

# College of Education and Affiliated Programs Annual Assessment Report Template – Fall 2011

**Educational Technology** 

Note: This report presents and analyzes data from the 2010-2011 academic year.

## **Background**

1. Describe your program (enrollment, number of faculty, general goals). Have there been any major changes since your last report?

The educational technology program at CSULB prepares its graduates to capitalize on the potential of educational technology to improve learning. In connection with the mission of the College of Education, the program educates graduates who understand technology in relation to its societal and cultural context, critically evaluate benefits and limitations of technologies, and build on ways of using technology towards socially positive ends. Specifically, the program prepares graduates for educational technology leadership roles in schools, educational institutions, and other agencies. It also provides a foundation for individuals planning to pursue doctoral degrees. Graduates of the program learn strategies for applying theoretical perspectives to use technology in the service of practical problems. They learn to evaluate, design, develop, and effectively use technology for educational purposes. The program fully supports the goal of the College to "prepare socially-responsible leaders for a rapidly-changing, technologically-rich world."

**Table 1**Program Student Learning Outcomes and Relevant Standards

	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
SLOs	Research/apply	Synthesize leadership	Apply instructional design	Integrate theoretical	Demonstrate effective written,
	knowledge of	principles within the	principles to develop and	perspectives to review,	electronic, and oral
	multicultural,	practice of educational	evaluate electronic	interpret, and/or conduct	communications that reflect
	ethical, and legal	technology planning,	materials for learning.	research in educational	crucial thinking.
	issues pertaining to	coordination and		technology.	
	using educational	professional			
	technologies and	development.			
	networks within the				
	global community.				
Signature	Final project	Final project	Web design project;	Final project	Project
Assignment(s)			Multimedia project		
National	Educational	Candidates	Candidates demonstrate	Candidates demonstrate	Use technology to communicate
Standards	technology leaders	demonstrate the	the knowledge, skills, and	knowledge, skills, and	and collaborate with peers,
	understand the	knowledge, skills, and	dispositions to design	dispositions to evaluate the	parents, and the larger
	social, ethical, legal,	dispositions to use	conditions for learning by	adequacy of instruction	community to nurture student
	and human issues	processes and	applying principles of	and learning by applying	learning. Candidates: 1. Model
	surrounding the use	resources for learning	instructional systems	principles of problem	the use of telecommunications
	of technology in PK-	by applying principles	design, message design,	analysis, criterion-	tools and resources for
	12 schools and	and theories of media	instructional strategies,	referenced measurement,	information sharing, remote
	develop programs	utilization, diffusion,	and learner characteristics.	formative and summative	information access, and
	facilitating	implementation, and	Candidates demonstrate	evaluation, and long-range	multimedia/hypermedia
	application of that	policy-making.	the knowledge, skills, and	planning.	publishing in order to nurture
	understanding in		dispositions to develop		student learning. 2. Communicate
	practice throughout		instructional materials and		with colleagues and discuss
	their		experiences using print,		current research to support
	district/region/state.		audiovisual, computer-		instruction, using applications
			based, and integrated		including electronic mail, online
			technologies.		conferencing, and Web browsers.
					3. Participate in online
					collaborative curricular projects
					and team activities to build
					bodies of knowledge around

	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
					specific topics. 4. Design,
					develop, and maintain Web pages
					and sites that support
					communication between the
					school and community.
Conceptual Framework	Values Diversity, Prepares Leaders	School Improvement; Service and Collaboration	Promotes Growth	Promotes Growth; Research and Evaluation	Promotes Growth
NCATE Elements	Knowledge and Skills  – Other; Student Learning – Other	Knowledge and Skills – Other	Student Learning – Other	Knowledge and Skills – Other	Professional Dispositions

Table 2

Program Specific Candidate Information, 2010-2011 (snapshot taken F10) – Transition Point 1 (Admission to Program)

	Number Applied	Number Accepted	Number Matriculated
TOTAL	17	16	14

#### Table 3

Program Specific Candidate Information, 2010-2011 (snapshot taken F10) – Transition Point 2 (Advancement to Culminating Experience)

	Number
Comps <sup>1</sup>	20
Project (699) <sup>2</sup>	3

#### Table 4

Program Specific Candidate Information, 2010-2011 (snapshot taken F10) – Transition Point 3 (Exit)

	Number
Degree	21

#### Table 5

Faculty Profile 2010-11

Status	Number	
Full-time TT/Lect.	3	
Part-time Lecturer	2	
Total:	5	

<sup>&</sup>lt;sup>1</sup> This is data on the number of students who *applied* to take the comprehensive examination in Summer 2010, Fall 2010, or Spring 2011. The data include students who may not have taken or passed the examination(s).

<sup>&</sup>lt;sup>2</sup> This is data on students who were conducting culminating projects during Fall 2010 and Spring 2011. This figure may include students who actually "crossed into" this transition point prior to Fall 2010 and were still making progress on their theses at this time.

2. How many of the total full- and part-time faculty in the program reviewed and discussed the assessment findings described in this document? Please attach minutes and/or completed worksheets/artifacts to document this meeting.

The data meeting took place from 10 am to 12:30 pm on November 18, 2011 in LA1-203. Three full-time program faculty members participated in the discussion. Meeting minutes are attached at the end of this document.

#### **Data**

- 3. Question 3 is in 2 parts focused on *primary* data sources related to: student learning and program effectiveness/student experience:
  - a. <u>Candidate Performance Data</u>: Provide *direct* evidence for the student learning outcomes assessed this year and describe how they were assessed (the tools, assignments, etc. used).
     Describe the process used for collection and analysis. Present descriptive statistics such as the range, median, mean, percentage passing as appropriate for each outcome.

**Table 6**Program Student Learning Outcomes and Signature Assignments

Student	Student Learning Outcome	Signature	Description of the Assignment
Learning	Description	Assignment(s)	
Outcome		Course(s)	
1	Apply knowledge of multicultural, ethical, and legal issues pertaining to using educational technologies and networks within the global community.	ETEC 525	Option one: research and write a paper related to the social and cultural implications of technology. Option two: implement a global learning project involving collaboration with a classroom in another country.
2	Synthesize leadership principles within the practice of educational technology planning, coordination and professional development.	ETEC 530	Write a grant for educational technology funding.
3	Apply instructional design principles to develop and evaluate electronic materials for learning.	ETEC 551 ETEC 570	Evaluate a web site including a comprehensive overview of the design, the content, and the contribution of the website to the field. (ETEC 551).  Create an interactive lesson or a tutorial and create a professional-looking presentation based on visual principles (ETEC 570).
4	Integrate theoretical perspectives to review,	ETEC 510	Compare the prominent learning theories adopted in the field of educational

Student	Student Learning Outcome	Signature	Description of the Assignment
Learning	Description	Assignment(s)	
Outcome		Course(s)	
	interpret, and/or conduct		technology and make connections between
	research in educational		theories and practices.
	technology.		
5	Demonstrate knowledge,	ETEC 523	Develop an electronic portfolio as a web
	skills, and dispositions to		site, wiki, a blog, or any Web 2.0
	locate, evaluate, and select		technology.
	technology resources for		
	professional development.		

During this assessment cycle the program faculty reviewed the overall comparison data as well as the data relevant to students' exit requirements, which address each of the five program SLOs listed in Table 6 above. Both Figures 1 and 2 below summarize the means across the five SLOs. Figure 1 shows that most students (about 70%) exceeded expectations on SLOs 1 and 4. Figure 2 also indicates that in general, students did particularly well on SLOs 1 and 4, though a significant number of them (about 30%) were struggling to meet SLO 2. On average, students met the five SLOs, with the means ranging from 3.04 (SLO 2) to 3.65 (SLO 1).

**Figure 1** *Educational Technology AY10-11 SLO Comparison* 

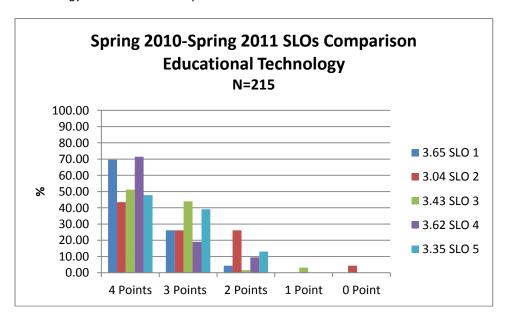
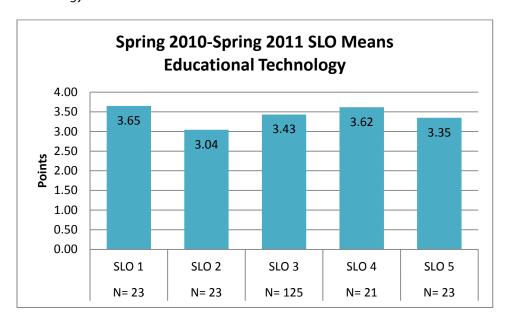


Figure 2

Educational Technology AY10-11 SLO Means



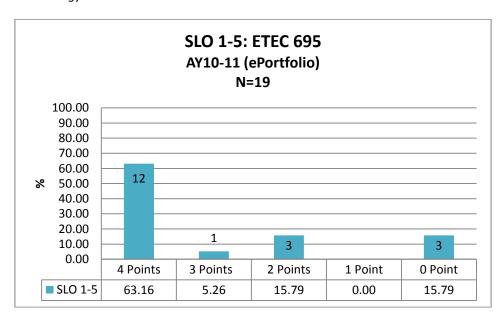
The program's exit requirements include an electronic portfolio and one of the following options: (a) comprehensive exam, (b) thesis, and (c) project. All students who started their program of study after Fall 2006 are required to develop and maintain an electronic portfolio. There are three check points for this requirement. First, faculty members introduce students to this requirement in a core course, ETEC 523, during which students create a framework and start building their portfolio. Students then continue to develop the portfolio during the course of their study. Second, before students can apply to take a capstone course (ETEC 695, ED P 698, or ED P 699, depending on which option the students select), they need to demonstrate that they have maintained their portfolio. Third, toward the end of the capstone course, students turn in their portfolio and have an exit interview with the instructor of the capstone course. The instructor then scores the portfolio according to a rubric.

The portfolio data that the faculty reviewed this time come from ETEC 695; this course prepares students for the comprehensive exam and uses electronic portfolios as the signature assignment. As 20 out of 23 students who completed the exit requirements during this assessment cycle opted for the comprehensive exam, the data are able to represent the majority of the students' performances when they exit the program. The following discussion provides a description of the data relevant to this assignment.

During the academic year 2010-11, the program collected portfolio data from 19 students (9 students during Fall 2010 and 10 students during Spring 2011). One student who graduated during this academic year had entered the program before Fall 2006 and thus was not required to complete the portfolio assignment. Figure 3 shows that among the 19 students, 12 exceeded the expectations, one met the expectations, three met the expectations with reservation, and three students did not receive any points for this assignment (probably because they did not turn in the assignment). In Fall 2010, the data were reported based on a 1-4 rating scale. Figure 4 shows the mean scores on the following three

criteria: artifacts, reflections, and writing. These means range from 3.22 to 3.67. In Spring 2011, the data were reported based on the points that the students had received. Criteria 1 to 3 respectively had the following possible points: 16, 16 and 8. Figure 5 shows that the average points that the students had received were 13.2 out of 16 on criterion 1 (artifacts), 12.4 out of 16 on criterion 2 (reflections), and 6.4 out of 8 on criterion 3 (writing).

**Figure 3** *Educational Technology AY10-11 Score Distribution-SLOs 1-5* 



**Figure 4** *Educational Technology Fall 2010 Criteria Score Means-SLOs 1-5* 

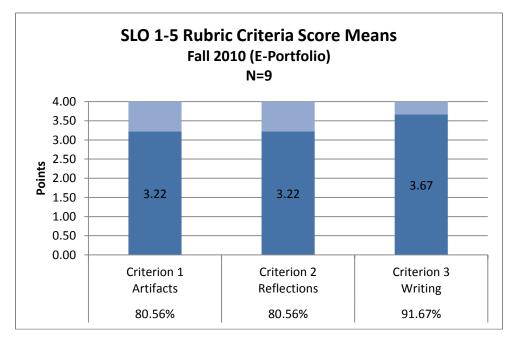
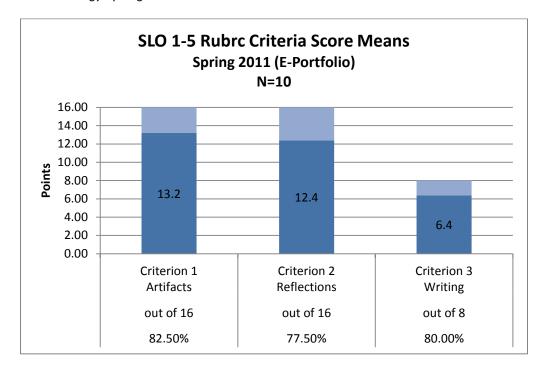


Figure 5

Educational Technology Spring 2011 Criteria Score Means-SLOs 1-5



b. <u>Program Effectiveness Data</u>: What data were collected to determine program effectiveness and how (e.g., post-program surveys, employer feedback, focus groups, retention data)? This may be indirect evidence of student learning, satisfaction data, or other indicators or program effectiveness. Describe the process used for collection and analysis. Present descriptive statistics such as the range, median, mean, or summarized qualitative data, for each outcome.

The CED Assessment Office helped with the distribution, collection and analysis of an exit survey in Spring 11. The survey collected information upon students' exit about their demographics, self-assessments of the attainment of the program SLOs, experiences with the program, levels of general satisfaction, and suggestions for improving the program. Nine students responded to the survey, but two students skipped the majority of the questions. Even though the sample was too small to be representative, the survey provided a mechanism for faculty to understand students' perspectives and experiences.

The program faculty were pleased to find that students' responses were generally very positive. For instance, Question 7 asked students to check if they had met each of the five program SLOs; the students who responded had selected either "strongly agree" or "agree." Question 17 asked students to assess their ability as a result of the program to locate online resources, use technology ethically, evaluate the reliability and quality of online resources, and use technology to enhance their professional work; they all reported 100%. The students had not only indicated their attainment of the program SLOs, but also showed their confidence in making the best use of technology academically and professionally. Regarding students' satisfaction with advisement, orientation and other support, they all expressed either "very satisfied" or "satisfied." When asked what had been the most valuable aspects of

the program, students' responses ranged from the subject matter, the faculty, writing skills, networking with peers, and hands-on experiences.

Students also made valuable suggestions for improving the program. Their suggestions included the following: a better support system for project and thesis candidates, offering a field experience course or more electives pertaining to educational technology, writing support, more experience with instructional design, making Adobe Flash a stand-alone course, and less emphasis on applications that require a steep learning curve, such as Flash. Several of the suggestions called for further discussions at future program meetings, but during the data meeting the faculty were able to reach an agreement on Adobe Flash. Flash, an authoring tool for creating interactive media, has been a required topic in ETEC 570 but in the future, students will have options to learn either Flash or to work on other multimedia projects. Students who would like to become multimedia course developers usually found the application very practical whereas students who plan to continue teaching tended to find it not relevant. Giving students options will help to establish a direct connection between the course requirement and students' career goals.

4. <u>OPTIONAL</u>: You may provide *additional* information (e.g., other data, copies of letters of support from granting agencies or school staff, etc.) about candidate performance, the student experience or program effectiveness used to inform programmatic decision making. This may include quantitative and qualitative data sources.

## **Analysis and Actions**

5. What do the data for each outcome say regarding candidate performance and program effectiveness? Please note particular areas of strength or in need of improvement.

#### Electronic portfolio assignment:

Students are successfully completing the electronic portfolio assignment and reflecting on key artifacts they have created during the course of the program. Although each SLO is assessed in signature assignments, the numeric electronic portfolio scores do not meaningfully contribute to the assessment of SLOs. Students' artifacts in their portfolios have already been assessed. In their portfolios they are thinking about how these items fit together. In this assignment, they are being assessed on their reflections, artifacts, and writing.

#### Adobe Flash:

As stated previously, the program faculty has decided to make changes on the requirement regarding Adobe Flash. Students will be able to use either Flash or a video editing tool for the development of their multimedia project in ETEC 570.

6. How do these findings compare to past assessment findings?

The findings from the five overall SLOs were similar to past findings. However, regarding the data relevant to the exit requirements and the exit survey, it was the first time for the program to analyze these data. No past assessment findings in these areas are available for comparison.

7. What steps, if any, will be taken with regard to curriculum, programs, practices, assessment processes, etc. based on these findings in Questions 5 and 6? Please link proposed changes to data discussed in Q5.

### Electronic portfolio assignment:

Program faculty will reevaluate the electronic portfolio assignment. This will include considering new options that are made possible by CSULB's D2L course management software.

#### Adobe Flash:

The faculty will revise the guidelines for the final project (i.e., the multimedia assignment) in ETEC 570 and develop two rubrics for evaluating this assignment. Students will be given options (i.e., to use either Flash or a video editing tool for the assignment). One rubric will be used to evaluate students' Flash project and the other will be used to evaluate students' video project.

#### **Action Plan**

Priority	Action or Proposed Changes To Be Made	By Whom?	By When?
1	Investigate D2L support for e-	Teresa*,	12/23/2012
	portfolios	Steve, Ali	
2	Revise e-portfolio assignment and	Steve*,	9/15/2012
	reconsider its role in the	Teresa, Ali	
	assessment process		
3	Revise the assignment on Adobe	Ali*	9/15/2012
	Flash		

<sup>\*</sup>Denotes the person coordinating the effort.

## Minutes of Assessment Data Review Meeting Educational Technology Program

November 18, 2011

Present: Teresa Chen, Ali Rezaei, Stephen Adams

Recorded by: Stephen Adams

The meeting began at 10 AM. The major topic of the meeting was a program requirement to complete electronic portfolios for students' overall experiences that also serves as the signature assignment for ETEC 695. The faculty reviewed data from the assessment office. There was some confusion about data that was labeled as pertaining to the comprehensive exam.

(Note: it was subsequently determined that the data was mislabeled and was actually from the electronic portfolio requirement, not from the comprehensive exam. The assessment office does not receive data on comprehensive exam performance.)

There was an extended discussion of the role of the electronic portfolio requirement. The rubric has three main elements pertaining to the artifacts, reflections, and writing. The 0-5 scores do not add meaningful information to the 5 SLOs listed on the assignment.

In connection with this discussion, faculty also noted that Beachboard's new Desire to Learn (D2L) software has support for electronic portfolios. It was decided that revision of the electronic portfolio assignment would be appropriate, as well as reconsidering its role in the assessment process.

Faculty also reviewed exit surveys of students in the program, who were generally positive about their experiences.

The main action items are as follows:

Teresa will invite a representative from academic technology to discuss support for electronic portfolios in D2L.

Steve will lead a process to revise the signature assignment for ETEC 695.

The meeting was adjourned at 12:30.