

## **Proposal to the Senate Educational Policy Committee**

**PROPOSAL TITLE:** Establish the Digital Environments for Learning, Teaching and Agency concentration in the Bachelor's of Science in Learning and Education Studies in the College of Education

**SPONSOR:** Fouad Abd-El-Khalick, Head of Curriculum and Instruction, 217/333-6510, fouad@illinois.edu

**COLLEGE CONTACT**: Christopher M. Span, Associate Dean for Academic Programs, 217/333-2800, <a href="mailto:cspan@illinois.edu">cspan@illinois.edu</a>

**BRIEF DESCRIPTION:** This proposal describes the Digital Environments for Learning, Teaching, & Agency (DELTA) concentration within the Learning and Educational Studies non-licensure program in the College of Education. This new concentration seeks to introduce students to practices and principles that address learning and teaching in digital environments. These environments range from technology-enhanced classrooms to mobile devices to immersive virtual worlds—any digital environment that may be used to train, teach, or cultivate new kinds of reasoning and understanding.

Courses in this concentration will focus on identifying the features of digital environments that are most effective for facilitating learning in a variety of content areas and disciplines. This includes the cognitive, affective, social, and cultural aspects of technology interactions. The concentration also highlights issues of equity and diversity that surround technology design and implementation in educational environments.

The DELTA concentration prepares students for a wide range of positions requiring expertise in how new technologies contribute to how people learn. Examples include educational publishing and educational technology development, museum exhibit design, corporate training, game design, web and mobile application development, etc.

See Program of Study for requirements.

#### **JUSTIFICATION:**

a. Why should we have the concentration? There is a need for a concentration for undergraduate students who are interested in the integration of technology into education. A concentration that allows students to learn more about the development and implementation of technology to support learning in a range of contexts (homes, schools, museums, workplaces etc), would appeal to students interested in the

- intersection of technology and education and in understanding how best to select, design or use technology to support learning. Like most undergraduate degree offerings today, it is highly important for students to consider graduate school to enhance their understanding and expertise. This concentration will provide a good basis for students who wish to pursue graduate work.
- b. What do we expect students to get from these concentrations? Digital Environments for Learning, Teaching and Agency will provide students with a strong background in the design, development and implementation of technology for a range of learning environments. Courses will introduce students to learning theory, designing and using technology to support learning, and issues encountered when deploying technology to classrooms, schools, and informal learning spaces. Students in the DELTA concentration will:
  - Explore theories and methods for designing and implementing technology in teaching and learning environments.
  - Identify general principles of learning and instruction and understand the role that technology may play in supporting learning in a variety of settings.
  - Engage in writing, design, and presentation skills that can be applied to a range of contexts (e.g., education, industry, non profit organizations).
  - Understand the limits and nature of technology, and issues of equity and access related to digital environments for learning, teaching and agency.
- c. What jobs will these students seek upon graduation? Graduating students will be prepared to engage with various stakeholders interested in using technology to support learning in a range of different contexts. Examples include selecting and deploying appropriate technology to support pedagogic goals for schools, corporations, or informal learning environments such as museums and afterschool clubs, designing educational games or toys and educational application development. One of the main objectives for students in DELTA is to build new ways to support learning, and prepare them for leadership roles in formal and informal environments, technology design and implementation strategies. They will be prepared to pursue graduate study in a range of programs, such as educational technology, learning sciences, or instructional technology at the University of Illinois or elsewhere. They will also be prepared for jobs that require expertise in design, analysis, and evaluation of learning environments, such as teachers, knowledge managers, policy makers, analysts, and professionals in government, business, and nonprofit organizations. In addition, they will be prepared for jobs that require the development, delivery, and evaluation of training and development programs across workplace settings, such as businesses and industries, two-year post-secondary schools, or community and government agencies. Students are encouraged to add a minor or pursue a coherent set of electives from other departments, determined in consultation with an adviser, to support the knowledge acquired in DELTA.
- d. What makes this major/concentrations different from other majors on this campus? The Digital Environments for Learning, Teaching and Agency concentration offers a unique combination of courses that will prepare students to create, evaluate and implement technology to support learning in a range of contexts. It will prepare students for jobs that cross disciplines, working with programmers, content experts, teachers and a range of stakeholders in schools and industry.
- e. How do we promote this program to high school and ICT students? This major will appeal to high school students who have an interest in education and technology but are unsure as to whether they are interested in becoming teachers, who have experience with programming or app development, who are excited about the

potential of technology to change the school system or learning opportunities in a range of settings. The Learning and Education Studies major allows students from across campus interested in education to ICT into the College of Education, allowing those who wish to learn more about the intersection of education and technology to enroll in this concentration. The College will market and advertise the Learning and Education Studies major and the DELTA concentration to high school, community college, and current university students.

#### BUDGETARY AND STAFF IMPLICATIONS: (See Appendix A for additional information.)

- a. Additional staff and dollars needed: No additional staff or dollars will be needed for this new concentration in the Learning and Education Studies major and degree. Existing faculty will teach courses in this new concentration and current academic advisers will advise students.
- b. Internal Reallocations: No significant internal reallocations are needed to accommodate this new concentration. The concentration will fold into the Learning and Education Studies degree.
- c. Effect on course enrollment in other units and explanations of discussions with representatives of those departments: There are no effects on course enrollment in College units for students in the concentration. All courses in the concentration, except for PSYC 357, are taught by faculty in the College and have been approved by the College's departmental executives. The only course listed in the concentration that exists outside the College is Psych 357 and the College has obtained a letter of support from Psychology for this course.
- d. Impact on the University Library: No additional resources will be needed from the University Library for this new concentration. (See Appendixes for Letter of Acknowledgment.)
- e. Impact on computer use, laboratory use, equipment, etc.: There are no anticipated impacts on computer use, laboratory use, equipment, etc. The classes will require flexible classrooms with access to a range of technologies. The classroom renovations that have been completed and are in progress at the College of Education will provide ample access to appropriate classroom spaces.

**DESIRED EFFECTIVE DATE:** Fall 2015

#### STATEMENT FOR PROGRAMS OF STUDY CATALOG:

# **Education**

http://education.illinois.edu/

Associate Dean for Academic Programs: Christopher M. Span 120 Education Building, 1310 South Sixth, Champaign, (217) 333-2800

## **Learning and Education Studies**

### For the Degree of Bachelor of Science in Learning and Education Studies

This curriculum prepares individuals for positions requiring expertise in formal and non-formal learning and educational settings that do NOT require licensure (becoming a licensed teacher). Students interested

in becoming a licensed teacher should consider the licensure program in the majors of Elementary Education, Early Childhood Education, or Special Education.

A minimum of 120 semester hours is necessary for graduation in the Learning and Education Studies program. Students will spend much of the first two years with general education courses, achieving a solid preparation in the humanities, social and natural sciences, technology and mathematics. In the final two years of the major, students will take a set of core courses, as well as coursework in one of the following concentrations: 1) Applied Learning Science; 2) Educational Equality and Cultural Understanding; 3) Workplace Training and Development; and 4) Digital Environments for Learning, Teaching and Agency.

## **Degree Requirements**

# Hours Orientation Seminar EDUC 101, Education Orientation Seminar

The following degree requirements also meet general education course requirements and must be selected from the campus general education course list. Selections of core requirements courses should be made in consultation with the adviser.

Constitution with the universe				
Hours	Composition <sup>1</sup>			
4-6	Composition I			
3-4	Advanced Composition			
Hours	Quantitative Reasoning <sup>1</sup>			
3	STAT 100 or another approved basic course in statistical methods such as EPSY 280, SOC 280, PSYC 235			
3	From approved campus list (Recommended: INFO 102)			
Hours	Natural Sciences and Technology <sup>1</sup>			
6	From approved campus list (Recommended: ECE 101)			
Hours	Humanities & the Arts <sup>1</sup>			
6	From approved campus list			
Hours	Social & Behavioral Sciences <sup>1</sup>			
6	From approved campus list (must include PSYC 100)			
Hours	Cultural Studies $^{\underline{1}}$			
3	From Western Culture(s) approved campus list			
3	From U.S. Minority Culture(s) or Non-Western Culture(s) approved campus list			
37-40	Total hours of general education courses			
Hours	Language other than English			
0-12	Three years of one language other than English in high school or completion of the third semester of college-level language.			
Hours 6-7	Core Requirements <sup>2</sup> Choose 2 from:			

SPED 117 – The Culture of Disability (3 hours)

EPSY 236 – Child Dev for Elemen Teachers  $\,$  (3 hours) (Not recommended for

the Workplace Training and Development concentration.)

EPS 201 – Foundations of Education (3 hours) or EPS 202 – Foundations of Education Advanced Composition (4 hours)

18-20 Choose 6 from the list below, with at least 2 in each area:

Teaching and Learning:

CI 260 – Serving Child in Schools/Comm (3 hours)

CI 415 – Language Varieties, Cult, & Learning (3 hours)

EPSY 401 – Child Language and Education (3 hours)

EOL 440 – Prof Issues for Teachers (3 hours)

EPSY 201 – Educational Psychology (3 hours)

EPSY 400 – Psyc of Learning in Education (3 hours)

Leadership in a Diverse Global Economy:

EPS 310 – Race and Cultural Diversity (4 hours)

EPS 402 – Asian American Education (4 hours)

EPS 405 – Historical and Social Barriers (3 hours)

HRD 415 – Diversity in the Workplace (3 hours)

24-27 Total hours of core requirements

#### Hours Concentration<sup>2</sup>

Students must complete 24 credit hours within one of the following three areas of concentration: 1) Applied Learning Science; 2) Educational Equality and Cultural Understanding; 3) Workplace Training and Development; or 4) Digital Environments for Learning, Teaching and Agency.

**Hours** Electives

16-34 Electives (including minor, if taken)

TOTAL minimum hours, including general education, language other than English, concentration, and core credits

- 1. General Education Requirement. Courses must be selected from the Campus General Education Approved Course List.
- 2. Area of Concentration and Core Requirement courses found on the <u>General Education Approved Course List</u> may also be credited toward the General Education requirements.

#### Digital Environments for Learning, Teaching and Agency (DELTA) Concentration

The undergraduate non-licensure concentration in Digital Environments for Learning, Teaching, and Agency (DELTA) will provide students with a strong background in the design, development and implementation of technology for a range of learning environments. Courses will introduce students to learning theory, designing and using technology to support learning, and issues encountered when deploying technology to schools, workplaces and informal learning spaces. The program culminates in a capstone course in which students work on a design project under the direction of one or more faculty members.

Graduating students will be prepared to engage with various stakeholders interested in using technology to support learning in a range of different contexts. Examples include selecting and deploying appropriate technology to support pedagogic goals for schools, corporations, or informal learning environments such as

museums and afterschool clubs, designing educational games or toys and educational application development. One of the main objectives for students in DELTA is to build new ways to support learning, and prepare them for leadership roles in formal and informal environments, technology design and implementation strategies. They will also be prepared to pursue graduate study in a range of programs, such as educational technology, learning sciences, or instructional technology at the University of Illinois or elsewhere.

Students are encouraged to pursue a relevant minor or coherent set of electives from several related departments. Suggested minors include: computer science, communication, psychology, informatics, media and cinema studies or sociology. Students may also consider a minor in a specific content area from the arts and sciences to develop expertise in a particular field.

The DELTA concentration consists of 24 hours of course work. Students are required to take a minimum of two foundations courses, three core courses and three elective courses. The core courses are designed to ensure students leave the program with foundational knowledge and skills necessary to design, develop, implement, manage, and evaluate digital environments. The elective courses allow students to tailor the concentration to fit individual career goals and areas of interest. Students should take the foundation course Introduction to Digital Environments in the first semester they join DELTA. Similarly, the Capstone Research Project should be taken in the last semester after the majority of DELTA-related course work is complete.

#### Hours Digital Environments for Learning, Teaching and Agency (DELTA)

The following courses are required as of Fall 2015 for this concentration. Changes/additions to this list can be obtained from the College office. Approvals for substitution must be submitted by petition to the College office for approval by the Assistant Dean for Academic Affairs.

- 3 CI 481 Introduction to Digital Environments
- 3 CI 489 Capstone Research Project
- 3 Choose 1 from

PSYC 357 - Introduction to Cognitive Science

EPSY 490 – Learning in Everyday Contexts

EPSY 408 Learning & Human Development with Education Technology

3 Choose 1 from

EPSY 402 – Sociocultural Influences on Learning

CI 482 - Social Learning and Multimedia

3 Choose 1 from

EPS 399 - Social Justice and Education

SPED 312 – Introduction to Educational Technology

HRD 415 - Technology & Education Reform

9 Choose 3 from

CI 437 – Education game design

CI 438 - Computer Programming and the Classroom

CI 424 - Child Development and Technology

EPSY 408 – Learning and Human Development with Educational Technology

HRD 472 – Learning Technologies

EPS 431 – New Learning: Innovative Pedagogy & Curriculum Design

HRD 575 – Innovations in eLearning

**CLEARANCES:** (Clearances should include signatures and dates of approval. **These signatures must appear on a separate sheet.** If multiple departments or colleges are sponsoring the proposal, please add the appropriate signature lines below.)

Signatures:	
CI Unit Representative:	10/28/2014 Date:
College Representative:	Date:
Graduate College Representative:	Date:

# **Appendix A:** (Budgetary and Staff Implications)

### **New Degree Programs – Required Budgetary Implication Questions**

1) How does the unit intend to financially support this program?

There are no anticipated additional costs to support this new degree offering. If there are, the costs would be covered by the additional revenue generated by the instructional units from the new degree offering.

2) Will the unit need to seek campus or other external resources?

No.

3) If no new resources are required, how will the unit create capacity or surplus to appropriately resource this program? (What functions or programs will the unit no longer support?)

No new resources are needed for this concentration. Over the past few years the College has made a concerted effort to hire a critical mass of faculty in the specialization of educational technology. These faculty have taught courses related to their field of expertise in the College, particularly at the graduate level. The recent approval of a new non-licensure major and degree in the College, Learning and Education Studies, allow faculty to teach this area of expertise at the undergraduate level as well.

4) Please provide a market analysis: What market indicators are driving this proposal? What type of employment outlook should these graduates expect? What resources will be required to assist students with job placement?

There are ever-increasing demands in the United States and abroad for persons trained to work in areas of specialization in education beyond licensure and in business and non-profit organizations, particularly in relation to technology, and the DELTA concentration will prepare students for a range of these opportunities. Graduates from DELTA will be prepared to work for a range of organizations and stakeholders interested in the application of technology to support learning across a range of contexts. These may include technology coordinators for schools or districts, where the graduates' expertise would be useful in selecting, implementing and supporting the integration of technology-enhanced curricula across k-12 schools. Opportunities in informal learning environments such as museums or after-school clubs and organizations will also require the knowledge and skills acquired as part of the DELTA concentration. In addition, corporations are increasingly focused on ongoing training and development opportunities for their staff. Working as members of corporations' human resource and development departments, or as external consultants for smaller organizations, DELTA graduates will be prepared to engage in development and deployment of technology-enhanced learning experiences at the corporate level.

The multi-billion dollar edutainment industry (educational entertainment) provides another sphere of opportunities for our graduates. These opportunities include working with startup companies to develop applications for hardware such as iPads, assisting television companies with creating educational content as part of a television show or off-screen activities that extend learning

opportunities for children and provide guidance for parents and teachers, and working for toy companies where graduates will be prepared to guide the development of educational goals for new technology-enhanced educational toys.

The potential of the field of 'serious games' to teach or recruit has been recognized by many organizations. In particular, the US military is prominent in the creation of serious games to fulfill a range of purposes. Graduates from DELTA will be prepared to take a variety of roles in the development of these types of learning opportunities, particularly as technology develops to allow for more embodied and virtual learning environments. The role of serious games in health education is also growing, and graduates interested in this field will find an international audience for games that use culturally sensitive and empathetic techniques to educate populations about essential, but frequently socially offensive, taboo, or complex ideas.

We will encourage students to consider a minor or a coherent set of electives from several departments as approved by their adviser, in a host of areas that complement their professional interests. Suggested minors for students in this concentration are: computer science, communication, psychology, informatics, media and cinema studies or sociology. Students may also consider a minor in a specific content area from the arts and sciences to develop expertise in a particular field, preparing them for more content-specific roles

With regard to any additional resources to assist students with job placement, it is the hope of the College of Education that campus career counselors and job fairs will work with the College to ensure our students are adequately placed in current and future markets. Notwithstanding, the College will work with additional potential employment outlets no different than it does for undergraduate students seeking licensure as teachers.

5) If this is a proposed graduate program, please discuss the programs intended use of waivers. If the program is dependent on waivers, how will the unit compensate for lost tuition revenue?

There will be no need for waivers. This is an undergraduate concentration, not a proposed graduate degree offering.

# UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

University Library
Office of the University Librarian
230 Main Library, MC-522
1408 West Gregory Drive
Urbana, IL 61801



October 21, 2014

Chris Span, Associate Dean for Academic Programs College of Education 1310 S. Sixth Street Room 120 MC-708

Dear Dean Span:

Thank you for giving the University Library the opportunity to review the College of Education's proposal to the Senate Committee on Educational Policy to Establish the Digital Environments for Learning, Teaching and Agency (DELTA) concentration in the Bachelor's of Science in Learning and Education Studies.

Based upon the proposal submitted to the Library on October 15, 2014, we do not believe that there will be any substantial, immediate impact on the Library's operations. With respect to Library materials, the subject specialist in this area feels as though the Library already purchases material on ICT, online learning, and to a lesser extent, educational games sufficient to support the early development of a program that will draw on resources located in the Social Sciences, Health, and Education Library, as well as the Grainger Engineering Library and, in some cases, the Undergraduate Library.

In terms of services and instruction, two of the core requirement courses for *Learning and Education Studies* already incorporate regular library instruction as part of their syllabus. EPS 202 and EPS 310 send approximately 7-8 sections for library instruction every semester. It may be desirable to add a library instruction component to the DELTA required courses if they are, or become, research-paper focused. Specifically, the note was made that CI 481 and CI 489 may benefit from instruction sessions focused on Library resources.

We appreciate your providing us with the proposals as such contact does help ensure that our services are in line with the programs developing in the School.

Sincerely,

John P. Wilkin

Juanita J. and Robert E. Simpson

Dean of Libraries and University Librarian

c: Nancy P. O'Brien Kathy Stalter Thomas Teper Subject: RE: letter of support

Date: Tuesday, October 28, 2014 at 1:01:36 PM Central Daylight Time

From: David Irwin

To: Carney, Karen M CC:

Stalter, Kathy L

Hi,

Yes, I agree.

Best,

Dave

David E. Irwin **Professor and Head** Department of Psychology University of Illinois 315 Psychology Building 603 E. Daniel St. Champaign, IL 61820

phone: 217-333-0632 fax: 217-244-5876 email: irwin@illinois.edu

Quoting "Carney, Karen M" < <a href="mailto:kmcarney@illinois.edu">kmcarney@illinois.edu</a>>:

Kathy, I've talked with Professor Irwin and am writing to indicate that both the Department of Psychology and College of Liberal Arts and Sciences approve of this change. PSYC 357, Intro to Cognitive Science, is already listed as a required course in the Applied Learning Science concentration. The proposed new concentration in Digital Environments for Learning, Teaching and Agency (DELTA), lists PSYC 357 as one of three options from which students can choose (along with two EPSY courses), so the additional impact should be minimal.

Thanks for asking for our review, and best wishes with the new concentration,

Karen

Karen M. Carney **Associate Dean** College of Liberal Arts and Sciences 2090 Lincoln Hall, MC-448 702 S. Wright St., Urbana IL 61801 kmcarnev@illinois.edu 217-333-1350

-----Original Message-----From: Stalter, Kathy L

Sent: Tuesday, October 28, 2014 12:29 PM

To: Irwin, David E; Carney, Karen M

Subject: letter of support

Importance: High

Hello Dean Carney and Dr. Irwin,

Please find attached a proposal for a new concentration in the College of Education. In this concentration, we would like to use PSCY 357 and would like your approval to do so. Please respond to this email with your response and any additional comments you may have.

Thank you for this consideration, Kathy

Kathy Stalter College of Education 1310 S. Sixth Street Room 142 Champaign, IL 61820 217/333-0964

http://education.illinois.edu/

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<http://go.education.illinois.edu/linkdn>

<https://twitter.com/edillinois>

<http://www.youtube.com/educationatillinois>

## UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Office of the Provost and Vice Chancellor for Academic Affairs

Swanlund Administration Building

Swanlund Administration Building 601 East John Street Champaign, IL 61820



November 7, 2014

Gay Miller, Chair Senate Committee on Educational Policy Office of the Senate 228 English Building, MC-461

Dear Professor Miller:

Enclosed is a copy of a proposal from the College of Education to establish a concentration in Digital Environments for Learning, Teaching and Agency in the B.S. in Learning and Education Studies.

The proposal has been reviewed and approved by the College of Education. It now requires Senate review.

Sincerely,

Kristi A. Kuntz Associate Provost

Enclosures

c: F. Abd-El-Khalick

Kush & Kunts

C. Span





# **Senate Educational Policy Committee Proposal Check Sheet**

PROPOSAL TITLE (Same as on proposal): Establish the Digital Environments for Learning, Teaching and Agency concentration in the Bachelor's of Science in Learning and Education Studies in the College

or Education							
PROPOSAL TYPE (select all that apply below):							
A. [							
1.	Degree program level:						
	☐ Graduate ☐ Professional ☐ Undergraduate						
2.	Proposal for a new <b>degree</b> (e.g. B.S., M.A. or Ph.D.):						
	Degree name, "e.g., Bachelor of Arts or Master of Science":						
3.	Proposal for a new or revised major, concentration, or minor:						
	☐ New or ☐ Revised <b>Major</b> in (name of existing or proposed major):						
	New or Revised Concentration in (name of existing or proposed concentration): Digital Environments for Learning, Teaching and Agency (DELTA)						
	New or Revised Minor in (name of existing or proposed minor):						
4.	4. Proposal to rename an existing major, concentration, or minor:						
	Major Concentration Minor						
	Current name:						
	Proposed new name:						
5.	5. Proposal to terminate an existing degree, major, concentration, or minor:						
	☐ Degree ☐ Major ☐ Concentration ☐ Minor						
	Name of existing degree, major, or concentration:						
6.	6. Proposal involving a multi-institutional degree:						

		□ New	Revision	☐ Termination				
		Name of existing Illinois (UIUC) degree:						
		Name of non-Illinois partnering institution:						
		Location of non-Illinois partnering institution:						
		State of Illinois	US State:	Foreign country:				
B.		roposal to create a nev	v academic unit (college,	school, department, program or other academic				
	N	ame of proposed new	unit:	2				
C.		roposal to rename an e	existing academic unit (co	ollege, school, department, or other academic				
	C	urrent name of unit: _						
	Pı	roposed new name of	unit:					
D.	Pr	roposal to reorganize e	existing units (colleges, s	chools, departments, or program):				
1	. 🗆	Proposal to change the department)	ne status of an existing ar	nd approved unit (e.g. change from a program to				
		Name of current unit	including status:					
2	. 🗆	Proposal to transfer a	nn existing unit:					
		Current unit's name	and home:					
		Proposed new home	for the unit:					
3		Proposal to merge tw	o or more existing units	(e.g., merge department A with department B):				
		Name and college of	unit one to be merged: _	<del></del>				
		Name and college of	unit two to be merged: _					
		Proposed name and o	college of new (merged)	unit:				
4		Proposal to terminate	an existing unit:					
		Current unit's name a	and status:					
E.	□ <b>O</b> 1	ther educational poli	cy proposals (e.g., acade	emic calendar, grading policies, etc.)				
	N	ature of the proposal:						