

University of California, Irvine

School of Education

Ph.D. in Education

2012 Poster Presentations

featuring

First Year Student Research

in

Learning, Cognition, and Development (LCD)

Educational Policy and Social Context (EPSC)

Language, Literacy, and Technology (LLT)

September 28, 2012

11:00 am - 1:00 pm

## 2012 Ph.D. in Education Poster Presentations

UC Irvine School of Education 3200

September 28, 2012

11:00 am – 1:00 pm

### 2012 Poster Abstracts

	<p><i>Title:</i> Exploring Faculty Perceptions of Diversity and Diversification Efforts</p> <p><i>Abstract:</i> This project explores faculty perceptions of diversity and diversity efforts at a research university in California. Qualitative analysis was conducted based on data gathered from a campus climate survey administered in the fall of 2010. Campus climate refers to “the perceptions and attitudes of its members and exists as the tone, ambience and governing environment of an institution” (Chang 2005). Of faculty respondents, one hundred and ten (42%) provided responses to the open-ended question: “What do you think we should know about diversity at (university name)?” Dominant themes were selected based on frequency counts. Patterns were identified by comparing emerging themes. Findings are based on qualitative data analysis. Faculty perceptions shape and influence the campus climate (Kim and Sax, 2009).</p> <p><i>Poster Presentation Advisor:</i> M. Estela Zarate</p>
	<p><i>Title:</i> Elementary Pre-Service Teachers’ Knowledge and Beliefs about Mathematics Teaching</p> <p><i>Abstract:</i> Before entering the profession, teachers must develop a considerable amount of knowledge in a relatively short time period. Teacher preparation program designers would benefit from understanding pre-service teachers’ (PSTs) entry-level knowledge and beliefs. This project’s aims are to (a) characterize the mathematical knowledge for teaching, ability to analyze teaching episodes, and beliefs about mathematics teaching and learning of elementary PSTs at the onset of teacher preparation; (b) compare PSTs’ knowledge and beliefs to those of practicing teachers; and (c) investigate the relations between knowledge and beliefs. Findings reveal that to effectively prepare elementary teachers to teach mathematics, teacher preparation programs need to focus not only on mathematics content knowledge, but also on their beliefs and on the ability to reason about/solve instruction problems.</p> <p><i>Poster Presentation Advisor:</i> Rossella Santagata</p>

Marina Corrales  
EPSC

Janet Garcia  
Mercado  
LCD



Nicholas Graham  
EPSC

*Title:* Misplacement of Native English Speakers into English as a Second Language Programs: Evidence from the ELS: 2002 Dataset

*Abstract:* Since only imperfect methods are available for schools to determine which students are English Language Learners, there is room for mistakes. This study used the nationally representative ELS: 2002 data to better understand how ESL placement works in practice. Fifty-six percent of the students who reported being placed in ESL also claimed to be native English speakers, many of which were 3rd generation or had English-speaking parents. Logistic regression revealed that low academic ability, including math scores, were predictive of a native English speaker being placed in ESL. Furthermore, being a native English speaker reduced the negative impact ESL had on college enrollment and high school dropout rates. This raises questions about how we label ESL and what ESL actually accomplishes.

*Poster Presentation Advisor:* George Farkas



Christa Mulker  
Greenfelder  
LCD

*Title:* Using Arts Lessons to Promote Early Literacy Skills of ELLs

*Abstract:* This is a mixed methods study of a San Diego-based professional development program that uses arts activities to promote K-2 language and literacy development, especially for English Language Learners (ELLs). The focus of this analysis is on student outcomes, and a main research question addressed is if ELLs who participated in this program improved in basic literacy functions. Findings from multiple regressions show that kindergarten ELLs who received the arts treatment performed significantly better than their peers in both listening and speaking assessments, providing evidence that arts activities positively affect young ELLs' foundational literacy skills. Considering that oral language is an indicator for future literacy, the implications of this study are noteworthy.

*Poster Presentation Advisor:* Liane Brouillette



Wenliang He  
LLT

*Title:* Patterns of Students' Vocabulary Improvement from One-time Instruction and Review Instruction

*Abstract:* The current study examines the pre and post test data collected from 310 students in 6th to 8th grades in 22 classes at one school implementing the Word Generation program. Halfway through the program, a review session was introduced, when half of the students (Group A) reviewed seven words taught in previous weeks, while the other half (Group B) reviewed another set of seven words. Group A and B served as control to each other in our study of the review effect. Post test was administered upon program completion. We studied the patterns of students' vocabulary improvement from one-time instruction and review instruction. It is found that effects of one-time and review instruction differ based on the difficulty of the words.

*Poster Presentation Advisor:* Joshua Lawrence



Ksenia Korobkova  
EPSC

*Title:* Finding a Workaround: Critical Digital Literacies in Virtual Worlds Designed for Youth

*Abstract:* In recent years, a growing number of preadolescent online game and virtual world users began to socialize, network, play, and learn in graphics-intensive landscapes using text chat, sounds, and video. Through open-ended and theory-based qualitative analyses, this work explores how children engage with popular virtual worlds, focusing on moments in which young users go beyond interpreting the design of the digital interface and work around perceived design limitations, employing critical digital literacies. This study spotlights motivational contexts in which informants exhibited faculties connected to interpreting and contextualizing their digital environments. Through qualitative analyses of audio interview transcripts, video gaming logs, and content of popular websites, this study shows that critical digital literacies are demonstrated in relation to social motives, like socialization, affiliation formation, and experimentation.

*Poster Presentation Advisor:* Rebecca Black



Kenneth Lee  
LCD

*Title:* Persistent Academic and Behavioral Problems and Eventual Educational Attainment

*Abstract:* Using the U.S. National Longitudinal Survey of Youth (n = 6,505), multiple regressions were conducted to examine the relationship between adult educational outcomes and persistent achievement and behavior problems in middle childhood. After adjusting for background controls and other problems, only persistent problems in mathematics, reading, and antisocial behaviors reduced years of completed schooling. Sibling fixed effect adjustments identified only problems in mathematics and reading as predictors of years of completed schooling. Interventions addressing mathematics issues in middle childhood might best increase the educational attainment of future generations.

*Poster Presentation Advisor:* Greg Duncan



Joyce Lin  
LCD

*Title:* Self-Efficacy Protects Against Barriers to Reading

*Abstract:* Although early reading practices impact language and literacy skills later in life (Mol & Bus, 2011), many parents do not read to their toddlers (Baker et al., 1995). One reason for this lack of early literacy practices could be due to mothers' feelings about their ability to successfully read to their child. This study explored whether mothers' reading self-efficacy predicted their perceived barriers to reading to their children at 18 months. Regression analyses suggest that self-efficacy buffers against mother-centered (e.g., too tired) and child-centered (e.g., toddler fussy) barriers to reading. Given the importance of early literacy and that not all mothers read to their toddler, reading self-efficacy may help explain this variation and offer a way to reduce perceived barriers.

*Poster Presentation Advisor:* Stephanie Reich



Marcella Martinez  
EPSC

*Title: Math Track: Parents' Expectations and Theories of Intelligence*

*Abstract:* Nationally, high school girls have reached parity with boys in completing the math track despite having lower 10th grade math test scores (Domina & Saldana, 2011). Girls enrolled in geometry or higher in 10th grade are 5 percentage points more likely than comparable boys to complete pre-calculus or calculus ( $p < .001$ ). I hypothesized that these girls are more likely to persist and complete advanced math courses than their male counterparts because (1) parents have higher expectations and aspirations for their daughters and/or (2) girls are more likely than boys to believe math can be learned (incremental intelligence). Results indicate neither parents' expectations/aspirations nor theories of intelligence explain why girls are more likely to persist and complete advanced math courses.

*Poster Presentation Advisor:* Thad Domina



Jolene McCall  
EPSC

*Title: Teachers' Perspectives of Their Role in Students' Preparation for College Access*

*Abstract:* Research indicates that underrepresented students depend on institutional agents to provide college knowledge their parents are often unable to sufficiently offer. However, less is known about how teachers view themselves as sources of college information and resources for students. This study investigates teachers' perceptions of their roles in students' college access using interviews following the implementation of a pilot college access intervention program in 6th grade classrooms. While teachers expressed feeling like they can influence students' access to college and be sources of college knowledge to students, teachers also indicated feeling limited in the extent to which they can determine students' access to college. Results indicate that teachers consider parents' responsibility primarily in affecting students' college access.

*Poster Presentation Advisor:* Estella Zarate



Elizabeth Miller  
EPSC

*Title: Do the Effects of Head Start Vary by Parental Pre-academic Stimulation? Results from the Head Start Impact Study*

*Abstract:* This study sought to investigate the main and moderating effects of parental pre-academic stimulation on child outcomes in a low-income sample of Head Start eligible children. Residualized growth models using data from the Head Start Impact Study (HSIS) examined whether Head Start differentially impacted children from home environments with high, middle, and low levels of parental pre-academic stimulation. Results showed there were main effects of both parental stimulation and Head Start, as well as differential effects. Depending on the academic outcome of interest, we found support for two moderating hypotheses surrounding the relationship between child care and home stimulation – the compensatory hypothesis and the “Goldilocks” hypothesis. Implications for Head Start and parental stimulation are discussed.

*Poster Presentation Advisor:* George Farkas



Diana Mullins

LLT

*Title:* Which Cognitive Strategies Predict Improved Analytical Writing?

*Abstract:* A primary reason students struggle with reading and writing is their poor understanding of cognitive strategies (Conley, 2008). Examining learner characteristics related to cognitive strategy use, this study tested the hypothesis that students who report higher levels of cognitive strategy use at pretest will perform best on posttest analytical writing. Teachers of the middle school student sample were involved in a professional development project focused on a cognitive strategies approach to teaching literary nonfiction and analytical writing. Results indicated that one particular cognitive strategy, brainstorming, seems to have the greatest association with student writing. In our current standards-based climate, where all students are expected to meet rigorous analytical writing goals, these findings may inform the design of effective adolescent literacy learning environments.

*Poster Presentation Advisor:* Carol Booth Olson



Jennifer Sun

LCD

*Title:* The Impact of Learning from Teaching on Pre-Service Mathematics Teachers' Attention to Student Thinking

*Abstract:* Teacher education advocates that teachers learn to systematically analyze teaching (Hiebert et al., 2007). Research shows that pre-service teachers can develop this important skill for teaching (Santagata et al., 2007, 2011; van Es, 2011). An important question concerns how this impacts teacher learning and teaching practice. Central to analyzing teaching is learning to make student thinking visible in teaching and attending to student ideas (Ball & Cohen, 1999; Franke et al., 2007; Sherin et al., 2011). This study investigates: 1) Do pre-service teachers who learn to analyze teaching in a systematic way teach in ways that allow them to gain insight into student thinking? 2) What about student thinking do pre-service teachers who learn how to systematically analyze teaching notice?

*Poster Presentation Advisor:* Elizabeth van Es



Viet Vu

LLT

*Title:* Effects of Visual-Syntactic Text Formatting on Reading Comprehension and Retention Measures

*Abstract:* Many students read below their grade level, especially English language learners (ELLs). As reading on electronic devices and through online media become more pervasive, technological interventions might offer possible solutions to improve reading scores. One potential solution is a software program that uses a process called visual-syntactic text formatting (VSTF) to convert text from block formatting to a cascading format via special algorithms. It is hypothesized that the cascading format reduces the need for syntactic awareness and cognitive load, thereby freeing mental resources for other reading tasks. This research investigates the implications of VSTF for ELLs of different English language acquisition statuses (ELAS). Based on the data obtained, VSTF was ineffective at increasing reading comprehension and retention scores for all categories of ELAS.

*Poster Presentation Advisor:* Rebecca Black

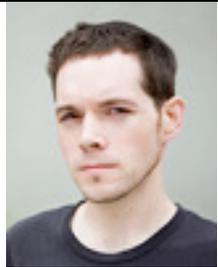


Kelly Ward  
EPSC

*Title:* The Influence of Schools' Racial Climate on Graduate Student Attitudes

*Abstract:* While more underrepresented minorities (URMs) are enrolling in graduate programs, their attrition rates are significantly higher than their majority peers. Positioning racial campus climate as a key factor in graduate student experiences, this study explores the relationship between school climate and individuals' attitudes about diversity and the degree to which this relationship may differ by URM status. Data for this analysis is from graduate student responses from a climate survey conducted at a public research university. Hierarchical linear modeling shows that climate has varied effects on graduate student attitudes toward diversity; while the representation of URMs does not predict individual attitudes, peer attitudes were shown to be strong predictors of individual attitudes but not always in a positive direction.

*Poster Presentation Advisor:* Estela Zarate



Neil Young  
LCD

*Title:* Creation and Validation of a Computerized Visuospatial Working Memory Task

*Abstract:* Visuospatial working memory is crucial for the manipulation of visual and spatial information and is related to measures of mathematic ability and achievement. A visuospatial working memory task, the alternating dot task, was created and then validated using a sample of college students. This task has participants remember a sequence of blue and yellow dots and report the two sequences separately. We predicted that working memory and spatial ability, as measured by other tasks administered concurrently, would both be related to the alternating dot task. A series of structural equation models demonstrated acceptable factor loadings with hypothesized latent variables of interest, indicating that the task is a valid measure of visuospatial working memory for college students.

*Poster Presentation Advisor:* AnneMarie Conley



Sara Young  
EPSC

*Title:* Motivation and Students: A Comparison Between Students with Identified Specific Learning Disabilities and Peers

*Abstract:* Motivation and cognition interplay as key elements in academic success. This study compares the impact of motivation during the adolescent period (grades 7 and 8) for students with and without identified specific learning disabilities (SLD) using data from the California Motivation Project. Findings revealed that none of the motivation approach coefficients were significant; however, both populations had positive gains of similar size in the Mastery Approach, thus, this approach appears helpful for students with or without SLD. Both populations had very small, negative, non-significant gains in the Performance Approach; thus, this approach does not appear helpful for students with or without SLD. Students with SLD were negatively impacted by the Performance-Avoidance Approach, whereas their peers received a significant positive boost utilizing this approach.

*Poster Presentation Advisor:* George Farkas

