

Instructional Design and Technology (IDT) Certificate of Achievement

Narrative and Supporting Documentation

Degree, Transfer and Certificate Programs
Fine Arts and Communications Division
Prepared by Steven McGriff, Ph.D., Krause Center for Innovation
9/29/2016

Item 1. Program Goals and Objectives

The goal of the certificate of achievement in Instructional Design & Technology (IDT) is Career Technical Education (CTE) to prepare students currently working in or planning for occupations as Training and Development Specialists (SOC 13-1151) or Instructional Coordinators/Instructional Designers and Technologists (SOC 25-9031) in any market segment.

The IDT certificate provides students both academic and vocational instruction consistent with the Foothill College Mission to provide programs that empower students to achieve their goals as members of the workforce. The program is also appropriate for community members interested in lifelong learning.

The IDT certificate enables the student to use knowledge and skill with instructional technology; to design and develop instructional resources, materials or learning experiences; and to design programs of learning for online and face-to-face settings.

The content of the certificate includes the foundational knowledge and skills of instructional technology, pedagogy, and training techniques that are currently used in schools, business, and industry.

Students develop the core competencies and skills to analyze, design, deliver, and evaluate instructional and informational content. They will be able to develop and create printed and online resources, multimedia, presentations, visual images, and information graphics that can be used for online instruction or in traditional classroom settings. They will know how to effectively design a lesson, unit of instruction, module of learning, an entire course, or any sequenced program of study.

The objectives of the 27-unit IDT certificate program are organized around the foundational knowledge of the field and three core competencies of instructional design and technology: analysis, design and development, and evaluation.

Specific objectives or student learning outcomes (SLOs) are:

Foundational Knowledge

- A. Understand how the principles and processes of systematic instructional design can be applied in any business or education setting to create instruction
- B. Use the three major theories of learning to design instruction
- C. Identify the instructional methods and strategies used to create effective learning environments with technology-based instruction
- D. Understand the techniques and strategies used to evaluate program and learner outcomes
- E. Design and develop an instructional design solution for a real world scenario
- F. Use effective visual and verbal communication skills

Analysis

- A. Conduct program and learner needs analyses using standard survey, interview, and observation methods
- B. Apply the results of an analysis to the design of an instructional solution

Design & Development

- A. Design and develop a technology plan that includes the effective use and management of technology in a classroom setting
- B. Apply Instructional Systems Design [ISD] principles to the design and delivery of classroom and online courses
- C. Identify technology requirements and constraints for delivery of instruction in class or online
- D. Develop instructional products and projects that align with the learning objectives, activities, and assessment methods.

Evaluation

- A. Describe the basics of evaluation processes and research for instructional technology
- B. Apply research strategies to measure outcomes for learners, instruction, and instructional programs
- C. Create an assessment instrument
- D. Use formative and summative assessment processes and instruments to evaluate the outcomes of program and student learning objectives

The need for this program at Foothill College is based on current market conditions and the California State Board of Education adoption of Common Core State Standards, ap-

proved on March 7, 2012. Common Core requires teachers and educators to effectively use technology to meet education standards in the K-12 system. The market conditions in the college service area show increasing use of technology in educational settings and business environments without corresponding increases in education and training programs designed to meet the need. Only one academic institution within the service area currently offers students a certificate in instructional design and technology and no college in the state offers an undergraduate degree.

Item 2. Catalog Description

The Instructional Design and Technology (IDT) certificate is designed for students working in or planning for a career in human resource training and development or education; in-service and pre-service teachers; educators at any level; and those working as trainers for any market sector. The 27-unit certificate program focuses on how to meld theoretical knowledge with practical skill for using technology to design and develop instructional resources or programs. The content includes the foundational skills of instructional technology, pedagogy, and training techniques that are currently used in real-world work environments. Skills learned include the ability to create printed and online resources, multimedia, and presentations that can be used online or in traditional classroom settings. Students will be able to design, deliver, and evaluate instructional and informational content in a variety of contexts such as, school or college classrooms, professional development programs, presentations, research, information graphic design, and business training environments.

Item 3. Program Requirements

The proposed certificate of achievement in Instructional Design & Technology (IDT) is a 27 unit program of study. The projected time to complete the certification is from three to five quarters.

| Requirements | Dept / Course ID | Course Title | Units | Example Sequence |
|--|-----------------------|---|-------|-------------------|
| Required Core (12 units) | LINC 75A | Introduction to Instructional Design & Technology | 3 | Yr 1, Fall |
| | LINC 82A | Introduction to Designing Instructional Technology | 3 | Yr 1/2, Winter |
| | LINC 91A | Projects | 3 | Yr 1/2, Spring |
| | LINC 92 ^a | Introduction to Assessing Instructional Technology Seminar in Instructional Design & Technology | 3 | Yr 2, Win/Spring |
| Required Strand Concentration (6 units) | LINC 75B | Instructional Technology Strategies | 3 | Yr 1/2, Win/Spr |
| | LINC 82B | Developing Instructional Materials | 3 | Yr 1/2, Fall/Win |
| | LINC 91B | Evaluating Technology-based Learning Outcomes | 3 | Yr 1/2, Win/Spr |
| Required Depth (3 units) | LINC 75C ^b | Instructional Design for Online Teaching | 3 | Yr 1/2, Fall/Win |
| | LINC 82C ^c | Creating Interactive Media for Instruction | 3 | Yr 1/2, Win/Spr |
| | LINC 91C ^d | Evaluating Instructional Design & Technology | 3 | Yr 2, Fall/Spring |
| Electives (6 units) | | Choose additional LINC or other approved courses | 1 - 3 | |

| Requirements | Dept / Course ID | Course Title | Units | Example Sequence |
|--------------------------------------|------------------|---|-------|------------------|
| Required Core Total: 21 units | | | | |
| Total Units: 27 units | | | | |
| Prerequisites | | LINC 92 ^a \ LINC 75A, 82A, 91A and (75B or 75C) and (82B or 82C) and (91B or 91C) LINC 75C ^b \ LINC 75A or 75B LINC 82C ^c \ LINC 82A or 82B LINC 91C ^d \ LINC 91A or 91B | | |

Proposed Sequence

| Year 1 Fall | Year 1 Winter | Year 1 Spring | Total Units |
|-------------|---------------|---------------|----------------|
| 6 | 6 | 6 | 18 |
| Year 2 Fall | Year 2 Winter | Year 2 Spring | |
| 6 | 3 | 0 | 9 |
| | | | 27 Total units |

or

| Year 1 Fall | Year 1 Winter | Year 1 Spring | Total Units |
|-------------|---------------|---------------|----------------|
| 9 | 9 | 9 | 27 |
| | | | 27 Total units |

Electives (Choose 6 units)

| |
|---|
| LINC 50F INTEGRATING TECHNOLOGY INTO A STANDARDS-BASED CURRICULUM I (2 units) |
| LINC 58 GLOBAL PROJECT-BASED LEARNING (2 units) |
| LINC 58B CHOOSING THE BEST MEDIA FOR PROJECTS (2 units) |
| LINC 76 CREATING EDUCATIONAL WEB SITES (2 units) |
| LINC 79 MULTIMEDIA PROJECT PRODUCTION (2 units) |
| LINC 87 Seminar in Educational Technology (5 units) |

| |
|---|
| LINC 90C ONLINE COLLABORATION TOOLS (2 units) |
| GID 33 Graphic Design Studio I (4 Units) |
| GID 45 Digital Sound, Video & Animation (4 Units) |
| GID 56 Web Site Design (4 Units) |
| PHOT 5 Introduction to Photography (4 Units) |
| PHOT 70 Introduction to Color Photography (4 Units) |

Item 4. Master Planning

The proposed Certificate of Achievement in Instructional Design and Technology is aligned with the mission of Foothill College to offer programs to students to achieve their goals as members of the workforce. Specifically, the college serves adult students who are in career transition, returning to the workforce, looking for new opportunities, or seeking to enhance their professional skills who would most likely benefit from earning the certificate.

The Certificate is designed to fit into the College curriculum as the envelope for all LINC (Learning in New Media Classroom) courses under the academic leadership of the Krause Center for Innovation in the Fine Arts and Communication Division. All LINC courses are designated as stand-alone courses without the advantage of being applied to an academic achievement goal, such as an associate arts, associate degree for transfer, or certificate of achievement. Many LINC courses are technology skills based courses that support student success in college and career, such as learning how to create collaborative documents, design web sites, conduct effective internet searching, managing computer-based hardware, and using online information systems.

The Certificate is aligned with three goals of the Educational Master Plan:

- Equity and Diversity
 - Enhance support for online quality and growth for instruction and student services.
- Collaboration/Partnerships
 - Collaborate with K-12, adult education, and four year colleges in ways that serve students and society.
 - Partner with business and industry to prepare students for the workforce.

The Certificate courses build confidence in students for handling technology used in college and career and offers opportunities for Foothill College faculty to learn the skills for developing effective online courses. The master plan goal for collaboration/partnerships parallels objectives of the Certificate curriculum. K-12 districts, adult education programs, and 4-year colleges are a significant source of jobs in the local market for instructional design and technology certificate holders. Collaborations and partnerships with these institutions are a planned aspect of the Certificate program and essential for es-

establishing credibility and authenticity in course projects and the instructional processes taught to students.

The need for the Certificate in the local region was first realized in Fall 2009 after the department of Instructional Technology, College of Education, San Jose State University had closed and students seeking similar courses began contacting the Krause Center for Innovation. The nearest academic programs offering instructional technology courses are located at San Francisco State University, UC Monterey Bay, CSU East Bay, and UC Santa Cruz Extension in Silicon Valley, the closest program to Foothill College.

The proposed Certificate is unique in the region. The CSU and UC programs award a master's degree and the UC Santa Cruz program offers a certificate upon completion of 21 units, but it is not a transcriptable California approved certificate.

Item 5. Enrollment and Completer Projections

Courses included in the proposed certificate were approved for teaching by the State for the first time in Summer 2016. Two courses were offered with enrollment of 44 students, see table below.

It is estimated that 5 students in California will complete the IDT certificate of achievement each year.

Projections are based, in part, on the Educational Technology Certificate at Cerritos College, where the certificate was awarded in 2013-2014 to 4 students. The count for the three previous academic years are 1, 2, 2, respectively.

In addition, enrollment in the Educational Technology Certificate at Cerritos College program for Fall 2013 quarter included 14 credit sections with an average of 18.75 FTES for a total enrollment count of 338.

A significant factor to support the completer projection is that within the target region in the San Francisco Bay Area, nearly 45 teachers have each completed 10 units of Foothill College LINC course credits each year for the past 12 years. That is approximately 540 teachers in the target population who have already demonstrated a commitment to learning instructional technology. Six of the ten units could be counted as the six required elective units for the certificate program.

Item 6. Place of Program in Curriculum/Similar Programs

No active inventory records need to be made inactive or changed in connection with the approval of this IDT certificate program.

The IDT certificate program does not replace any existing program on the Foothill College inventory.

No related programs are offered by Foothill College.

Item 7. Similar Programs at Other Colleges in Service Area

A similar program is offered by University of California, Santa Cruz, Silicon Valley Extension (UCSC-X), *Instructional Design for Educators and Corporate Trainers certificate program*, as described by the program's online catalog, shown below. No other similar programs for undergraduates in the college service area were found. The only two programs found in California are outside the service area, but worth noting to demonstrate the viability of the proposed IDT program. California State University, Chico offers the Minor in Instructional Design, 24 units, shown below. The other program is from the California Community College, Cerritos College, located in Norwalk, CA which has an 18 unit Educational Technology Certificate, shown below.

SUPPORTING DOCUMENTATION

Course Outlines of Records

10 LINC Course Outlines of Record are appended to the end of this document

Advisory Committee Recommendation

Roster of KCI Advisory Board, April 1, 2015

| Name | Association/position | Business |
|------------------|---|---|
| Barbara, Manny | VP Advocacy & Thought Leadership | Silicon Valley Education Foundation |
| Brown, Shelley | Community Volunteer, KCI Supporter | |
| Brumbaugh, Kyle | Director, Information Technology | Presentation High School, San Jose |
| Cates, Julie | Advisory Board President, KCI Supporter | A-Learn, Silicon Valley Social Ventures (SV2) |
| Chandler, Tess | Director | Foothill-De Anza College Foundation |
| Dalma, Gina | Grants Program Director | Silicon Valley Community Foundation |
| Fong, Bernadine | former Foothill President, current senior director at | Carnegie Foundation |
| Foster, David | SVI Math CEO | Silicon Valley Mathematics Initiative |
| Freeman, Liane | Director, Strategic Planning | Krause Center for Innovation |
| Grinalds, Andrew | College Student (senior), computer science entrepreneur | Stanford University |
| Hanson, Susan | | |
| Hurley, Rushton | former MERIT program director; international speaker | |
| Kern, John | Executive | CISCO |
| Krause, Gay | Executive Director | Krause Center for Innovation |
| Lashman, Carol | Author, Grant Writer | |
| Lempert, Ted | CEO | Children Now |
| Lim, Margaret | MERIT teacher, Rambus Innovation award winner | |
| Martucci, Dean | Encore Fellow | Krause Center for Innovation |
| McGriff, Steve | Professor-in-Residence | Krause Center for Innovation |
| Miner, Judy | President | Foothill College |
| Moss, Linda | VP WW Education Services Juniper Networks (A.2071) | Juniper Networks |
| Mummert, John | VP Workforce Development | Foothill College |

| | | |
|------------------|---|--------------------------------------|
| Nilsson, Thea | | Microsoft Corporation |
| Pope, Kelly | Board Member and Partner | Silicon Valley Social Ventures (SV2) |
| Richie, Tim | CEO | The Tech Museum of Innovation |
| Swift, Art | Industry start-up CEO | |
| Tognetti, Gene | Vice Principal (and KCI Consultant) | St. Leo the Great School |
| Trilling, Bernie | Author, Consultant, 21st Century Living Advisor | |
| Vesuna, Sarosh | VP, Education and Healthcare | Meru Networks |
| Walker, Gretchen | VP, Education | The Tech Museum of Innovation |



KCI Advisory Board

Agenda

Wednesday, April 1, 2015

12:00 P.M. – 2:00 P.M.

Krause Center for Innovation

Foothill College

Room 4004

Lunch will be provided at 11:30 A.M.

Special Guest: Ellen Moir, CEO of New Teacher's Center

1. Figuring out its “widget” – the exact mix of products and services to offer client school districts (as well as the right fees to charge client school districts)
2. Growing geographically, while maintaining quality and a high functioning organization
3. Staffing a growing organization with new talent and experience
4. Identifying the right measures to track progress, success, and impact at each phase

Dr. Steven McGriff, KCI Instructional Technologist

Presentation of proposed state certificate of achievement in Instructional Design & Technology for review, revision, and approval [10 minutes]

Presentation and Documents about the IDT Certificate proposal given to the KCI Advisory Board Members at the Meeting, April 1, 2015

The Instructional Design and Technology (IDT) Proposed State Certificate of Achievement

The Instructional Design and Technology (IDT) certificate prepares:

- students interested in entering the field of instructional design or training,
 - in-service and pre-service teachers,
 - education professionals, and
 - trainers in any field
- to use technology to design and develop instruction.

The 27-unit program focuses on

- the fundamental technology, pedagogy, and training skills needed to
- work within today's instructional technology or training environments.

The certificate provides a foundation in

- software, online resources, and
- technology for curriculum development,
- multimedia, presentations, and
- other general instructional technology skills and
- strategies that would be used online or in traditional classroom settings.

The acquired skills and knowledge can be applied in a variety of contexts, including:

- school or college classrooms,
 - professional development programs,
 - presentations, research,
 - information graphic design, and
 - business training environments
- to enhance the delivery of instructional and informational content.

Proposal for a certificate of achievement

Instructional Design & Technology

presented to the KCI Advisory Board
April 1, 2015

1

Curriculum

LINC Curriculum (college credit courses)



2

Curriculum

college credit is beneficial to teachers

student enrollments are good for Foothill College

LINC Curriculum (college credit courses)

3

California Certificate of Achievement:
Instructional Design & Technology

Currently Stand Alone Courses
LINC Curriculum (college credit courses)

4

California Certificate of Achievement:

Instructional Design & Technology

Stand Alone courses need a home

Stand Alone courses become electives for the certificate

LINC Curriculum (college credit courses)

5

Certificate Description

The Instructional Design and Technology (IDT) certificate prepares:

students interested in entering the field of instructional design or training, in-service and pre-service teachers, education professionals, and trainers in any field to use technology to design and develop instruction.

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Certificate Description

The 27-unit program focuses on the fundamental technology, pedagogy, and training skills needed to work within today's instructional technology or training environments.

The certificate provides a foundation in software, online resources, and technology for curriculum development, multimedia, presentations, and other general instructional technology skills and strategies that would be used online or in traditional classroom settings.

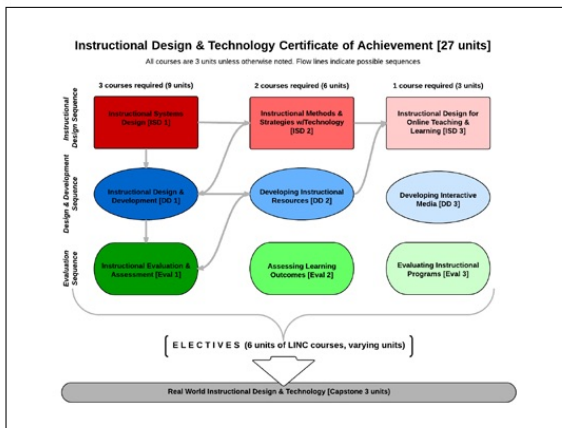
7

Certificate Description

The acquired skills and knowledge can be applied in a variety of contexts, including:

school or college classrooms, professional development programs, presentations, research, information graphic design, and business training environments to enhance the delivery of instructional and informational content.

8



9

Instructional Design & Technology Certificate of Achievement
optional course sequences and corresponding timeline to completion

| | Quarter 1 | Quarter 2 | Quarter 3 | Quarter 4 | Quarter 5 | Units |
|--|-----------|-------------|----------------------|-----------|-----------|--------------|
| with emphasis on ISD sequence | ISD1 | ISD2 DD1 | DD2 Eval1 | ISD3 | Capstone | 15 6 6 |
| with emphasis on Development (DD) sequence | ISD1 | DD1 | DD2 Eval1 | DD3 | Capstone | 15 6 6 |
| with emphasis on Evaluation (Eval) sequence | ISD1 | Eval1 | Eval2 ISD2 DD1 | Eval3 | Capstone | 15 6 6 |

Notes: All courses are 3 units each except electives, which vary 27 units are required to earn certificate
Core courses total is 21 units + 6 elective units

Steven McGuff, Kalamazoo Center for Innovation | mcguff@kalamazoo.edu | last updated: 12/2014

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Advisory Group Feedback

Certificate Program Application

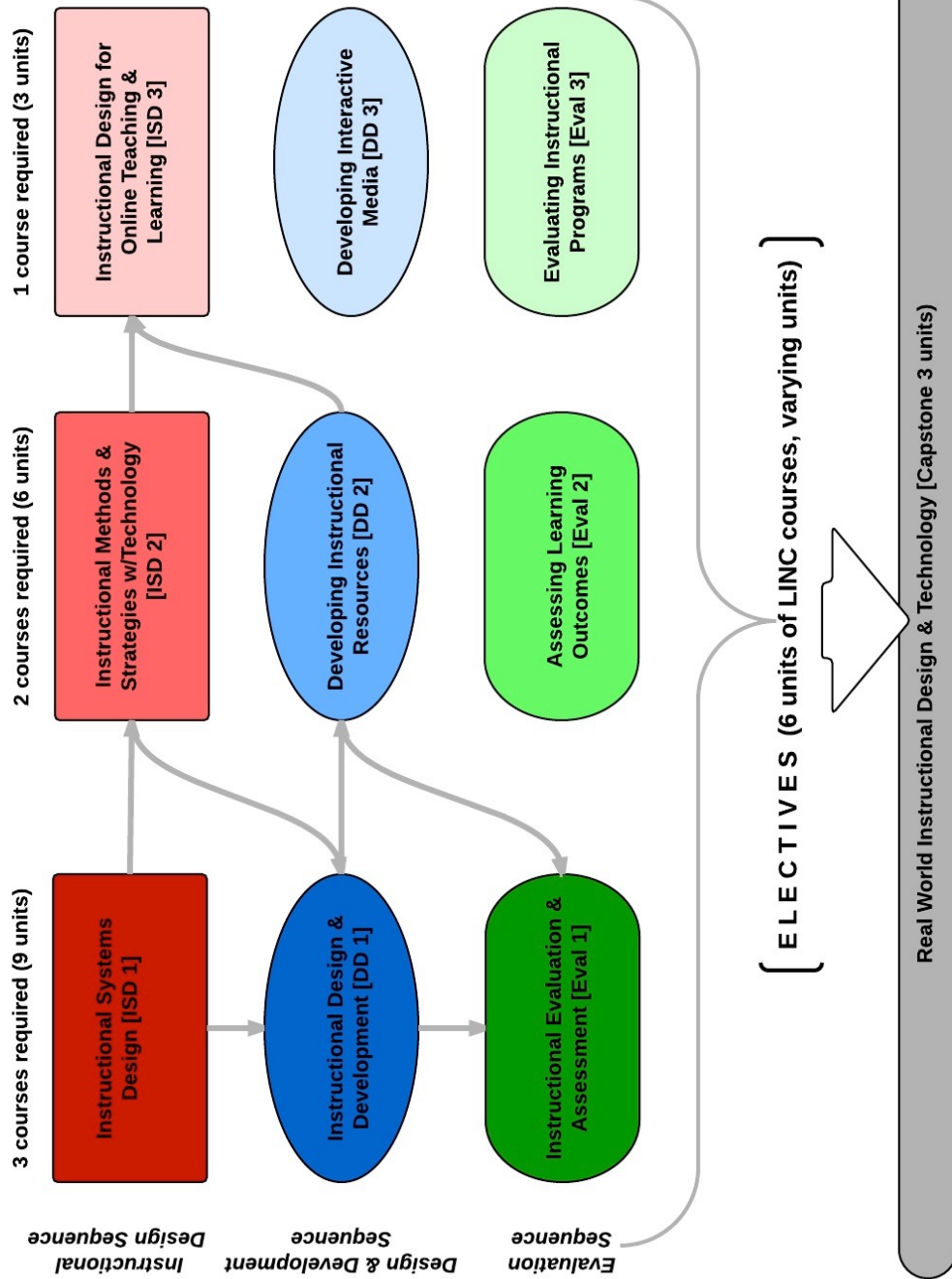
The goal selected is "Career Technical Education (CTE)," then the set of requirements must reflect the thinking of the advisory committee

So, what do you think?

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Instructional Design & Technology Certificate of Achievement [27 units]

All courses are 3 units unless otherwise noted. Flow lines indicate possible sequences



Advisory Meeting – Discussion of Proposal for a Certificate of Achievement in Instructional Design & Technology Notes

Notetaker: Melia Arken, Administrative Assistant, Krause Center for Innovation

April 1, 2015

Attendees:

Melia Arken
Kyle Brumbaugh
Julie Cates
Tess Chandler
Gina Dalma
Liane Freeman
Susan Hanson
Rushton Hurley
John Kern
Gay Krause
Dean Martucci
Steven McGriff
Thea Nilsson
Kelly Pope
Sarosh Vesuna
Gretchen Walker

Dr. Steven McGriff presented the proposal that is currently being submitted for a California Community College Certificate of Achievement in Instructional Design & Technology at Foothill College.

Currently, the KCI has short courses (0.5 - 2 units) under the LINC department that offer college credit to students. Currently, LINC is comprised of 59 stand-alone courses. By definition, a stand-alone course is not part of a degree or certificate program.

State of California says that in the near future, no college can offer stand-alone courses. For that reason the KCI is preparing a 27-unit Certificate of Achievement in Instructional Design & Technology, under which all current stand-alone courses will be included, thus removing the stand-alone designation. At the present time, only Cerritos College in Norwalk, CA offers a similar certificate, titled "Educational Technology," for 18 units.

The current catalog of LINC courses does not include courses of depth and academic rigor to be included in the certificate. For the KCI, a significant component of the certificate application process is to create the new core courses. The curriculum plan underway is to create 10 core courses at 3 units each. 7 core courses are needed to earn 21 core units towards the 27-unit certificate requirement. The current LINC stand-alone courses and a few selected courses from other Fine Arts Division departments will be offered to fulfill the 6-unit elective requirement. The curriculum offerings include nine core courses and one program summation course. The certificate courses are designed within three different instructional design competencies, like themes: instructional design sequence, instructional development sequence, and an evaluation sequence. In summa-

ry, the proposed 27-unit certificate is comprised of 21 core units plus 6 elective units. The program of study can be completed in less than 2 years (6 quarters), more like 5 or 4 quarters.

The 27-unit program focuses on fundamental instructional technology, pedagogy and training skills needed to work within today's instructional technology or training environment. Students completing the certificate can find jobs as instructional technologists for curriculum developers. For example, in school districts as educational technology coordinators; in business as IT specialists who design training; in human resources as trainers; inside schools as teachers with specialized edtech training; and in non-profits where training or curriculum design is needed.

This certificate will be classified as Certificated Technical Education ("CTE") program at Foothill College and offered as part of the undergraduate program for students at Foothill college. The target population for the KCI is namely the teachers, educators, and community members interested in instructional design as a professional growth opportunity.

Discussion/questions/Comments:

Q: How does this affect MERIT & FAME programs?

A: Credit courses are imperative to MERT & FAME programs. Many of the teachers are very concerned about whether they get the credit for the classes and would not be as interested if the courses were non-credit. Every 15 units that a teacher receives credit for means an extra \$2,000 in pay on their salary schedule.

Q: Is it the same content as the current LINC courses?

A: All of the courses are brand new content. They are not simply repackaging of same content but are new classes with new content; at 3-units each these have more academic rigor, held over the span of an academic quarter...not short courses any longer. Homework, projects are central to the learning experience.

Q: How will success be measured?

A: The certificate program will be provided with the intention of having the certificate be the same caliber as MERIT & FAME. The philosophy of how the classes are taught and the exemplary instructors will be upheld. As with all Foothill courses, success is measured by student completion rates, first by course, then by completion of the certificate.

Q: What does this mean to the MERIT teachers?

A: When joining the MERIT program, each accepted teacher will have to complete a 10-units of credit classes. Let's change the MERIT summer program to include 2 core certificate courses...that's 6 units towards the 27 or ... other words, 2 core classes towards the 7 needed to complete the certificate, so there is incentive to have the MERIT people complete the certificate.

Q: How do we get the program to be accepted for transfer into the UC system?

A: There are not any undergraduate degree programs currently being offered in the UC system and the entire CSU system has only one minor degree (CSU Chico) on Instructional Design & Technology. While LINC courses are not approved for transfer to UC, they are transferrable to CSU! Once offered, the certificate courses will automatically tie into the current undergraduate program and therefore allow students to transfer the units to CSU. .

Q: What does this mean for the job market?

A: Better trained trainers! Here's what the KCI is learning...As part of the certification application process, school districts and corporations are being surveyed to see if they have a need for this type of certificate and have job openings. We expect that many local companies, use Instructional Designers in their Human Resources departments as part of the training of their employees. Sometimes the trainers are the best person on the job and tagged to lead instructing others in the company...that's who we want to get into this program. For school districts, we know that they are promoting or hiring people, some are teachers, who have skills in edtech, but not certification, to fulfill the kind of work that a certificated IDT professional would be qualified to do. This idea we have will allow for a certificate to be presented that meets the needs of the employers.

Q: What is the incentive for the KCI to get this certificate approved?

A: The immediate need is to preserve the access to credits we can now offer teachers with stand-alone courses. Teachers want salary increases for those credits and, without this certificate, the KCI will no longer be able to offer courses for credit. A new California law makes all credit courses have to apply toward some type of certificate or degree.

Q: Does the board recommend the KCI to complete the application for a 27-unit State approved Certificate in Instructional Design & Technology?

A: Yays all around, no nays. Unanimous support.

Summary of KCI Advisory Board Recommendations

- UC Transferrable
 - Cannot be incorporated, but CSU transferability is automatically included with the curriculum approval process.
- Use certificate effectively to maintain incentives for MERIT (and FAME) program participants
 - Future MERIT programs can use the certificate courses as the curriculum of learning for program participants, who are K-12 teachers. Invite FAME (mathematics focused curriculum program) to enroll in the certificate program.
- Measure success of the certificate program
 - The college course structure includes metrics for measuring class and program success. To go further, the KCI would need to use surveys to measure participant response to the curriculum and certificate program.

Decision process for designing the major components of the curriculum

Dr. Steven McGriff led the process of gathering feedback that would be used to inform the design of the certificate program.

Consulting with LINC part-time faculty in one-one meetings or small group discussions about the topics, themes, and structure of the 10 courses

Hiring Steven Caringella, a part-time LINC faculty, who holds a master's degree in Instructional Technology, to design and develop the curriculum with Dr. McGriff

Discussions with KCI staff to determine market projections, audience profile, and specific content topics

Discussions with MERIT program participants, who are K-12 teachers, about their need to understand the principles offered in the certificate

Discussions with a few school district administrators about the skills, knowledge and ability they felt were needed by teachers and edtech specialists in their own districts

Review the curriculum of degree programs in colleges around the country and locally to determine the most common topics

College faculty and administrators shaped the structure of units and made recommendations to increase the differentiation of content among the 10 courses through the college process of curriculum review

The college articulation officer reviewed the content to determine which CSU programs aligned with the proposed curriculum, and then advised changes to better align with already approved programs

Regional Consortia Approval Meeting Minutes

Pending a meeting of the Bay Area Community College Consortium (BACCC) to review the IDT Certificate program endorsement.

Upcoming Meeting Dates 2016-17

Friday, October 28, 2016 is the deadline to submit a request for Program Endorsement in time for the Thursday, November 17, 2016, BACCC Call, 9:30-10:45am

Friday, November 25, 2016 is the deadline to submit a request for Program Endorsement in time for the Thursday, December 15, 2016, BACCC Call, 9:30-10:45am

Friday, December 30, 2016 is the deadline to submit a request for Program Endorsement in time for the Thursday, January 19, 2017, BACCC Call, 9:30-10:45am

Friday, January 27, 2017 is the deadline to submit a request for Program Endorsement in time for the Thursday, February 16, 2017

Contacts

Kit O'Doherty
Bay Area Community College Consortium
Hosted at Cabrillo College
(650) 560-9798
kitodoherty@gmail.com

Rock Pfothauer
Chair, Bay Area Community College Consortium
Hosted at Cabrillo College
6500 Soquel Drive
Aptos, CA 95003
Office: 831.479.6482
rock@baccc.net

Course Outline Editor

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Fine Arts and Communication

LINC 75A INTRODUCTION TO INSTRUCTIONAL DESIGN & TECHNOLOGY

[Edit Course Outline](#)

LINC 75A

INTRODUCTION TO INSTRUCTIONAL DESIGN & TECHNOLOGY

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This introductory course in instructional design and technology is for students, teachers, educators, and trainers who want to know how to create technology-based educational or training materials and resources for school, college, or business settings. Students will develop foundational knowledge and skills in systematic design processes that guide writing learning objectives, developing learning activities, applying best practices for using technology in instructional settings, and assessing learning outcomes. This is the first course in the Instructional Design & Technology program sequence.

Advisory: Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Understand the impact of instructional technology on the learning process (foundations)
- B. Describe the principles and process of systematic instructional design in business and education settings (foundations)
- C. Compare models of instructional design (foundations)
- D. Understand major theories of learning (foundations)
- E. Write instructional objectives using Bloom's Taxonomy and Mager's (design)
- F. Apply instructional design within different learning environments (design)
- G. Write an instructional design plan for a unit of instruction (design)
- H. Examine best practices for using instructional technologies (evaluation)
- I. Create an assessment plan that is aligned with instructional objectives (evaluation)

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Educational technology foundations
 1. History
 2. Role in learning process
 3. Current trends
 4. Technical considerations
 5. Mediated learning
- B. Principles and processes of instructional design
 1. Definition and background
 2. Intentional versus incidental learning
 3. Principles of instructional design
 4. Instructional design processes
- C. Models of instructional design
 1. ADDIE
 2. Gagne's Nine Events of Instruction
 3. Kemp
 4. Dick and Carey Model
 5. Rapid Prototyping Model
 6. SAM model
 7. ARCS motivational model
- D. Models of learning applied to instructional design
 1. Behaviorist
 2. Cognitivist
 3. Constructivist
- E. Instructional objectives
 1. Determine intended outcomes
 2. Write effective measurable performance outcomes
 3. Aligned with assessment measures
 4. Bloom's Taxonomy
- F. Learning environments

1. Instructor-led
2. Self-paced
3. Blended learning
- G. Instructional design plan
 1. Needs analysis: learner, environment, work
 2. Goal analysis
 3. Task analysis: job, content
 4. Development strategy
 5. Implementation plan
 6. Designing instructional materials
- H. Best practices for using instructional technology
 1. Direct instruction and online settings
 2. Discussion facilitation and feedback loops
 3. Questioning and reflection
 4. Cooperative learning and collaboration
- I. Assessment plan
 1. Formal and informal
 2. Formative and summative evaluation
 3. Alignment with learning objectives and instructional goal

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

- A. Designing and developing a systematic instructional design plan with a product or project
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. Representative Text(s) -

Dirksen, Julie, [Design for How People Learn](#), Berkeley, CA, New Riders, 2012.
 Allen, Michael W., and Richard H. Sites, [Leaving ADDIE for SAM: An Agile Model for Developing the Best Learning Experiences](#), Alexandria, VA, American Society for Training and Development, 2012.

8. Disciplines -

Instructional Design & Technology

9. Method of Instruction -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. Lab Content -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Types and/or Examples of Required Reading, Writing and Outside of Class Assignments -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-03-09 13:27:26

LINC 75A INTRODUCTION TO INSTRUCTIONAL DESIGN & TECHNOLOGY

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LINC 75B INSTRUCTIONAL TECHNOLOGY STRATEGIES

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LINC 75B

INSTRUCTIONAL TECHNOLOGY STRATEGIES

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This instructional design and technology course builds on the coursework of LINC 75A and focuses on the specific strategies for using technology in the education or training environment. Students develop instructional plans that use technology to meet the needs of a variety of learners; plan for effective use and management of technology for teaching and learning (i.e., laptop carts, mobile devices, Bring Your Own Device [BYOD], classroom audio-visual, online technologies and learning systems); and learn to manage instructional design projects. This course is part of the Instructional Design & Technology program sequence.

Advisories: It is advised, but not required, that students have the background knowledge and skill taught in LINC 75A. Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Examine the relationship between Instructional Systems Design [ISD] models and effective classroom instruction
- B. Identify the instructional methods and strategies used to create effective learning environments with technology-based instruction
- C. Understand how ISD models are used to create instructional delivery and content that is differentiated for a wide range of learners
- D. Compare instructor-centered learning methods to student-centered learning methods
- E. Examine instructional systems design within non-traditional and emerging instructional methods
- F. Understand the role of technology in supporting student learning in the classroom
- G. Apply models of ISD to analyze an instructional problem in order to create a more effective learning environment
- H. Utilize models of ISD to design an instructional plan that will effectively meet the needs of a diverse range of learners
- I. Develop the instructional plan to include a component that is project-based, inquiry-based, or problem-based
- J. Manage the instructional plan that will work with a blended or personalized learning environment
- K. Design and develop a technology plan that includes the effective use and management of technology in a classroom setting

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. ISD models and effective classroom instruction
 1. Merrill's First Principles of Instruction
 2. Dick and Carey Model
 3. Gagne's Nine Events of Instruction
 4. Bloom's Taxonomy
 5. Webb's Depth of Knowledge
- B. Effective learning environments
 1. Application of learning models
 2. Instructional strategies
 3. Problem-solving and application of learning
 4. Authentic assessment
- C. Differentiated instruction and content
 1. Content
 2. Process
 3. Product
 4. Diverse learning needs and styles
 5. English learners
- D. Instructor-centered and student-centered learning methods
 1. Traditional instructional approaches
 2. Non-traditional, student-centered approaches
 3. Instructor's role in both approaches

4. Students' roles in both approaches
- E. Non-traditional and emerging instructional methods.
 1. Project-based learning
 2. Inquiry-based learning
 3. Problem-based learning
 4. Blended learning models
- F. Role of technology
 1. Instructional shifts using technology
 2. Differentiating with technology
 3. Personalized learning
- G. Analyze an instructional problem
 1. Instructional problem related to learning environment
 2. Application of ISD models to understand and define problem
- H. Design an instructional plan
 1. Synthesize ISD models to plan instruction
 2. Outcomes and objectives
 3. Instructional sequence
 4. Application of learning
 5. Assessment
- I. Develop the instructional plan
 1. Application of learning
 2. Opportunities for complex problem-solving
- J. Develop an alternate instructional plan
 1. Apply technology to blend learning
 2. Design plan within hybrid, blended, or personalized learning environment
- K. Manage a technology plan
 1. Effective use of web-based technology
 2. Effective use of equipment
 3. Cost, technology constraints, technical considerations
 4. Effective management at classroom, school, organizational levels

5. **Repeatability** - Moved to header area.

6. **Methods of Evaluation** -

- A. Designing, developing and managing an instructional plan and product or project
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. **Representative Text(s)** -

Dirksen, Julie, [Design for How People Learn](#), Berkeley, CA, New Riders, 2012.

Allen, Michael W., and Richard H. Sites, [Leaving ADDIE for SAM: An Agile Model for Developing the Best Learning Experiences](#), Alexandria, VA, American Society for Training and Development, 2012.

8. **Disciplines** -

Instructional Design & Technology

9. **Method of Instruction** -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. **Lab Content** -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. **Types and/or Examples of Required Reading, Writing and Outside of Class Assignments** -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

Course status: *Active*

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-02-25 12:58:43

LINC 75B INSTRUCTIONAL TECHNOLOGY STRATEGIES

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LINC 75C DESIGNING ONLINE INSTRUCTION

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LINC 75C
3 hours lecture.

DESIGNING ONLINE INSTRUCTION

Summer 2016
3 Units

Total Contact Hours: 36 *(Total of All Lecture and Lab hours X 12)*

Total Student Learning Hours: 108 *(Total of All Lecture, Lab and Out of Class hours X 12)*

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This course advances the knowledge of instructional design and technology taught in LINC 75A and LINC 75B while focusing on the unique design challenges and delivery options of online education or training. Students apply the methods of instruction with web-based technologies to design online learning courses, lessons, activities, and resources. Special emphasis is provided for creating multimedia resources (e.g., screen casting and instructional videos) and for designing online learning with video conferencing, threaded discussions, shared documents and online collaboration used in learning management systems. This course is part of the Instructional Design & Technology program sequence.

Prerequisite: LINC 75A or 75B.

Advisory: Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Apply Instructional Systems Design [ISD] principles to the design and delivery of synchronous and asynchronous online courses
- B. Compare synchronous and asynchronous instructional strategies for online delivery technology
- C. Identify and describe the differences between online, hybrid, and face to face learning modules
- D. Compare the interactive resources of online learning, blended learning, and self-paced, web-based learning
- E. Survey multimedia and other web-based tools incorporated into online learning courses
- F. Compare different methods for online communication
- G. Synthesize ISD principles to design a synchronous or asynchronous online learning course
- H. Develop online learning course for classroom or training environment
 - I. Select appropriate online multimedia tools to incorporate into the online learning environment
 - J. Incorporate methods for online communication and collaboration
- K. Identify technology requirements and constraints for delivery of online learning

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Synchronous and asynchronous online courses
 1. Relationship between ISD models and online course design
- B. Compare and contrast uses and advantages of synchronous and asynchronous online delivery technology
- C. Online, hybrid, and face to face learning
 1. Instructor's role
 2. Students' roles
 3. Instructional delivery
 4. Learning methods
 5. Assessment
 6. Communication
- D. Online learning, blended learning, and self-paced, web-based learning modules
 1. Online learning models
 2. Blended learning models
 3. Self-paced, web-based learning modules
- E. Multimedia and web-based tools
 1. Screen casting
 2. Online video
 3. Other web-based multimedia tools
- F. Online communication tools
 1. Threaded discussions
 2. Videoconferencing
 3. Web-based collaboration tools
 4. Email and other messaging tools
- G. Design online learning course

1. Needs assessment
2. Learning analysis
3. Performance analysis
4. Outcomes and objectives
5. Instructional tasks
6. Assessment methods
- H. Develop online learning course
 1. Method for online learning
 2. Technology considerations
 3. Learning modules
 4. Multimedia and other web-based tools
 5. Method for online communication
- I. Select appropriate multimedia tools
 1. Aligned with instructional objectives
 2. Supported by technology platform
- J. Online communication
 1. Aligned with instructional objective
 2. Synchronous or asynchronous
- K. Technology requirements and constraints
 1. Delivery platforms
 2. Technical requirements for instructors
 3. Technical requirements for end-users

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

- A. Designing and developing an online lesson or activity
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. Representative Text(s) -

Allen, Michael W., and Richard H. Sites, [Leaving ADDIE for SAM: An Agile Model for Developing the Best Learning Experiences](#), Alexandria, VA, American Society for Training and Development, 2012.
 Arshavskiy, Marina, [Instructional Design for ELearning: Essential Guide to Creating Successful ELearning Courses](#), Seattle, CreateSpace, 2013.

8. Disciplines -

Instructional Design & Technology

9. Method of Instruction -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. Lab Content -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Types and/or Examples of Required Reading, Writing and Outside of Class Assignments -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
 - B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
 - C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.
-

Course status: *Active*

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-02-25 12:58:43

LINC 75C DESIGNING ONLINE INSTRUCTION

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LINC 82A INTRODUCTION TO DESIGNING INSTRUCTIONAL TECHNOLOGY PROJECTS

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| | | |
|------------------|---|-------------|
| LINC 82A | INTRODUCTION TO DESIGNING INSTRUCTIONAL TECHNOLOGY PROJECTS | Summer 2016 |
| 3 hours lecture. | | 3 Units |

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students,

teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This introductory course in designing and developing instructional projects is for students, educators, and trainers interested in the planning of instructional design and technology projects. Students will acquire the knowledge and technology skills needed to lead the design, creation, and iteration of instructional materials, specifically, basic project management, applying instructional technology principles, and using rapid prototyping models to efficiently design, make, and evaluate instructional projects for education or business learning contexts. This course is part of the Instructional Design & Technology program sequence.

Advisories: Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Design and develop instruction and training projects for a unit or course in a classroom or training curriculum
- B. Create an instructional project using a rapid prototyping method
- C. Iterate design ideas of the instructional project
- D. Managing project development
- E. Design project assessment plan

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Instruction and training materials and tools
 1. Review instructional technology tools to create product
 - a. Presentations
 - b. Web sites
 - c. Video
 - d. Screencast
 - e. Poster
 - f. Handout
 - g. Information graphic
 2. Analyze application of each tool to project outcomes
- B. Rapid prototype of instruction
 1. Successive Approximation Model (SAM)
 2. Preparation phase
 3. Prototyping
 4. Constructing the prototype
 5. Iterative phase
 6. Review and evaluate the outcomes
- C. Iterate design project ideas
 1. Revisit the project goal
 2. Review the learning audience
 3. Brainstorm new ideas
 4. Find new instructor activities
 5. Revise and update all learner activities
- D. Managing course projects
 1. Instructional project planning matrix
 2. Instructional products
 3. Selecting and evaluating the technology
- E. Assessment plan
 1. Formative and summative
 2. Aligned with project goals
 3. Implementation strategies

4. Getting feedback
5. Making changes

5. **Repeatability** - Moved to header area.

6. **Methods of Evaluation** -

- A. Designing and developing an instructional plan and product or project
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. **Representative Text(s)** -

Bean, Cammy, [The Accidental Instructional Designer](#), Alexandria, VA, American Society for Training & Development (ASTD), 2014.

Hagen, Rebecca, and Kim Golombisky, [WSINYE: White Space Is Not Your Enemy: A Beginner's Guide to Communicating Visually through Graphic, Web & Multimedia Design](#), New York, NY, Focal, 2013.

Vaughn, Tay, [Multimedia: Making It Work](#), 9th ed. New York, McGraw-Hill, 2014.

8. **Disciplines** -

Instructional Design & Technology

9. **Method of Instruction** -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. **Lab Content** -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. **Types and/or Examples of Required Reading, Writing and Outside of Class Assignments** -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

Course status: *Active*

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-03-09 13:28:03

LINC 82A INTRODUCTION TO DESIGNING INSTRUCTIONAL TECHNOLOGY PROJECTS

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Fine Arts and Communication

LINC 82B DEVELOPING INSTRUCTIONAL MATERIALS

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LINC 82B

DEVELOPING INSTRUCTIONAL MATERIALS

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This instructional design and development course builds on the coursework of LINC 82A and focuses on refining the skills needed for making digital media for education or business learning contexts. Students interested in the study of instructional design will rapidly design, develop, and evaluate presentations, infographics, posters, digital resources, multimedia, and web sites for particular learning styles. Special emphasis is given for using collaborative tools to facilitate and manage group projects. This course is part of the Instructional Design & Technology program sequence.

Advisories: It is advised, but not required that students have the background knowledge and skill taught in LINC 82A. Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Apply Instructional Systems Design [ISD] principles to design and development of instructional resources
- B. Analyze examples of effective instructional resources used in classroom and training settings
- C. Ensure project alignment between objectives, instructor activity, learner activity, and assessment
- D. Compare print, online, and computer media projects
- E. Identify online instructional resources
- F. Develop a variety of instructional print resources
- G. Develop a variety of computer media instructional resources
- H. Match learner profile with instructional project features
- I. Develop project to align with objectives, activities, and assessment

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Instructional resource design
 - 1. Revise existing materials or create new materials
 - 2. Method of delivery
 - 3. Best media to match instructional objectives
- B. Effective instructional resources
 - 1. Best practices
 - 2. Examples of print and non-print materials
 - 3. Online resources
- C. Alignment
 - 1. Learning objectives
 - 2. Instructor and learner activities
 - 3. Assessment
- D. Comparison of print, online, and computer media resources
 - 1. Best media type for particular objectives and learning environments
- E. Online instructional resources.
 - 1. Online resources already available
 - 2. Online tools for creation of online resources
- F. Develop print resources.
 - 1. Job aids
 - 2. Handouts
 - 3. Manuals
- G. Develop computer media resources
 - 1. Multimedia (infographics, posters)
 - 2. Video (screen casting)
 - 3. Web sites (interactive, information, survey)
- H. Match learner needs with project features
 - 1. Which collaboration tools to use?
 - 2. Which web sites provide appropriate information?
 - 3. How do you build collaboration among students?
 - 4. Which forms of video are most effective?

5. How might interactive components facilitate learning?
- I. Develop project alignment
 1. Learner needs
 2. Learning objectives
 3. Learning environment

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

- A. Designing and developing an instructional project that includes collaboration
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. Representative Text(s) -

Bean, Cammy, The Accidental Instructional Designer, Alexandria, VA, American Society for Training & Development (ASTD), 2014.

Hagen, Rebecca, and Kim Golombisky, *WSINYE: White Space Is Not Your Enemy: A Beginner's Guide to Communicating Visually through Graphic, Web & Multimedia Design*, New York, NY, Focal, 2013.

Vaughn, Tay, Multimedia: Making It Work, 9th ed. New York, McGraw-Hill, 2014.

8. Disciplines -

Instructional Design & Technology

9. Method of Instruction -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. Lab Content -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Types and/or Examples of Required Reading, Writing and Outside of Class Assignments -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

Course status: Active

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-03-09 13:28:35

LINC 82B DEVELOPING INSTRUCTIONAL MATERIALS

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LINC 82C CREATING INTERACTIVE MEDIA FOR INSTRUCTION

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LINC 82C

CREATING INTERACTIVE MEDIA FOR INSTRUCTION

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This advanced course in creating interactive media for instruction continues the coursework of LINC 82A and LINC 82B and provides the depth of skills and knowledge needed for making online learning media that includes interactive components, such as instructional video, multimedia, game-based learning, graphical user interface design, interactive tutorials, embedding collaborative elements in web sites or learning management systems. Students interested in the study of instructional design and technology will develop a project for either education or business learning contexts. This course is part of the Instructional Design & Technology program sequence.

Prerequisite: LINC 82A or 82B.

Advisory: Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The students will be able to:

- A. Define levels of instructional interaction
- B. Create online interactive games and activities for learners
- C. Create online interactive assessments for learners
- D. Utilize instructional design principles to create an instructional video
- E. Apply the concept of flipped learning
- F. Create a plan for flipped learning environment in the classroom
- G. Embed interactive media in a website and collaborative online documents
- H. Embed interactive media for use by learners in a learning management system
 - I. Explore the pedagogy behind game-based learning
 - J. Explore several tools for game-based learning

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Levels of instructional interaction
 1. Level 1 Passive-no interaction
 2. Level 2 Limited interaction
 3. Level 3 Moderate interaction
 4. Level 4 Simulation and game-based learning
- B. Online interactive games and activities
 1. Learner objectives
 2. Format
 3. Content
 4. Online tools - Flash, HTML5, other
 5. Hosting platform
- C. Online interactive assessments
 1. Learner objectives
 2. Reliability and validity
 3. Format
 4. Content
 5. Online tool
 6. Hosting platform
- D. Instructional video
 1. Learner objectives
 2. Instructional sequence of content
 3. Format
 4. Screencasting
 5. Screen shots and images
 6. Video
 7. Hosting platform and embedding
- E. Understand flipped learning

1. Individualized/personalized learning
2. Interactive learning environment
- F. Plan for flipped learning
 1. Flexible environment
 2. Instructor and student roles
 3. Use of time
 4. Technology
 5. Instructional content
 6. Ongoing assessment
- G. Embed interactive media - website and documents
 1. Enhanced instruction
 2. Personalized learning
 3. Technical aspects
- H. Embed interactive media - learning management system
 1. Enhanced instruction
 2. Personalized learning
 3. Technical aspects
- I. Game-based learning - pedagogy
 1. Collaborative problem-solving
 2. Divergent thinking
 3. Creativity
- J. Game-based learning - tools
 1. Print-based
 2. Electronic
 3. Online

5. **Repeatability** - Moved to header area.

6. **Methods of Evaluation** -

- A. Designing and developing an interactive online instructional project
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. **Representative Text(s)** -

Bean, Cammy, [The Accidental Instructional Designer](#), Alexandria, VA, American Society for Training & Development (ASTD), 2014.

Hagen, Rebecca, and Kim Golombisky, [WSINYE: White Space Is Not Your Enemy: A Beginner's Guide to Communicating Visually through Graphic, Web & Multimedia Design](#), New York, NY, Focal, 2013.

Vaughn, Tay, [Multimedia: Making It Work](#), 9th ed. New York, McGraw-Hill, 2014.

8. **Disciplines** -

Instructional Design & Technology

9. **Method of Instruction** -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. **Lab Content** -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. **Types and/or Examples of Required Reading, Writing and Outside of Class Assignments** -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.

C. When taught online these methods may take the form of video, audio, animation and web page presentations.
Writing assignments are completed online.

Course status: *Active*

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-03-09 13:29:14

LINC 82C CREATING INTERACTIVE MEDIA FOR INSTRUCTION

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Fine Arts and Communication

LINC 91A INTRODUCTION TO ASSESSING INSTRUCTIONAL TECHNOLOGY

[Edit Course Outline](#)

LINC 91A INTRODUCTION TO ASSESSING INSTRUCTIONAL TECHNOLOGY Summer 2016
3 hours lecture. 3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 Lab Hours: Weekly Out of Class Hours: 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 Load Factor: .067 FOAP Code: 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This introductory course in assessing instructional technologies is for students, educators, and trainers interested in instructional design and technology. Students develop critical thinking skills and use evaluation processes, resources, and instruments to select and evaluate instructional materials, technologies, resources, and programs that meet specific learning outcomes for educational and training contexts. Coursework includes using technology to conduct survey research and basic data analysis. This course is part of the Instructional Design & Technology program sequence.

Advisories: Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Describe the basics of evaluation processes and research for instructional technology
- B. Apply critical thinking skills
- C. Use quantitative evaluation strategies
- D. Use qualitative evaluation strategies
- E. Use action research
- F. Describe application of research methodologies to instructional design and technology
- G. Apply research strategies to measure outcomes for learners, instruction, and instructional programs
- H. Assess and select instructional technology tools and resources for research
 - I. Create an assessment instrument
 - J. Analyze data for instructional design purposes
 - K. Explain the ethical standards of educational research

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. The basics of instructional technology evaluation
 1. Research problem
 2. Variables and hypotheses
 3. Sampling
 4. Instrumentation
 5. Validity and reliability
 6. Evaluation, assessment, and testing
- B. Critical thinking
 1. Observation
 2. Compare and contrast items and topics
 3. Discuss and analyze items and topics
 4. Encourage collaboration in analysis process
 5. Facilitate open-ended discussion
 6. Practice Socratic method
 7. Use argument analysis
- C. Quantitative evaluation strategies
 1. Experimental research
 2. Survey research
 3. How to use quantitative research in instructional technology
- D. Qualitative evaluation strategies
 1. Observation, interviews, focus groups
 2. Content analysis
 3. How to use qualitative research in instructional technology
- E. Action research
 1. Practical research methods and strategies
 2. How to use action research in instructional technology
- F. Choosing a research methodology to evaluate instructional technology
 1. Formative and summative assessment

- 2. Kirkpatrick's Four Levels of Evaluation
- G. Apply research strategies to measure outcomes for learners, instruction, and instructional programs
 - 1. Learner analysis techniques
 - 2. Assessing instructional outcomes for an activity, lesson, or unit of learning
 - 3. Evaluating outcomes of instructional programs
- H. Assess and select instructional technology tools and resources for evaluation
 - 1. Paper survey instruments
 - 2. Online resources for data collection
 - 3. Computer-based methods
- I. Create an assessment instrument
 - 1. Compare instruments and contexts for use
 - 2. Compare delivery media
 - 3. Collecting data
- J. Analyze data for instructional design purposes
 - 1. Demographic data
 - 2. Preferences data
 - 3. Evaluative data
- K. Explain the ethical standards of educational research
 - 1. Value of research
 - 2. Scientific validity
 - 3. Fair subject selection
 - 4. Informed consent
 - 5. Confidentiality

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

- A. Designing and developing an evaluation plan and instrument for instructional technologies
- B. Presenting the evaluation instrument and plan to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. Representative Text(s) -

Fraenkel, Jack R., Norman Wallen, and Helen Hyun, How to Design and Evaluate Research in Education, 9th ed. New York, McGraw-Hill, 2014.

Greenstein, Laura, Assessing 21st Century Skills: A Guide to Evaluating Mastery and Authentic Learning, Thousand Oaks, Corwin, 2012.

8. Disciplines -

Instructional Design & Technology

9. Method of Instruction -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. Lab Content -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Types and/or Examples of Required Reading, Writing and Outside of Class Assignments -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

Course status: *Active*

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-03-09 13:39:22

LINC 91A INTRODUCTION TO ASSESSING INSTRUCTIONAL TECHNOLOGY

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LINC 91B EVALUATING TECHNOLOGY-BASED LEARNING OUTCOMES

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LINC 91B

EVALUATING TECHNOLOGY-BASED LEARNING OUTCOMES

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This instructional design and technology course builds on the coursework of LINC 91A and focuses on evaluating learning outcomes in educational and business training contexts. Students will design and develop technology-based authentic and performance-based assessments, rubrics, needs assessment plans, learner analysis instruments, adaptive testing, and surveys. Coursework includes managing data collection, analyzing results, and reporting findings. This course is part of the Instructional Design & Technology program sequence.

Advisory: It is advised, but not required that students have the background knowledge and skill taught in LINC 91A. Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Learning outcomes
- B. Apply formative and summative assessment processes and instruments to evaluate the outcomes of instructional objectives
- C. Use technology to create different evaluation and assessment tools
- D. Managing the evaluation process
- E. Explore techniques for creating conditional and adaptive tests
- F. Designing an effective survey
- G. Collect data
- H. Conduct a data analysis
- I. Report the results

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Learning outcomes
 1. Goals and objectives analysis
 2. Task analysis
 3. Using Bloom's taxonomy to write learning outcomes
- B. Evaluate the outcomes of instructional objectives
 1. Formative
 2. Summative
 3. Evaluation instruments
 4. Authentic assessments
 5. Performance-based assessments
 6. Rubrics
- C. Use technology to create different evaluation and assessment tools
 1. Technology enabled observation tools
 2. Paper-based resources
- D. Managing evaluation processes
 1. Project tracking tools and processes
 2. Finding evaluation instruments vs. making one
- E. Conditional and adaptive tests
 1. Test content
 2. Adaptive software
 3. Use in personalization of learning
- F. Effective surveys
 1. Objectives
 2. High quality questions
 3. Response choices
 4. Pilot
- G. Data collection
 1. Questionnaires
 2. Focus groups

- 3. Interviews
- H. Data analysis
 - 1. Review data
 - 2. Organize data
 - 3. Code data
 - 4. Conduct statistical analyses
 - 5. Interpret data
- I. Data reporting
 - 1. Audience
 - 2. Format for presenting findings

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

- A. Writing learning outcomes and developing an evaluation method to measure the outcomes
- B. Presenting the evaluation project and plan to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. Representative Text(s) -

Fraenkel, Jack R., Norman Wallen, and Helen Hyun, How to Design and Evaluate Research in Education, 9th ed. New York, McGraw-Hill, 2014.
Greenstein, Laura, Assessing 21st Century Skills: A Guide to Evaluating Mastery and Authentic Learning, Thousand Oaks, Corwin, 2012.

8. Disciplines -

Instructional Design & Technology

9. Method of Instruction -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. Lab Content -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Types and/or Examples of Required Reading, Writing and Outside of Class Assignments -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

Course status: *Active*

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-02-25 12:58:43

Course Outline Editor

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LINC 91C EVALUATING INSTRUCTIONAL PROGRAMS

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LINC 91C

EVALUATING INSTRUCTIONAL PROGRAMS

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This advanced course in evaluating instructional technology programs continues the coursework of LINC 91A and LINC 91B and further develops the skills and knowledge students need to measure and evaluate the effectiveness of educational curriculum or training programs. Using analysis skills, students examine the entire process from program design to implementation. Students interested in the study of instructional design and technology will determine and report on the effectiveness of an instructional program or curriculum for either online or classroom delivery in terms of instructor preparation, planning, delivery medium, and effective use of technology. Skill development includes effective use of technology tools for writing, conducting, analyzing, and reporting an instructional program evaluation plan. This course is part of the Instructional Design & Technology program sequence.

Prerequisites: LINC 91A or 91B.

Advisories: Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

The student will be able to:

- A. Describe the processes of evaluation for an instructional curriculum or program
- B. Utilize evaluation instruments in evaluation of an instructional technology program
- C. Determine the effectiveness of a program in terms of content, instructor, technology
- D. Use evaluation method to determine program's success over time
- E. Write a program evaluation plan
- F. Conduct the program evaluation plan of an instructional technology program

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with computers running either Windows and /or Macintosh operating system and internet connectivity.
- B. When taught via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail software, and web browsing capability.

4. Course Content (Body of knowledge) -

- A. Processes in evaluation of an instructional program
 1. Kirkpatrick's Four Levels of program evaluation
- B. Utilize evaluation instruments for instructional programs
 1. Focus groups
 2. Surveys
 3. Pre- and post -tests
 4. Observations and interviews
- C. Determine the program or curriculum effectiveness
 1. Content
 - a. Learning objectives and outcomes
 2. Instructor effectiveness
 - a. End of course surveys
 - b. Observations
 - c. Supervisor reports
 3. Use of technology
 - a. Effectiveness and efficiency
 - b. Technical considerations
 - c. Cost considerations
- D. Use evaluation method to determine program's success over time
 1. Surveys
 2. Focus group questions
 3. Interview questions
 4. Supervisor reports
- E. Program evaluation plan
 1. Tailor plan to classroom or training environment
 2. Consider instructional problem
 3. Align with instructional sequence
 4. Create evaluation instruments
 5. Design evaluation data analysis routines

- F. Conduct the program evaluation plan of an instructional technology program
1. Implement in real world context
 2. Assess learner outcomes
 3. Assess program effectiveness
 4. Write evaluation report

5. **Repeatability** - Moved to header area.

6. Methods of Evaluation -

- A. Designing and developing an instructional plan and data collection instrument
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback

7. Representative Text(s) -

Fraenkel, Jack R., Norman Wallen, and Helen Hyun, How to Design and Evaluate Research in Education, 9th ed. New York, McGraw-Hill, 2014.
Greenstein, Laura, Assessing 21st Century Skills: A Guide to Evaluating Mastery and Authentic Learning, Thousand Oaks, Corwin, 2012.
Handshaw, Dick, Training That Delivers Results: Instructional Design That Aligns with Business Goals, New York, American Management Association, 2014.

8. Disciplines -

Instructional Design & Technology

9. Method of Instruction -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. Lab Content -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. Types and/or Examples of Required Reading, Writing and Outside of Class Assignments -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

Course status: *Active*

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-03-10 07:34:35

LINC 91C EVALUATING INSTRUCTIONAL PROGRAMS

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LINC 92 SEMINAR IN INSTRUCTIONAL DESIGN & TECHNOLOGY

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LINC 92

SEMINAR IN INSTRUCTIONAL DESIGN & TECHNOLOGY

Summer 2016

3 hours lecture.

3 Units

Total Contact Hours: 36 (Total of All Lecture and Lab hours X 12)

Total Student Learning Hours: 108 (Total of All Lecture, Lab and Out of Class hours X 12)

Lecture Hours: 3 **Lab Hours:** **Weekly Out of Class Hours:** 6

Note: If Lab hours are specified, the *item 10. Lab Content* field must be completed.

Repeatability -

Statement: Not Repeatable.

Status -

Course Status: Active

Grading: Letter Grade with P/NP option

Degree Status: Applicable

Credit Status: Credit

Degree or Certificate Requirement: Stand Alone Course

GE Status: Non-GE

Articulation Office Information -

C.I.D. Notation:

Transferability: CSU

Validation: 5/22/15

Division Dean Information -

Seat Count: 37 **Load Factor:** .067 **FOAP Code:** 114000151011086000

Instruction Office Information -

FSA Code:

Distance Learning: yes

Stand Alone Designation: yes

Program Title:

Program TOPs Code:

Program Unique Code:

13. Need/Justification -

This Workforce Education course provides specialized training in instructional design and technology for students, teachers, and those in work transition. The primary target audience include educators from school districts within the FHDA district service area: Mountain View-Whisman, Palo Alto Unified, Sunnyvale Elementary, Mountain View-Los Altos Union HSD, Los Altos Elementary, Fremont Union HSD, and Cupertino Union and secondary regions of San

Mateo, Santa Clara, Santa Cruz, and Alameda counties. The course is relevant for current and future adult educators in university, community-college, and adult-education settings, as well as government and business trainers, consultants, and human-resource professionals.

1. Description -

This seminar course is for teachers, educators, and trainers who have completed the pre-requisite coursework in the Instructional Design and Technology program sequence. Students demonstrate ability to apply knowledge, skills, and dispositions acquired through program coursework to the design, development, evaluation, and implementation of technology-based instructional and training projects in a "real-world" scenario. The seminar experience provides students the opportunity to act as consultants in a real, client-based case study to apply theories, concepts, and principles of instructional technology to solve an instructional or a training problem in authentic education or business settings.

Prerequisites: Completion of LINC 75A and (LINC 75B or 75C); LINC 82A and (LINC 82B or 82C); and LINC 91A and (LINC 91B or 91C).

Advisory: Basic skills using standard computer systems and internet-based technologies.

2. Course Objectives -

Students will be able to:

- A. Design and develop an instructional design solution for a real world scenario
- B. Apply knowledge and skills of instructional design and technology to a real-world context
- C. Collaborate in consulting context to develop solution paths
- D. Present the solution to the client
- E. Maintain an online journal of the simulated learning experience
- F. Assess the effectiveness of the instructional solution using Kirkpatrick's Four Levels of Evaluation

3. Special Facilities and/or Equipment -

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Foothill Global Access students must have current e-mail accounts and/or ongoing access to computers with e-mail and web browsing capability

4. Course Content (Body of knowledge) -

- A. Instructional design solution development
 1. Understanding client - consultant relationships
 2. Client interview
 3. Needs assessment
- B. Define the instructional problem in real-world context
 1. Identify instructional problem
 2. Write instructional analysis plan (including analysis, design, implementation, evaluation)
 3. Develop instructional tools and resources
 4. Implement solution path, process or project
 5. Evaluate outcomes and revise project
- C. Consulting teams process
 1. Forming
 2. Storming
 3. Norming
 4. Performing
 5. Communication and collaboration strategies
- D. Client presentation
 1. Description of instructional problem and client need
 2. Description of instructional solution
 3. Summary of process to create the project solution
 4. Self-assessment and reflection on learning
- E. Consultant journal
 1. Weekly entries
 2. Collaborative dialogue between consulting teams and client
- F. Project Evaluation (Kirkpatrick's Levels)
 1. Evaluation of project by client (Level 1)
 2. Evaluate knowledge and skills gained, and shifts in attitude (Level 2)
 3. Evaluate changes in behavior (Level 3)
 4. Evaluate overall results of solution program, project (Level 4)

5. **Repeatability** - Moved to header area.

6. **Methods of Evaluation** -

- A. Designing and developing a real-world, authentic product or project for a case-study client
- B. Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- C. Making constructive contributions to class discussions and peer review feedback
- D. Evaluation of solution by peers, instructor, and case-study client

7. **Representative Text(s)** -

Ertmer, Peggy A., James Quinn, and Krista D. Glazewski. The ID CaseBook: Case Studies in Instructional Design, 4th ed. Upper Saddle River, NJ: Pearson, 2013. Print.

Larson, Miriam B., and Barbara B. Lockee. Streamlined ID: A Practical Guide to Instructional Design. New York: Routledge, 2013. Print.

When course is taught on-line: Additional information, notes, handouts, syllabus, assignments, tests, and other relevant course material will be delivered by e-mail and on the World Wide Web, and discussion may be handled with internet communication tools.

8. **Disciplines** -

Instructional Design & Technology

9. **Method of Instruction** -

- A. Writing notes, listening, and participating in lecture presentation
- B. Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- C. Presenting and communicating their ideas in discussion and/or participating in peer reviews

10. **Lab Content** -

Not applicable.

11. **Honors Description** - No longer used. Integrated into main description section.

12. **Types and/or Examples of Required Reading, Writing and Outside of Class Assignments** -

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.
- C. When taught online these methods may take the form of video, audio, animation and web page presentations. Writing assignments are completed online.

Course status: *Active*

Development status: Edit

Owner-Editor: mcgriffsteven@fhda.edu

Last updated: 2016-03-09 13:41:37

LINC 92 SEMINAR IN INSTRUCTIONAL DESIGN & TECHNOLOGY

[Edit Course Outline](#)

Course Outline Editor

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Labor Market Information (LMI) and Analysis

Certificate of Achievement in Instructional Design and Technology

Net Job Market

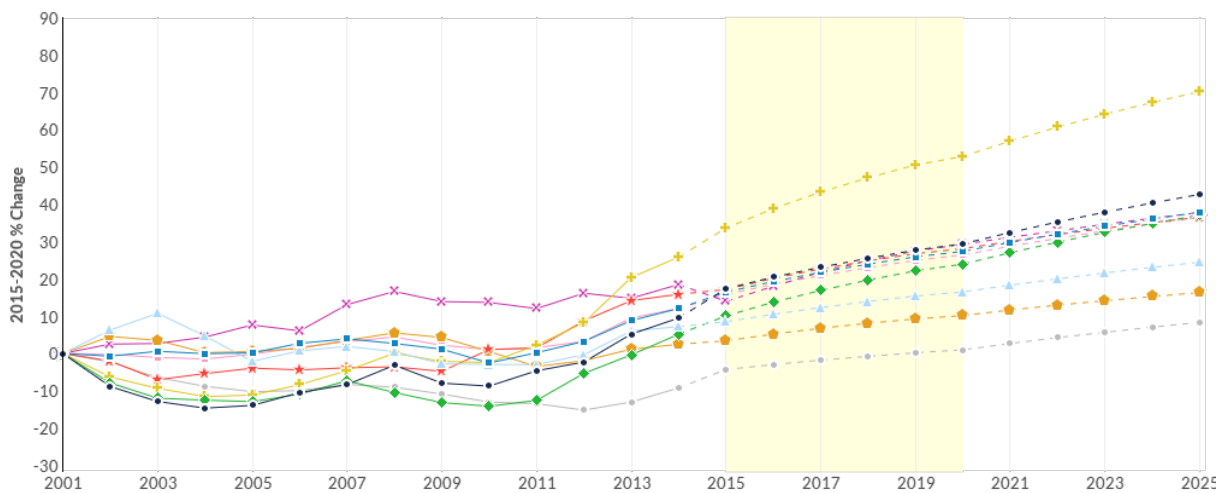
This occupation report, compiled by Elaine Kuo, Institutional Researcher, Foothill College, focuses on two occupational codes: Training and Development Specialists (SOC 13-1151) and Instructional Coordinators/Instructional Designers and Technologists (SOC 25-9031). For purposes of this report, these occupational groupings will be combined into one occupation, Instructional Design and Technology. The occupation summary data predicts there will be ongoing job growth in this area through 2020 (10%). In Santa Clara County, there were 3,533 full- and part-time jobs in 2015, most of these occupations are accounted for by Training and Development Specialists (2,703). It is projected that Santa Clara County will add 362 Instructional Design and Technology jobs by 2020 (10% or 3,895).

Occupation Summary for Instructional Design and Technology

| 3,533 Jobs (2015) 23% above National average | 10.2% % Change (2015-2020) Nation: 8.0% | \$40.50/hr Median Hourly Earnings Nation: \$28.83/hr | | |
|---|--|---|--------|----------|
| Occupation | 2015 Jobs | 2020 Jobs | Change | % Change |
| Training and Development Specialists (13-1151) | 2,703 | 2,962 | 259 | 10% |
| Instructional Coordinators (25-9031) | 830 | 933 | 103 | 12% |

An examination of the projected job growth among the nine counties in the Greater Bay Area region and at the state-level indicates the largest percentage rate change will be the highest in Santa Francisco County (14%), Napa (14%), San Mateo County (13%) and Santa Clara County (10%). Santa Clara County is projected to increase the most number of jobs by 2020 (362), followed by San Francisco (352), Alameda (210) and San Mateo (143) Counties.

Instructional Design and Technology Occupation Change Projections

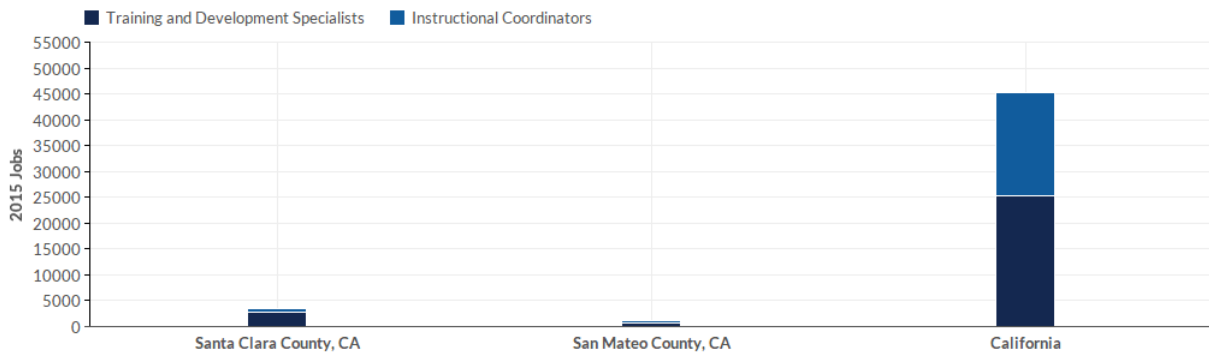


| | Region | 2015 Jobs | 2020 Jobs | Change | % Change | Median Hourly Earnings |
|---|--------------------------|-----------|-----------|--------|----------|------------------------|
| ● | Santa Clara County, CA | 3,533 | 3,895 | 362 | 10% | \$40.50 |
| ● | Alameda County, CA | 2,246 | 2,456 | 210 | 9% | \$37.61 |
| ● | Contra Costa County, CA | 1,004 | 1,077 | 73 | 7% | \$36.76 |
| ● | San Mateo County, CA | 1,140 | 1,283 | 143 | 13% | \$35.47 |
| ● | San Francisco County, CA | 2,447 | 2,799 | 352 | 14% | \$35.16 |

| | Region | 2015 Jobs | 2020 Jobs | Change | % Change | Median Hourly Earnings |
|---|-------------------|-----------|-----------|--------|----------|------------------------|
| ● | Marin County, CA | 402 | 439 | 37 | 9% | \$33.04 |
| ● | Solano County, CA | 360 | 383 | 23 | 6% | \$32.27 |
| ● | Napa County, CA | 162 | 184 | 22 | 14% | \$31.69 |
| ● | Sonoma County, CA | 460 | 485 | 25 | 5% | \$31.63 |
| ● | California | 45,261 | 49,397 | 4,136 | 9% | \$33.43 |

The data and accompanying tables below show the number of jobs between 2015 and 2020, disaggregated by Santa Clara and San Mateo Counties.

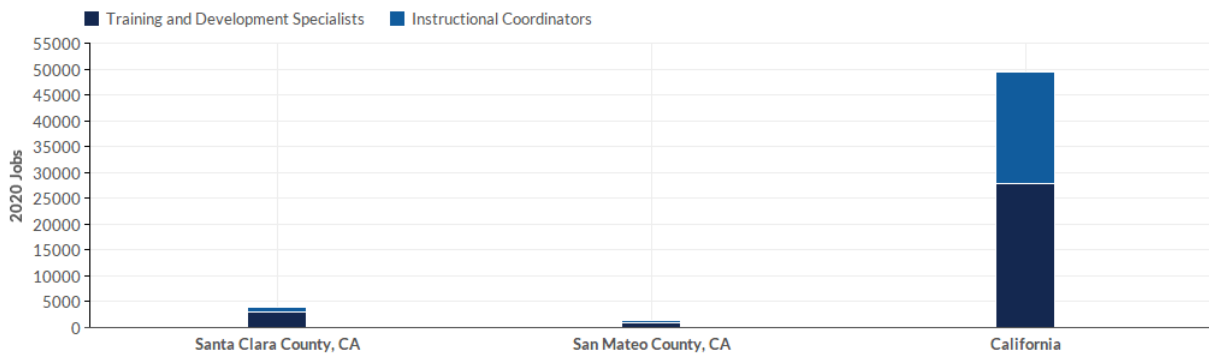
Instructional Design and Technology Occupation Breakdown - 2015 Jobs



| Occupation | Description | Santa Clara County, CA | San Mateo County, CA | California |
|------------|--------------------------------------|------------------------|----------------------|------------|
| 13-1151 | Training and Development Specialists | 2,703 | 778 | 25,267 |

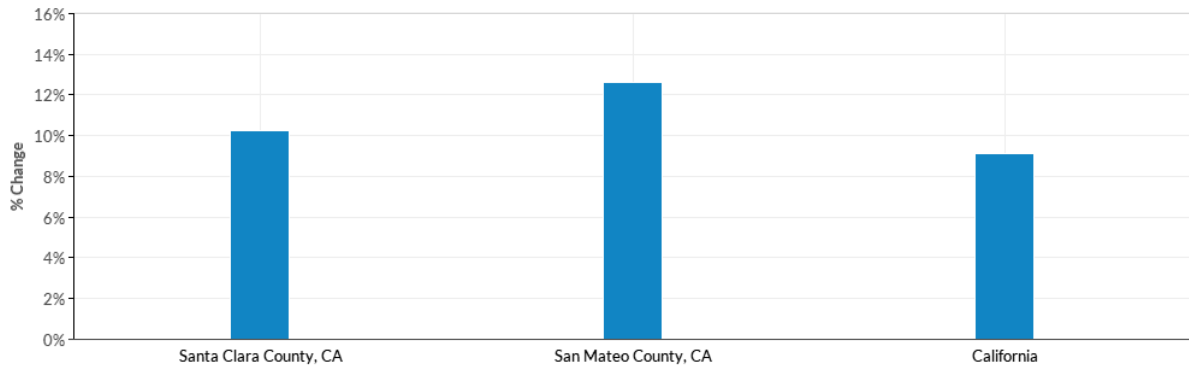
| Occupation | Description | Santa Clara County, CA | San Mateo County, CA | California |
|------------|----------------------------|------------------------|----------------------|------------|
| 25-9031 | Instructional Coordinators | 830 | 362 | 19,994 |
| | Total | 3,533 | 1,140 | 45,261 |

Instructional Design and Technology Occupation Breakdown - 2020 Jobs



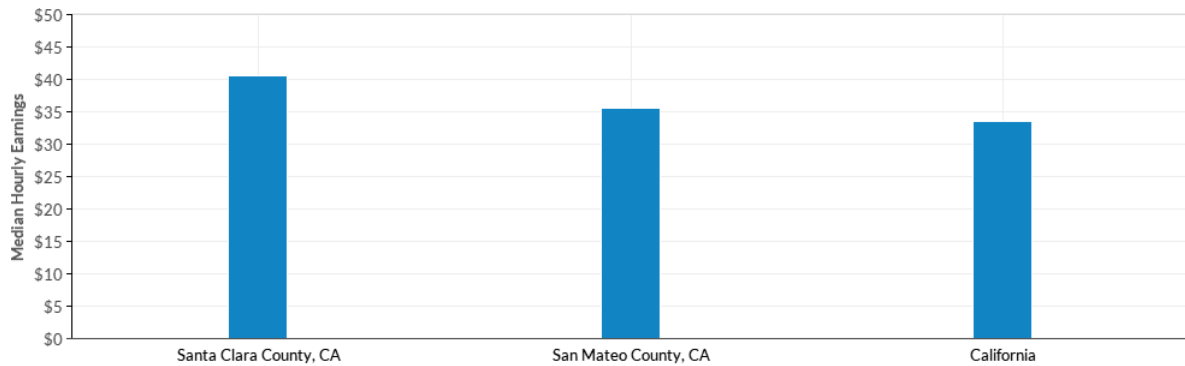
| Occupation | Description | Santa Clara County, CA | San Mateo County, CA | California |
|------------|--------------------------------------|------------------------|----------------------|------------|
| 13-1151 | Training and Development Specialists | 2,962 | 882 | 27,881 |
| 25-9031 | Instructional Coordinators | 933 | 402 | 21,515 |
| | Total | 3,895 | 1,283 | 49,397 |

Occupation Breakdown - % Change



| Occupation | Description | Santa Clara County, CA | San Mateo County, CA | California |
|------------|--------------------------------------|------------------------|----------------------|------------|
| 25-9031 | Instructional Coordinators | 12% | 11% | 8% |
| 13-1151 | Training and Development Specialists | 10% | 13% | 10% |
| | Total | 10% | 13% | 9% |

Occupation Breakdown - Median Hourly Earnings



| Occupation | Description | Santa Clara County, CA | San Mateo County, CA | California |
|------------|--------------------------------------|------------------------|----------------------|------------|
| 13-1151 | Training and Development Specialists | \$42.60 | \$37.05 | \$31.71 |
| 25-9031 | Instructional Coordinators | \$33.86 | \$32.20 | \$35.54 |
| | Total | \$40.50 | \$35.47 | \$33.43 |

Target Occupations Demographics

The demographics among those employed in Industrial Design and Technology occupations in Santa Clara County for 2015 show that a majority are female (64%) and about three-fourths are between the ages of 25-54 (73%) and White (59%).

Occupation Gender Breakdown

| Gender | 2015 Jobs | 2015 Percent |
|---------|-----------|--------------|
| Males | 1,279 | 36.2% |
| Females | 2,253 | 63.8% |

Occupation Age Breakdown

| Age | 2015 Jobs | 2015 Per- cent |
|-------|-----------|-------------------|
| 14-18 | 9 | 0.2% |
| 19-24 | 140 | 4.0% |
| 25-34 | 785 | 22.2% |
| 35-44 | 987 | 27.9% |
| 45-54 | 837 | 23.7% |
| 55-64 | 606 | 17.2% |
| 65+ | 169 | 4.8% |

Occupation Race/Ethnicity Breakdown

| Race/Ethnicity | 2015 Jobs | 2015 Per- cent |
|---|-----------|-------------------|
| White | 2,093 | 59.2% |
| Asian | 606 | 17.2% |
| Hispanic or Latino | 516 | 14.6% |
| Black or African American | 206 | 5.8% |
| Two or More Races | 84 | 2.4% |
| Native Hawaiian or Other Pacific Islander | 14 | 0.4% |
| American Indian or Alaska Native | 14 | 0.4% |

Industries Employing Instructional Design and Technology Occupations

A number of industries in Santa Clara County employ those trained in Instructional Design and Technology occupations. The following table represents a regional industry breakdown of the number of Industrial Design and Technology positions employed, the percentage of Industrial Design and Technology employed by industry and the percentage Industrial Design and Technology jobs represent within all jobs by each industry. While top five industries employed 28% of all regional Industrial Design and Technology positions in 2015, Industrial Design and Technology compose a minority of all jobs in that industry (3%).

Top Industries Employing Instructional Design and Technology Occupations

| Industry | Occupation Group Jobs in Industry (2015) | % of Occupation Group in Industry (2015) | % of Total Jobs in Industry (2015) |
|---|--|--|------------------------------------|
| Custom Computer Programming Services | 242 | 6.9% | 0.6% |
| Elementary and Secondary Schools (Local Government) | 214 | 6.1% | 0.7% |
| Colleges, Universities, and Professional Schools | 190 | 5.4% | 0.6% |
| Internet Publishing and Broadcasting and Web Search Portals | 190 | 5.4% | 0.5% |
| Computer Systems Design Services | 178 | 5.0% | 0.6% |

* *Inverse Staffing Patterns - Settings*

Earning Potential

The range in earnings in Santa Clara County among Instructional Design and Technology show that while the median earnings are \$40.50/hr, the top earning quartile earns \$16.63 more an hour while the lowest quartile earns \$10.12 less an hour. These data show that the range of earnings among Training and Development Specialists is higher than Instructional Coordinators/Instructional Designers and Technologists.

Instructional Design and Technology Percentile Earnings

| | \$30.38/hr | \$40.50/hr | \$57.13/hr |
|--|---------------------------------|------------------------|---------------------------------|
| | 25th Percentile Earnings | Median Earnings | 75th Percentile Earnings |
| Occupation | 25th Percentile Earnings | Median Earnings | 75th Percentile Earnings |
| Training and Development Specialists (13-1151) | \$31.60 | \$42.60 | \$59.34 |
| Instructional Coordinators (25-9031) | \$26.52 | \$33.86 | \$50.10 |

Data Sources and Calculations

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department

Federal Data Sources

This report uses federal data from the following agencies: Quarterly Census of Employment and Wages (QCEW) from the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA).

Additional Areas of Discussion Not Addressed in the LMI Report

The LMI report produced by Elaine Kuo, Institutional Researcher, Foothill College did not address two suggested topics for discussion. These topics are presented below for consideration and written by Dr. Steven McGriff, adjunct faculty, Foothill College and primary author of the certificate application.

Program Credibility/Career Potential

The certificate in instructional design and technology is designed for students who are currently working in or planning for a career as human resource training and development specialists or careers within the education field, such as teachers, instructional coordinators, and information technology technicians and trainers.

The certificate enables potential students who are situated in a career to remain current in their field and creates pathways for career advancement. Students who are entering the field will learn the foundational skills and knowledge with practical application to real-world training and learning contexts. The program is organized around the core knowledge domains of the field of instructional design and technology and immerses the student in an applied learning experience. At the end of the program, students with no prior knowledge of the field will have gained appropriate depth and breadth to be a viable candidate for any position that employs these skills.

The data on the occupation race/ethnicity breakdown shows a demographic distribution that closely matches the general population. The program prepares students to work in an ethnically diverse workforce in the local region.

Career Technical Education Skills

The proposed IDT certificate is designed for students who are either entry level learners or who are already employed. The courses are designed for online and blended-learning formats to increase the opportunity for course completion. When offered in blended or classroom-based formats, the courses will be scheduled for weekdays in the late afternoon and evening. The planned sequence of courses offered in the academic year seeks to accommodate the employed student's needs, such as prior experience and knowledge, to allow the most flexibility in choosing a pathway of courses that fulfills the certificate requirements.

Education Level Data for Occupations in Instructional Design and Technology

This section about education levels was compiled by Dr. Steven McGriff, Krause Center for Innovation, Foothill College, using data from O*NET Online. The reported education information details are for occupational codes: Training and Development Specialists (SOC 13-1151) and Instructional Coordinators/Instructional Designers and Technologists (SOC 25-9031).

13-1151.00 - Training and Development Specialists

Design and conduct training and development programs to improve individual and organizational performance. May analyze training needs.

Sample of reported job titles: Computer Training Specialist, Corporate Trainer, Learning Developer, Job Training Specialist, Management Development Specialist, Senior Instructor, Supervisory Training Specialist, Technical Trainer, Trainer, Training Specialist

Education: Most of these occupations require a four-year bachelor's degree, but some do not.

| Percentage of Respondents | Education Level Required |
|----------------------------------|---------------------------------|
| 58 | Bachelor's degree |
| 17 | Master's degree |
| 11 | Post-baccalaureate certificate |

25-9031.00 - Instructional Coordinators

Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Include educational consultants and specialists, and instructional material directors.

Sample of reported job titles: Career Technical Supervisor, Curriculum and Assessment Director, Curriculum and Instruction Director, Curriculum Coordinator, Curriculum Director, Curriculum Specialist, Education Specialist, Instructional Systems Specialist, Program Administrator, School Standards Coach

Education: Employers are usually looking for candidates with a Master's degree.

| Percentage of Respondents | Education Level Required |
|----------------------------------|---------------------------------|
| 73 | Master's degree |
| 20 | Post-master's certificate |
| 4 | Post-baccalaureate certificate |

25-9031.01 - Instructional Designers and Technologists

Develop instructional materials and products and assist in the technology-based redesign of courses. Assist faculty in learning about, becoming proficient in, and applying instructional technology.

Sample of reported job titles: Chief Technology Officer; Director, Educational Research and Product Strategy; Instructional Designer; Instructional Technologist; IT Senior Analyst (Instructional Technology Senior Analyst); Lead Performance Support Analyst; Learning Development Specialist; Senior Instructional Designer; Team Lead, Teacher Support and Student Intervention

Education : Employers are usually looking for candidates with a Bachelor's degree.

| Percentage of Respondents | Education Level Required |
|----------------------------------|---------------------------------|
| 65 | Master's degree |
| 36 | Post-master's certificate |
| 4 | Post-baccalaureate certificate |

Employer Survey

Certificate of Achievement in Instructional Design and Technology

Methodology

Local employers were surveyed in May and July 2016 via online or telephone survey to explore whether students earning a certificate of achievement in Instructional Design and Technology will have the skills and experiences necessary to find employment, generally, and specifically within their respective organizations. The target list of employers who received the survey includes: directors of instructional technology in school districts and the county office of education; assistant superintendent of curriculum and instruction; education directors of non-profit technology museums and organizations; and higher education directors of technology.

See Appendix A, Instructional Design and Technology Employer Survey, for the online survey form and questions.

Additionally, the survey sought to gather data regarding the employment opportunities for these potential certificate earners.

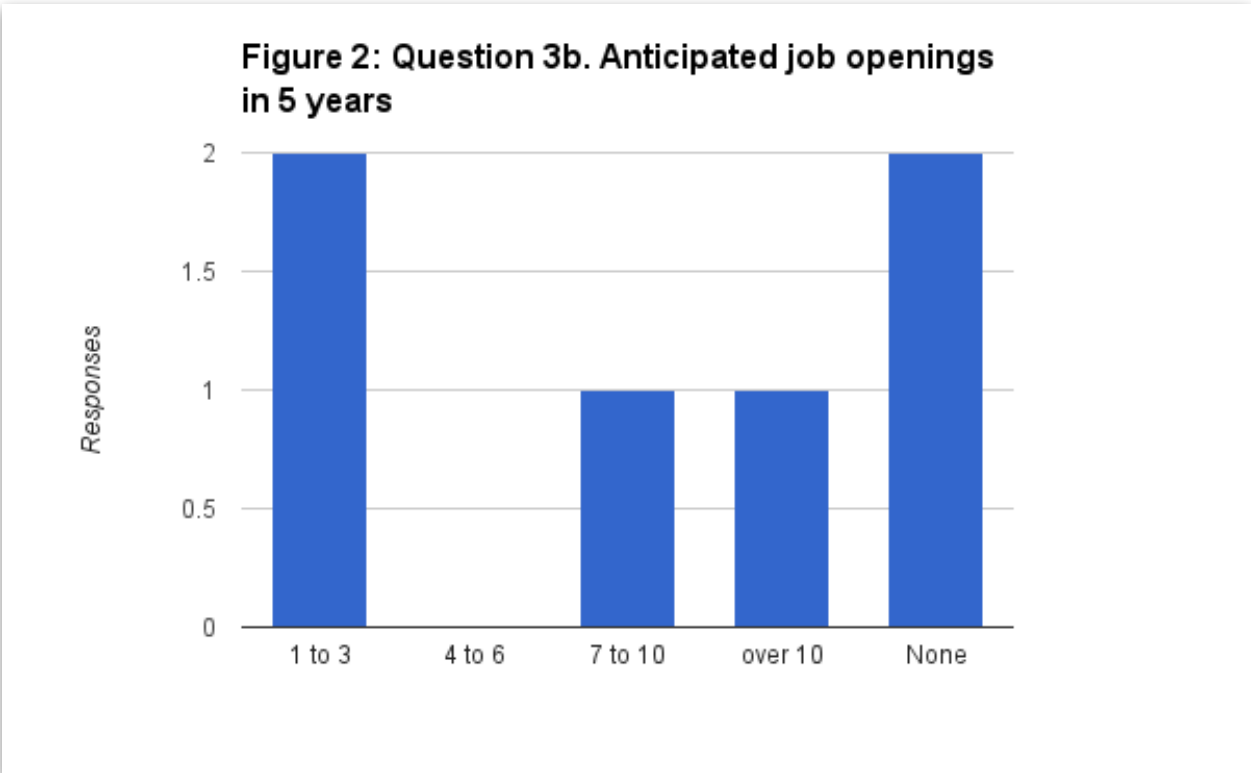
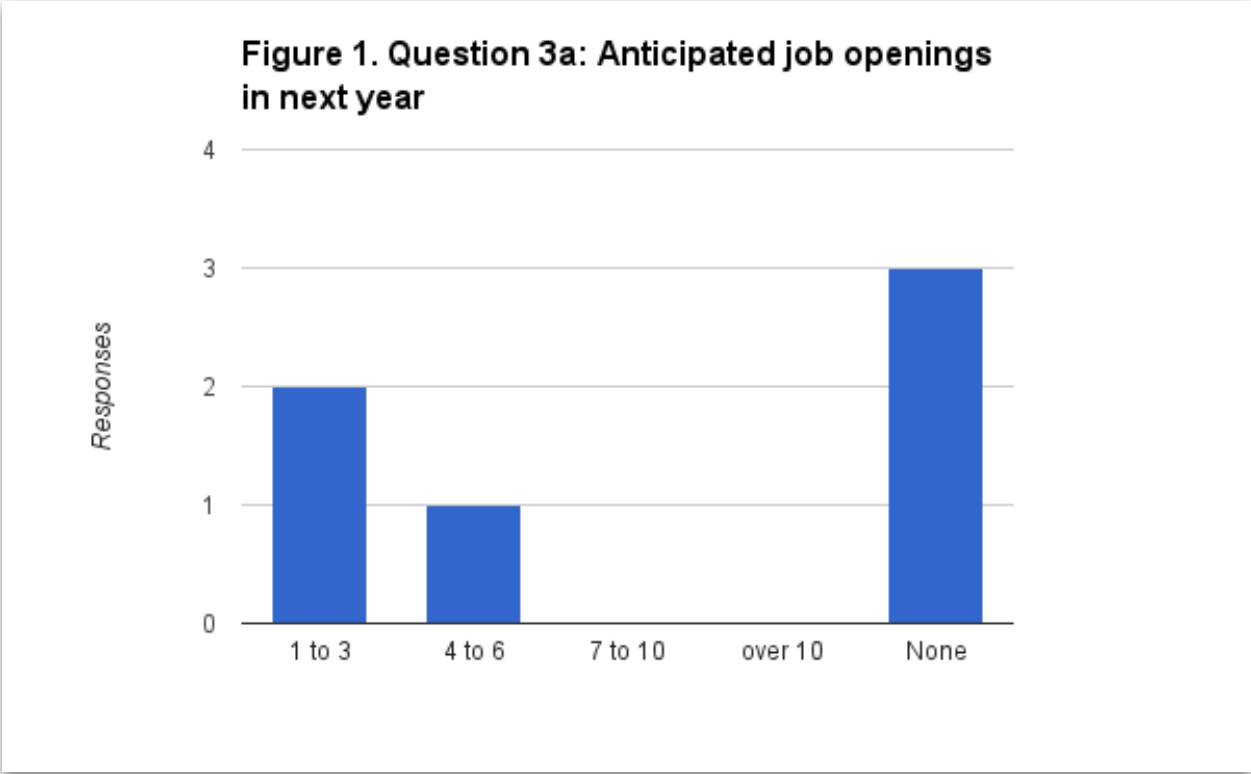
Response rate

17 survey requests were sent by email and 6 responses were received (35% response rate).

Projections

Responses to question 3a show the potential for 6-12 total positions over the next year, see Figure 1, below. Two organizations expect to hire up to 3 people and one organization up to 6. Over the next five years, responses from question 3b show increasing rates of hiring with four organizations that anticipate hiring, see Figure 2. Among those, two are expecting to hire 7 or more employees to fill anticipated job openings due to both separation from service and job growth.

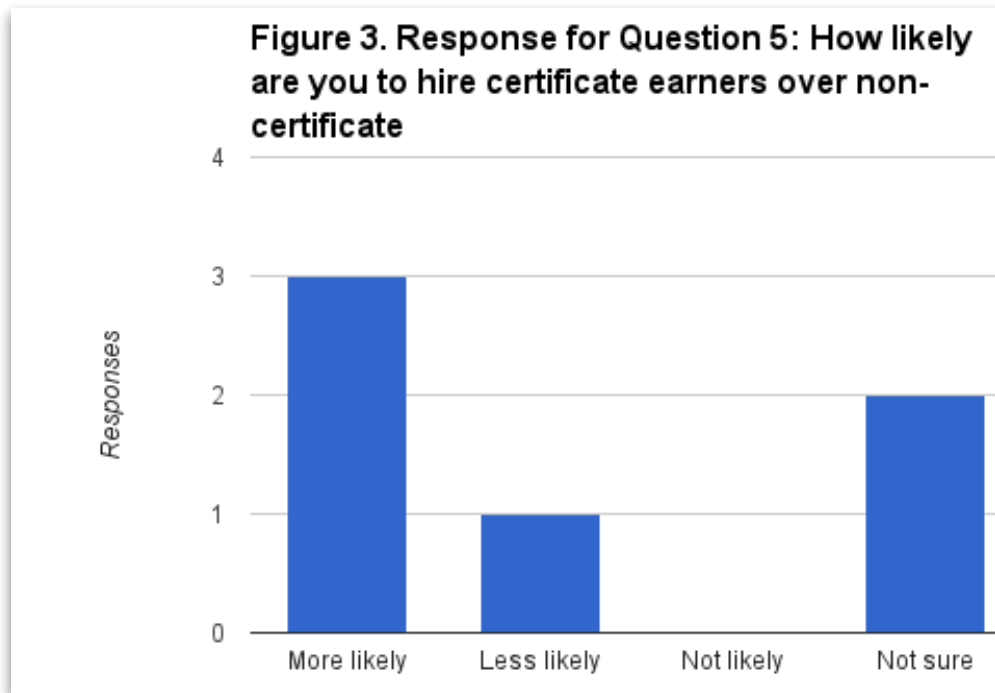
In response to question 1, “Does the program description reflect the education/training your organization looks for among potential employees?” the data shows an average rating of 2 on a 5-point scale, where 1 indicates “completely accurate” and 5 indicates “not accurate.” Respondents perceive the education and skills acquired in the certificate program accurately describes the type of employee they would likely hire.



The job titles within the respondents' organizations for which the certificate would meet minimum qualifications include:

- teacher on special assignment/coach
- While we don't have a job for someone with just this certificate it would be great background for a teacher or teacher on special assignment
- Instructional designer
- teacher, Coordinator of Educational Technology, Coordinator of Professional Learning. Teachers on Special Assignment of various disciplines.
- Instructional tech coach, coordinator, specialist

In response to question 5, "How likely would you or your organization hire students who complete the certificate compared to other applicants who have not completed an equivalent certificate, if all other job considerations are equal?" Half of respondents indicated the highest response, "More likely," as shown in Figure 3.



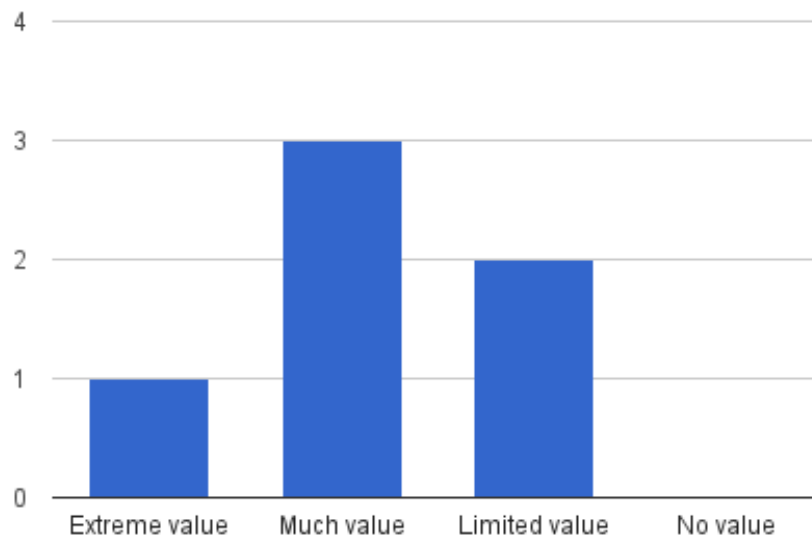
When asked if the reputation of the Krause Center for Innovation would add value to a certificate in instructional design and technology, 3 respondents replied, "Much value" and one indicated "Extreme value." See Figure 4, below. Optional open-ended elaboration responses to survey question six include:

"I believe the reputation has grown over the years and the addition of a certificate is a great idea. Beyond tech use and into solid instructional design principles."

“They have created programs like Merit and mini Merit that help teachers get excited about using technology in their classrooms”

“The KCI is known for quality professional development and teachers who have gone through MERIT are highly regarded.”

Figure 4. Question 6: Perceived added value of the KCI to the certificate



Question 7 asks about the prospects for mobility and career advancement. Figure 5, below, shows favorable possibilities with 3 responses of “good possibility” and 1 “very good possibility” ratings.

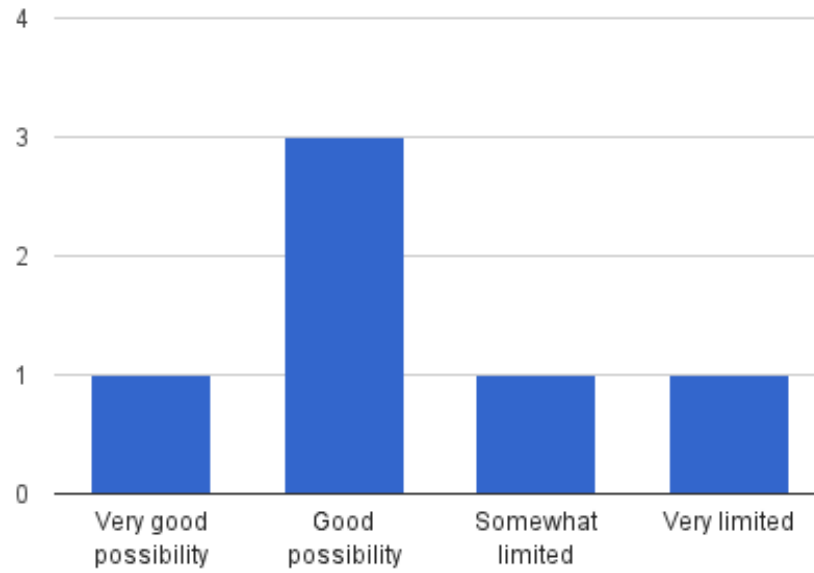
One respondent wrote an optional elaboration to their response to Question 7:

“While we [a unified school district] do not have a career ladder, there are possibilities to move, for example, from teacher, to TOSA [Teacher on Special Assignment], to Coordinator, to Director. Of course, there are fewer positions the higher it goes, but prospects are there. Also, depending on the time and need, new positions are created.”

Another respondent stated,

“This type of certification also suggests an employee who likes to learn and will continue learning and thus the mobility and career advancement is quite likely and the certification will add extra chops.”

Figure 5. Question 7: Certificate earner's prospects for mobility and advancement



Appendix A

Instructional Design & Technology Employer Survey

Instructional Design & Technology Employer Survey

Created by the Krause Center for Innovation at Foothill College, this survey is designed for employers who may hire professionals with certification in instructional design and technology.

* Required



Introduction

Foothill College located in Los Altos Hills, California plans to create a new Instructional Design & Technology program. Students will be able to earn a California Community Colleges authorized Certificate of Achievement on their transcript. We are surveying local employers to ensure that students who complete the certificate will have the skills and experiences to help them find employment. Additionally, your feedback can shape our new program so that the curriculum maintains its currency and relevancy.

Should you have any questions or comments regarding this survey or the development of the Certificate of Achievement in Instructional Design & Technology program at Foothill College, please contact Dr. Steven McGriff at mcgriffsteven@foothill.edu.

PROGRAM DESCRIPTION

The proposed certificate of achievement in Instructional Design & Technology (IDT) is a 27-unit program of study. The projected time to complete the certification is five quarters. The certificate is designed to meet the professional growth needs of a variety of students: those currently working in or planning for a career in human resource training and development or the education field; in-service and pre-service teachers; educators at any level; information technology professionals; and those already working as technical or soft skills trainers within any market sector.

The certificate program focuses on applying knowledge and skill for using technology to design and develop instructional resources or programs for online, as well as face-to-face learning settings.

The content includes the foundational knowledge and skills of instructional technology, pedagogy, and training techniques that are currently used in real-world work environments in schools, business, and industry.

Skills students learn include the ability to create printed and online resources, multimedia, and presentations that can be used for online instruction or in traditional classroom settings.

Upon completion of all program requirements, students will be able to design, deliver, and evaluate instructional and informational content in a variety of contexts such as, school or college classrooms, professional development programs, presentations, research, information graphic design (infographics), and business training environments.

Thank you for your time!

Additional questions or comments can be directed to
Dr. Steven McGriff, Instructional Designer and Professor in Residence
Krause Center for Innovation, Foothill College
mcgriffsteven@foothill.edu • (650) 949-7681

Questions

1. 1. Does the program description reflect the education/training your organization looks for among potential employees? *

Select your response using a scale of 1 to 5, where 1 = completely accurate and 5 = not accurate
Mark only one oval.

1 2 3 4 5

Completely accurate Not accurate

2. 2. Identify the job titles in your organization for which students who completed the certificate in Instructional Design & Technology would meet minimum qualifications: *

Please list 1-4 job titles

.....

3. 3a. How many job openings fitting the certificate description are anticipated by your organization in the next year? *

Mark only one oval.

- 1 to 3
 4 to 6
 7 to 10
 over 10
 None

4. 3b. How many job openings fitting the certificate description are anticipated by your organization in the next 5 years? *

Mark only one oval.

- 1 to 3
 4 to 6
 7 to 10
 over 10
 None

5. 4. Are the anticipated openings that fit the program description due primarily to separations (resignations/retirements) or new job growth? *

Mark only one oval.

- Separations
 Job growth
 Both separation and job growth
 Not applicable: No openings anticipated

6. 5. How likely would you or your organization hire students who complete the certificate compared to other applicants who have not completed an equivalent certificate, if all other job considerations are equal? *

Mark only one oval.

- More likely
- Less likely
- Not likely
- Not sure

7. 6. How much value does the reputation of the Krause Center for Innovation at Foothill College add to a certificate in instructional design & technology? *

Mark only one oval.

- Extreme value
- Much value
- Limited value
- No value

8. 6a. Please elaborate on your response to survey item 6:

9. 7. For individuals hired by your organization with this certificate, what are the prospects for mobility and career advancement? *

Mark only one oval.

- Very good possibility
- Good possibility
- Somewhat limited
- Very limited

10. 7a. Please elaborate on your response to survey item 7:

Thank you, we appreciate your time

11. If we can contact you for further information or clarification on your responses, please provide your name, title, organization, and email below:
