ANNUAL PROGRAM REPORT

College	CEAS
Department	TED
Program	Educational Technology Graduate Program
Reporting for Academic Year	2016-2017
Last 5-Year Review	2010-2015
Next 5-Year Review	2015-2020
Department Chair	Eric Engdahl
Date Submitted	10/18/2017

1. SELF-STUDY (about 1 page)

A. Five-year Review Planning Goals

The following outlines the status of items from the Educational Technology Graduate Program's current 5-year Plan (2016-2021). The five-year plan focused on re-visioning and enhancing the academic quality of the Program.

● Instituting a three-tiered admission review process.
Applicants to our program were reviewed in a three-tier process: (1) initial screening with their GPA qualification and completeness of required document submission by the program secretary, (2) the program coordinator's review, and (3) program admission committee review.

● increasing candidate's use of tablet or handheld devices and candidate's application of such devices to comply with STEM and NGSS standards.

● helping candidates to develop and demonstrate analytical skills in reviewing literature and interpreting informational data.

● Hiring qualified faculty in the program to support the program's curricular needs.
Although we have already had two highly qualified full-time faculty, two adjunct faculty with extensive experiences and skills in the field of educational technology were hired to teach a few courses in our program. One of them, Ms. Arrash Jaffarzardeh, has been well accepted by our students and regularly taught in our program in the past three years. With one of the two full-time faculty, Dr. Bijan Gillani, will start FERPing in Fall 2018, we hope we will have a tenure-track faculty position open in the near future to maintain the quality of our teaching.

● Increasing funding for updating instructional equipment, hardware and software.
Funding for equipment, hardware, and software has been addressed with the implementation of the university-wide student fee and funding system from the college. It has been a great relief to see faculty able to teach with the most cutting edge equipment, such as Mondopad and Panopto technology.

B. Five-year Review Planning Goals Progress

The tremendous progress toward our proposed goals is addressed as follows.

● Instituting a three-tiered admission review process. All applicants to our program were reviewed in a three-tier process.
a. Initial screening with their GPA qualification and completeness of the required documents by the program secretary. Only those applicants who meet the basic GPA requirements and complete the submission of all required documents will be forwarded to the program coordinator for further review.
b. The 2nd stage of admission review is carried out by the program coordinator. For highly qualified applicants, such as applicants with high GPA, good recommendation letters, and demonstrating passion for our program, the program coordinator would admit regularly without provision.
c. The 3rd tier of admission review process will be conducted by the program admission committee which consists of two full-time faculty and one adjunct faculty. The committee reviews applicants whose GPA and technological skills are in the borderline.
The three-tiered admission review process has been implemented and has successfully addressed the quality of applicants.

● Increasing candidate's use of tablet or handheld devices and candidate's application of such devices to comply with STEM and NGSS standards. A proposed course and projects were accepted and we have implemented them in our program in the past five years. EDUI6250 iPad Application development proved to be highly successful. Students who learn to develop iPad/iPhone application have become much more marketable toward their career goals. Our STEM course, EDUI 6240 Math Science and Technology, takes an integrated, interdisciplinary, and collaborative complimentary approach. This approach has been highly successful. Through the course, we also have integrated the Next Generation Science Standard (NGSS) in curriculum. Furthermore in our interdisciplinary approach we have connected to Common Core Standard, as well as Mathematics Standards. According to students' input, they highly enjoy such approach and they think it is the most practical and useful approach to teach STEM.

● Helping candidates to develop and demonstrate analytical skills in reviewing literature and interpreting informational data. To reach the goal, the instructor designs and develops new course contents, activities, research tools, assignments, and assessments for EDUI6500, Research in Educational Technology class to help improving candidate's analytical skills in reviewing literature and analyzing research data. New online research tools, such as diigo, google forms, and spreadsheets, are introduced in the research class. A new assignment, such as online bibliography collection with Zotero has been implemented.

● Hiring qualified adjunct faculty in the program to support the program's curricular needs. Although we have already had two highly qualified full-time faculty, two adjunct faculty with extensive experiences and skills in the field of educational technology were hired to teach a few courses in our program. One of them, Ms. Arrash Jaffarzardeh, has been well accepted by our students and regularly teaches in our program in the past three years. With one of the two full-time faculty, Dr. Bijan Gillani, will start FERPing in Fall 2018, we hope we will have a tenure-track faculty position open in the near future to maintain the quality of our teaching.

● Increasing funding for updating instructional facilities, equipment, hardware and software.

Working hard with the professional staff at CSUEB to solve the technical problems in the classroom of VBT136.
a. Since Fall 2011, we have been able to apply Panopto technology, the technology with lecture capture capability also called East Bay Replay, to record our face-to-face teaching sessions so that students are able to review the course contents at any time they wish.
b. Since Fall 2015, we have applied Mondopad and Mikogo technologies to live broadcasting between Hayward and Concord campuses. With the integration of Mondopad and Mikogo technology, we are also to connect our students both at Hayward and Concord campuses.
c. Starting from Spring 2016, we have Zoom professional edition for faculty to carry out online synchronous instruction regularly.

C. Program Changes and Needs

● Overview:

In order to continue our success in preparing our students for the current job market demands, the Educational Technology Program is in need of new faculty, facilities, and latest technological equipment. In the academic year of 2016-2017, the changes and updates that our program has made from last year's report include curriculum, faculty, resources, and assessment.

● Curriculum:
We expanded the effort to incorporate teaching with tablet and handheld devices. These efforts were successful and, as a result, we have started offering EDUI6250 iPad Apps Development for Educators class since Spring 2012. In addition, EDUI 6240 Math Science and Technology class with a focus on STEM curriculum and integration of tablet and handheld devices' apps, has also been offered. Both courses are very popular to our candidates as well as to students who major in digital graphics.

In response to our Program Learning Objective #4, students graduating with a Master of Science (M.S.) in Educational Technology Master Program from California State University, East Bay will be able to "gather, use, and analyze data, bibliographic and other resources of materials extensively and critically," we design and develop new course contents, activities, research tools, assignments, and assessments for EDUI6500, Research in Educational Technology class to help improving candidate's analytical skills in reviewing literature and analyzing research data. New online research tools, such as Zotero, diigo, google forms, and google spreadsheet, are introduced and exercised in the class. A new assignment, online bibliography collection with Zotero has been implemented since Fall 2016. Our collected data has shown that our students' analytical skills in reviewing literature and analyzing information data have been improved with the integration of the new tools and new assignment.

Although a few new apps and new research tools have been added into our curriculum to enhance our students' learning, our program is in need to have a curriculum budget for faculty to purchase or subscribe updated, emerging, and needed curriculum tools to keep up to date with current technology.

● Faculty:
Although we possess a superior faculty which makes it possible to run an extremely complex curriculum and information technology environment, one full-time faculty, Dr. Bijan Gillani, will take Faculty Early Retirement Program (FERP) starting from Fall 2018. Our program will need to hire a new full-time faculty soon.

● Resources:
We worked hard with the professional staff at CSUEB to solve the technical problems in the classroom of VBT136. Since Fall 2011, we have been able to apply Panopto technology, the technology with lecture capture capability also called East Bay Replay, to record our face-to-face teaching sessions so that students are able to review the course contents at any time they wish. Since Fall 2015, we have applied Mondopad and Mikogo technologies to live broadcasting between Hayward and Concord campuses. Since Spring 2016, we have started to use the Zoom profession version for our online synchronous instruction.
As technology is advanced rapidly, our program is in need to purchase new facilities, such as 3D printer for our EDUI6240, Math, Science, and Technology class, google cardboard for students to explore virtual reality and augmented reality.

● Assessment:
We have built a holistic 5-year assessment plan with rubric for all assignments in the courses we offered. In the past year, we changed the assessment data collection tool from TaskStream to Blackboard. Our students' performance assessment data in signature assignments were collected in Blackboard. Such change helps us to synchronize all students' performance data in one platform and also helps to reduce students' additional costs in subscribing to TaskStream. In addition, we have also implemented new student's application data submission via google forms and data collection via google spreadsheet since November 2016. Although we still accept hard-copy application, we hope to move toward all electronic collection in the future. We also need some training for faculty and staff in getting familiar with the data collection systems to better serve our students.

2. **SUMMARY OF ASSESSMENT (about 1 page)**

A. Program Student Learning Outcomes

Educational Technology Master Program, Program Student Learning Outcomes (PLOs) include:

1. Assess the importance and use of technology to support diverse student's learning.
2. Identify and investigate educational technology theories and instructional design principles to generate new ideas, projects, and materials for diverse students.
3. Create and develop effective instructional or e-learning materials by choosing and applying appropriate tools and design theories individually and collaboratively.
4. Gather, use, and analyze data, bibliographic and other resources of materials extensively and critically.
5. Write and present scholarly findings and projects independently.

Our program curriculum map shows alignment of the Program Student Learning Outcomes (PSLOs) and CSUEB ILOs. You can find the matrix in the appendix at the end of the document.

B. Program Student Learning Outcome(s) Assessed

All of the five Program Student Learning Outcomes (PLOs) have been assessed in the past academic year. The specific course numbers that used to assess each PSLO are listed below:

1. Assess the importance and use of technology to support diverse student's learning. (EDUI6110, EDUI6200, EDUI6350, EDUI6600, EDUI6899)
2. Identify and investigate educational technology theories and instructional design principles to generate new ideas, projects, and materials for diverse students. (EDUI610, EDUI6200, EDUI6350, EDUI6240, EDUI6600, EDUI6210)
3. Create and develop effective instructional or e-learning materials by choosing and applying appropriate tools and design theories individually and collaboratively. (EDUI6200, EDUI6350, EDUI6600, EDUI6210, EDUI6005, EDUI6250, EDUI6899)
4. Gather, use, and analyze data, bibliographic and other resources of materials extensively and critically. (EDUI6500, EDUI6350, EDUI6899, EDUI6909)
5. Write and present scholarly findings and projects independently. (EDUI6500, EDUI6899, EDUI6909)

In response to our Program Learning Objective #4 particularly, we design and develop new course contents, activities, research tools, assignments, and assessments for EDUI6500, Research in Educational Technology class to help improving candidate's analytical skills in reviewing literature and analyzing research data. New online research tools, such as Zotero, diigo, google forms, and google spreadsheet, are introduced and exercised in the class. A new assignment, online bibliography collection with Zotero has been implemented since Fall 2016. Our collected data has shown that our students' analytical skills in reviewing literature and analyzing information data have been improved with the integration of the new tools and new

assignment.

Our Program Learning Objective #4 can also be assessed in the technology case study assignment in EDUI6350, Educational Technology for Language and Social Studies class. The technology case study assignment requires students to "gather, use, and analyze data, bibliographic and other resources of materials extensively and critically" following a research approach to study and investigate a real world technology integration case.

C. Summary of Assessment Process

Our program assessment system have been developed and confirmed by faculty in the program and the department chair of Teacher Education. The specific system includes initial, midpoint and pre-culminating, and culminating assessment: Decisions about candidate performance are based on multiple assessments made at multiple points before program completion. The models focus on student performance; with early, mid-point and summative measures. Authentic assessments are a focal point for program assessment.

The assessment tools and data source that we use for the assessment process include:
- Signature assignments
- Student course evaluation
- Informal student's email feedback
- Course award and certificate
- Exit survey

The evidence that we have used to document changes include syllabi, course lectures, Panopto recordings, online session recordings, student's projects, course evaluation, Blackboard online course materials, etc.

D. Summary of Assessment Results

Summary of our program assessment results is listed as follows:

- In response to our Program Learning Objective #4 particularly, we design and develop new course contents, activities, research tools, assignments, and assessments for EDUI6500, Research in Educational Technology class to help improving candidate's analytical skills in reviewing literature and analyzing research data. New online research tools, such as Zotero, diigo, google forms, and google spreadsheet, are introduced and exercised in the class. A new assignment, online bibliography collection with Zotero has been implemented since Fall 2016. With the addition of applying the research tool, Zotero, and the incorporation of learning activities of Google Forms, literature review analysis, and critique, we found an overall increase in signature assignment of literature review in EDUI6500 from 3.92 (2015-2016) to an overall score of 3.96 (2016-2017).

Our Program Learning Objective #4 can also be assessed in the technology case study assignment in EDUI6350, Educational Technology in Teaching of Language Arts & Social Studies class. The technology case study assignment requires students to "gather, use, and analyze data, bibliographic and other resources of materials extensively and critically" following a research approach to study and investigate a real world technology integration case. Technology case study is a signature assignment in EDUI6350 class. According to the data collected in Blackboard, we found that an overall increase in the signature assignment of technology case study in EDUI6350 from 3.95 (2015-2016) to an overall score of 3.97 (2016-2017).

- From students' performance in signature assignments in EDUI6110, it is found that students have a better understanding of the course contents due to the incorporation of lecture capture technologies. For example, student's website evaluation presentation signature assignment grades have increased from an average score of 3.97 in Fall 2015 to 4.0 in Fall 2016.

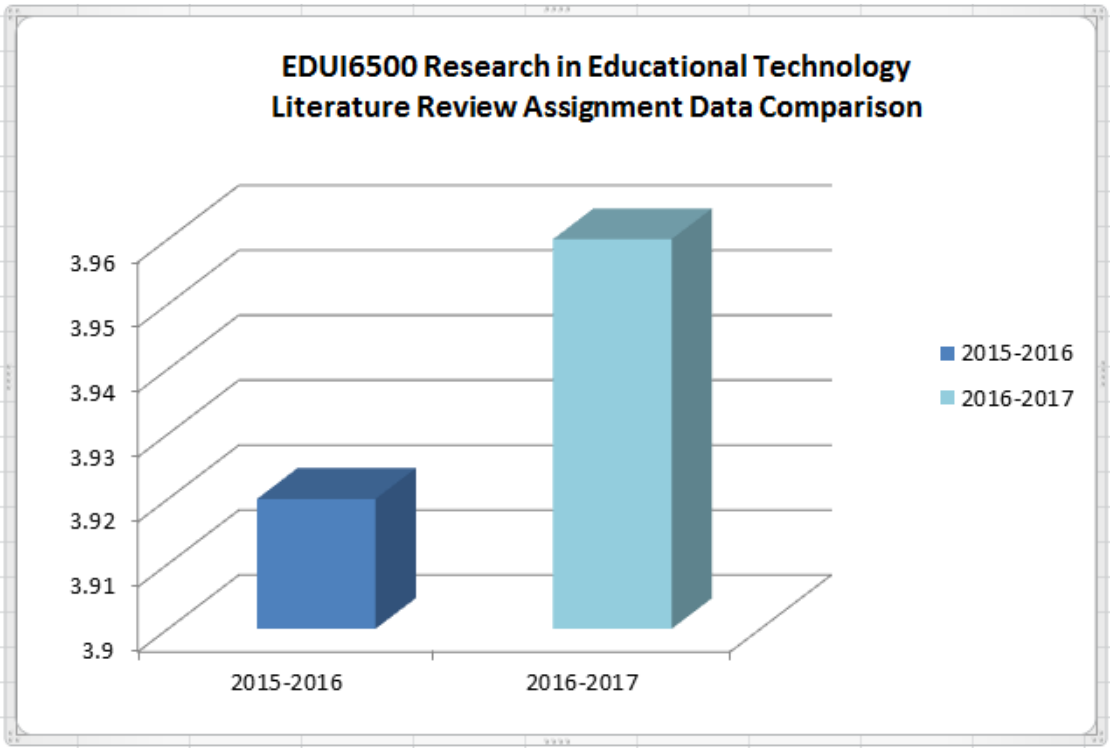
- Students provide positive feedback in all course evaluation and unsolicited emails regarding the incorporation of tablet and handheld devices in EDUI6250, iPad Apps Development for Educators.

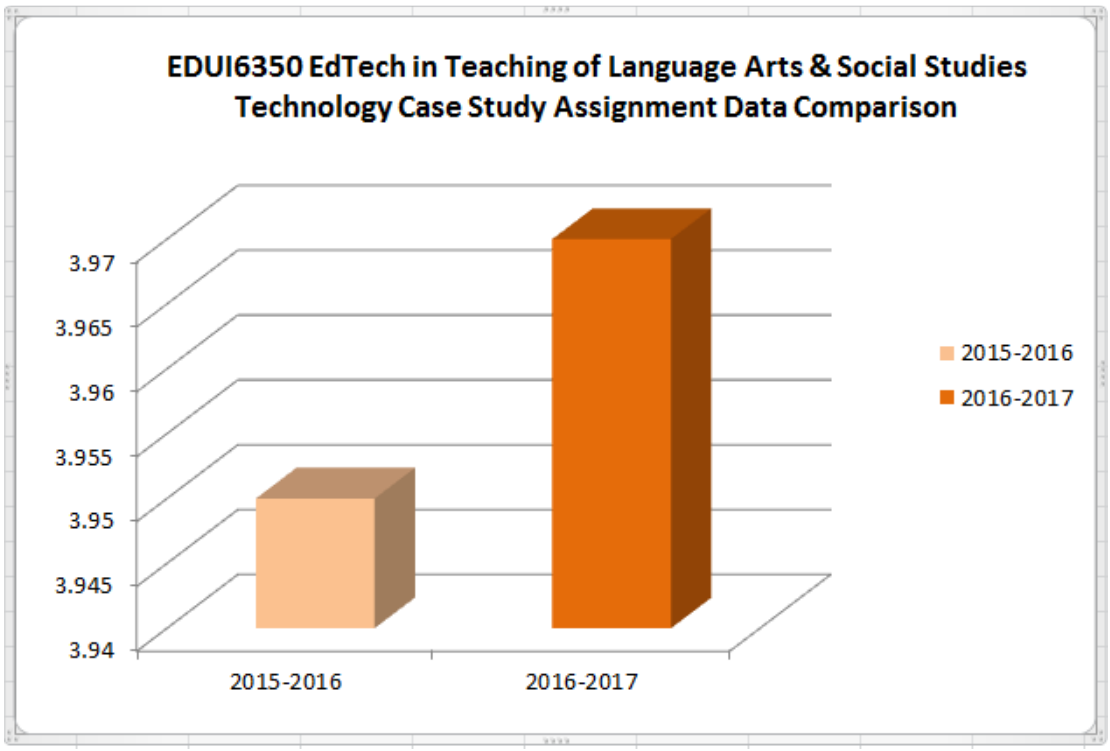
- With the successful integration of up-to-date video conferencing technologies, EDUI6210 Principles of Instructional Design received a QM (Quality Matters) online course certificate in Spring 2017.

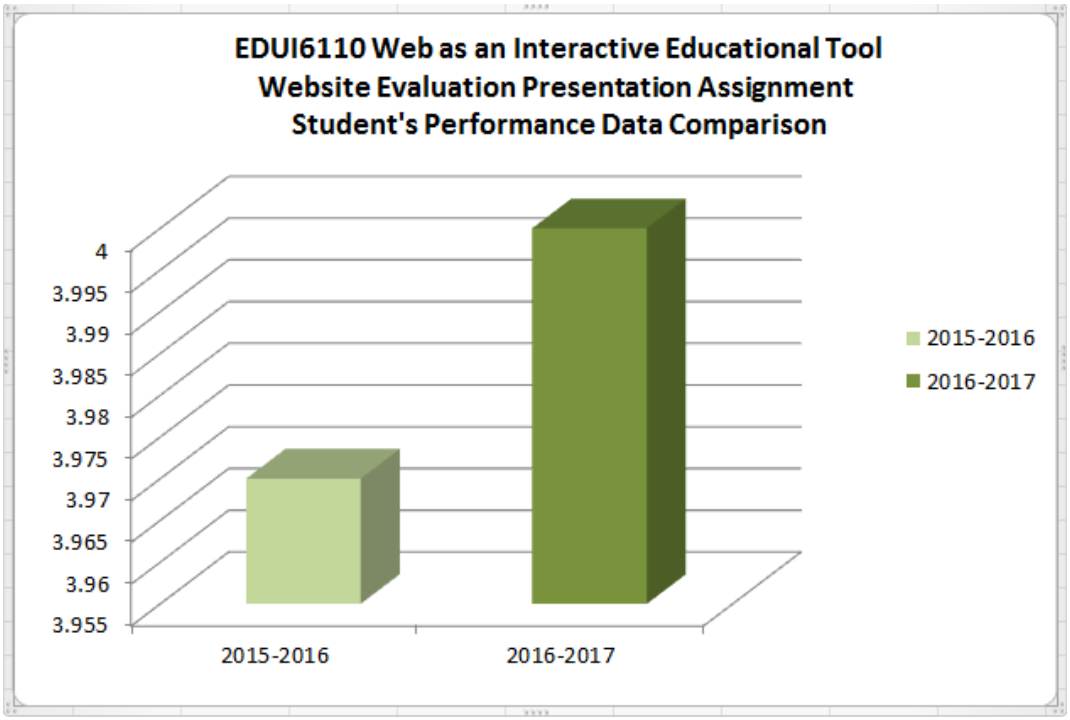
3. STATISTICAL DATA (about 1 page)

Below are the charts that show the summary of our assessment results:

EDUI6500 Research in Educational Technology, Literature Review Assignment Data Comparison







Planning and Institutional Research produce program statistics annually in standard format. These statistics will be attached to the Annual Report of the Program Unit. This statistical document is expected to be approximately one page long and will contain the same data as required for the five-year review including student demographics of majors, student level of majors (e.g. Juniors, Seniors), faculty and academic allocation, and course data.

The following links might be helpful:

a) Student demographics of majors
http://www.csueastbay.edu/ira/factbook/capr%20enrollment%20by%20pgm%20major.html

b) Degrees Conferred by the program
http://www.csueastbay.edu/ira/tables/AcademicProgramReview/Degrees%20Awarded%202011-12.html

c) SFR's by discipline
http://www.csueastbay.edu/ira/tables/sfr/APR%20sfr%20by%20Subject.html

d) Course History data
http://www.csueastbay.edu/ira/factbook/APR%20course_History.html

Additional data can be obtained through this link:
http://www.csueastbay.edu/ira/factbook/Academic%20Program%20Review%20Summary%20Data.html/

The Annual Report may include one or two pages of supplemental information, as appendices, in the form of graphical presentation (e.g., line graphs), tables, and pertinent discussion which summarize the data of the last several (3-5) years to make changes and trends more apparent.

Appendix

Curriculum Map #1:

PSLOs Aligned to Required and Elective Courses in MS in Education, Educational Technology Leadership

- Provide a course title and new number for all required and elective courses. Indicate if required (R) or elective (E) course
- For all required courses, use I = Introduce, D = Develop, M = Master, A= Assess.

PLOs	R/E	PSLO 1	PSLO 2	PSLO 3	PSLO 4	PSLO 5
EDUI6110, Web as an Interactive Edu Tool	R	I	I	I	I	I
EDUI6200, Theories & Design of E-learning	R	D	D	D		I
EDUI6240, Math, Science, & Tech	R	M	M	D		I
EDUI6500, Research in EdTech	R	M	M	M	D	M
EDUI6250, Mobile Applications for Educators	E	I	D	D		
EDUI6005, Digital Graphics	E	D	D	D		
EDUI6210, Principles of Instructional Design	E	I	D	M		D
EDUI6315 Current Technologies	E	D	D	D		
EDUI6900, Independent Study	E	A	A	A	A	A
EDUI6899, Project	R	M	M	M	M	M
EDUI6420, Technology Internship	E	A	D	A		

EDUI6909, Dept. Thesis	E	A	A	A	M	M

Curriculum Map #2: CSUEB, ILOs Aligned to PSLOs for Educational Technology Master Program

Institutional Learning Outcomes	PSLO 1	PSLO 2	PSLO 3	PSLO 4	PSLO 5
Thinking and Reasoning: think critically and creatively and apply analytical and quantitative reasoning to address complex challenges and everyday problems.		√	√	√	√
Communication: communicate ideas, perspectives, and values clearly and persuasively while listening openly to others.		√		√	√
Diversity: apply knowledge of diversity and multicultural competencies to promote equity and social justice in our communities.	√				
Collaboration*:* work collaboratively and respectfully as members and leaders of diverse teams and communities.			√	√	√
Sustainability*:* act responsibly and sustainably at local, national, and global levels.					√