



**ANNUAL PROGRAM REPORT**

College	CEAS
Department	Teacher Education
Program	M.S. in Educational Technology
Reporting for Academic Year	2018-2019
Last 5-Year Review	2011-2015
Next 5-Year Review	2015-2020
Department Chair	Eric Engdahl
Date Submitted	9/26/2019

**1. SELF-STUDY**

**A. Five-year Review Planning Goals**

The following outlines the status of items from the Educational Technology Graduate Program's current 5-year Plan (2015-2020). The five-year plan focuses on re-visioning and enhancing the academic quality of the Program. 2018-2019 represents the fourth year of the five-year Planning Goal Review Cycle

- 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,
  - (3) program admission committee review.
- Digitalizing application process.  
Since November 2016, we have implemented department application form from hard-copy to digital format. Prospective applicants submit their application data via google forms and the department collects their data via google spreadsheet.
- Elevating Educational Technology Graduate Program from an option in education to a standalone graduate program.
- Increasing the quality of Educational Technology courses by re-designing some courses contents and submitting for Quality Matters (QM) National Online/Hybrid review.
- Smoothing the transition from semester to quarter by re-designing all Educational Technology courses.
- 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 for the program to support the program's curricular needs.
- Increasing funding for updating instructional equipment, hardware and software.
- Update course materials and instructional activities to keep current with best practices and technology in education.

## B. Five-year Review Planning Goals Progress

In 2018-2019, we have made the following tremendous progress in our program.

- **Instituted a three-tiered admission review process.** In the academic year, 2017-2018, we implemented a three-tiered admission review process to review all program applicants:
  - a. Initial screening with their GPA qualification and completeness of the required documents by the program secretary. Only those applicants who met the basic GPA requirements and completed the submission of all required documents were forwarded to the program coordinator for further review.
  - b. The 2nd stage of admission review was carried out by the program coordinator. For highly qualified applicants, such as applicants with a high GPA, good recommendation letters, and demonstrated passion for our program, the program coordinator would admit without a provision.
  - c. The 3rd tier of admission review process was conducted by the program admission committee which consists of two full-time faculty members and one adjunct faculty. The committee reviews applicants whose GPA and technological skills were on the borderline.

The three-tiered admission review process has been implemented and has successfully addressed the quality of applicants. Due to the organized admission review process, we admitted 55 qualified applicants from 70 applications submitted in Spring 2019.

**Elevating the program from an option in education to a stand-alone graduate program in the Department of Teacher Education:** In Spring 2018, the program has successfully been approved by the Chancellor's Office to elevate from an optional in education to a stand-alone M.S. Program in Educational Technology. Starting from Fall 2018, the Educational Technology Master program has been running as a stand-alone graduate program in Department of Teacher Education. To enhance the quality of the program and to provide maximum degree benefits for our candidates, the program coordinator prepared documents required by the Chancellor's Office to justify the need and benefit of such an elevation. The Chancellor's Office approved the elevation in Spring 2018.

- **Increasing the quality of our Educational Technology courses by re-designing some course content and submitting the courses for Quality Matters (QM) National Online/Hybrid review.**

By the end of academic year 2018-2019, four courses in our program had been redesigned, submitted for QM review, and received QM certificates. They are EDUI610, EDUI640, EDUI670, and EDUI680. Both EDUI 610 and EDUI 640 are core courses. EDUI670 and EDUI680 are elective courses. With the receiving of national online/hybrid course review certificates, we are proud to say that 50% of the core courses and 67% of the elective courses in our Educational Technology program meet national online/hybrid courses standards.

- **Smoothing the transition from quarter to semester by re-designing all Educational Technology courses.**

The academic year of 2018-2019 is the first academic year at CSUEB to run with a semester system. The transition is very smooth because we ensure all courses were re-designed and ready for the transition from quarter to semester in Spring 2018. Faculty in our program successfully participated

several workshops held by the Office of Online Campus and Faculty Development Center and were able to apply what they learned in the workshops to re-design courses to meet semester needs.

- **Increasing candidate's use of tablet or handheld devices and candidate's application of such devices to comply with STEM and NGSS standards.**

In the year of 2018-2019, tablets and handheld devices has been incorporated in various courses, such as EDUI610 and EDUI630. In EDUI610, there are several online activities can be implemented via tablet or handheld devices. For example, the online interactive discussion activities in Piazza, Direct Message in Twitter, and facebook. A STEM course, EDUI630 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). 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 EDUI 640, 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.**

With Dr. Bijan Gillani's full retirement starting from summer 2019, there is only one tenure-track faculty left in our program. At the same time, our program student number has increased from 30 in 2018-2019 to 55 in 2019-2020. We are extremely in need of hiring a tenure-track faculty and adjunct faculty. In Fall 2019, we hire two adjunct faculty with extensive experiences and skills in the field of educational technology to teach various courses in our program. The adjunct faculty, Ms. Arrash Jaffarzardeh, has been well accepted by our students and regularly taught in our program in the past four years. In Fall 2019, Dr. Karla Prince, has been hired to teach two sessions of EDUI640. 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.**

In the past four years, we have been working very hard with the University professional staff and faculty to update the instructional facilities, equipment, hardware, and software. Below is a list of accomplishments:

- a. Since Fall 2015, 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 at both Hayward and Concord campuses.
- c. Starting from Spring 2016, we have Zoom (Professional Edition) for faculty to carry out online synchronous instruction regularly.
- d. Starting from November 2018, all of our graduate students are able to use Adobe Creative Cloud software free via the University entrepreneur ID.

- **Update course materials and instructional activities to keep current with best practices and technology in education.**

We keep updated our course materials and instructional activities to make sure they are current and the best practice in the field. For example, in EDUI680 Current Technology class, we introduce and practice the most current and popular instructional technology tools, such as hyperdocs, infographic, 3D printing, Artificial Intelligent, Virtual Reality, Augmented Reality, and Mixed Reality.

## C. Program Changes and Needs

In order to continue our success in preparing our students for the current job market demands, the Educational Technology Graduate Program has made several successful changes, yet we are also in need of new faculty, facilities, and latest technological equipment. In the academic year of 2018-2019, the changes and updates that our program has made from last year's report include curriculum, faculty, resources, and assessment.

### Program Changes

- Starting Fall 2018, the M.S. in Education, Option in Educational Technology Leadership was elevated as a standalone graduate program, M.S. in Educational Technology. Before being approved by the Chancellor's Office and CSUEB, the graduate program in Educational Technology was an option in education. To enhance the quality of program and to provide maximum degree benefits for our candidates, the program coordinator prepared documents to justify the benefits and needs of such elevation.

- Curriculum:

By the end of academic year 2018-2019, four Educational Technology courses had been redesigned, submitted for QM review, and received QM certificates. They are:

- EDUI 610 Web as an Interactive Educational Tool
- EDUI 640 Research in Educational Technology
- EDUI 670 Principles of Instructional Design
- EDUI680 Current Technology.

Both EDUI 610 and EDUI 640 are core courses. EDUI 670 and EDUI680 are elective courses. With receiving certificates for national online/hybrid course review, we are proud to say that 50% of the core courses and 67% of our elective courses in our Educational Technology program meet national standards.

In addition, we constantly keep updated our course materials and instructional activities to make sure they are current and the best practice in the field. For example, in EDUI680 Current Technology class, we introduce and practice the most current and popular instructional technology tools, such as hyperdocs, infographic, 3D printing, Artificial Intelligent, Virtual Reality, Augmented Reality, and Mixed Reality.

- Resources

We worked hard with the professional staff at CSUEB to solve the technical problems in the classroom of VBT136. Since Fall 2015, we have applied 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. Since November 2018, we are able to offer Adobe Creative Cloud for all of our graduate students to use for free.

- 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. Students performance assessment data on signature assignments was collected in Blackboard. Such a change helps us to synchronize performance data for all students on one platform and also helps to

reduce additional subscription costs to TaskStream for students. Starting in Fall 2018, we have chosen two PLO's to align with CSUEB ILO's with detailed assessment strategies and plans. Specification can be found in the appendix.

**Program Needs:**

● **Application Process:**

Since November 2016, we have implemented new student's application data submission via google forms and data collection via google spreadsheet. Starting from Fall 2018, we have converted all department application to digital format. No more hard copy department application is accepted. The conversion is very helpful for track student's application. Yet we still need some training for faculty and staff in getting familiar with the data collection system to better serve our students.

● **Curriculum:**

Although some new apps and new research tools have been added to our curriculum to enhance student learning, our program needs a curriculum budget for faculty to purchase or subscribe to updated, emerging, and needed curriculum tools such as Camtasia to keep up to date with current technology.

● **Resources:**

As technology has advanced rapidly, our program needs to purchase new facilities, such as a 3D printer for EDUI 630 Math, Science, and Technology class, and Google cardboard for students to explore virtual reality and augmented reality in EDUI680 class.

● **Faculty:**

Our program is in extreme need to hire a new full-time faculty member as soon as possible. With Dr. Bijan Gillani's full retirement starting from summer 2019, there is only one tenure-track faculty left in our program. At the same time, our program student number has increased from 30 in 2018-2019 to 55 in 2019-2020. We really need to hire a tenure-track faculty and adjunct faculty. In Fall 2019, we hire two adjunct faculty with extensive experiences and skills in the field of educational technology to teach various courses in our program. The adjunct faculty, Ms. Arrash Jaffarzardeh, has been well accepted by our students and regularly taught in our program in the past four years. In Fall 2019, Dr. Karla Prince, has been hired to teach two sessions of EDUI640. We hope we will have a tenure-track faculty position open in the near future to maintain the quality of our teaching.

## 2. SUMMARY OF ILO and PLO ASSESSMENT

### A. Institutional Learning Outcomes (ILO)

We assessed the ILO of Written Communication.

### B. Program Learning Outcomes (PLO)

PLO #4: Gather, use, and analyze data, bibliographic and other resources of materials extensively and critically.

PLO #5: Write and present scholarly findings and projects independently.

In the academic year of 2018-2019, we have specifically chosen the following two PLO's to align with **CSUEB written communication ILO** with assessment strategies, plans, and results.

PLO #4: Gather, use, and analyze data, bibliographic and other resources of materials extensively and critically.

--- to be aligned with CSUEB ILO: Written Communication

--- aligned courses: EDUI 640 and EDUI 693.

--- aligned assignments/assessment: Zotero bibliography collection, literature review/rubric

PLO #5: Write and present scholarly findings and projects independently.

--- to be aligned with CSUEB ILO: Written Communication.

--- aligned courses: EDUI 640 and EDUI 693.

--- aligned assignments/assessment: Literature Review, Project Proposal Document/rubric

The alignment matrixes for PLO, ILO, and Curriculum map are attached in Appendix 1, 2, and 3 at the end of the document.

### C. Summary of Assessment Process

**Instrument(s):** We created our own rubric for the Written Communication ILO, using a 1-to-4 scale.

#### Educational Technology Master Program PLO Written Communication Rubric

Description: One of the major writing assignments for Educational Technology Master students is to write a literature review. The following rubric is created to evaluate Educational Technology Master students' written communication skills in writing a literature review.

Evaluation Area	NA 1	Fair 2	Good 3	Excellent 4
1. <b>Overall Communication:</b> Follows logical introduction	Lacks a description on the problems, needs, or issues in the area or topic.	Inconsistently or superficially describes problems, needs, or issues in the area or topic.	Adequately describes and presents problems, needs, or issues in the area or topic.	Constantly, Clearly and logically describes and presents problems, needs, or issues in the area or topic.
	Lacks the description on why the topic is important or worth investigating.	Inconsistently or superficially describes why the topic is important or worth investigating.	Adequately describes why the topic is important or worth investigating.	Clearly and logically describes why the topic is important or worth investigating.

	Lacks a purpose/goal statement of a central idea, or states central idea inappropriate to the assignment.	Inconsistently or superficially states a central idea, minimally appropriate to the assignment.	Adequately states a purpose/goal statement with a central idea, generally appropriate to the assignment.	Clearly states a purpose/goal statement with a central idea, appropriate to the assignment.
<b>Discipline Specific:</b> Academic Language	Lacks a title page for the literature review assignment.	Includes partial information in the title page. However, there are some APA style errors, yet there are some APA style errors.	Clearly includes a title, fulfillment statement, his/her name, term, and the full name of the university in the title page, yet there are some APA style errors.	Clearly and accurately includes a title, fulfillment statement, his/her name, term, and the full name of the university in the title page. The title page also complies with APA style.
	Lacks an introduction on the organization and structure of the session.	Inconsistently or superficially introduces the organization and structure of the session.	Adequately introduces the organization and structure of the session.	Clearly introduces the organization and structure of the session.
	Lacks to justify what theory can support research or project.	Inconsistently or superficially justifies what theory can support research or project.	Adequately justifies what theory can support research or project.	Clearly and logically justifies what theory can support research or project.
	Lacks to identify and provide definition of terms used in the assignment.	Inconsistently or superficially identify and provide definition of terms used in the assignment.	Adequately identify and provide definition of terms used in the assignment.	clearly identify and provide appropriate definition of terms used in the assignment.
	Lacks to identify three themes from review of literature and elaborate the themes with relevant literature support.	Inconsistently or superficially identifies three themes from review of literature and elaborate the themes with relevant literature support.	Adequately identify three themes from review of literature and elaborate the themes with relevant literature support.	Clearly identify at least three themes from review of literature and elaborate the themes with relevant literature support.
	Lacks to apply APA styles for in-text citations in the assignment.	Contains APA style in-text citations errors in the assignment.	Contains only one APA styles error for in-text citations in the assignment.	Accurately apply APA styles for in-text citations in the assignment.
	Lacks a conclusion statement about the findings from literature and the importance of the investigating topic.	Irrelevantly states a conclusion statement about the findings from literature and the importance of the investigating topic.	Accurately states a conclusion statement about the findings from literature and the importance of the investigating topic.	Clearly states and articulates a conclusion statement about the findings from literature and the importance of the investigating topic.

	Lacks to provide at least 7 citations on relevant articles or reports to support the review.	Inadequately provides 7 citations on relevant articles or reports to support the review. Contains APA style citations errors in the assignment.	Adequately provides 7 citations on relevant articles or reports to support the review. Contains APA style citations errors in the assignment.	Accurately and Adequately provides 7 or more citations on relevant articles or reports to support the review. All APA style citations are correct.
<b>The logistics of writing:</b> Mechanics, grammar, punctuation, spelling	Contains grammar, spelling, punctuation errors that are highly distracting or often interfere with meaning.	Contains grammar, spelling, punctuation errors that are distracting or occasionally interfere with meaning.	Shows mostly correct use of grammar, spelling, punctuation. May have occasional errors that do not interfere with meaning.	Shows correct use of grammar, spelling, punctuation.

**Sampling Procedure:** We sampled assignments from EDUI640, Research in Educational Technology in Fall 2018 and assignments from EDUI693, Master’s Project in Fall 2018 and Spring 2019. To choose the assignments that were considered significant for the classes, we looked at the literature review assignment in EDUI640, and the project proposal assignment in EDUI693 which is a capstone class at our program. The literature review assignment was graded based on the above rubric. The project proposal assignment was evaluated with another rubric which includes the same three measures: overall communication, discipline specifics, and the logistics of writing, yet different in the discipline specifics.

**Sample Characteristics:**

**Data Collection:** We collected our data from two courses, EDUI640 and EDUI693. Dr. Li-Ling Chen taught the two courses in 2018-2019. We followed our program specified rubric for literature review and project proposal for both classes. To align with the university’s ILO of Written Communication, both literature review and project proposal were assessed under the three evaluation measures: Overall Communication, Discipline Specific, and The Logistics of Writing. Detailed requirements for both assignments vary in the discipline specific areas. Specific data collection information including course title, student numbers, and schedule are shown in the following table.

Course Number & Title	Semester Course Offered	Data collection Student Number
EDUI640 Research in Educational Technology	Fall 2018	24
EDUI693 Master’s Project	Fall 2018	6
EDUI693 Master’s Project	Spring 2018	18

**Data Analysis:** The totals in each category for the literature review assignment in EDUI640 in Fall 2018 are summarized in the table below.

Scores	1	2	3	4
Overall Communication			3	21
Discipline Specific			1	23
The Logics of Writing			4	20

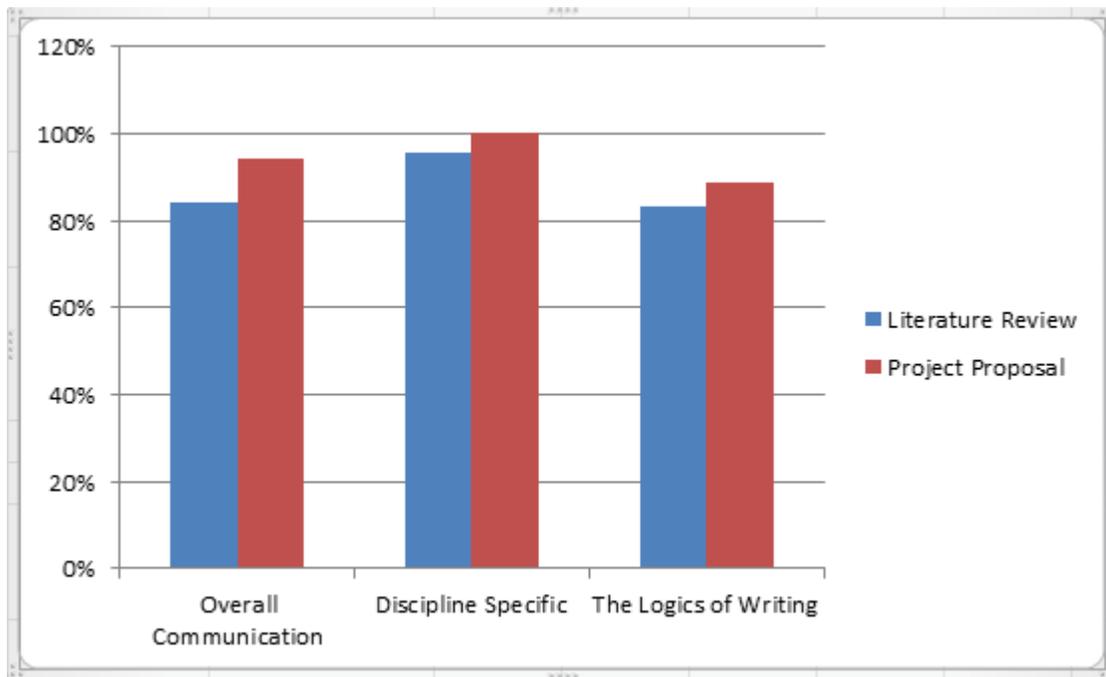
The totals in each category for the Project Proposal assignment in EDUI693 for Fall 2018 session are summarized in the table below.

Scores	1	2	3	4
Overall Communication			1	5
Discipline Specific				6
The Logics of Writing			1	5

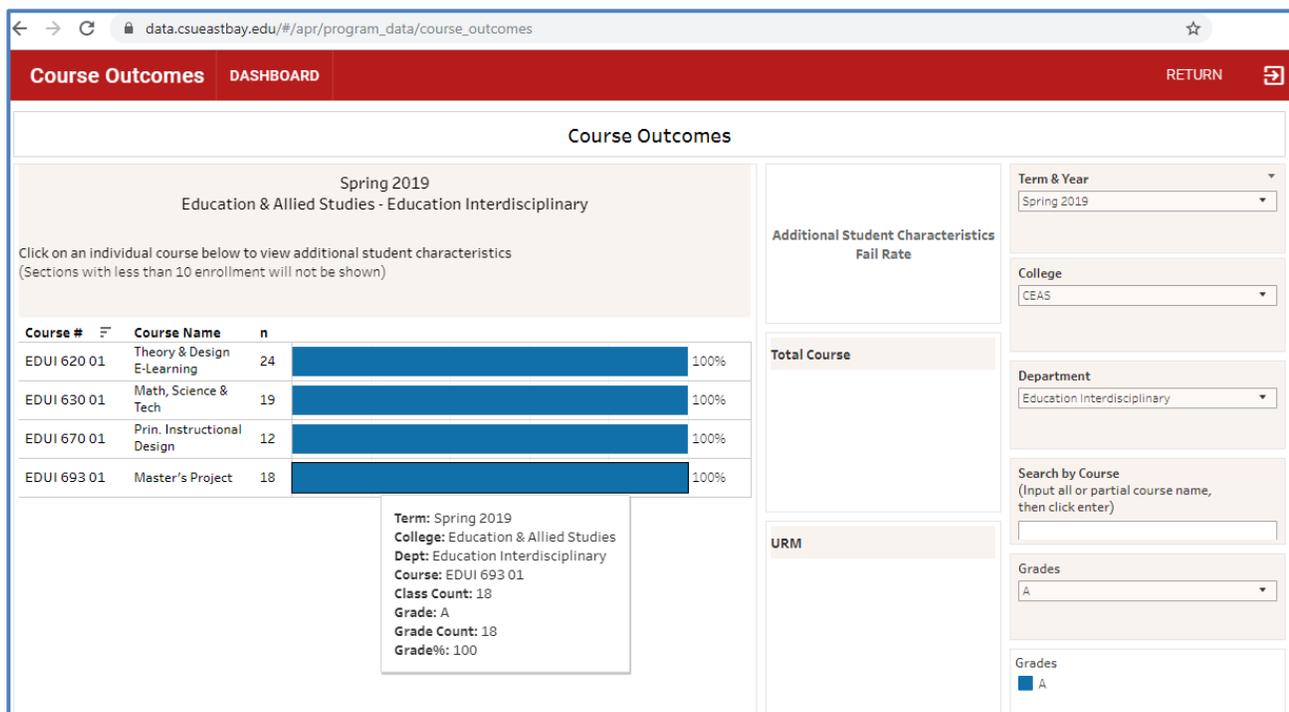
The totals in each category for the Project Proposal assignment in EDUI693 for Spring 2019 session are summarized in the table below.

Scores	1	2	3	4
Overall Communication			1	17
Discipline Specific				18
The Logics of Writing			2	16

The collected data shows that our students have slightly improved their written communication skills from Fall 2018 to Spring 2019. In fall 2018, the percentages of students who received a score of 4s in their literature review assignment on overall communication, discipline specific, and logics of writing were 84%, 95.8%, and 83.3% respectively. In Spring 2019, the percentages of students who received a score of 4s in the project proposal assignment on overall communication, discipline specific, and logics of writing were 94.4%, 100%, and 88.8% respectively. The comparison chart below shows the improvement.



The project proposal is one of the two major assignments in EDUI693 class. According to the data collected by the University at <https://data.csueastbay.edu>, our students have an exceptional outstanding performance in the course. (See the following screen shot from the website.)



## D. Summary of Assessment Results

**Main Findings:** Our collected data has shown that our students' written communication skills in writing a literature review and project proposal have been improved from Fall 2018 to Spring 2019. It is a great sign to indicate that our students have learned how to use correct and appropriate academic language in the discipline by graduating from our program. On the two assignments we examined, all students were able to receive at least a score of 3 or above. With a highly diverse student population, we have some students whose primary language is not English. This could be why we have some scores of 3s in overall communication and the logistics of writing areas.

**Recommendations for Program Improvement:** To improve our students' overall communication skills, we plan to implement the following strategies:

1. Clarify program expectation at the orientation for all new students before the start of Fall semester.
2. Set course expectation and communicate with our graduate students at the beginning of the course.
3. Incorporate effective instructional strategy and learning activities to improve our students' communication skills.
4. Work closely with the department as well as the Graduate Office to ensure that the expectation for written communication is aligned with University ILO.

**Next Steps for Closing the Loop:** As our program expands, we have to offer two sessions for EDUI640 in Fall 2019. Therefore, it is extremely essential for us to communicate with the faculty members who may teach the course regarding our expectation in improving students' written communication skills. We also plan to re-design course materials and learning activities to help our students master the skills. Detailed grading guidelines and assessment expectations at the introductory, developing, and mastery levels in the rubric will be shared with faculty and students.

## E. Assessment Plans for Next Year

In 2019-20, we will assess Critical Thinking skills with our program specified rubric which will be also aligned with the University guidelines and rubric.

## Appendix 1

### Curriculum Map #1: PSLOs Aligned to Required and Elective Courses in MS in Educational Technology

- 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
EDUI 610, Web as an Interactive Edu Tool	R	I	I	I	I	I
EDUI 620, Theories & Design of E- learning	R	D	D	D		I
EDUI 630, Math, Science, & Tech	R	M	M	D		I
EDUI 640, Research in Educational Technology	R	M	M	M	D	M
EDUI 650, Mobile Applications for Educators	E	I	D	D		
EDUI 660, Digital Graphics	E	D	D	D		
EDUI 670, Principles of Instructional Design	E	I	D	M		D
EDUI 680 Current Technologies	E	D	D	D		
EDUI 690, Independent Study	E	A	A	A	A	A
EDUI 693, Project	R	M	M	M	M	M
EDUI 695, Technology Internship	E	A	D	A		
EDUI 699, Dept. Thesis	E	A	A	A	M	M

## Appendix 2

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

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

### Appendix 3

## CSU East Bay ILO-PLO Assessment Alignment

Name of College: CEAS

Name of Program: Educational Technology, M.S.

PLO #4: Gather, use, and analyze data, bibliographic and other resources of materials extensively and critically.

PLO #5: Write and present scholarly findings and projects independently.

Institutional Learning Outcomes (Definitions pg.2)		PLO 4	PLO 5	Course #	Fall	Spring	Assignment/ Assessment
<b>Thinking and Reasoning</b>	Critical Thinking						
	Quantitative Reasoning						
	Creative Thinking						
<b>Communication</b>	Written Communication	X	X	EDUI 640	X		literature review/ rubric
			X	EDUI 693		X	Project proposal/ rubric
	Oral Communication						
	Information Literacy						
<b>Diversity</b>	Diversity						
	Social Justice						
<b>Collaboration</b>	Collaboration and Teamwork						
	Leadership						
<b>Sustainability</b>	Sustainability						
	Social Responsibility Citizenship						
	Ethics						