the stage for later discussion.
___ The main point of the paper is revisited in the conclusion.

A separate reader judged all the papers (87 in spring 2010 and 64 in summer 2011) using a rubric for the technical features—grammar, punctuation, citations (Outcome 3b). During other semesters, topics have included the purpose of history, science, or mathematics or analysis and interpretation of art.

An experimental approach is used for Part 2 of the capstone. A lesson plan format for demonstrating and applying content knowledge has met with success (Goals 2 and 4b). This approach was first adopted for fall 2009 at the request of students in the spring 2009 LIB S 498 course, who believed that writing a lesson plan would later help them when they entered their
credential program. Notice the message MG (summer 2012 graduate—the first with a Foundational Level General Science certification) sent:

*The credential program is amazing! I am really student teaching! I'm at High Tech Middle Media Arts in Point Loma in a 6th grade science/math class. To help me plan my lessons better (I've been generating ideas but I need to carry them out better) can you please send me the lesson plan template we used for the Capstone? I have the general steps but I like how everything was written out for what we had to do at that step.*

The “lesson plan” for LIB S 498 is much more than a traditional lesson plan because students are asked to include everything they would say and everything the children would respond. How well Liberal Studies seniors are able to use the content and skills they have been learning throughout the program is judged based on these hypothetical responses.

CSET-style tests were first piloted (as an alternative to the traditional reflection paper) is spring 2009 because the program wanted students to prepare for the official CSET, desired a more quantitative measure of content knowledge (Goal 2 & for linguistics also 4a), and had difficulty recruiting and training faculty readers in science and math. The science test was created in spring 2009; the linguistics test, in fall 2011; and the mathematics test, in fall 2012. Each test includes a variety of multiple choice questions, which like the official CSET questions require analysis and thinking, plus one or two constructed response questions.

For the in-class essay, students reacted to different experiences they have had in the major. Their work is judged based on 1) whether or not they responded to the prompt, (2) how well they supported their ideas, and (3) how well they used Standard English (Outcomes 3a and 3b).

### Results 1: Overall Pass Rate for LIB S 498

Students in the LIB S 498 assessment course can earn a maximum of 120 points for the capstone project plus 80 points for the CSET-style test, i.e. 200 points total. They can earn a total of 50 points for the technical features of their capstone project. Students must earn 65% to pass and 90% to earn commendable. The in-class essay is use when deciding difficult cases but is primarily used for program feedback. The table below shows the aggregate results for the last four years plus partial results for the year in progress.

<table>
<thead>
<tr>
<th>Year or Semester</th>
<th>Number (First Time)</th>
<th>% Pass</th>
<th>% Commendable</th>
<th>% Satisfactory</th>
<th>% Fail</th>
<th># Fail due to Writing*</th>
<th>% Fail due to Writing*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>257</td>
<td>85.6</td>
<td>12.8</td>
<td>75.9</td>
<td>7.3</td>
<td>25</td>
<td>9.7</td>
</tr>
<tr>
<td>2009</td>
<td>260</td>
<td>86.5</td>
<td>7.7</td>
<td>79.2</td>
<td>13.5</td>
<td>25</td>
<td>9.6</td>
</tr>
<tr>
<td>2010</td>
<td>222</td>
<td>83.8</td>
<td>10.4</td>
<td>73.4</td>
<td>16.2</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td>2011</td>
<td>222</td>
<td>84.2</td>
<td>9.0</td>
<td>73.9</td>
<td>15.8</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>2012 sp &amp; su</td>
<td>89</td>
<td>91.0</td>
<td>11.2</td>
<td>79.8</td>
<td>9.0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Includes students who failed to earn 65% of the 50 pts needed to pass the writing/technical features or both the writing/technical features and content assessment.

Notice that the pass rates per year tend to be pretty stable. The good news is that the students who initially fail almost always resubmit during a later semester and pass, albeit in some cases
with help from the LIB S coordinator. One or two have even earned commendable. Usually students need to use one or more of the following strategies in order to succeed: (1) set up their own weekly deadlines and stick to them; (2) either make an outline prior to writing or, if they can’t think that way, at least write an outline based on the paragraphs they have written; and/or (3) avoid thinking in Spanish and writing in English OR using “big” words to try to impress the reader. 27.1% of the students at SDSU are Hispanic; only 33% are white; the rest are from various ethnic and language groups. For many, English is a second language.

Results 2: Good News about the Writing Quality of the Capstone Papers
Professors Dale Spector, Charlie Littrell, and others began requiring Pearson’s My Writing Lab exercises in the LIB S 300 course in fall 2009. Given that students take LIB S 498 about a year or more after they take LIB S 300, Professors Roeder and Egipto predicted that they would see fewer students failing LIB S 498 due to poor writing starting in 2010. Notice on the chart above that in 2010 and 2011 only 6-8 students failed LIB S 498 due to the technical features of their writing while in 2008 and 2009 25-27 students failed due to writing. This is a dramatic drop! Capstone reader Jamie Madden is convinced this change is a significant.

Results 3: CSET-Style Linguistics, Science, and Math Tests
In 2003 in response to the federal No Child Left Behind law, California began requiring that prospective elementary teachers demonstrate subject matter competency by passing the official California Subject Examinations for Teachers (CSET). The LIB S Program briefly required that its students take and submit scores for one of the three official CSET subtests until it learned that privacy rules prevent programs from requiring submission of scores except for credential program admissions purposes. Voluntary submissions proved ineffective and data submitted to SDSU’s credential programs—93% pass rate for Caucasians, 70% for Hispanics, etc. for students who took the tests between September 2007 through July 2008—did not include students who went to other credential programs or any control over how early students took the tests. Thus, in spring 2009, the Liberal Studies Program piloted its first CSET-style test.

Results achieved have been very consistent: for science 68.6% in spring 2009, 68.7% in summer 2011, and 70.3% in summer 2012 and for linguistics, 68.9% in fall 2011 and 67.2% in spring 2012. Math will be tried for the first time in fall 2012. Item analyses for the summer 2011 and 2012 science tests showed ~70% success on the questions in each subject area; only earth science was a little lower (due to a couple of very challenging questions). Analysis of the students whose science scores were in the lowest, second, third, and top quartile showed only a minor correlation with the scores they earned on the capstone project for history content. Thus, the CSET-style test provides a valuable assessment that complements the capstone assessment. The program always requires student assessment in two subject areas using two different measures.

F. Improvements: “How can we help students learn more effectively?”
The program is satisfied with the overall pass rate for LIB S 498, with the recognition that 98% ultimately pass albeit sometimes the second time with a moderate amount of assistance. The program leaders would like to find a way to help students plan enough time for LIB S 498; it should be treated as a 3-unit course. Currently, each semester four to six students do not submit their capstones. While about half of these students have legitimate emergencies, the others procrastinate and fail to manage their time effectively.
The program is quite pleased with the results presented above for Goal 3b: Communication now that students are completing the My Writing Lab activities in the junior-level LIB S 300 course. Students’ writing is so greatly improved that the program will be implementing a rubric that better defines excellent, good, and satisfactory levels of writing, not just pass and not pass. The program predicts it will see further improvements as students in the 2011 and 2012 catalog years begin taking LING 253/RWS 253 to learn better how to proofread (if they earn less than 8 on the WPA) and now that all sections of ENGL 306W are taught by Prof. Galbraith, who helps students identify the parts of sentences so that they can punctuate correctly. Students in the new literacy focus will also have the benefit of three linguistics courses, not just the two in the earlier program. The third course, LING 430, English Grammar for Prospective Teachers, will help graduates learn how to explain grammar to the students they will ultimately teach. An ability to write well (as well as teach writing well) is one of the most important skills that graduates can take into the job market.

While an average of 67% on a CSET-style test is not great compared to what students expect in a regular class, the program is satisfied, especially since in science students take their courses over a period of four years and most have not taken the final physics course by the time they take the CSET-style science test. If a 60% score were required for passing, as is the case for the official CSET, 32 out of 40, i.e. 80%, of the students would have passed this summer (2012). Given that most of them take the LIB S 498 CSET-style test before they take the official CSET, requiring such a test motivates students to do the studying that will help them pass one of the three official CSET subtests. The program would like to see that a higher percentage of its Hispanic students are passing the official CSET the next time it requests information from the College of Education credential programs database.

Part 2 of the capstone project—specifically the lesson plan—requires further attention. The visual and performing arts faculty and LIB S 300 instructors are working with the coordinator on how better to prepare students for the LIB S 498 lesson plan. Students need to be able to look at subject matter material and decide what to use for the children’s guided practice and then—working backwards—plan what to say and model prior to the guided practice so that children will be able to succeed. By writing a “script” for exactly what they would say and what their hypothetical children would respond, they prove they can use what they have been learning in their future careers. Success in a future classroom would be the ideal test of whether each graduate has satisfied the program’s outcomes; unfortunately, tracking such success quantitatively is costly so the program can only say that messages from graduates like those featured on the home page suggest students are succeeding. If you are a graduate, let us know how you are doing!