

University of California, Irvine

Department of Education

Ph.D. in Education

## 2011 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 23, 2011

11:00 am – 1:00 pm

3200 Education

## 2011 Ph.D. in Education Poster Presentations

UC Irvine Department of Education 3200

September 23, 2011

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### 2011 Poster Abstracts



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

