

University of California, Irvine

Department of Education

Ph.D. in Education

2009-2011 Poster Presentations

featuring

Research by Ph.D. Students

specializing in

Learning, Cognition, and Development  
Educational Policy and Social Context  
Language, Literacy, and Technology

## 2009 Ph.D. in Education Poster Presentations: 2008 Class

UC Irvine Department of Education 3200



Alejandra  
Albarrán  
LCD

*Title:* Development of Maternal Self-Efficacy for First-Time Mothers and Its Influence on One Year-Olds' Cognitive Development

*Abstract:* Maternal self-efficacy is a sense of competence in parenting and linked to maternal behaviors that effect infant developmental growth. First-time mothers' maternal self-efficacy changes and develops as they gain experience with their new child. The study seeks to better understand how new mothers develop their sense of parenting efficacy over the first year of motherhood and whether their maternal self-efficacy impacts their infant's early language development at 12 months. Primiparous mothers (n=122) completed the Maternal Self-Efficacy Scale at 2, 4, 9, and 12 months postpartum. Infants were assessed at 12 months of age using the Preschool Language Scale (PLS). Maternal self-efficacy significantly changed over time and did not predict infant 12-month language ability.

*Poster Presentation Advisor:* Stephanie Reich



Karina Cuamea  
EPSC

*Title:* Latino Perspectives: Parental Involvement among Spanish-speaking and English-speaking Latinos

*Abstract:* This study reflects on parental involvement perspectives of Latino Spanish-speaking and English-speaking parents of middle and high school students. Paramount value has been placed on parental involvement due to the positive impact it has on student performance in school. Research has demonstrated that it is important for student success and achievement such as reading and math scores, grades, and college enrollment (Desimone, 1999; Ho & Willms, 1996; Perna & Titus, 2005). Central forms of parental involvement have revolved around at-home (i.e. helping with homework and school curriculum) and in-school (i.e. attending parent conferences and volunteering) activities. The Latino parents in this study stressed *consejos* as a key part of their parental involvement, which oftentimes is not recognized as a mainstream behavior.

*Poster Presentation Advisor:* Leticia Oseguera



Briana Hinga  
LCD

*Title:* Preparing the Next Generation of After-school Educators: College Students' Perceived Learning and Civic Engagement Associated with the CASE Program

*Abstract:* This study reports first-year evaluation findings from the University of California, Irvine Department of Education's Certificate in After-school Education (CASE) program. The goal of CASE is to educate and train the after-school workforce. For the first year evaluation, students enrolled in CASE courses were surveyed to measure perceived course understanding, civic interests and engagement, and multicultural appreciation. A comparison group of students were also surveyed. Students in CASE courses report higher levels of course understanding, academic satisfaction, and civic responsibility than students in the non-CASE course ( $p < .05$ ). Students enrolled in CASE courses requiring fieldwork report greater course understanding and empowerment than CASE students without fieldwork. The findings suggest the program is achieving several of its early goals.

*Poster Presentation Advisor:* Joseph Mahoney



Melissa Courtney  
Kibrick  
EPSC

*Title:* A Cognitive Model of Constructivist Reform Adoption

*Abstract:* Utilizing a cognitive models approach, this study analyzed constructivist reform adoption among teachers and administrators. Through interviews with teachers and administrators and observations of classes and professional development sessions, individual cognitive models of the reform were developed. From these it was found that the teachers framed their knowledge of the reform through their past experiences and pedagogical expertise. The administrators' strong models of the reform were not shared either with each other or the teachers. The final result of the study is a consolidated model of the reform for the administrators use in moving from free discovery toward guided discovery professional development.

*Poster Presentation Advisor:* Mark Warschauer



Wei-Lin Li  
EPSC

*Title:* Is Center Care Important? For Whom?

*Abstract:* There are many studies emphasizing the importance of center care quality; however, few studies concentrate on which group center care shows its importance. Also in some cases, center care seems important to children maybe because of the "occasional" high quality of the sampling center care. In this project, a 2-level linear model was used to estimate center care effects for different social/cognitive groups on children's cognitive development, with controlling ORCE scores for setting group level. The results show that before 24 months, center care has strongly significant effect for all children, especially for children with mothers having at least bachelor's degrees, and between 24-54 months, center care has significant effect only for children with higher cognitive level at 24 months.

*Poster Presentation Advisor:* Greg Duncan



Sonja Lind

LLT

*Title:* Technology Access and Use Among English Language Teachers in the United States

*Abstract:* This study examines the current access to and use of technology for instructional English language teaching (ELT) in three geographical regions worldwide, including East Asia, Latin America and the United States. One-day case studies were conducted at ten educational institutions in southern California, Japan, Brazil and Mexico. The case studies involved interviews with teachers, students and administrators, as well as observations of classes in which technology is being used by both teachers and students. The observations and interviews were summarized and findings were compared across institutions.

*Poster Presentation Advisor:* Mark Warschauer



Tina Matuchniak

LLT

*Title:* Beyond Family and Culture: Expressions of School Failure

*Abstract:* This study examines 50 college students' perceptions of school success and failure as disclosed through their essay responses to the question "What factors are responsible for educational inequality and the achievement gap?" Prior to writing these essays, these students spent 10 weeks taking a college course in Multicultural Education in which they read current and seminal literature in the field of educational inequality and the achievement gap and conducted fieldwork in urban after-school programs. Students identified six different categories of factors that they believed contributed to school failure: Economic, Social, Cultural, School, Political, and Individual factors. Additionally, they adopted four different stances in their essays—Summary, Alignment, Rejection, and Ambivalence—that further elaborated their perceptions of school failure and success.

*Poster Presentation Advisor:* Gilberto Conchas



Paul Rama

LLT

*Title:* Video Games and Learning

*Abstract:* Video games show outstanding potential for providing learning opportunities. The existing research on games and learning draws upon theories asserting the existence of learning principles embedded in good games. This project seeks to identify the most prevalent types of learning that take place during video game play. The goal of the study is to help establish a research-based foundation upon which to consider claims of the role of video games and learning, and thus lay the basis for future implementation and study of educational uses of games.

*Poster Presentation Advisor:* Mark Warschauer



Lauren Shea

LLT

*Title:* Students Talk, Teachers Learn: A Study of a Professional Development Model for Teaching Science to English Language Learners

*Abstract:* A synergy exists between science and language learning. Yet, the majority of teachers are unprepared to integrate the science and language teaching. For English language learners (ELL), this missed opportunity can contribute to increased student failure. This research shows how a professional development (PD) program explicitly embedded language learning strategies, including promotion of academic student talk and student interaction, into modeled science lessons to attempt to increase achievement in science literacy, improve production and comprehension of academic science vocabulary, and practice structures of the English language. The subsequent teacher learning, teacher perceptions, and classroom implementation demonstrate that the PD program provided teachers with a noninvasive and accessible model to incorporate more academic student interaction into science lessons.

*Poster Presentation Advisor:* Terry Shanahan and Mark Warschauer



Adam Sheppard

EPSC

*Title:* Youth Sports Participation and Problem Behaviors: A Longitudinal Analysis of Directions of Association

*Abstract:* This longitudinal study examined the direction of association between time spent in sport and problem behavior among 1692 adolescents. Greater time spent in sport in childhood was associated with lower levels of internalizing behavior in adolescence, even when controlling for previous internalizing behavior. There was no evidence that sports participation was associated with higher levels of externalizing behavior. Higher levels of internalizing behavior in childhood was associated with less time spent in sport in adolescence, whereas there was no relation between previous externalizing behavior and duration of sport participation. Overall, these findings suggest that sport-based intervention programs should target youth with higher internalizing behavior, as they may not participate on their own.

*Poster Presentation Advisor:* Joseph Mahoney



Shelly Vanamburg

LCD

*Title:* Dance Transcends Language Barriers in Kindergarten Classrooms

*Abstract:* This study used the lens of Movement Play Theory to examine the impact that a nine-week series of dance lessons had on the social-emotional development and oral English language skills of five kindergarten classes in Southeastern San Diego. Over 80% of the students were English language learners (ELLs). The arts lessons were integrated with the English language arts curriculum. Research methods included observation and interviews with teachers using the program. Findings suggested that the dance lessons helped students build interpersonal skills and vocabulary. Most helpful to ELLs was using oral English during lessons. This study may help identify means by which classroom teachers may use multimodal methods of instruction to facilitate learning and development in ELL kindergarten classrooms.

*Poster Presentation Advisor:* Liane Brouillette



## 2010 Ph.D. in Education Poster Presentations: 2009 Class

UC Irvine Department of Education 3200



Anamarie Auger  
EPSC

*Title:* The Effect of Baby Books on Mothers' Reading Beliefs and Reading Practices

*Abstract:* Research has shown that reading beliefs influence reading practices. Given that reading contributes to language development, it is important to examine if providing free baby books to low-income mothers can change reading beliefs. Data come from the NICHD-funded Baby Books Project. Low-income women (n=198) were randomly assigned to either receive educational or non-educational baby books, or no baby books. Multiple regression was used to test the relationship between treatment and maternal reading beliefs and reading practices. Women who received baby books had significantly higher global reading beliefs and verbal participation reading beliefs when their child was 12 months old. However, no treatment group differences in reading practices were found.

*Poster Presentation Advisor:* Greg Duncan



Tara Barnhart  
LCD

*Title:* Learning to Learn from Teaching: Promoting Student-Centered Instruction in a Pre-Service Teacher Education Program

*Abstract:* A teacher's influence on the quality of student learning has been documented in the literature and recognized by policy makers (Darling-Hammond, 2010). Acknowledging that teaching is complex and that all that needs to be known cannot be learned during a credentialing program, teacher preparation programs are shifting away from teaching discrete skills to developing dispositions such as reflecting on practice and creating student-centered learning environments (Borko, 2004; Heibert et al., 2007; Jansen & Spitzer, 2009). This study sought to increase understanding the influence of a new course in a teacher preparation program on the way participants enacted and reflected on their own teaching. Analysis of videos and written reflections from the PACT teaching event reveal shifts toward student-centered instruction.

*Poster Presentation Advisor:* Elizabeth van Es



Tracy Bennett  
EPSC

*Title:* Attendance in an Academically Aligned After-School Program and Changes in Academic Achievement

*Abstract:* In a high-stakes accountability era, some school districts are using after-school programs as a way to bolster achievement for at-risk students. This study examined attendance in one such program and changes in academic achievement. Students in the treatment group attended the after-school program at least one day whereas students in the comparison group never attended the program. Multiple regression was used to determine if higher dosage of program attendance was linked to positive gains in students' English Language Arts and Mathematics test scores from baseline to follow-up. Program attendance was significantly associated with positive gains in English Language Arts scores, but not Mathematics.

*Poster Presentation Advisor:* Deborah Lowe Vandell



Mary Cashen  
EPSC

*Title:* Tracing the Experiences of the First Graduating Class of an Urban California Charter High School

*Abstract:* On average, previous research has failed to show significant gains for urban charter schools as compared to typical public schools. This study investigates how one urban California charter school has made such gains. Qualitative semi-structured interviews of the class of 2010 were conducted to determine what factors contributed to the success of these students. Themes that emerged were the strong supportive community, lack of gang presence, and focus on rigorous academic curriculum. One remaining obstacle students face is legal status and access to affordable post-secondary education. These results have implications for similar student populations at both charter and typical public schools.

*Poster Presentation Advisor:* Liane Brouillette



Huy Chung  
LCD

*Title:* The Many Faces of Teaching: Comparing and Contrasting Pre-Service English Language Arts Teachers' Conception of Teaching

*Abstract:* Current national policy has called for greater scrutiny of teacher education programs. Using the Performance Assessment of California Teachers (PACT) portfolio results of nine English Language Arts pre-service teacher candidates, qualitative methods were used to elucidate how candidates compared and contrasted along four different dimensions of pre-service teacher developmental expectations (Feiman-Nemser, 2001). Themes that emerged from the data revealed that most candidates need more help in promoting student collaboration, holding students to high expectations in writing, providing learner feedback, and studying classroom discourse. These results can influence the design of teacher education programs and policy changes needed to equip candidates with the tools they need to become more effective teachers.

*Poster Presentation Advisor:* Elizabeth van Es



Daniel Flynn  
EPSC

*Title:* Freshman Engineering Project Participation and Achievement in Core Engineering Coursework: A Pilot Study

*Abstract:* Studies of college engineering students suggest that “hands-on” projects, early in the curriculum may improve retention. Since few institutions offer a project based early coursework, few empirical studies connect early college project coursework with academic achievement. This study evaluates the E98 project-based engineering course for incoming freshman offered at the UCI School of Engineering. Using a quasi-experimental design with roughly matched treatment and control groups of freshman engineering students during Fall 2009, this project establishes a link between the E98 project coursework and academic achievement in core coursework (Math, Chemistry and Math). The analysis associates an increased number of completed core units and higher achievement following participation in the E98 project course.

*Poster Presentation Advisor:* Thad Domina



Ernest Johnson  
LLT

*Title:* Technology Use and Student Achievement

*Abstract:* Recently, there has been a great deal of attention to the relationship between home access to computers and academic achievement. This study examines this issue through use of the Early Childhood Kindergarten Study (ECLS-K), which followed a national cohort of children from kindergarten in 1998-1999 through the completion of eighth grade in 2007. A value added model is used to measure the effect of having access to computers and other technology at home at an early age. The study includes control variables similar to Fryer and Levitt (2006). With these controls in place, this study found that having a home computer in kindergarten is positively associated with gains in 8<sup>th</sup> grade math, reading, and science test scores.

*Poster Presentation Advisor:* Mark Warschauer



Sabrina Kataoka  
LCD

*Title:* Experiences in High-Quality After-School Programs and Adolescent Outcomes

*Abstract:* Program quality and program attendance have been hypothesized to contribute to the inconsistent effects of after-school programs on adolescent developmental outcomes. In this study, four aspects of program experience (i.e., students’ reports of emotional support, autonomy/privacy, peer affiliation, and feelings of belonging) along with records of daily attendance in one year are considered relative to adolescent outcomes the following year. Results indicate that emotional support in Year 1 predicts improvements in teacher reports of task persistence and work habits in Year 2. Feelings of belonging in Year 1 also predict improvements in student reports of self-efficacy in Year 2. Furthermore, higher program attendance in Year 1 predicts small decreases in Year 2 teacher reports of prosocial behavior with peers.

*Poster Presentation Advisor:* Deborah Lowe Vandell



David Lee

LLT

*Title:* Metaphorically Speaking: Metaphor Processing and Reading Comprehension

*Abstract:* This study examines the relationship between reading comprehension and the processing of figurative language by analyzing undergraduate students' ability to generate metaphors. 34 undergraduate students were individually administered measures of working memory, vocabulary, print exposure, reading, reading comprehension, and metaphor production. While previous studies demonstrated significant impact of working memory and inhibitory control on the ability to comprehend metaphors, the results of this study suggests that individual vocabulary knowledge was a stronger predictor than working memory on the ability to generate both apt and conventional metaphors in those with low reading comprehension skills. Compared to lower comprehenders, stronger comprehenders may have reached a ceiling on vocabulary skills, which may allow for more working memory space to be used for higher cognitive processing

*Poster Presentation Advisor:* Penny Collins



Alex Lin

EPSC

*Title:* African American Male Students in the "So-Called" Post-Racial America: Perceptions on Race, School Inequality, Aspirations, and Expectations

*Abstract:* The academic performance of African American males has plummeted to levels of tragic and dangerous proportions. The perpetuation of negative stereotypes and continued low societal expectations of African American males may be a difficult, seemingly impossible trend to reverse. However, Obama's election as the country's first Black president—a time period characterized as post-racial-- has generated a positive transformation in the expectations of African American males. In this study, we explore how Black high school boys perceive their career aspirations in a "so-called" post-racial society. The implications of this study call for a reemphasis on the relevancy of race in improving the career aspirations for African American males and provide strong caution to an early declaration of a post-racial society.

*Poster Presentation Advisor:* Gilberto Q. Conchas



Jennifer Long

LCD

*Title:* Investigating the Nature of University Supervisor's "Noticing" of Classroom Lessons

*Abstract:* One important skill for teaching is learning what to attend to and how to reason about classroom interactions, what Sherin (2007) refers to as a professional vision of teaching. One context for developing professional vision is through interactions with university supervisors, who observe pre-service teachers and provide feedback on their practice. Supervisors "notice" important events and help student teachers learn what to attend to and how to make sense of the complexity of teaching. The questions for this study are: (1) What do supervisors attend to when they observe lessons? and (2) What do they communicate as the important dimensions of learning to notice? This study has implications for the role of supervisors in helping pre-service teachers develop professional vision.

*Poster Presentation Advisor:* Elizabeth van Es



Emily Penner  
EPSC

*Title:* Do Teachers Have an Effect on Student Height and Weight? A Falsification Test of Value-Added Models

*Abstract:* Policy makers and school districts increasingly rely on Value-Added Models (VAMs) to evaluate teacher effectiveness. However, recent research questions the accuracy and reliability of these models due to measurement error and non-random sorting of students into classrooms (Rothstein 2008, 2010). Using kindergarten data from the nationally representative Early Childhood Longitudinal Study (ECLS-K), this study provides a new falsification test of VAMs by comparing teacher effects on student achievement with teacher effects on height and weight. Results show that teacher effects for height and weight are one-third to one-half as large as teacher effects for reading and math. These findings underscore the need for further falsification tests of VAMs as they are incorporated into teacher evaluation, retention, and compensation policies.

*Poster Presentation Advisor:* Thad Domina



Teomara Rutherford  
LCD

*Title:* Emotional Well-Being and Matches between Child and Parent Educational Aspirations and Expectations

*Abstract:* Previous research has shown that discrepancies in actual and ideal selves or between expected and hoped for selves can have negative implications. This poster extends these concepts to look at conflicts in *educational possible selves*. Using the 2007 Panel Study of Income Dynamics Child Development Supplement, student and parent educational aspirations and expectations were categorized and classified as matching or not matching. The impact of these matches on concurrent measures of student emotional well-being was investigated. Regression analysis reveals associations between matches and emotional well-being: in high school students when considering student self matches and in middle school students when considering student to parent matches. These results are in line with previous studies of possible selves in domains different from educational attainment.

*Poster Presentation Advisor:* Margaret Burchinal



Chenoa Woods  
EPSC

*Title:* Student-School Counselor Ratio and Counselor Influence on Student Behaviors Associated with Applying to College

*Abstract:* This study examines the relationship between high school student-school counselor ratios and students meeting with counselors about college information, as well as the association between meeting with a counselor and SAT and Advanced Placement (AP) test taking. Data are from the nationally representative Educational Longitudinal Study of 2002, a study of high school tenth and twelfth graders. OLS regression identifies a positive curvilinear relationship between the student-counselor ratio of a high school and talking to a counselor; there is some evidence to suggest that for students in schools with very high ratios, the generally negative relationship between ratio and student-counselor meetings is less pronounced. Logistic regression determines that students who meet with a counselor are more likely to take the SAT and/or an AP test.

*Poster Presentation Advisor:* Thad Domina



Binbin Zheng

LLT

*Title:* Digital Media and Writing in Upper Elementary Schools: A Mixed Methods Study

*Abstract:* There has been little systematic study of the relationship between new technologies and writing in K-12 schools. This one-year long study investigated the use of three new forms of technology – netbook computers, automated writing evaluation, and social media – and their impact on learning process and outcomes in two school districts. Our observations, interviews, and surveys indicated that netbooks were used extensively in classrooms, especially in writing; new media were especially beneficial for helping English Language Learners strengthen their identity as writers in English. Analysis of students’ writing achievement on standardized tests showed that after introduction of the new technology, test scores increased for 4th and 6th grade students, but decreased for 5th grade students.

*Poster Presentation Advisor:* Mark Warschauer



## 2011 Ph.D. in Education Poster Presentations

UC Irvine Department of Education 3200



Kreshnik Begolli

LCD

*Title:* Unloading Working Memory Through Visual Cues to Facilitate Comparisons Between Mathematical Concepts

*Abstract:* Mathematics teachers are advised to compare multiple solutions to single problems, but techniques for doing so are not well understood. Two experiments evaluated one recommendation from the working memory literature: solutions that are being compared must be visible simultaneously throughout the instruction. Sixth grade students solved a word problem invoking rate/ratio concepts, interacted with a videotaped lesson in which a teacher compared multiple solutions to that problem, and then completed a posttest. Experiment 1 compared two videotape lesson versions: Not Visible (NV) - solutions were not visible, and Partially Visible (PV) - solutions were visible but erased when they were no longer being discussed. Experiment 2 compared PV and All Visible (AV) - all solutions were visible throughout the lesson.

*Poster Presentation Advisor:* Lindsey Richland



Arena Chang

LCD

*Title:* A Longitudinal Comparison of Parent and Child Influence on Sports Participation

*Abstract:* Which has more influence on how youths spend their leisure time in adolescence—children's motivational beliefs or parental influences in middle childhood? This study examines whether youth motivation or parent encouragement and beliefs (i.e., perceived importance of sports and perceived child ability) in middle childhood is more predictive of time spent participating in sports in adolescence. Findings reveal that both youth motivational beliefs and parental influences in middle childhood were significant predictors; however, parental influences were more predictive of time spent in organized sports in adolescence.

*Poster Presentation Advisor:* Joseph Mahoney



Sean Drake  
EPSC

*Title:* The Ideal Playmate: Investigating the Importance of Diversity in Preschool

*Abstract:* Both Black and White kindergartners prefer same-race peers and this preference increases over the course of a school year (Finkelstein & Haskins, 1983). Same-race preferences have also been found among Black and Latino preschool students but not among White preschool students (Lederberg et al., 1986). This study further examines preschool children’s playgroup preferences by looking at the general physical characteristics of a child’s peers and the impact that those characteristics may have on playgroup preference. Additionally, this study investigates how children feel about their playgroup preferences. Findings indicate that preschool children prefer to play with others who look like they do and that they feel negatively about playing in a group setting where their appearance would be in the minority.

*Poster Presentation Advisor:* Gilberto Q. Conchas



Sarah Gilliland  
LCD

*Title:* An Exploratory Study of Clinical Reasoning in Physical Therapist Students

*Abstract:* Clinical reasoning is a complex cognitive process necessary for medical decision-making, accurate diagnosis, and treatment planning. This qualitative study explored how first-year and third-year physical therapist students approached and carried out clinical reasoning while completing an assessment of a simulated patient case. Third-year students demonstrated more specific and focused work than the first-year students in the examination and treatment processes. Third-year students demonstrated some reasoning patterns characteristic of novice physical therapists while first-year students demonstrated patterns of faulty reasoning not yet described in the literature. The findings of this study provide a framework for describing the development of the novice physical therapist.

*Poster Presentation Advisor:* Judith Haymore Sandholtz



Jin Hwang  
LLT

*Title:* Exploring the Writing Patterns of Elementary School Students as a Function of their Proficiency in English

*Abstract:* This study examines how three groups of English language learners (ELLs), 1) initially fluent English proficient (I-FEP), 2) redesignated fluent English proficient (R-FEP), and 3) limited English proficient (LEP), write compared to their native-English-speaking (NES) peers. Elementary school students’ essays based on a scientific prompt were analyzed. Results suggest that I-FEPs’ and R-FEPs’ essays are not different from those written by the NESs in the number of tokens, word types, and academic words. However, LEPs’ essays consist of fewer word tokens, types, and academic words than the NESs. Additionally, they have more difficulty producing phonologically accurate spelling. Findings reveal the type of difficulties the subgroups of ELLs have in writing. Implications include further investigating the types of instruction each subgroup needs.

*Poster Presentation Advisor:* Penelope Collins



Ilona Missakian

LLT

*Title:* Writing Center Efficacy at Community College—Perceptions of Instructors, Tutors, and Students

*Abstract:* The study on community college Writing Center efficacy is an exploratory one that seeks to measure the perceptions of instructors, tutors, and students of Writing Center services. Three research questions are being looked at: What writing challenges do the groups identify and expect assistance with? What are their perceptions of Writing Center assistance, focus, and projected needs? And, in what ways, if any, does the Writing Center model influence the perceptions? Surveys that contain a similar sequence of questions were administered to the three groups on four Southern California campuses. The results were gathered to create an overall profile of the patterns and differences in the responses and show differing priorities for writing, focus, and projected needs among the groups.

*Poster Presentation Advisor:* Carol Booth Olson



Rahila Munshi Simzar

EPSC

*Title:* Motivational Effects of Eighth Grade Algebra Placement

*Abstract:* This study examines the motivational consequences of efforts to intensify middle school mathematics. Using data from a large urban Southern Californian school district, I investigate the achievement goal and expectancy value effects of eighth grade Algebra placement for students at varying achievement levels. Multiple regression was used to test the relationship between course placement and motivational outcomes. It was hypothesized that lower skilled students would experience an increase in maladaptive achievement goals and expectancy values while above average students would experience increases in adaptive achievement goals and expectancy values. Findings show that below average students placed in eighth grade Algebra experienced significantly lowered academic self-efficacy and task value, while all students experienced a significant increase in performance avoidance achievement goals.

*Poster Presentation Advisor:* George Farkas



Youngmin Park

LLT

*Title:* Reading Aloud to Adolescent English Learners: A Study in a Korean High School

*Abstract:* Reading aloud is highly recommended for encouraging language development. However, the majority of reading aloud research focuses on primary grades; the technique has been seldom studied among secondary English learners. With most English instruction focused on discrete language points, Korean high school students spend little time in reading or being read to. This quasi-experiment compares an experimental group, which incorporates 15 minutes of daily teacher reading aloud, to a control group, which has textbook reading and skill-related activities. Data analysis reveals that the treatment resulted in impressive improvement in reading comprehension, and helped reduce problems that typically hinder English learners' reading. Students also developed a positive attitude toward reading English books, which, in turn, might increase their engagement and achievement.

*Poster Presentation Advisor:* Mark Warschauer



Katerina Schenke  
LCD

*Title:* Teaching Practices of Comparing and Contrasting

*Abstract:* What are pre-service teachers' intuitions about using comparisons to help students make connections in mathematics? Teachers can foster these connections through techniques of comparison such as presenting multiple solutions to a problem, making connections visible, and making links through gestures. This study explores whether pre-service teachers' unconstrained instructional practices align with techniques that foster students' comparative thinking. Eighty pre-service teachers from the UC Irvine credential program were videotaped teaching an algebra lesson segment. Quantitative coding revealed that despite being given an opportunity to compare student solutions, less than half of the participants did so. Those who did still did not reliably use visual or verbal cues. We conclude that pre-service teachers are not oriented towards using and supporting students' comparative thinking.

*Poster Presentation Advisor:* Lindsey Richland



Cathy Tran  
LCD

*Title:* What Predicts Course Preferences: Academic Achievement or Motivation?

*Abstract:* This study explores what affects course preferences: expectancy for success, value for the subject, or academic achievement. In the fall and spring of the school year, we surveyed 2,424 predominantly Vietnamese and Hispanic middle school students about their math motivation and course preferences. Results indicated that increased value for math significantly boosted the likelihood of students maintaining a math class preference and switching from a non-math preference to a math preference from fall to spring. Increased expectancy for success in math showed a similar trend though at a lower magnitude. Changes in math achievement, however, did not influence course preferences, suggesting that task value and expectancy have greater impacts on continued math involvement.

*Poster Presentation Advisor:* AnneMarie Conley



Jessica Tunney  
LCD

*Title:* Facilitating Productive Teacher Discussions in Video-Based Professional Development

*Abstract:* In professional development (PD) programs, video is used to help teachers analyze teaching and learning within the complex classroom context. The facilitator's role in video-based discussions is crucial; research has shown that video artifacts are effective for teacher learning only when skillfully used and connected to improving teaching (Schifter & Lester, 2002; Remillard & Geist, 2002). However, little is known about *how* PD facilitators lead productive video-based discussions. This study presents a *Framework of Facilitation Moves* based on the examination and comparison of two PD program cases. Facilitation practices associated with productive discussions are identified and highlighted for analysis. These findings have important implications for the future design of PD programs and the preparation of facilitators and teacher leaders.

*Poster Presentation Advisor:* Elizabeth van Es



Cathery Yeh  
LCD

*Title:* From their Eyes: Examining Pre-Service Teacher Perceptions of Alignment between Field Experiences and Mathematics University Courses

*Abstract:* Research advocates the design of programs in which pre-service teachers learn research-based practices in university courses while observing and implementing these practices in the field. However, the alignment between these two settings is seldom in place. This study investigates this issue from the pre-service teachers' perspective. Structured into three parts, the first component includes case studies of four pre-service teachers and investigates the images of mathematics teaching they formed through their field and university experiences. The second component utilizes findings from the case studies to design a survey that investigates issues of alignment between the two settings on a larger scale. The third component examines findings from the pilot testing of the survey and sheds lights on pre-service teachers' perspectives.

*Poster Presentation Advisor:* Rossella Santagata



Alma Zaragoza  
EPSC

*Title:* The Importance of Family Support and Positive Teacher Influences in the Trajectory to College of Latinas

*Abstract:* Data from a 15-year study of randomly recruited Latino and Latina youth (N=35, primarily second-generation Mexican Americans) revealed that not all girls who performed poorly in standardized math tests in K-12 faced similar college enrollment outcomes. Those tracked into higher-level math class went to college, indicating that track placement seems to correct the negative influence of low math performance. Some Latina students with both low standardized test performance and low math track placement in high school enrolled in college. Data revealed that family support seems to have played a pivotal role among participants whose trajectories predicted no post-secondary education. Students with low math trajectories that did not enroll in college also associated negative teacher experiences/influences with their own learning potential.

*Poster Presentation Advisor:* Estela Zarate

