University of California, Berkeley Graduate School of Education 2017 Research Day Program

A brief outline of Schedule:

9:00-9:15 Registration and Sign-in with a light breakfast and beverages

9:15 - Start

9:20-10:10 - Welcome and Opening Speaker(s)

10:20-11:30 Session I

11:30-12:30 Lunch

12:15 - Student Organizations Present briefly

12:30-2pm Afternoon Plenary

2:10-3:20 Session II

3:30-4:40 Session III

4:45-6pm Poster session & Reception

Education Research Day - April 14, 2017 UC Berkeley Graduate School of Education
Reimagining Education for California

9:00-9:15	Sign-in & Breakfast: *Education Psychology Library*					
9:15-10:10	Opening & Keynote Speakers: *Education Psychology Library* Dean Prudence Carter and Dr. Na'ilah Suad Nasir					
10:10-10:20	*Passing Period*					
Session I 10:20-11:30	*Session I - A* Room 5634	*Session I - B* Room 3507	*Session I - C* Room 2319	*Session I - D* Room 2320	*Session I - E* Room 2326	*Session I - F* Room 3515
	Paper Presentations	Paper Presentations	Paper Presentations	Paper Presentations	Paper Presentations	Paper Presentations
	Laurie Jo Murdock	Juliet Kunkel	Nigel Haikins	Daniel Thomas	Susan Nisonger Olsen	Courtney Green
	Erin Bird	Michael Singh	Ellen Lin	Darielle Blevins & Lorren Comeaux	Jeff Moran	Cassandra Drake
	Kevin Macpherson & Stevie Jeung	Renee Starowicz	Maria Jose Aragon	Holly Nishimura	Stevie Jeung	Deborah Michele La Torre
11:30-12:30	Lunch: *Education Psychology Library*					
12:30-2:00	Afternoon Plenary: *Education Psychology Library* Dr. Karin Martin, Dr. G Ryes, and Dr. Claude Steele discuss "Disrupting (Mis)education"					
2:00-2:10	*Passing Period*					
Session II 2:10-3:20	*Session II - A* Room 5634	*Session II - B* Room 3515	*Session II - C* Room 5527	*Session II - D* Room 2320	*Session II - E* Room 3507	*Session II - F* Room 4648
	Paper Presentations	Paper Presentations	Paper Presentations	Paper Presentations	Paper Presentations	Workshop: Methodology
	Stephen Ward	Elizabeth Rubalcava	Maria Morales	Kayce Mastrup	Jim Gribble	
	Yanira Madrigal-Garcia	Juliet Kunkel	Derrika Hunt	Courtney Green	Linda Fischer-Werk	Andrew Galpern
	Nicole Rangel	Franklin Moreno	Kevin Collins	Tahl Sendowski	Sarah Manchanda	
3:20-3:30	*Passing Period*					
Session III 3:30-4:40	*Session III - A* Room 3515	*Session III - B* Room 5634	*Session III - C* Room 2320	*Session III - D* Room 4648	*Session III - E* Room 3507	
	Paper Presentations	Paper Presentations	Paper Presentations	Paper Presentations	Paper Presentations	
	Emily Moline	Christian Reyes	Rachel Marie Restani	Frances Free Ramos, René Espinoza Kissell,	Alexander Blum	
	Alejandra Ojeda-Beck	Mary Requa	Rachel Chen	Elise Castillo, Seenae Chong	David DeLiema	
	Grace Hong	Leah Faw	Kirsten Hextrum & Suyang Lu	Michael J. Myers II & Mahasan Chaney	Beth McBride	
4:40-4:45	*Passing Period*					

Session I - G column:
Room 2515 — Workshop: BRE Publishing — Elise Castillo & Leah Faw

4:45-6:00	Poster Session & Reception: *Education Psychology Library*			
	Posters			
	Judith Warren Little, Elena Duran Lopez, Anna Weltman, Joan Heller, Nicole Wong, Selena Burns	Kyra Muhs	Carolina Ramirez	Peter Benitti	Cassandra Drake
	Lisette Lopez, Sandra Zuniga-Ruiz, Seth Corrigan	Jessica De Anda	Meghna Soni, Yukari Okamoto	Ann Veu	Heather Fink
	Annemarie Newell, Emily Gilden, Lizzy Dutton, Vicki Laina	Deborah Baroi	Laleh Cote	Carolina Ramirez	Zoe Clark
	Laleh Cote, Anne Baranger, Elisa Stone, Max Helix, Colette Flood	Dr. Dor Abrahamson	Rebecca Shareff	Hila Pazner	Seth Corrigan
	Anna Weltman, Heather Fink, Rebecca Shareff, Elisa Stone, Dor Abrahamson	Cyrell Roberson	Maria Morales	Matt Kronzer	Robin Irey
	Denise Groce, Eva Iskander, Leena Furtado	Alice Taylor and colleagues			

Session I

A

Laurie Jo Murdock, B-CLAD (Spanish), MA, PPSC, LMFT Doctorate in Educational Leadership Student, San Francisco State University Bilingual Literacy Coach

Title: Exploring a Community of Practice and Teacher Learning For Spanish-speaking Biliterate Students

Spanish-speaking biliterate students deserve better opportunities to learn in both their primary and second languages. Overall, teachers need support with on-going professional learning to build capacity (Dufour, 2007) in implementing policy, learning the new standards, and effectively meeting Spanish-speaking biliterate students' language needs (Olsen, 2010). This applied research explored the learning process of four teachers applying the language standards and policy, while considering strengths and meeting needs of their Spanish-speaking biliterate students. Transcriptions of audio recordings of professional learning community meetings, coaching sessions, and peer observation debriefs were completed. Early findings suggest that a community of practice that included a multifaceted professional learning experience provided a safe space for learning, collaboration and rich discussions on race and equity that influenced language learning philosophies and transformed instructional practices for Spanish-speaking students. This small-scale study offers perspectives of how teachers learn.

Purpose: In California, 85% of English Language Learners (or biliterate students) are Latin@ (Hill, Weston, & Hayes, 2014), with only 15% ever earning a bachelor's degree (NCES, 2013). A lack a quality education means fewer career opportunities (Navarez & Wood, 2010; Gándara, 2010). Bilingual education addresses cognitive and cultural strengths (Cammarota, 2004; Gándara, 2010; Hakuta, 2011; Valenzuela, 1999). Furthermore, the United States District Court Northern California (2015) issued a Modified Consent Decree, which has guided the district on biliteracy language practices. The California Department of Education (2012) also recently released the new CA English Language Development standards. Teachers have a responsibility to understand and meet Spanish-speaking students' strengths and needs. Therefore, applying theories of Communities of Practice (COP) (Lave & Wenger, 1991), Adult Learning (Mezirow, 1997), and LatCrit (Solórzano & Bernal, 2001), this applied research study case investigates the research question: What is the process of teacher development through a multifaceted professional

learning approach and how does it support elementary school teachers in serving Spanish-speaking Latina/o students?

Brief Literature Review: Teachers are generally open to learning new standards (Ebersole, Kanahele-Mossman & Kawakami, 2015) and in implementing policy (Figueroa-Murphy & Haller, 2015). Studies show that a professional learning community (Dufour, 2007), coaching (Joyce & Showers, 1980) and peer observations (Daniels, Pirayoff & Bessant, 2013) allow teachers to learn new standards, employ policy, and to delve into the complexity of language learning (Fillmore & Fillmore, 2012; Schleppegrell, 2012; Zwiers, O'Hara & Pritchard, 2014), while providing opportunities to discuss race and equity (Boske, 2012; Gordon, 2011; Hirsh & Hord, 2010; Singleton, 2015).

Methodology: My study was an analysis of teacher learning with a multifaceted approach. I obtained a convenience sample of 1st-5th grade teachers of Spanish-speaking biliterate students who met once a month, from January to May, for 1 ½ hours, with additional coaching and peer observations. Finally, I conducted phenomenological interviews (Seidman, 2006) to explore teachers' processes. Based on the work and coding practices of Miles, Huberman, & Saldaña (2014), I am currently analyzing my data corpus. Initial findings show that this safe and collegial learning experience is an effective way to develop and deepen instructional practices.

Kevin Macpherson, UC Berkeley & SFSU
Tite: Social-Psychological Impacts of a Values Affirmation Intervention in Ethnically Diverse Contexts
Overview: The goal of the project is to further understand the impact of a values affirmation writing assignment on feelings of school belonging and classroom grades, and how ethnic identity may moderate the relationship within the contexts of high schools with primarily students of color. The proposed project will be carried out in several California middle and high schools, each with a student body of primarily Black or Latino students.
Background: The growing research body of values affirmation interventions offer encouraging findings in real-world contexts but needs to be further explored in contexts where a majority of students are people of color (Hanselmen et al., 2014). Thus far, the intervention has only been conducted in schools with negatively stereotyped groups (i.e. Black or Latino) alongside a population of White students. The previous literature may not be most representative of the heavily segregated school settings that exist today, and it situates the threat coming only from other white students (Reardon, 2013; Reardon, 2016). Second, racial/ethnic differences have been identified by outside researchers but not specifically measured by students as a moderator of identity, limiting the explanation of intervention effectiveness between and within groups.

Third, although sense of belonging has been theoretically linked as a psychological lever of change (Cohen et al., 2012), only one values affirmation intervention study has included measures of school belonging and it was in a college laboratory setting (Brady et al., 2016). The proposed study seeks to cultivate well-being in a several high-need middle and high school contexts with negatively stereotyped students, and explore several underlying mechanisms.

Research Questions 1)   Does a values affirmation intervention impact students' feelings of school belonging and classroom grades in the context of a student body with primarily Black and Latino students? 2)   How does ethnic identity and other group orientation moderate the impacts of a values affirmation (school belonging and grades) within the context of a diverse student body? 3)   Do the treatment effects of the value affirmation intervention on grades and school belonging differ between the three school contexts, based upon the reported demographic population of students?

This is a work-in- progress proposal, and the presenter welcomes feedback and suggestions in person during the session or via e-mail at kevin.h.macpherson@berkeley.edu.

Erin Bridges Bird, UC Davis, Ph.D. Student in Science & Agricultural Education
Title: Attending to uncertainty: How students generate and evaluate knowledge in a citizen science school project

The scientific endeavor is fundamentally a means through which to understand the world; it is a process for generating and evaluating knowledge. Over the past thirty years there has been concerted efforts to reform science education to be more reflective of scientific processes, or scientific inquiry (National Research Council, 2007, 2012; The National Science Education Standards, 1996; American Association for the Advancement of Science, 1989). These reform efforts can in turn support more accurate conceptions of science as a dynamic, durable and tentative body of knowledge; thereby informing student perceptions of science as well as their self-perceptions about their ability to do and contribute to science (Archer et al, 2012; Archer, Dewitt, and Osborne, 2015). Additionally, scientific inquiry in schools is not only a more accurate way of depicting science, it is also a more equitable and inclusive way of teaching science (Emdin, 2007).

Within science education reform, scientific argumentation has emerged as a critical epistemic practice, which is nearly absent from scientific classrooms (Osborne, 2010). Argumentation is a discursive and collaborative action intended to solve problems and advance knowledge (Driver, Newton and Osborne, 1998; Duschl & Osborne, 2002; Osborne, Erduran and Simon, 2004). While used in all aspects of scientific inquiry from justifying protocols used to evaluating alternative claims, argumentation is also the fulcrum for producing scientific claims from empirical

evidence. This dynamic and iterative process increases confidence and certainty and generates a differentiated understanding of scientific knowledge – it is not all fact and there are still questions left unanswered.

As an instructional tool, citizen science creates unique opportunities for argumentation as students collect and make sense of their own data before submitting findings to scientists. In high-level participatory projects students design data collection protocols, collect data, and analyze their results to answer their own research questions (see Houseal, Abd-El-Khalick and Destefano, 2013; Gray, Nicosia & Jordan, 2012). This process is reflective of the dynamic, uncertain and social nature of science, in which the end results are not pre-determined, questions are open-ended and argumentation is necessary to ensure certainty before contributing results to scientists. Because these projects position students as doing 'real' science (Ballard, Dixon and Harris, 2016), and as there is no predetermined 'correct' outcome, being able to identify uncertainty and knowing how to take precautionary measures to reduce uncertainty is essential. To this end, students have purpose for productive argumentation and have reason to build upon nascent skills specific to scientific knowledge production. Using preliminary findings from a fourth grade citizen science project, in which students monitor the abundance and diversity of local bird populations and submit their findings to the Cornell Lab or Ornithology, this presentation shares when, where, and how uncertainty within science classrooms drives argumentation and knowledge production. Specifically, what is the role of uncertainty within science learning? When and where does is it introduced to students? And, how does uncertainty drive and sustain engagement in argumentation?

B

Juliet Kunkel, University of California, Berkeley
Title: Free Your Mind and the Rest Will Follow: Methodological-Epistemological entanglement and the problematics of consciousness-raising

This methodological paper seeks to engage with the theoretical and empirical difficulties of academic research that attempts to contribute to decolonizing or anti-white supremacist projects. Specifically, this paper is a theoretical engagement with participatory research and consciousness-raising as a method and goal. Building off and critiquing the Freirian distinction

oppressor/oppressed in consciousness-raising approaches, I detail some ethical considerations of researching the oppressed, and structural difficulties of researching the oppressor. My purpose is to work towards a more precise and authentic discussion of the limitations and potential of research that articulates a goal of social justice.

Michael Singh, University of California, Berkeley

Title: Role Models Without Guarantees: Corrective Representations and the Cultural Politics of a Latino Male Teacher in the Borderlands

In recent years mentorship has become a popular 'solution' for struggling boys of color and has led to the recruitment of more male of color teachers. While not arguing against the merits of mentorship, this article critiques what the author deems 'corrective representations.' Corrective representations are the imagined embodiment of proper and productive masculinities that male of color educators are asked to perform. This discourse perpetuates confining representations of identity and locates the problem of boys of color within their own actions. Designed as an ethnographic case study, this article explores the life of one Latino male teacher as he navigates discourses of corrective representation as coordinator of his school's Latino boys program. This project provides a detailed account of the cultural politics of Latino male mentorship and offers the notion of a critical borderlands approach to identity as an avenue to problematize essentialist and deficit approaches to Latino boys.

Renee Starowicz, University of California, Berkeley and San Francisco State University

Title: "I don't like (.) her:" AAC, Adolescence and Silences.

This presentation is a secondary analysis of a conversation between a speech-language pathology student, a focal adolescent student that uses Augmentative and Alternative communication (AAC), an aide and an adolescent peer. The aim of this project is to investigate the wide variety of communication resources that are deployed by the focal student in interaction through Conversation Analysis (Sacks, Schegloff & Jefferson,. 1974) In particular, issues of silence and voice are taken up through a Critical Disability Studies Lens (Apler, 2017; Ashby, Jung, Woodfield, Vroman & Orsati, 2015; Cowley & Bacon, 2013; Wickenden, 2011a; 2011b;). This paper focuses on a particular segment of the conversation in which the focal student demonstrates minimal conversation input until the aide exits the room. This passage

brings forward issues of how verbal silence is read in relation to dis/ability and how young people that use AAC also deploy silence as a strategy in conversation. Suggestions are made to emphasize the wide variety of communication resources that exists and have implications for our current understandings of education and Disability Studies (Annamma, Connor & Ferri, 2013; Broderick & Leonardo, 2011).

Alper, Meryl. (2017) Giving voice: Mobile communication, disability and inequality. Cambridge, MA: MIT Press. Annamma, S. A., Connor, D., & Ferri, B. (2013). Dis/ability critical race studies (DisCrit): Theorizing at the intersections of race and dis/ability. Race Ethnicity and Education, 16(1), 1-31. Ashby, C., Jung, E., Woodfield, C., Vroman, K., & Orsati, F. (2015). 'Wishing to go it alone': the complicated interplay of independence, interdependence and agency. Disability & Society, 30(10), 1474-1489. doi:10.1080/09687599.2015.1108901 Broderick, A., & Leonardo, Z. (2011). Smartness as property: A critical exploration of intersections between whiteness and disability studies. Teachers College Record, 113(10), 2206-2223. Cowley, D. M., & Bacon, J. K. (2013) Self-determination in Schools: Reconstructing the Concept through a Disability Studies Framework. PowerPlay, 5 (1), 463-489. Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. language, 696-735. Wickenden, M. (2011a). Talking to teenagers: Using anthropological methods to explore identity and the lifeworlds of young people who use AAC. Communication Disorders Quarterly, 32(3), 151-163. Wickenden, M. (2011b). Whose voice is that?: Issues of identity, voice and representation arising in an ethnographic study of the lives of disabled teenagers who use Augmentative and Alternative Communication (AAC). Disability Studies Quarterly, 31(4).

C

Ellen Lin, GSE UC Berkeley
Title: Degenerate Intimacies: Colonial Apprehensions of Child Development in Racial and Cultural Frontiers
Few public institutions embody the ultimate drive of an adult/human Savior developing, as Trinh Minh-ha (1989) discerned in Western scholarism (p. 49), his

underdeveloped Other than the space of the school. Mirroring a Western colonial onto-epistemology, the destruction of diverse forms of being, sensing, and behaving sediment the adult world, becoming the criteria of knowledge, skills, and dispositions that measure the adequacy of a child's development. Similarly, human acts of atrocity are loaded with noble narratives of liberal protection and development, hinging on the necessary death and loss of underdeveloped, uncivilized, or savage existence. The figure of the child is thusly produced by and produces the unquestioned value of conservative and linear temporalities, Edelman's (2004) understanding of reproductive futurism. While Edelman (2004) "chooses not to choose the child" as society's reproductive fetish, this paper pursues the figure of the child as already a site of simultaneous rejection and embracement, exposing the possibility that what humanity claims to protect and love most is also what it daily obliterates out of fear and hatred. Historical narratives of child-rearing and schooling practices in imperial settings (Stoler, 2002) furnish one path through which to rethink the ways in which a concern for children lies at the heart of concerns for colonial progress. In straying from the precious iconography of childhood as fragile, insubstantial, and linear in progress, this paper reconsiders the colonial conditioning of the possibilities of being in the child's vulnerability to and uncertain positionality in the category of the human.

Nigel Haikins-Appiah, University of California, Berkeley
Title: Sports: An Unofficial Tool of Racial Socialization
The consistent low level of academic success that plagues the NCAA's African American male athlete population is well documented. In fact, it is one of the biggest ongoing controversies within intercollegiate athletics that present a legitimate threat to the revenue-generating behemoth that the NCAA has monopolized. This persistent academic underachievement by the group that constitutes the majority of revenue-generating athletes has attracted the scrutiny of educators and administrators alike. Constant accusations of the educational exploitation of this group of athletes has led to increased pressures on university athletic departments nationwide to reassess their approach to the learning process of their student-athletes. Despite the publicised subpar academic performance of "black" student-athletes, there is a group within the black athlete community that has experienced tremendous academic success in majors and fields that have historically had very little black representation

(such as STEM majors). Student-athletes of direct West African descent (first and second generation) continue to be among the highest academic performers in the student-athlete population. This project will strive to identify and explore the social and cultural factors that contribute to this group's ostensibly abnormal academic success. While exploring this topic, issues of race, class, ethnicity and identity will be thoroughly explored. By doing so, the social and systematic elements that account for this group's continued success can be incorporated into the education process of all student-athletes (African Americans in particular). This work will serve as a step towards the creation of an intercollegiate athletic model that is more conducive than the current model to a meaningful and engaging learning experience for its participants.

María José Aragón, Ph.D. Candidate, University of California, Santa Barbara
Title: Engaging through text: Agency and identity in peer discussions among Latina/o elementary students

The widespread adoption of the Common Core State Standards (CCSS) has led to a growing concern among education scholars and practitioners about how the standards will impact the educational trajectories of students from minoritized linguistic, ethnic, and racial backgrounds (Bunch, Walqui, & Pearson, 2014; Hakuta, Santos, & Fang, 2013; Lee, Quinn, & Valdés, 2013). In the area of English Language Arts (ELA), the CCSS foreground a number of analytical skills, such as interpreting multiple levels of meaning in complex texts, and effectively communicating claims and findings supported by evidence from different sources.

The close reading of texts, particularly informational texts, is identified as one of the primary reading skills students are expected to acquire, and is presented as central to students' academic success in school and beyond. The CCSS narrowly define close reading as the practice of extracting knowledge and evidence from texts, paying limited attention to students' broader learning contexts and existing funds of knowledge (Moll et al., 1992). Research further suggests that members of marginalized groups, such as Latina/os and emergent bilinguals (García, 2009), often have limited exposure to the kinds of language and ideas found in complex texts and are at a disadvantage when it comes to mastering the skills mandated by the standards (Fillmore & Fillmore, 2012; Kibler, Walqui, & Bunch, 2015).

The CCSS's conceptualization of close reading contrasts with a sociocultural orientation to literacy (Castanheira et al., 2001; Hull & Moje, 2012) in which students'

language and literacy practices are viewed as socially situated and constructed. Drawing on the latter perspective, as well as on Vygotskian sociocultural theory (Rogoff, 1990), the present study examines student interactions within and across instructional activities designed to support the acquisition of literacy skills required for close reading and analysis of complex texts. The paper presents a discourse analysis (Green & Gee, 1998) of peer interactions in a sixth grade public school classroom based on observations documented over the course of five months using video and audio recordings, field notes, and classroom artifacts, such as texts and samples of students' work. More specifically, I focus on peer discussions among students from Latina/o immigrant backgrounds during English Language Arts and Academic Language Development activities, in which students were asked to read and analyze various types of text.

Findings suggest that students employ a wide range of linguistic resources, such as translanguaging practices (García & Wei, 2014) and the use of different registers, to make meaning and co-construct their understanding of texts with others. Further, students' identities and experiences outside the classroom function as powerful tools in mediating their interpretations of texts, as well as their levels of engagement in different literacy tasks. These finding have implications for how teaching practices associated with close reading can be designed to leverage students' knowledge and interests and expand learning opportunities for linguistically and racially minoritized students.

References

Bunch, G. C., Walqui, A., & Pearson, P. D. (2014). Complex text and new common standards in the United States: Castanheira, M. L., Crawford, T., Dixon, C. N., & Green, J. L. (2001). Interactional ethnography: An approach to studying the social construction of literate practices. Linguistics and Education, 11(4), 353-400. Fillmore, L. W., & Fillmore, C. J. (2012). What Does Text Complexity Mean for English Learners and Language Minority Students?. Commissioned Papers on Language and Literacy Issues in the Common Core State Standards and Next Generation Science Standards, 94, 64. García, O. (2009). Emergent Bilinguals and TESOL: What's in a Name?. Tesol Quarterly, 43(2), 322-326. García, O., & Wei, L. (2014). Translanguaging: Language, bilingualism and education. Basingstoke: Palgrave Macmillan. Gee, J., & Green, J. (1998). Discourse analysis, learning, and social practice: A methodological study. Review of Research in Education, 23, 119-170. Hakuta, K., Santos, M., & Fang, Z. (2013). Challenges and opportunities for language learning in the context of the CCSS and

the NGSS. Journal of Adolescent & Adult Literacy, 56(6), 451-454. Hull, G. A., & Moje, E. B. (2012). What is the development of literacy the development of?. Commissioned Papers on Language and Literacy Issues in the Common Core State Standards and Next Generation Science Standards, 94, 52. Kibler, A. K., Walqui, A., & Bunch, G. C. (2015). Transformational opportunities: Language and literacy instruction for English language learners in the common core era in the United States. TESOL Journal, 6(1), 9-35. Lee, O., Quinn, H., & Valdés, G. (2013). Science and language for English language learners in relation to Next Generation Science Standards and with implications for Common Core State Standards for English language arts and mathematics. Educational Researcher, 0013189X13480524. Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. Theory into Practice, 31(2), 132-141. Rogoff, B. (1990). Apprenticeship in Thinking. Cognitive Development in Social Context. NY: Oxford University Press. Valdés, G., Kibler, A., & Walqui, A. (2014, March). Changes in the expertise of ESL professionals: Knowledge and action in an era of new standards. Alexandria, VA: TESOL International Association.

D

Daniel Thomas, UC Berkeley
Title: Dialogue with student-athlete
This presentation will discuss issues regarding education and athletics with student-athletes from University of California, Berkeley through a dialogue format.

Darielle Blevins, San Diego State University, Doctoral Student Department of Education & Lorren Comeaux San Diego State University Student pursuing Masters in Counseling emphasis Multicultural Community Counseling and Social Justice Education.
Title: Closeness and Conflict: Kindergarten Teachers Perceptions of Kindergarten Girls.
This study seeks to determine if differences exist in teacher reported closeness and

conflict among Kindergarten girls of various ethnicities and family income. Additionally, researchers examined if there were differences in the ways teachers report children's misbehavior interfering with classroom teaching among kindergarten girls based on ethnicity and family income level using African American girls as a reference group. African American girls are disproportionately represented in school discipline. By centering African American girls in the conversation around teacher perceptions, researchers can further understand how to best serve this population.Results indicated teachers did not differ in reported closeness to African American girls across income levels, nevertheless teachers reported higher levels of conflict and classroom interference for African American girls compared to girls of other ethnicities. Further research could examine perceptions girls hold about their behavior and about their relationship with their teachers. Implications for educators include anti bias influenced reflective supervision which allows educators to reflect on their core beliefs concerning race and gender as it relates to their daily classroom experiences.

Holly Nishimura, UC Berkeley School of Public Health and UCSF School of Medicine

Title: Faculty Competencies for Teaching Diverse Learners in Medical Education
Medical educators enhance learner engagement and performance by fostering an inclusive learning environment.[1-4] As we actively recruit students from diverse backgrounds, we must ensure that medical educators possess skills to effectively teach diverse learners. Based on recommendations by LCME to increase the culture of inclusiveness and results from the University of California Climate Survey, it became clear that the University of California San Francisco (UCSF) needed to improve the climate of inclusion. UCSF is well known for its success in increasing student body diversity, yet instructors still face challenges in effectively teaching and mentoring students from diverse backgrounds. We identified the Multicontextual Model for Diverse Learning Environments (MMDLE) as a useful framework for explaining the organizational, curricular and individual level factors that impact the campus climate and thus learners.[1] This study sought to identify faculty educator competencies for creating an inclusive learning environment for diverse learners aligned with the MMDLE.

Methods: This study took a multi-step approach: 1) we conducted a scoping review of literature on teaching diverse learners for medical and health professions faculty

to identify existing competencies; 2) we interviewed 12 key stakeholders; 3) we reviewed learning objectives for 7 existing diversity and inclusion curricula at UCSF targeting faculty, trainees, or staff. Lastly we conducted thematic analysis the objectives and mapped themes to the domains of the MMDLE.

Results/Outcomes: From our analysis, we developed 7 essential faculty educator competencies which were then mapped to the MMDLE model. Domain 1: Instructor Identity 1. Build foundational knowledge of key concepts such as privilege, power, unconscious bias, cultural humility, microaggressions, intersectionality 2. Establish awareness of one's own identity(ies) 3. Develop ability to recognize, remedy and monitor conscious and unconscious bias and discrimination Domain 2: Pedagogy and Teaching Methods 1. Communicate effectively across racial, ethnic, gender, social other differences for learners and for patients 2. Develop educational skills for creating an inclusive learning environment for learners and for patients Domain 3: Course Content 1. Apply curriculum development skills to include diversity in course and curricular design and content. 2. Represent and invite diverse perspectives in the structure of learning opportunities

Discussion: LCME states that future physicians "will be best prepared for medical practice in a diverse society if they learn in an environment characterized by, and supportive of, diversity and inclusion."5 We've developed 7 essential faculty competencies for teaching diverse learners in an attempt to create such an environment. The competencies address 3 domains of the MMDLE including instructor identity, teaching methodology, and curriculum development and will inform faculty development offerings aimed at improving the culture of inclusivity at UCSF.

Significance: Competencies for teaching diverse learners in a health professions setting will ensure that faculty are well-equipped to cultivate an inclusive climate for all learners. The methodology for developing these competencies may have implications for other academic institutions looking to enhance faculty development offerings related to diversity and inclusion in a manner that is contextually specific to the needs of the faculty, learners, and institution.

E

Jeff Moran, University of California, Davis

Title: Operationalizing an 'English for Critical Literacy' College Composition Course
The title of my project is "Operationalizing an Adult ELL Critical Literacy
Composition Course." It situates the literacy practices of adult English language
learners (ELLs) in the context of a dialogic sociocultural framework of acquisition
which occurs along the language faultines (Menard-Warwick, 2013). Additionally, it
centralizes the development of critical literacy in adult ELLs in order to ensure that
these students are given space to exist as fully human beings through naming the
world around them and then seeking to change it (Freire, 1970). However, this project
is more than a de rigueur poststructuralist literature review. It situates the college-
level composition classroom within this framework in order to operationalize a
curriculum, syllabus, and classrooms materials. In order to do this, the project begins
by recognizing the tremendous diversity- linguistic, cultural, educational,
immigration status- of adult ELL students in community college and 4-year
university composition classrooms (Ferris, 2009). For example, it is not uncommon
for my own community college writing classrooms to hold space for students who
were born in the US, students born outside the US but graduated from a US high
school, and students who only recently arrived in the US to continue their education.
This poses an exciting challenge. How can teachers employ a culturally relevant
pedagogy (Ladson-Billings, 1995) that serves all of these students as they pursue a
personally meaningful education both inside and outside of the classroom? Drawing
upon both critical TESOL researchers (Pennycook, 1999) and university composition
teacher practice (Holten, 2009), this project presents these background conditions of
the classroom environment, and then suggests a practical 10-week syllabus designed
to synthesize the movement from theory to pedagogy to practice.

Stevie Jeung, University of California, Berkeley

Title: Self-Efficacy and School Context in a Wise Feedback Intervention This
proposed research project will replicate and extend work done by Cohen, Steele, and
Ross (1999) and Yeager et al. (2013) on a wise critical feedback intervention to improve
the writing performance of students experiencing stereotype threat (Steele &
Aronson, 1995). This intervention relies on the premise that Black students may

experience critical feedback on their writing from White instructors as biased and may not trust the feedback, leading to lower engagement with writing tasks and lower grades. A wise critical feedback intervention involves pairing a teacher's critical feedback with this message: "I am giving you this feedback because I have high expectations and I know you can reach them." In lab studies by Cohen, Steele, and Ross (1999), Black students given this treatment were more likely to revise their work and produced better revisions than did Black students in the control condition and White students in both conditions. Furthermore, Yeager et al. (2013) found in a school setting that the effect was mediated by school trust (i.e. low-trust Black students benefited most) **and that the** intervention seemed to prevent a downward trend in grades experienced by Black control students. The proposed study will extend this work by investigating the contextual features of a threat environment and the extent to which students' access to positive self-efficacy beliefs (Bandura, 1977) may facilitate the effectiveness of the intervention. Social persuasions from a trusted source are a key source of self-efficacy beliefs, particularly for stereotyped students (Usher & Pajares, 2008). Self-efficacy is highly predictive of academic achievement (Pajares & Valiante, 2006) and "helps explain why people's behavior may differ markedly even when they have similar knowledge and skills" (Pajares & Johnson, 1994, p. 313). Understanding racially-based barriers to self-efficacy may reveal (a) ways in which certain school contexts depress the performance of stereotyped students, and (b) precise points of intervention to protect students and schools against this effect. Research questions include: 1. Does writing self-efficacy mediate the relationship between school trust and outcome measures (revision, assignment grade, class grade, GPA)? 2. Does the effectiveness of the intervention vary based on teacher race or school demographics? 3. What role do teachers' expectations of students play in intervention effects? Participating schools were recruited in the San Francisco and Los Angeles areas. Students will complete measures of teacher and institutional trust, writing self-efficacy, ethnic identity, hope, mindset, and school belonging at the beginning of the year. The task and treatment will be delivered via Google docs, and the teachers will be blind to which students were assigned to treatment and control conditions. Psychosocial measures will be administered again post-treatment and at the end of the school year, and data on task performance, English grade, and overall GPA will be collected. Teacher expectations data will be collected at the beginning and end of the year. This is a work-in-progress proposal, and the presenter welcomes feedback and suggestions

in person during the session or via e-mail at stevie.j@berkeley.edu.

Susan Nisonger Olsen, California State University, Sacramento

Title: The Effects of New Teacher Turnover in High-Poverty Urban Schools

The job of a teacher is overwhelming, particularly in the first five years of teaching. Teachers are still learning their practice and refining their skills while trying to meet the needs of a diverse population of students, learning to communicate with staff and families and meet their own certification requirements. However, working in high-poverty urban schools often comes with additional challenges for teachers including over-packed classrooms, lack of resources and students with many different backgrounds, assets and needs. For a new teacher facing the unique challenges that are present in high-poverty urban schools is overwhelming. It can lead to disappointment, feelings of incompetence and an overall sense of failure. For this reason, many new and early career teachers quit or transfer out of urban schools. Teacher turnover is a major problem when districts and schools are left with hard-to-fill vacancies, often in the middle of a school year. This paper identifies and explores issues of teacher turnover and the effects they have on staffing in high-poverty districts and schools. It will provide background knowledge of the issue as well as establish relevant information and concerns surrounding the issue. Additionally, it will analyze some of the causes for the issue. Lastly, it will present best practices and recommendations for urban school districts and teacher education programs.

F

Courtney Green, MD; Emily Huang, MD; Patricia O'Sullivan, EdD, Dor Abrahamson, PhD

Title: Robotic surgery in residency training: How do we learn to feel what we see?

Robotic surgery has expanded dramatically over the last decade. The meteoric rise of robotic surgery creates challenges in teaching. Surgeons themselves are learning to operate robotically mastering the lack of haptic feedback and relying entirely on visual processing to interpret the operative field. Consequently, surgeons often

relegate residents to observing attempting to learn using solely the intracorporeal image on screen.   Robotic curricula arose from industry efforts to teach robotic technology to fully competent surgeons.   Such curricula neglect reality; residents are still developing their surgical cognitive and technical skills while learning to use the robotic systems.   This curricular gap stems from failure to recognize that technical and cognitive skills develop reciprocally and in situated context, and developing purposeful seeing (i.e., the surgeon's perceptual expertise in recognizing visual cues for deliberate action[1]) is fundamental for surgical learning. The lack of haptic feedback enlarges this pedagogical chasm; residents can no longer feel the effects of their surgical manipulations. Surgical trainees often lack the relevant experiential resources to decipher these visual cues and act upon them. Theories from the cognitive sciences are relevant to designing curricula. Professional vision[2] describes the practices that help novices build disciplined ways of seeing events and understanding their implications for practice. Learners gain perceptual expertise with surgical experience and correlate with skill mastery[1,3]. A curriculum may be limited by the "expert blind spot"[4]; a skilled individual lacks conscious access to their own know-how; they consequently cannot begin to articulate, let alone teach, that skill to novices. The field needs a deep understanding of how surgeons use words, gestures, and vocalizations to communicate how they feel what they can only see in robotic surgery. One approach is to understand surgeons' semiotic practices (signs, symbols, and their interpretations) in the instruction of operative procedures.

The purpose of this study is to describe how surgeons with differing backgrounds in open, laparoscopic, and robotic surgery use words, gestures, and vocalizations to describe what is happening during a robotic procedure. This will provide insight as to how surgeons can cultivate residents' perceptual expertise. Then shared language can be developed so surgeons communicate to trainees the physical sensations of something they can only see. Surgeons with different levels of robotic experience will participate individually in prompted interviews. Participants will watch each clip and concurrently explain what is happening on the screen as if they are speaking to a junior surgical resident. The researchers will record a participant's description in its entirety. The recorded interactions will then be retroactively time-stamped in 5-10 second intervals. We will use a microanalysis approach[5] to examine what is said, what gestures and sounds are made. After review we will provide a detailed comparative analysis of participants' responses based on their level of surgical expertise. We anticipate identifying recurring patterns in language usage and physical gestures to

highlight components of perceptual expertise and professional vision. The results of this study will provide the basis of teaching scripts allowing residents to move from being observers to actually operating in robotic surgery.

Cassandra Drake, Assessment Coordinator, Arts Alive SDSU Doctoral Student in Education, San Diego State University and Claremont Graduate University

Title: Instagram and Snapchat as a qualitative assessment tools: Methods and other considerations for using the popular applications to produce student generated, visual data and assess interdisciplinary student learning in the university classroom This poster presentation will highlight student work created using Snapchat in the context of an arts-based assessment plan which was developed to meet multiple needs and outcomes in the context of university-level teaching and learning. Along with designing, implementing and supporting an assessment which measured student outcomes, the researcher was also asked to design a creative process for students to demonstrate interdisciplinary comprehension. This process needed to yield student generated visual data and include an innovative strategy for communicating student knowledge with the larger university via social media applications. Student data, both stills and videos, will be presented and as well as their reactions to the assessment piece; which were gathered in an end of semester survey.

Deborah Michele La Torre, UCLA

Title: Exploring the Rating of Cognitive Complexity in High-Stakes Mathematics Assessment Items

According to surveys conducted by the Center on Education Policy of both state departments of education and school districts (Renter, 2013; Renter & Kober, 2014), the identification or development of Common Core aligned curricula is a challenge. Not only are the content standards and mathematical practices seen as more rigorous than previous state standards (Carmichael, Wilson, Porter-Magee, & Martino, 2010), but many superintendents believe that successful implementation requires "fundamental changes in instruction" (Rentner, 2013, pg. 5). Similarly, the adoption of these and other college and career ready (CCR) standards have necessitated the development of assessments that align not only with the skills but also with the cognitive complexity inherent in these standards.

While various systems of measuring complexity exist, Norman Webb's Depth of

Knowledge (DOK) framework holds prominence. Documentation about DOK can be found on the web sites for many large districts, county offices of education, and most state departments of education. In addition, DOK is often emphasized in the development and/or alignment studies of high stakes assessments in order to help establish construct validity (see Messick, 1989). For example, Webb's framework has recently been used to analyze tests from the Partnership for Assessment of Readiness for College and Careers (PARCC), the Smarter Balanced Assessment Consortium, ACT Aspire, the Massachusetts Department of Elementary and Secondary Education (MCAS), and the Programme for International Student Assessment (PISA). In brief, Webb's DOK framework (see Webb, Alt, Ely, & Vesperman, 2005) characterizes the following four levels of thinking that students are required to apply to correctly respond to an item and/or to attain full credit for a response: • DOK1: Recall of a fact, term, concept, or procedure; basic comprehension • DOK2: Application of concepts and/or procedures involving some mental processing • DOK3: Applications requiring abstract thinking, reasoning, and/or more complex inferences • DOK4: Extended analysis or investigation that requires synthesis and analysis across multiple contexts and non-routine problems and applications.

Background: This project is designed to build on previous research conducted by the author. This work focused on characterizing expectations for high levels of cognitive demand in the PARCC and Smarter Balanced summative tests (Author, 2015) as well as an item level analysis of the 2015 operational PISA tests (Author, 2016). As part of this work, potential gaps were observed in the mathematics descriptors that could affect rater reliability. In particular, expert raters seemed to have difficulty differentiating between DOK2, which in part represents lower order thinking, and DOK3, which in part represents higher order thinking. These assumptions form the basis of a multi-phase study.

Methods: The phase of the study reported in this presentation focuses on issues of rater reliability in the application of Webb's DOK framework with mathematics items. As such, the project utilizes two approaches: 1) a review of literature on Webb and other frameworks to assess cognitive complexity; 2) a review of documentation on Webb's DOK on state department of education web sites; 3) an item-level, and when possible rater-level, analysis of publicly released alignment studies of high-stakes mathematics tests.

Submission References: Carmichael, S.B., Martino, G., Porter-Magee, K., & Wilson, W.S. (2010). The state of state standards—and the Common Core—in 2010.

Washington, DC: Thomas B. Fordham Institute.   Messick, S. (1989). Validity. In R.L. Linn (Ed.), Educational Measurement (3rd edition). New York, NY: American Council on Education – Macmillan Publishing Company. Rentner, D.S. (2013). Year 3 of implementing the Common Core State Standards: An overview of states' progress and challenges. Washington, DC: Center on Education Policy.   Renter, D.S., & Kober, N. (2014). Common Core State Standards in 2014: Curriculum and professional development at the district level. Washington, DC: Center on Education Policy. Webb, N.L., Alt, M., Ely, R., & Vesperman, B. (2005). Web alignment tool (WAT): Training manual 1.1. Retrieved from http://www.wcer.wisc.edu/WAT/Training@20Manual@202.1%20Draft%20091205.doc

G

Presenters: Elise Castillo, Co-Chief Editor, Berkeley Review of Education Leah Faw, Senior Editor and Co-Chief Editor Emerita, Berkeley Review of Education
Title: Demystifying the Publications Process: Submitting Manuscripts and Engaging in Peer Reviews

While publications are a critical component of the academic portfolio, writing for publication and the publication process itself are not often made explicit to graduate students. As a result, stepping into the world of academic journals can be overwhelming. This session offers insights and advice on writing specifically for academic journals. Sponsored by the Berkeley Review of Education (BRE), an interdisciplinary peer-reviewed journal run by graduate students at UC Berkeley, this session will focus on how to select journals, an overview of the publication process, and an overview of the peer review process (including how to interpret feedback), with ample time for extended discussion in which participants can share their knowledge and experiences about publishing in academia.

Session II

A

Yanira Madrigal-Garcia, University of California, Davis

Title: "Humanizing Schooling: Reimagining Violence Through a Comparison of School Culture at Two Urban High Schools"

For the past 25 years, public health and psychology studies within the community and youth violence literature have examined the serious repercussions for low-income students. This research frames violence as a public health epidemic and even though violence is the topic at hand, there is little to no structural analysis that examines the link between violent crime, economics, and racism. In failing to link these processes, studies can normalize negative labels of students of color by utilizing theories that link violence to individual pathological behaviors. Moreover, there is a dearth of literature that examines how schools as institutions can perpetrate violence on students. Utilizing a social justice lens, my research examines schooling contexts and student experiences along the K-20 educational pipeline in a local, national, and transnational context. My primary research goal is to examine the type of violence that can marginalize students and divert their educational goals. By violence, I refer to visible acts that harm, as well as invisible symbolic (language), and systemic (economic and political) processes that reproduce social domination. My research broadly contextualizes the educational experiences for students of color that systemically foster violent environments through policies, practices, and discourses. My dissertation "Humanizing schooling: Reimagining violence through a comparison of school culture at two urban high schools," intervenes in the long-standing paradigms of "community" and "youth" violence and intersects the school to prison pipeline research. Through a comparative ethnographic study of two urban Northern California high schools, I examine the schooling contexts at an ethnically diverse flagship school with award-winning programs and a Latina/o-majority academically low-performing school. My study blends formal and informal interviews with students and teachers, participant-observations, and document analysis to understand violence from an organizational and individual perspective. At the organizational level, I examine how visible and invisible violence manifest through

systemic processes and at the individual level how agents experience and respond to criminalization. Findings reveal that both schools reproduce ideologies and engage in practices that, I argue, are modes of violence; thus, I establish intersectional schooling violence (ISV) a construct that draws from, 1) critical race theory, in particular Kimberlé Crenshaw's notion of intersectionality; 2) U.S. Third World feminism, a sphere that cultivates historically situated analyses of women of color's oppression and resistance; and 3) decolonial thought, a tradition that accounts for colonization and frames racism as a structure of power and domination. I set forth ISV as an ideology that cuts across race, class, gender, sexuality, religion, and immigration status that becomes the norm, and is experienced in schools as control, punishment, blaming, dehumanization, and dispossession. In sum, at the organizational level both visible and invisible violence manifested through policies, practices, and discourses. At the individual level, agents (students, teachers, and administrators) who experience multiple marginality experienced criminalization primarily as negative perceptions on abilities or achievements. These agents responded to criminalization through resistance that encompassed student activism, teacher organizing, along with collaborations among community members, school agents and students.

Stephen R. Ward, MS., PPS. Claremont Graduate University
Title: English Learners and Local Control Funding Formula: Emerging Patterns in California
The location of a school (e.g. rural, urban, or suburban) has been shown to affect various factors related to education (Bouck, 2005). Many rural California high schools are impacted by limited resources, non-English speaking students, and challenges of the rural context (Masumoto, & Brown-Welty, 2009), while suburban schools have become more multicultural and must respond to educating a diverse student body (Ayscue, 2016) including English Learners. Similarly, English Learner enrollment in California has increased while the budget to educate ELs has diminished (Horsford & Sampson, 2013).
The Local Control Funding Formula is a new method of funding proposed by legislation that now takes into account the higher costs of educating English Learners as Low Income and Foster Youth (Fuller & Tobin, 2014). Two important components of the LCFF is the Funding Formula and the Local Control Accountability Plan (stakeholder engagement). This research will study the LCAP and the

performance of English Learners in Urban and Rural High School Districts. A mixed methods analysis includes analyzing Local Control Accountability Plans (LCAPs) and analyzing Reclassification rates for ELs. This will include descriptive statistics, t- test, and Pearson r-correlations. Fifty high school districts in California will be examined from three secondary data sources: 1) The Record Layout for the LCFF State Priorities Snapshot Data File, 2) Town Hall Local Control Accountability Plans (LCAPs) and 3) Reclassification statistics of English Learners from the California Department of Education.

Nicole Rangel, UC Berkeley

Title: Overriding Shared Governance: A Critical Discourse Analysis Centering the Suspension of a Course on Palestine at UC Berkeley

The university is often celebrated as a site for critique, where intellectual laborers, protected by academic freedom, identify pressing social issues that need attention. However, academic freedom—the ostensible bedrock of the U.S. university system—is not always honored systematically. This paper explores the suspension and reinstatement of a one-credit, student-facilitated course on Palestine at University of California, Berkeley that received international media coverage in fall 2016. Using critical discourse analysis (CDA) to examine official university statements, open letters and journalistic press that both celebrated and criticized the course's suspension, this research project asks how the various constituencies involved in the case: 1) frame UC Berkeley's commitment to academic freedom; 2) believe the Israel-Palestine conflict should be approached pedagogically; 3) describe the social implications that have or may have resulted from the suspension/reinstatement? CDA is a felicitous methodology for these queries due to the special attention it gives to how unequal relationships of power are legitimized, reproduced and challenged within discourse. This facilitates an analysis of the texts that illuminates relationships of power, allowing for the mapping of the ethical and ideological positions at play in this case. To contextualize the findings, I begin with a theoretical framework that examines the purpose of the public university, illuminating the tension that exists between democratic and neoliberal approaches to higher education as they relate to academic freedom. This CDA investigation assesses the extent to which UC Berkeley protected free inquiry in the midst of this fall 2016 scandal. It aims to provide insights that contribute to higher education accountability efforts, which argue that the integrity of the public university depends on academic freedom functioning in all

spaces of controversy.

B

Juliet Kunkel, University of California, Berkeley
Title: Language Out of Place: (Settler)-Colonial Language Frames and Raciolinguistic Violence
This theoretical paper engages with the emerging field of raciolinguistics, discussing the racial and linguistic violence of (settler)-colonial formations and the consequences for social "common sense" concerning people and language. The intent is to render some of these processes more transparent, in particular the colonial conceptualization of language as bounded, biologicalized, and hierarchically valued, with implications for the ways in which we approach language work in the educational field and in decolonizing projects.

Elizabeth Rubalcava, University of California, Los Angeles
Title: The Mental Health Effects of Coming Out for Latinx Students on the College Campus

Franklin Moreno, University of California, Berkeley
Title: Moral Reasoning about Inflicting Physical Harm and Interpersonal Relationships
Violence associated with homicide, extortion and threats involving gangs is a major concern in the city of San Pedro Sula, Honduras. Examining how children and adolescents think about acts of violence within the context of ongoing violence is critical for understanding the ontology of violence and the psychological processes associated with it. In collaboration with the National Foundation for the Development of Honduras (FUNADEH), we conducted research in San Pedro Sula that involved two focus groups exploring dimensions of violence, and a study on the moral judgments of children and adolescents regarding acts of physical aggression within the context of ongoing violence from a social domain theory perspective. Accordingly, children

and adolescents develop distinct social, moral and personal domains knowledge (Turiel, 1983). Moral concepts refer to welfare, harm, justice and rights; social concepts refer to rules, authority, and structures organizing social relationships; and personal concepts refer to areas of personal choice outside of rule contingency or moral concerns.

Typically, violent acts are presented in social-moral research as singular, momentary acts between two or more individuals. Our study situated violent acts within the context of ongoing conflict. Unlike previous studies, we controlled for the physical act and the consequence of the act throughout each situation: punching and breaking the nose of other person. Our study also examined whether physical violence is evaluated as acceptable or necessary, and under what conditions.

There have also been limited studies that directly examine the effects of interpersonal relationships on the moral evaluations regarding the act physical harm (Fontaine et al., 2002; Tisak & Tisak, 1996). In the present study we switched the relationship between the aggressor and victim within the same act of violence. The varying relationships presented in this study involve strangers, family and non-family members affiliated with a gang. Participants were recruited from the city of San Pedro Sula, Honduras. The focus groups involved participants between the ages of 15-21-years of age. Participants 11-12, 14-15, and 17-18-years of age were asked to make moral judgments about physically harming another person using a semi-structured interview, modeled from previous research (Helwig, 1991). Three types of assessments were used for the study. The abstract assessment comprised of a series of questions examining general conceptions of physical harm. A novel component includes asking participants if physical aggression is alright or necessary and under what circumstances. Two types of contextualized scenarios were presented to the participants: 1) a prototypical situation of unprovoked physical harm; and, 2) multifaceted situations featuring acts of physical harm, gang affiliation, extortion, authority directives, retaliation and family welfare.

C

Maria Morales, Claremont Graduate University

Title: Exploring Models of Faculty/Student Pre-major Advising

Overview of Study In November of 2016, the Vice President at P. College asked us to explore best practices related to pre-major advising and to make recommendations for improving the College's advising program. The Vice President asked us to consider the following for our study: · Successful current practices at peer institutions ● Successful approaches to advisor/advisee matching ● Analysis of Cohort style groupings of advisees with limited number of trained advisors compared to universal involvement of all faculty

We analyzed and discussed findings from faculty surveys, student focus groups, and from exploration of best practices at other institutions. Based upon this study and discussion, we came up with recommendations for ways in which academic advising at P. College could be strengthened. In our final report, we summarized our main discussions and findings and presented specific recommendations. The perspectives in our findings section included those of faculty and students at P. College, and those collected from other liberal arts colleges. The perspectives of faculty members were gathered via surveys, while those of students were obtained via focus group meetings. Those of other institutions were extracted from their respective websites and via phone and email interviews.

Derrika Hunt, University of California, Berkeley
Title:

This paper attempts to uncover a series of questions regarding the relationships between epistemology, knowledge production and alternative forms of knowledge. I seek to examine alternative epistemologies as a rupture to western paradigms of knowledge production, which often prioritize western ways of knowing. I suggest embodied, spiritual, cultural and other indigenous ways of knowing are legitimate even when they are illegible to Western paradigms of research. I further attempt to locate alternative epistemologies to examine the possibilities and promises of alternative systems of knowledge. The primary question undergirding this research project is: whose knowledge counts? Further, the author offers Black feminist epistemology as a counter narrative.

Kevin Collins, Claremont Graduate University/Pepperdine University
Title:

Beginning in the 1980's, colleges and universities throughout the nation witnessed a

significant increase in the number of first generation, as well as under-represented cultural and ethnic minorities. In part, the increased diversification of the student body resulted in college administrators taking additional steps to create a more inclusive community (Smith, 2009). Consequently, numerous public university's developed institutional policies to restrict student speech with the hypothesized goal of achieving civility and inclusivity on-campus. Speech restrictions, commonly referred to as "speech codes" or "non-academic student speech policies," were developed by college administrators to provide an immediate and measured response to the racial conflict. However, the unintended consequences have resulted in college student's First Amendment rights at public institutions being violated (Bryne, 1991; Chong, 2006; Herbold, 1994; Jones, 1991; Kwok, 2002, Lukianoff, 2012; Martin, 1991; Rychlak, 1992; Smith, 2009). Consequently, non-academic speech policies have been the subject of considerable scrutiny by a small group of social scientists and independent policy groups (Gould 2001; Haldemann, 1998; Korwar, 1994; Martin, 2004; Page, 1993; FIRE 2006-2017). Moreover, the Foundation for Individual Rights in Education, (FIRE) a non-partisan, nonprofit, tax-exempt education and civil liberties organization has amassed evidence that over a ten-year period (2005-2015) 68% of the 2,246 public and private colleges and universities surveyed had at least one or more non-academic speech policy, thereby placing limitations on student speech. Furthermore, numerous federal court decisions (including Federal District, Circuit or Appellate Courts and the Supreme Court) have unambiguously articulated that pure or protected speech cannot be prohibited and/or regulated without demonstrating to the appropriate court of jurisdiction a compelling governmental interest. Consequentially, when state actors create and enforce policies (including but not limited to) non-academic speech policies that restrict college student's First Amendment rights, college administrators are exceeding their scope and power as governmental agents (Chemerinsky 2006; Nowak and Rotunda 1995; 2004). Otherwise referred to as "unfettered discretion." Thus, while it is evident based upon the previous literature that non-academic speech policies are prevalent and that these policies likely violate college student's First Amendment rights, what remains unexamined are the legal, equitable and administrative remedies available to college students. While the purpose of this analysis is not to act in lieu of the courts, a content analysis study that analyzes and evaluates the non-academic student speech policies by identifying the potential First Amendment legal remedies, thus providing clarification to a contemporary public policy dilemma is an important analysis.

Research Question: Subsequently, this study answered the following research question: What is the relationship between the legal remedies that students may seek in federal court and the non-academic speech policies at public universities? For the purposes of this study, legal remedies are limited to First Amendment causes of action. These causes of action are often cited in federal court filings when the aggrieved party (college students) are seek injunctive relief from the enforcement of college/university policies in question.

Conceptual Framework: Constitutionalism was chosen as the studies conceptual framework. Constitutionalism was chosen because it is a theory that explains not only limits the power of governmental officials (state actors) but how citizen's fundamental rights are protected. Research Design: Content analysis was determined to be the most appropriate research design and data collection method for this study. In total, ninety-six public flagship, land-grant and historically black colleges and universities (HBCU's) were selected for this study. These institutions were selected with the goal of analyzing the data through the lens of the individual Circuit Courts which provided a more meaningful analysis. The non-academic speech policies examined in this study were found in the institution's student handbooks, student conduct codes, and academic catalogs. The documents were located on the institution's website pages and were thereby publicly available. Subsequently, three groups of codes (units) were created for the coding schemas. The first group consisted of twenty-four deductive codes operationalized from the studies conceptual framework. A second group of deductive codes that were revised following the pilot study. Finally, a much larger group of inductive codes were developed when coding the ninety-six university student handbooks. In total, the study yielded well over four hundred deductive and inductive codes. Initial or "open" coding was used whereby the content was examined line by line (Saldana, 2009). Open coding allowed for the text which specifically addressed the institution's non-academic student speech policies to be identified. Focused coding began after open coding was completed. Focused coding provided a mechanism to more easily analyze large chunks of data and to ensure the appropriate "unit" or "units" was assigned the appropriate code(s) (Lofland, Snow, Anderson, & Lofland, 2006, p. 201). The data has been collected and recorded in NVivo (qualitative data management program). All data has been coded and is now being analyzed. Study Results will be finalized at the end of March 2017 - Ph.D. Dissertation Project.

D

Kayce L. Mastrup, UC Davis, School of Education & Academic Technology Services

Title: Mathematical Autobiographies: A Narrative Approach to Bridging Beliefs, Values, and Past Experiences with Future Instructional Practices

Researchers have revealed and explored a great deal about how students develop their ways of thinking about important mathematical constructs (Lesh & Lovitts, 2000; Boaler, 2016; Boaler et al., 2000; Ball et al., 2001; Cobb et al., 2009; Silva & Roddick, 2001). But many questions remain unaddressed about the required understandings and abilities that teachers should develop in regards to mathematical knowledge and instructional practices. While there has been work has surrounding teachers' prior experiences with mathematics much of the focus has been placed on comparisons between expert and novice teachers, or have investigated the individual experiences of practicing teachers, and other work has included descriptions of teachers' implementations or lack thereof of reform curriculum. Little research has focused on understanding in detail the connections between teachers' mathematics life stories and specific instructional sense making practices from the lens of preservice teachers. Furthermore, while the need to study the mental processes of teachers has increased, research in this area has largely concentrated on the observations of teacher performance in classroom settings rather than the examination of teachers' cognitive and metacognitive processes during instruction (Thompson, 1984). McCulloch et al. (2013) characterize mathematical identities (teacher's conceptions of mathematics) as stories, and thus an appropriate methodology for revealing them is through storytelling. Autobiographical narratives are descriptive stories about memorable events or times. They include specific events, or experiences that affect individuals in meaningful and impactful manners. This paper aims to examine the relationship of one's teacher and mathematical identity, as constructs of narratives, and pedagogical approaches. It is important for math educators to understand their role in the development of students' mathematics identities and recognize the role and connection their personal beliefs and experiences as mathematics learners play in this complex process. There is a strong precedent for using the mathematical autobiography both as a research data collection tool (see, for example, Hobden et al., 2011; Drake, 2006; Shaw et al., 1996;

Millsaps, 2000; McCulloch et al., 2013; Silva & Roddic, 2001) and as a means to define and understand the evolution of mathematics identities (Sfard & Prusak, 2005). The use of mathematical autobiographies as a pedagogical approach to improving teaching and learning is of great importance for understanding in detail the connections between teachers' mathematics life stories and specific instructional and sense making practices (Gainsburg, 2012; Drake, 2006). The following literature review will examine the results from studies focusing on the social histories, beliefs, and experiences of preservice teachers and the role these features played in shaping their future teacher self. The goal is to gain better understandings surrounding the motivation behind pedagogical approaches teachers elect and identify areas within the literature that could be explored further. This paper will cover three topics surrounding mathematics education. Since this paper places heavy emphasis on the importance of narratives as a way of knowing, it only seems fitting to begin with mathematics autobiographies as a means to explore and understand the development of individuals mathematical and teacher identity. Section two will then examine reform mathematics, placing specific focus on pedagogical content knowledge and instructional practices that promote mathematical understanding. The third section of the literature review will briefly examine the final piece of the puzzle, teacher preparatory programs, and the literature around why teachers do or do not implement the practices from these programs.

Tahl Sendowski, UC Berkeley
Title: In Their Own Words: Using Siblings' Perspectives to Understand The Influence of a Child With a Developmental Disability on the Family System and Sibling Experience

Developmental and family scholars consider sibling relationships to play a key role in individual development across the lifespan, through processes of socialization and support (Dunn, 2015; McHale, Updegraff, & Whiteman, 2013). For many, sibling relationships are the longest-lasting relationships experienced during a lifetime, and research suggests that these relationships hold meaning at all developmental stages. Due to the lifelong developmental importance of sibling relationships, it is crucial to understand how the experiences of children change when one child has a developmental disability and the other does not. Our tools for exploring this complex relationship are limited due to the dearth of empirical work, both in quantity and

quality, that exists to understand typical (McHale et al., 2013) and atypical (Hodapp, Glidden, & Kaiser, 2005; Stoneman, 2005) sibling relationships. My work takes a closer look at the experiences of non-disabled siblings by capturing their narratives about daily family life, and using these narratives to explore potential processes through which having a disabled sibling influences family life for a non-disabled siblings. In this presentation I will discuss a pilot study I conducted with non-disabled siblings, and my current path toward turning this project into a dissertation proposal.

Courtney Green, MD, Edward Kim, MD, Patricia O'Sullivan, EdD, Hueylan Chern, MD.

Title: Combining Technological Advances and Educational Principles to Improve Surgical Skills Curriculum: Our Experience with a Mobile Application for Surgical Trainees

Technology provides opportunity to improve instructional approach. Utilizing a combination of multi-media platforms educators have been able to avoid some of the temporal and spatial limitations that exist in traditional classroom learning. For surgeons, operating rooms serve as our classrooms. Previously, our surgical educators published a successful home-video, basic surgical skills curriculum. Unfortunately, implementation required substantial faculty time and resources, and the approach was limited by delayed feedback and technical difficulties with cumbersome recording equipment. To address these limitations we integrated the home-video curricula with a mobile application platform. Our purpose is to describe the format of this application and learner satisfaction.

This mobile application incorporates a patented pedagogical design based on Erikson's deliberate practice and Bandura's social learning theory. Within the platform instructors build modules focused on skill acquisition. Each module includes activities at different stages, representing a step-wise approach to learning: Challenge, Peer Review and Recap. In the Challenge phase, learners watch a video of surgical tasks completed by experts. In response, learners upload a video of themselves performing the same task. After submitting their video, learners enter the Peer Review phase where they are randomly assigned peer videos (of the same task) to review. Learners complete three peer video assessments using a grading rubric highlighting essential components for the task. After completion, learners "unlock"

the final Recap stage where they receive individual feedback and can review their own videos. Using our basic surgical skills home-video curricula, we created 16 different modules with associated grading rubrics. We then invited 2 different learner groups to participate, graduating medical students and matriculating surgical residents. In addition to use of the mobile application, learners participated in 2-4 lab sessions run by surgical faculty focused on technical skills and completed a final survey about their experience with the platform.

In total 50 different learners submitted videos of assigned tasks and completed peer reviews. Positive experiences were reported specifically for the Peer Review Stage, structured home practice, ease of mobile access to submit and review videos and ongoing immediate feedback. Testimonies from learners further illustrate the educational theories and highlight strengths of the integrated platform. Additionally, over half of the learners reported spending at least 10-30 min practicing skills before recording their videos and over 80% re-recorded at least 2 times before submission. Based on these findings, learners appreciated the practice and peer feedback. The ability to do these steps was greatly facilitated by the electronic platform and ease of mobile use to view and record videos. Learners reported motivation to re-record prior to submission, indicating use of the application resulted in deliberate skill repetition. Peer feedback significantly decreased faculty resources compared to our prior implementation. Future investigation could determine the sufficiency of this platform as a stand-alone curriculum to teach surgical skills.

E

Rebecca Bateman Allison Firestone Sarah Manchanda UC Berkeley & San Francisco State University

Title: Paving the Way for Culturally Responsive Teaching: An Examination of Teacher Self-Efficacy.

Cultural and linguistic minorities, particularly African American and Latino students, are victims of inequity in our current education system. According to Noguera (2003), "Black males are more likely to be classified as mentally retarded or suffering from a learning disability, more likely to be placed in special education, and more likely to be

absent from advanced-placement and honors courses" (p. 432). As classrooms become increasingly diverse and racial disparities continue to exist, it is imperative that we prepare culturally responsive teachers.

Despite the advent of culturally responsive instructional practices, little research has been done to examine whether teacher candidates and practicing teachers feel competent in their ability to implement culturally responsive practices, and whether time within the actual teaching practice increases self-efficacy beliefs. This study is designed to answer the following research questions: 1) To what extent do teacher candidates and practicing teachers feel self-efficacious in their use of culturally responsive teaching (CRT), 2) what factors predict high self-efficacy beliefs, and, 3) does experience as a practicing teacher increase levels of self-efficacy?

Participants from school districts and teaching credential programs in California, District of Columbia, and Idaho were recruited, as well as participants nationwide with experience in non-traditional teacher credential programs (n=203 teachers). We used the *Culturally Responsive Teaching Self-Efficacy Scale* (CRTSE), developed by Siwatu (2007), which consists of 40 likert-type items that elicit information regarding teachers' beliefs in their ability to execute specific teaching practices and tasks within a culturally responsive pedagogy. The scale includes questions regarding specific culturally responsive teaching competencies (e.g., "To what extent do you believe that acknowledging the ways that school culture is different from student home culture will minimize the likelihood of discipline problems?") and questions regarding efficacy to execute specific practices (e.g., "How comfortable are you in using student prior knowledge to help make learning meaningful?"). These likert-type items were summed to generate a total mean score for each participant.

We conducted a descriptive analysis to examine the various item-specific components embedded within the CRTSE that indicate highest areas of belief and self-efficacy among all teachers: pre-service, in-service, and practicing. To examine the factors that predict beliefs, we ran independent sample t-statistics by credential type (Special Education vs. General Education), age category (20-30, 31-40, 41-50, 60+) and by years of experience (0, 1-5, 6-10, 12-15, 16+). This will examine whether or not experience, setting, and duration are factors in self-efficacy determination when considering CRT, and will allow for a critical examination of which programs and settings might assist newer teachers in developing and improving the ability to implement CRT practices in the most effective way.

Teachers' primary language, race/ethnicity, years of teaching experience, personal

educational background, and credential type emerged as significant predictors of self-efficacy beliefs. Improving student outcomes for cultural and linguistic minorities requires that teachers understand culturally responsive teaching practices and feel efficacious in their ability to implement them. Crucial areas in achieving this goal are in bolstering the quality of teacher preparation around CRT practices, developing cultural knowledge and sensitivity and pedagogical tools as they relate to teaching diverse learners, and working with diverse families and communities; however, teacher educators often struggle with determining what types of learning experiences prompt teachers to make the important connections among their own cultural background and experiences, those of their students, and the curriculum they intend to teach. Future qualitative data regarding participant experiences as teacher candidates or practicing teachers will further our understanding of ways in which professional development opportunities can help increase teachers' self efficacy beliefs with regard to CRT.

Jim Gribble UCSB Ali Hansen UCSB Danielle Harlow UCSB Kelly Lai UCSB Diana Franklin University of Chicago
Title: Cracking the Code: The Impact of Computer Coding on the Interactions of a Child with Autism

This paper reports on the communication patterns of two students in two settings: the elementary school classroom and the computer lab. One child was diagnosed with autism and the other was considered neurotypical. These students participated in a computer science curriculum designed for upper elementary school children (grades 4-5; ages 9-10), featuring block-based coding. The computer science instruction occurred in an inclusive general education setting. Analysis of video data revealed Alex, the child with autism, communicated more (in terms of both total time speaking and interactions initiated) in the computer lab than was observed in the traditional classroom setting. Opposite trends were observed for Nick, the neurotypical child. Nick interacted 23 times in the classroom setting and only 13 times in the computer lab whereas the reverse was true for Alex. Alex interacted only 6 times in the classroom setting and 34 times in the computer lab.

Time (s)   Initiations

Student Context Speaking % Teacher Peer

Alex Classroom 300 14% 4 2

Nick Classroom 480 22% 1 22

Alex Lab 955 19% 10 24

Nick Lab 235 5% 3 10

Similar to Papert, we advocate for using the computer as a powerful tool to think with and act through. In our case, the computer served as a tool for a student to communicate and connect with both peers and adults. As elementary school teachers embrace coding through mediums born out of Logo to teach computational thinking or other disciplinary content, we, as researchers, must also attend to the social benefits coding provides students. This is especially true for students with exceptionalities, such as autism, if we are to ensure computer science is accessible to all students

Linda Fisher – Werk, Fremont Unified School District Title:

Two years ago, a school in the east bay embarked on an ambitious pilot program to include students with disabilities in general education classrooms with all the appropriate supports. The school team formed a community of practice to support, collaborate and learn from each other. In this paper, the teachers reflect on how engaging in this pilot and the research process altered their practice, their perceptions towards children with disabilities and their typically developing peers. A qualitative research study that examined their perceptions, attitudes and beliefs was the catalyst for these reflections and the realizations of the gaps between theory and practice. These teachers reflect on next steps and how their work is impacting district vision towards inclusive education and guiding policy at the district and SELPA level.

F

Host: Andrew Galpern, GSE Graduate Student, QME Program

This workshop is designed to help you improve your research by being clear about

what it is you're measuring. Your workshop leaders are experienced graduate students in the QME (Quantitative Methods and Evaluation) program in the GSE and have lots of experience! Participants can be at any stage of the research process...looking for research ideas, planning a project, data collection, data analysis. Everyone is welcome! Hope to see you there!

Session III

A

Emily Moline, UC Davis

Title: Emergent Adult L1 Literacy: A Case Study Research in children's L1 literacy development is robust, with exploration of such areas as children's emergent writing practices (Coates and Coates 2015), children's writing in communicative contexts (Jaeger 2014), and motivations underlying early spelling choices (Milburn et al. 2016). Underexplored, however, is similar attention to adult learners of their first languages' writing systems. Although research has pointed to the fact that "adults often arrive [to literacy programs] with prior experiences of authentic reading and writing" (Lytle 1990: 110), little investigation has been done on the particulars of how learning happens for adults within literacy learning sessions.   This paper addresses this gap by offering an in-depth qualitative case study of the reading strategies of S., a woman in her mid-40s who participates in a community-based literacy program in Northern California. Close analysis of transcribed tutoring sessions with her reveals several insights into the reading behavior of an adult learner learning to read in their L1, practices that are markedly different from those typically associated with children learning to read. These include the heavy use of semantic-associative links, including strong auditory ties; conflicts between spoken vernacular and print materials; and transference of reading/writing genres. In particular, the paper explores how S. draws on particular context-heavy strategies to aid with co-relating sounds and

words. Her errors/miscues (Goodman 1969) are revealed upon closer analysis to be linked with the broader context of the text, including extra-textual materials and lived experiences. Although some of these reading methods may seem surprising, they are not so when considering that an adult learner has been existing in a world of printed words for many years; literacy learning by adults is necessarily "thoroughly lived or situated" (Foorman 1991: 103). Evidence such as this allows us to see that the development of emergent adult L1 literacy is likely to be very different from that associated with children. Indeed, work with adults has shown us, for instance, that literacy correlates with ability to better recognize two-dimensional (Reis et al. 2001) and color object representations (Reis et al. 2006), factors which compose many literacy events that an emergent adult learner experiences when interpreting a text. Examples such as these as well as the findings in this paper call attention to the need to focus on fields as diverse as cognitive linguistics, auditory processing, semantics, and critical theory when conceptualizing how adults learn/re-learn reading/writing in their L1. The paper concludes with a discussion of the importance of a broad approach to understanding emergent adult literacy, and further, the importance of recognizing how the interplay of ideologies influences the way adult students and the materials created for them are positioned to learn ways of reading (Menard-Warwick 2013, Ramanathan 2013). In theorizing emergent adult literacy, especially the semantic-associative links that an adult learner may bring to the learning event, this paper also underscores the need for appraising the effectiveness of pedagogical literacy materials and the approaches taken in training volunteer teachers in community literacy programs.

Hong, Cheng-Huei, National Taiwan Normal University, Ph. D candidate
Neil Gilbert, University of California Berkeley, Professor

Title: Cognitive Dissonance: Attitudes toward gender roles in the division of labor in family life in East Asian and Western industrial countries
Although aging societies amid low fertility rates are a global trend, the lowest fertility rates are found among the East Asian countries. With the exception of China where until recently the fertility rate was held in check by the one-child policy, the East Asian experience is somewhat at odds with the Confucian devotion to parents and family in these societies. This study analyzes the extent to which gender attitudes toward the division of labor in East Asian and Western industrial might shed some

light on the apparent discrepancy between the relatively low fertility rates and the strong cultural emphasis on family in East Asian societies. This study is based on data from the "International Social Survey Program (ISSP)". Survey in 2012 addressing "Family and Changing Gender Roles IV." Among the 40 countries surveyed, 16 were selected for this study. These countries were categorized into 4 groups by culture and welfare state regime: Anglo America, North Europe, West Europe and East Asia. The questionnaire items were analyzed to capture public attitudes toward gender roles in the division of labor in the family (A man's job is to earn money; a woman's job is to look after the home and family) and employment in the market (Both the man and woman should contribute to the household income). The degree of disagreement and agreement with these items can be seen as reflecting traditional versus modern attitudes about gender roles. The findings show that overall the attitudes toward gender roles in the division of labor were significantly different among the countries with respondents from East Asian countries expressing more traditional attitudes toward gender roles. However, in comparing the responses within countries the results reveal a relatively high degree of consistency among attitudes toward gender roles in the market and home, except for the East Asian countries. Here respondents expressed a high degree of cognitive dissonance between tradition and modern attitudes. Supporting tradition roles in family life but modern roles in the market, the East Asian respondents expressed expectations that woman should stay at home and care for the family and at the same they should be employed in the market earning an income. North Europe countries expressed the least cognitive dissonance in this regard. We discuss the implications for family life of the high degree of dissonance about gender roles in East Asian societies.

Alejandra Ojeda-Beck, University of California, Berkeley
Title: Harnessing the Power of the Graphic Novel Format for Incidental Vocabulary Learning.

This quantitative experimental study examines the innovative possibility of

sequenced visual images (graphic novels and comic books) to scaffold incidental academic vocabulary acquisition from visual and textual context. Due to the popularity and recent growth of graphic novels as a popular text format, empirical investigation is needed to identify how to best understand and integrate the format into existing classroom curriculum. This study is designed to inform on 10th grade student' ability to incidentally learn the meaning of academic language based on the context in which they are placed. Further, a robust cohort of English Language Learners participated in this study allowing for comparison of the impact of the text format on different student populations within U.S. schools. Students' ability to effectively learning unknown academic vocabulary from additional visual scaffolding that is found in graphic novels and comic books will prove to be an extremely influential in informing current teaching practices, library sciences, and educational policies.

Incidental vocabulary acquisition is generally described as the picking up of new words when students are engaged in a reading, listening, speaking, or writing task (Rott, 2013). This picking up occurs in reference to the contextual cues and surrounding information to the unknown word. The body of literature on incidental vocabulary acquisition shows that vocabulary is learned at a rate greater than that which could be acquired from formal instruction (Nagy, 1995). Initially this learning occurs through verbal contexts and is then enhanced through reading (Nation & Meara, 2002; Shu, et al., 1995; Herman, et al., 1987; Nagy, Herman & Anderson 1985; Jenkins, Stein & Wysocki, 1984). When a person encounters an unknown word in print, typically marginal increases of word knowledge occur (Nagy & Herman, 1987). Graphic novels are a book-length, single story-arc, narrative comprised of sequential art in combination with text (Carter, 2007). The term was originally coined by Will Eisner in 1978, and quickly was appropriated as a marketing term for other comic book authors. Eisner and McCloud are regarded as the two central theorist regarding the comic book and graphic novel format by members of the comic/graphic novel community and by scholars on the topic. The most widely accepted definition of graphic novels is provided by Scott McCloud, he states that graphic novels are "[j]uxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer" (McCloud 1993, 9). He further provides the case for graphic novels being a format of text rather than a genre.

260 10th grade students in a Northern California public school district were engaged

in this study in January 2017. This cohort was given the Gates-MacGinitie Reading Test as well as a pre-test of targeted academic vocabulary in William Shakespeare's The Tempest and A Midsummer Night's Dream. The Gates-MacGinitie was used to match-pair students into which format they received on the following visit, and within those groups were randomly assigned to a play to read initially. On the final day of testing the students were given the play they had not read in the format they had not previously encountered. After each reading day they were given an exit vocabulary test with the targeted academic vocabulary. The scores from the pre-test and post-test were compared to gage incidental acquisition of targeted vocabulary. These scores were regressed upon the students' home language survey—used as a proxy for English Language Learner status. Preliminary findings will be presented in this presentation.

B

Christian Reyes, UCLA

Title: How second-generation Central Americans utilize the Internet and other ICTs The vast majority of second-generation Latinos (those born in the United States to at least one foreign-born parent) are now online, a development that suggests that Latinos will soon close the digital divide (Brown et al, 2016). Yet less is known about how second-generation Central American Latinos use the Internet and other Information and Communication Technologies (ICTs), or what factors encourage or impede their ability to use these technologies effectively. Central Americans have become the fastest-growing population of Latinos in the United States (Zong & Batalova, 2015), and over 1.5 million U.S.-born children under the age of 18 reside in a household with a parent born in Central America (Terrazas, 2011). With Internet access and ownership still highly stratified by race, socioeconomic status, and educational level (Coughlan, 2016; File and Ryan, 2014), failure to understand what digital inequalities this community faces threatens to limit their ability to reap the most digital rewards from technology today (Hampton and Wellman, 2003). This qualitative, phenomenological study therefore aims to answer the following research questions: 1) how do second-generation Central American youths utilize the Internet and other (ICTs) in their daily lives, 2) what factors positively or negatively affect their

access to these technologies, as well as the digital literacy skills needed to utilize them effectively, and 3) how does their technology usage intersect with current "offline" local institutions in improving civic participation within their communities. These questions are guided by Warschauer's technology and social inclusion framework, which states that meaningful access and use of technology requires a "complex array of factors encompassing physical, digital, human, and social resources and relationships" (2003). For this study, one-hour, semi-structured interviews were conducted with eight participants over the age of 18 who were born in Los Angeles, CA to at least one, foreign-born Central American parent. Participants were recruited from the Central American Resource Center (CARECEN), an organization that provides financial, educational, and legal assistance to the Central Americans in Los Angeles.   A thematic analysis of the data shows that while second-generation Central Americans utilize the Internet for a wide range of uses within a variety of different contexts, their access and skill level is still dependent on factors such as their schooling or socioeconomic status. And despite being aware of issues impacting their local communities and their parent's native countries, most of the participants reported not using the Internet for any form of civic engagement, suggesting that any effective use of the Internet and other ICTs still requires institutional and societal structures to enhance the social, economic, or political power of a community (Warschauer, 2003).   This study concludes with recommendations to improve access to technology and digital literacy skills for underrepresented Latino groups, as well as suggestions on using ICTs to supplement existing forms of civic participation. Ensuring better access and skills can lead to better personal outcomes and stronger community engagement, while also promising to unleash the immense potential that second-generation Central Americans have in affecting all aspects of American society (Rumbaut, 2002).

Leah Faw (UCB GSE), Professor Daniel Perlstein (UCB GSE)
Title: The Power of Their Ideas: Intellectualism & Teaching in High School
American schools have been the objects of two broad, sometimes overlapping, sometimes conflicting critiques of education. A left critique has condemned the role of schooling in the reproduction of social inequality. Unequal resources, biased curricula and the like steer some students to academic success, college and high paying careers, and others to warehouse programs, dropping out, poverty and prison. Whereas in the left critique, successful students benefit from schooling, in

the romantic critique, schools defeat youth via brain- and spirit-crushing tedium. The students who "succeed" are those who have most fully surrendered their minds and spirit and those who flunk out might actually be granted some kind of victory. *Dead Poets Society* offers viewers the second sort of romantic critique.

Dead Poets celebrates the American Transcendentalist movement, representing such transcendentalist ideals as individuality, communing with nature, and rebellion against received intellectual and political authority. The writings of transcendentalists Henry David Thoreau and Walt Whitman are thus important characters in the movie. Keating encourages the boys to find inspiration in their art and mentorship in their creative lives.

Keating certainly leads his students to feel something essential that they vaguely knew but could not yet name. But as humanistic teaching and learning it is a poor model. Keating clearly rejects the mental discipline required of close reading and literary analysis. Keating is, if nothing else, a celebration of indiscipline. His vision of the humanities invokes "living deliberately" but does not provide the required reason or introspection that would make such a life possible.

The left critique of schooling offers hints to the limits to *Dead Poet*'s romantic critique. Intellection and social stratification intersect. The film portrays an idealized and sentimental 1950s, captured at its misremembered dying moment. The only references to people of color in the movie are a few instances of race music on students' radio and the white boys' exotification of the other, epitomized by Charlie re-naming himself "Nuwanda" and playing bongos in an "old Indian cave."

At precisely the moment when young African American activists were living deliberately in lunch counter sit ins (to say nothing of white bohemian beat artists seeking to actually challenge the complacency of mainstream America), the movie's events pull away from the present to find models of deliberate living in a sanitized past that leaves actual politics and lives un-impacted. The students in *Dead Poets* will go on to the Ivies with a patina of culture but, unlike Thoreau who sat in prison to confront American imperialism, will divorce their private artistic imaginations from their conventional corporate public lives.

The movie's class politics are no better. The film positions the private school teachers and youth as cultured and refined, superior to the townie dolts in public school, paining the latter as drunken football players in a tired cliché. For all his appeals to rebellion, Robin Williams' Keating adheres to the Hollywood template of the good teacher–a charismatic outsiders who battles not only students'

internalization of neighborhood or family pathologies (in this case the pathologies of class privilege, rather than of poverty) but also the laziness and stupidity of other teachers and administrators. Like other such Hollywood teachers, Keating is involved in students' lives not because he needs them to genuinely examine the nature of their situation, but because he possesses a superior understanding and morality.

The film should be praised for asking the right questions at the heart of the romantic critique of schooling: what does it mean to live deliberately and what education enables this practice? Yet the film fails in two distinct ways. First, the way the story's narrative raises these questions is bounded by class, race, and gender privilege that limit its abilities to come up with meaningful answers. Genuine intellectual engagement, such as it is possible, is reserved only for the sons of wealth and privilege and not deemed possible for the plebeian masses. Second, though Keating and the film spout an enlightened rhetoric, they actually advocate a "pied piper" mentality rather than any genuinely self-directed thought.

Mary K. Requa, PhD Candidate, Joint Doctoral Program in Special Education at UC Berkeley and San Francisco State University
Title: Vocabulary Development through Shared Storybook Reading with Preschool Caregivers: A Pilot Study

Language and learning begins at birth. Because parents and caregivers are children's first teachers, it is essential to consider the power they possess to improve their children's language and emergent literacy development prior to kindergarten enrollment. This study examines the effects of a caregiver workshop intervention that may influence the quality of shared storybook reading (SSR) between caregivers and their children. SSR is the interaction that occurs between a child and an adult when they share a storybook (Ezell & Justice, 2005). Caregivers may be successfully taught to implement positive shared reading behaviors including elaborated (novel words in which instruction provides precise definitions, synonyms, and examples of meaning) and non-elaborated vocabulary instruction (novel words introduced in a quick and efficient way with simple incidental definitions provided) during shared storybook reading (SSR). Further, as a result of an intervention workshop, caregivers will learn fundamental components of early reading in order to improve and enhance shared reading interactions with their child. Using a pre-posttest comparison group

in an experimental research design, 75 caregiver/child dyads will be studied to investigate caregivers' interactions during SSR and children's vocabulary word learning.

C

Rachel Marie Restani from University of California, Davis

Title: Exploring the Voices of Marginalized Students in a High School Mathematics Classroom

In traditional math classes, people of color, people from low socioeconomic communities, women, English language learners, students with resource needs, first generation graduates, and other marginalized groups of people are negatively impacted by the lack of opportunities to exchange ideas and engage in rich discussions (Gutierrez, 2002). Social inequalities that are perpetuated by public school systems need to be disrupted by providing access to higher-level mathematics education to all learners (Apple, 1995). For the purpose of teaching and empowering traditionally marginalized students, I explored the following research question: how do students react to a teacher's attempts to implement discussion-based mathematical practices? My presentation addresses preliminary findings of how the math-talk learning community evolved over the course of the year. Assuming the role as researcher-teacher, I used sociocultural classroom practices such as individual journal writing, partner talk, small group collaboration, and whole class discussions. As the teacher on record, I used daily field notes, daily audio-recordings, monthly student-journal entries, tri-annual survey questions, and daily lesson plans to provide evidence of how students responded to discussion-based lessons. These artifacts were systematically coded to determine patterns of student voice in our math class. Similar to others who have researched their own teaching practice (e.g., Lampert, 1985), excerpts from transcribed audio are used to portray specific examples of how students engaged in a whole class discussion.

My findings highlight the extent to which students in a racially and economically diverse community engaged in mathematical discussions. Some students engaged in the practice of arguing, critiquing, and making sense of each other's ideas. Learners

publically shared their ideas and practiced sociomathematical norms. The classroom norms created a space for students to simultaneously perform social skills alongside engaging in the CCSS math practices. I found that the way students chose to contribute in the whole class discussions varied from day to day. There were some moments when the math-talk learning community was actualized and other times when the discussions were focused on procedures or on management, even toward the end of the school year. The successes and challenges of creating a discussion-based classroom environment can be further analyzed to help math educators determine how to effectively break down traditional math classroom norms.

References

Apple, M. W. (1995). Taking power seriously: New directions in equity in mathematics education and beyond. New directions for equity in mathematics education.

Gutierrez, R. (2002). Enabling the practice of mathematics teachers in context: Toward a new equity research agenda. Mathematical Thinking and Learning, 4(2-3), 145-187.

Lampert, M. (1985). How do teachers manage to teach? Perspectives on problems in practice. Harvard Educational Review, 55(2), 178-195.

Rachel Chen, University of California, Berkeley & San Francisco State University
Dr. Laura Sterponi, University of California, Berkeley

Title: Again and again but not quite the same: Variations within Formulaic Sequences by Minimally-Verbal Individuals with Autism

Background The propensity to engage in repetition is a distinctive characteristic of Autism (DSM-5, 2013), of which echolalia is one of the most commonly recognized forms. While the proclivity to produce repetitive speech in Autism has traditionally been conceptualized as impairment, studies on spontaneous verbal interactions of children with autism in everyday settings have shown that echolalia perform cognitive as well as communicative functions (e.g. Prizant & Duchan, 1981; Sterponi & Shankey, 2014). The functionality of repetition has also underpinned speech-pathologists' use of scripts and formulaic sequences as resources for engaging with individuals with communicative impairments, drawing from and expanding upon their (limited) linguistic repertoire to develop social interaction and foster their

verbal output (Loveland & Tunali 1991; Wray, 2008; Sidtis, 2012). Objectives This paper examines the production of formulaic sequences in the interactions of children with autism beyond the context of clinical interventions, i.e. within naturally occurring interactions in home settings. Methods The analysis draws from a corpus of video recordings (25 hours) of naturally occurring family interactions involving five children aged 6-9 years, each minimally-verbal and given clinical diagnosis of moderate to severe Autism. The children were video-recorded in their homes during their everyday activities. All instances of formulaic sequences were identified across the dataset and then transcribed according to the procedures and conventions of conversation analysis (Atkinson & Heritage, 1984). Formulaic sequences were analyzed employing an integrated methodology, which combines linguistic, discourse and acoustic analyses. At the linguistic level we consider the syntactic and lexical make-up of formulaic sequences. At the discourse level, we examine when formulaic sequences occur and their compositional organization, i.e. which segments are proffered by the child with autism and which by his interlocutors. We also study spectrograms, pitch plots and intensity contours to evaluate the role of prosody, rhythm and voice quality in the production formulaic sequences and their variations.

Results Our analysis generated two important findings: 1) rather than being monological strings uttered all at once by the child with autism, formulaic sequences are developed conjointly; that is they are co-constructed between the child and his interlocutor; 2) while maintaining a core unchanging component, formulaic sequences present degrees of variation in the child's contributions. Our analysis reveals that formulaic sequences provide rich context for interaction and mutual understanding between the child with autism and his interlocutor. These sequences are launched by adult interlocutors as well as by children with autism, and then they are assembled together through fine-tuned coordination at both syntactic and discursive levels. Within these collaborative executions of formulaic sequences, we also identified degrees of variation in the children's actions, revealing their ability to steer interactions outside repetitiveness. Our analysis discerned dimensions of variation at the lexical, prosodic and interactional levels. Conclusion This paper aims to demonstrate the fruitfulness of discourse analytic studies of repetitive language, by revealing much complexity and interactional sensibility even in a most simple and predictable stretch of speech. References: American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, text rev. Washington, DC: American Psychiatric Association. Atkinson, J. M., &

Heritage, J. (1984). Structures of social action. Cambridge University Press. Loveland, K. A., & Tunali, B. (1991). Social scripts for conversational interactions in autism and Down syndrome. Journal of Autism and Developmental Disorders, 21(2), 177–186. Prizant, B. M., & Duchan, J. F. (1981). The functions of immediate echolalia in autistic children. Journal of speech and hearing disorders,46(3), 241-249. Sidtis, D. V. L. (2012). Formulaic language and language disorders. Annual Review of Applied Linguistics, 32, 62-80. Sterponi, L., & Shankey, J. (2014). Rethinking echolalia: Repetition as interactional resource in the communication of a child with autism. Journal of Child Language, 41(02), 275-304. Wray, A. (2008). Formulaic language: Pushing the boundaries. Oxford University Press.

Kirsten Hextrum & Suyang Lu, UC Berkeley
Title: Reproducing Sport Stars: How Students Become Elite Athletes

The American folklore of upward mobility is littered with rags-to-riches stories of athletic achievement breaking through systemic inequality (Gems & Pfister, 2009; Mackin & Walther, 2011). Schools further this notion by sponsoring sports programs. Through athletic talent, students with less-than-stellar grades and test-scores can receive exceptional admission and/or scholarships to top universities (Brand, 2006; Eitzen, 2012; Schulman & Bowen, 2001). Scholars have long challenged sports' role in upward mobility by highlighting the slim odds for youth to become college and later professional athletes (Edwards, 1979; Eitzen, 2012; Riess, 1990; New, 2015). Instead of questioning whether sports allow someone to make it out, this presentation uncovers a "sport-track-to-college" that keeps people in their position within the existing power structures such as class, race, and gender. School sports promote the folklore of upward mobility by offering participants a chance to test both hard work and physical gifts to reach athletic achievement (Eitzen, 2012; Novak, 1993; Sage, 1998). Through a combination of effort and talent, sports are intended to reward the most meritorious victor. The often public and visible nature of school sports at the high school and college levels make interscholastic athletics potent site for training the public in the value of meritocracy (Eitzen, 2012; Foley, 1990; Sut, 1989). Much "scientific" research further supports sports as meritocratic vehicles by offering physiological explanations for athletes' exceptional physical talent (Baxter-Jones, 1995; Burgess & Naughton, 2010; Daniels, 1974; Durand-Bush & Salmela, 2002; Gould, Dieffenbach, & Moffett, 2002; Ostojic, Mazic, Dikic, 2006). Others examine the effort

athletes put in to improve in their sport (Côté & Fraser-Thomas, 2008; Duda & White, 1992; Gilbert, Gilbert, & Trudel, 2001; Trujillo, 1991). In either story, sports success is attributed to individual-level variables. This project moves away from the individual-only level of analysis because it obscures the social support systems, institutional investments, economic resources, and cultural alignments that enable certain groups to participate in elite athletics. By doing so, we question a core feature of America's sporting and schooling cultures: meritocracy. Rather than those with the physical talents or hard work rising to the top, this paper demonstrates how social, economic, racial, and gendered factors shape athletic access and achievement. Using multiple sources of data—47 interviews with college athletes, institutional reports, and an original dataset—the project maps the structures, hierarchies, demands, and identities that shape one's life-path to elite athletics. Research and analysis is guided by social reproduction theory (Bowles & Gintis, 1976; Bourdieu, 1977) to explain how geography, class, race, and gender impact access to college sports. The findings are divided into three parts. The first part uses the large quantitative data set to demonstrate the basic principle of social reproduction or that there is a "correspondence" between the school system—or in this case, the school-sports system—and elite groups. The next two parts use the qualitative data to go into the pipeline to demonstrate what enables the correspondence. The two major features of the pipeline reviewed here are Community resources and Social relationships. Findings contradict the national belief that elite athletics provide a reasonable pathway out of poverty (Bourdieu, 1978; Eitzen, 2012). Rather, middle and upper class youth more often use athletics to access elite colleges.

D

Frances Free Ramos, **UC Berkeley**
Title: Oral Histories of Community Engagement in Market Reform: Black and Brown Perspectives on Schooling

René Espinoza Kissell, **UC Berkeley**
Title: A Literature Review of Latino Engagement in School Choice Policies

Elise Castillo, UC Berkeley

Title: The Landscape of Political Advocacy Across the Charter School Sector

Seenae Chong, UC Berkeley

Title: The Possible in California's School Funding Formula and Accountability plan: Participation Frames By an Intermediary Organization

Mahasan Chaney and Michael J. Myers II, UC Berkeley

Title: Neoliberalism and the persistence of a Black Colonial Education Project: Privatizing public Education in New Orleans and Liberia

E

Alexander Mario Blum, University of California, Berkeley and San Francisco State University

Title: Validating and Extending Pearson and Johnson's (1978) Inferential Thinking Model

Understanding the construct of inferential reasoning in narratives is essential when teaching social skills, context, and inferring causal relationships between characters. This study investigated whether Pearson and Johnson's (1978) Script Implied and Text-Implied Inferences, and inferences that demonstrate a combination of both, are all different levels of an ordinal inferential reasoning continuum, in context of narrative comprehension in a multimodal sequential image format (i.e., Comics). Using a researcher-made comic survey containing a series of short three panel narratives, 69 participants, ages 8-12, provided an inference as to why a character engaged in an intentional action, what the moral of the comic was, and their reasoning behind both answers. Responses were then coded for the type of inference made (text-implied; script-implied; or a combination of both), which are hypothesized to be ordinal, with the combination category being at the top of the continuum, and text-implied inferences being at the bottom. Masters' (1982) Partial Credit Model, an ordinal Rasch-family model, was used to estimate item and step difficulties, person proficiencies, and fit statistics. Output measures, including step

difficulties and reliability (coefficient alpha .77; person-separation reliability .83), indicate that this construct behaves in an ordinal fashion. Person proficiency was also regressed on age, which was found to be a significant predictor of scoring into higher categories on this continuum. This line of research provides important insights for educational practitioners to provide targeted instruction in narrative comprehension, casual reasoning, argumentation, and social skills development.

Elizabeth McBride, Jonathan Vitale, Lauren Applebaum, Marcia Linn (all UC Berkeley)

Title: Examining the Flow of Ideas During Critique Activities in a Design Project

Abstract: Peer critique activities in design projects give students the opportunity to share ideas, receive feedback, and revise their work. Critique can increase student feelings of ownership of science ideas and help students to distinguish between different ideas they may have about how things work. In this paper, we examine how students use their own ideas and ideas from a partner group to revise and improve a physical solar oven they have built using guidance from an online curriculum. We find that students fall into two groups: distinguishing ideas and adding new ideas. Within distinguishing ideas, students can further separated by whether or not they kept only their own ideas or also added the ideas from their partner group. We look at case studies to determine how these groups changed their ideas before, during, and after the critique activity.

David DeLiema

Title: Middle school students' private and public reflections on upcoming, ongoing, and past moments of debugging computer code

Poster Session

Education Psychology Library

Laura Armstrong1, Shruti Bathia1, Lauren Caton2, Laleh Coté1, Ashley Lynette3, Diana Pacheco1, Laura Pryor1, Erin Murphy-Graham1, Sophia Sobko1, Alice Taylor1

In alphabetical order, all at UC Berkeley: 1Graduate School of Education, 2School of

Public Health, 3School of Social Welfare

"Creating a Campus Free of Sexual Violence and Harassment": A Team Evaluation of Initiatives Across UC Berkeley Using A Social Norms Approach

In 2016, the UC Berkeley PATH to Care Center distributed a call for proposals for a mini-grant entitled: "Changing Social Norms: Creating a Campus Free of Sexual Violence and Harassment." Over the course of the Spring 2017 semester, the six grants awarded have implemented a campaign or initiative that addresses social norms change in a distinct UC Berkeley context, i.e., in academic departments, sports or residential facilities, and with student parents/ families. The purpose of this work is to enable the Cal community promote respectful, healthy, and non-violent experiences within their peer and academic groups and relationships. Recognizing the need for systematic inquiry into the implementation process and outcomes, PATH to Care partnered with a group of UC Berkeley graduate students to evaluate the mini-grant initiatives. This poster features the evaluation as a critical area in which UC Berkeley students are positioned to contribute. The evaluation also demonstrates a model of collaboration among graduate students in the Graduate School of Education with other departments, and shows how this collaboration can contribute to gender and social justice at Cal.

Deborah Baroi, Claremont Graduate University

Teacher Union Stewards: Significant Leadership Qualities

The significance and efficacy of teacher union leadership within the United States continues to be examined and evaluated. This quantitative pilot study (N=54), using a Likert-scale survey, identifies and evaluates the leadership qualities of elected teacher union site representatives, union stewards, at a California public high school. The research question is: do teachers identify elected union site representatives as demonstrating measurable leadership qualities? Previous research targets teacher perceptions of principals' leadership or focus on union presidents (Sears, 2000; Hodgkinson 2005; Waters, 2006: Kerchner 2010). In contrast, this specific area of union leadership, elected school site leadership, has been ignored in educational research.   Using Balanced Leadership Framework and Distributed Leadership Theory, the results of this study confirm teachers identify an elected union representative as demonstrating leadership qualities. Current educational research identifies school leadership qualities that contribute to the overall positive effect on student achievement and sustained learning cultures (Marzano, 2003; Ogawa 1987:

Zigarelli 1994; Goldstein 2003). Correlated data from this study indicate teachers value elected teacher union site stewards as possessing very significant qualities. Teachers identified their site union representatives in significant to very significant ways in the area of leadership qualities. Teachers identified their site union representatives as having several leadership characteristics identical to administrative leadership roles (Waters & Marzano 2003). These characteristics are defined by educational research as impacting and contributing to student achievement. (Marzano 2000; Carini 2003; Park 1998). This study informs public policy, educational management, leadership, and teacher unions the importance to recognize the capacity of elected site union representatives as leaders on campus and suggests district and site administrators design strategies that add value and leverage to promote positive school culture surrounding union stewards.   Although the sample size of this study is small, results of this research reveal emerging critical aspects of union steward significance. Additional research is recommended, with larger sample sizes and nested focus groups to further determine the impact and relationships of teacher union leadership within school communities.

Peter Benitti, MA, Ed.D. Candidate, California State University, Sacramento
 Restorative Practices as Conflict Resolution: Targeted Student Teacher Placement at the Secondary Level
Targeted Student Teacher Placement seeks to align placement of single subject student teachers at secondary public school sites where Restorative Justice is being implemented in an effort to support conflict resolution interventions through the application of restorative practices involving students, parents, staff, and the community in order to help counter an increasingly volatile, culturally- and racially-charged post-election climate.

Laleh Cote2, 1, Anne Baranger2, Elisa Stone2, Max Helix2, Colette Flood1 1 - Lawrence Berkeley National Laboratory 2 - UC Berkeley

The work described here is a two-part project to examine the impacts of three internship programs funded by the U.S. Department of Energy at Lawrence Berkeley National Laboratory. The first of these is a summative program evaluation to assess the outcomes and impacts of the Community College Internship program by analyzing extant information from 2009 to 2016 (post-surveys and written

assignments), administering surveys to program alumni, and conducting interviews with both alumni and mentors. The second project is a randomized controlled trial on participants in all three programs at Lawrence Berkeley National Laboratory, in which we'll assess the effect of an educational intervention on their ability to communicate about their research projects. Based on a decade of experience with these internship programs, this research was developed by Laleh Coté, a first-year PhD student in the Graduate Group in Science and Mathematics Education (SESAME) program, under the advisement of Anne Baranger in the College of Chemistry at UC Berkeley. At the time of this poster presentation, some work will have been completed on the summative program evaluation, and pilot interviews with alumni of the Community College Internship program will be complete. Recruitment efforts and data collection for the randomized controlled trial is planned for Summer 2017. This material is based upon work supported by the National Science Foundation Graduate Research Fellowship Program (NSF GRFP) under Grant No. DGE 1106400.

Jessica De Anda, **Maria Morales,** Claremont Graduate University
Changing the College Culture: How Faculty Advisors can Cultivate the Social Capital of Minority Students
Institutions have identified both first year seminar courses and academic advising as strategies to increase retention and graduation rates. In addition, faculty advisors have the potential to help students expand their social capital and consequently, to significantly and positively impact students' academic and personal development. This is particularly true in the case of minority students, who frequently enter college with limited or inadequate skills to effectively navigate the system of higher education. Despite an abundant body of research that looks at approaches and theories of academic advising, there are few studies that focus on the connection that exists between the formation and activation of social capital by underrepresented, minority students and the role that faculty advisors play in this very important process. In this work researchers examined the pre-major advising programs of 20 small liberal arts colleges. With the few exceptions of colleges that have established programs specially designed to address the needs of students of color, most institutions we examined do not provide either faculty or students with clear, specific guidelines or support in the process of academic advising. Additional studies are needed to evaluate the role that pre-major faculty advisors from small private liberal arts colleges play in the academic success of students.

Cassandra Drake, Assessment Coordinator, Arts Alive SDSU Doctoral Student in Education, San Diego State University and Claremont Graduate University

Can Snapchat be utilized in an academic context? Using the popular application to produce student generated, visual data at the university level

This poster presentation will highlight student work created using Snapchat in the context of an arts-based assessment plan which was developed to meet multiple needs and outcomes in the context of university-level teaching and learning. Along with designing, implementing and supporting an assessment which measured student outcomes, the researcher was also asked to design a creative process for students to demonstrate interdisciplinary comprehension. This process needed to yield student generated visual data and include an innovative strategy for communicating student knowledge with the larger university via social media applications. Student data, both stills and videos, will be presented and as well as their reactions to the assessment piece; which were gathered in an end of semester survey.

Heather Fink, GSE, UC Berkeley

A Tale of Two Narratives: Divergent Teacher Noticing of Student Collaboration

Implementing collaborative learning successfully in K-12 classrooms is considered important in mathematics, English Language Arts (ELA), and other fields. While it might seem that successful collaboration is easy to recognize, data in this study show otherwise. Eight experienced teachers assessed student collaboration on a mathematics task. Mathematics teachers judged the student work similarly, but ELA teachers differed. Specifically, a focus on two highly skilled teachers (one from ELA, one from mathematics) indicates the teachers attended to different aspects of student participation, resulting in different judgments of collaboration success. Thus, understanding what teachers notice is critical for supporting effective student collaboration.

Ms. Denise Groce, Dr. Eva Iskander and **Dr. Leena Furtado**, CSUDH Teaching Graduate-Level Research Writing: **Filling the Composition Studies Gap**

Students in master's and doctoral programs lack the skills needed to write polished scholarly papers (Harris, 2006; Vorhies & Blain, 2015). The current study examines the effect of scaffolding on graduate students writing research. Two types of

scaffolding were utilized: a) live and on-line workshop presentations, and b) tutoring and direct instruction. The findings give insight into the relationship between scaffolding as an intervention and graduate students' performance in research writing.

Robin Irey, UC Berkeley

Matt Kronzer, Adjunct English Instructor and Ed.D. Candidate at CSU, Sacramento Improving developmental sequences and assessment programs
Many institutions utilize developmental courses to prepare students for college success. However, the benefits of these courses are small in magnitude; in some cases, the outcome is negative, particularly for students from underrepresented communities. Given increasing enrollment rates within developmental courses, institutions must critically examine their assessment programs and existing developmental sequences to increase student success.

Judith Warren Little, Elena Duran Lopez, Anna Weltman, UC Berkeley **Joan Heller, Nicole Wong, Selena Burns, Heller Research Associates Examining the relationship between professional development and classroom practice in elementary science**
The poster will present results from a video-based investigation that explores the relationship between teachers' professional development experience in science and their subsequent classroom instruction. The video analysis forms the second major phase of data analysis from a randomized controlled trial (RCT) study of science professional development (PD) for elementary teachers. The poster will summarize variations in PD quality, report comparisons of classroom instruction in experimental and control classrooms, and illustrate results of the PD-Classroom relationship under conditions of high-quality PD facilitation.

Lisette Lopez, Sandra Zuniga-Ruiz, Seth Corrigan, UC Berkeley
EDUC 222C "Design-Based Research Forum" Fall 2016— graduate student poster session
In this group-poster session, participants in the Fall 2016 graduate-level practicum EDUC 222C, Design-Based Research Forum (Abrahamson, instructor) will present their work, including educational artifacts as well as multimedia results from empirical evaluation studies.

Maria Morales, Claremont Graduate University

Colleges use two major strategies to increase student retention and promote academic success: requiring freshmen to enroll in first-year seminars and utilizing faculty advisors. Both first year seminar courses and academic advisors seek to connect students to campus resources and to facilitate the process of acclimating to college life. By assessing advisees' academic strengths and weaknesses, connecting them to campus resources, and helping them devise plans that prepare them for their future endeavors; faculty advisors have the potential to help students expand their social capital and consequently, to significantly and positively impact students' academic and personal development. This is particularly true in the case of minority students, who frequently enter college with limited or inadequate skills to effectively navigate the system of higher education. Unfortunately, despite an abundant body of research that looks at approaches and theories of academic advising, there are few studies that focus on the connection that exists between the formation and activation of social capital by underrepresented, minority students and the role that faculty advisors play in this very important process. To examine this topic, the researchers conducted phone interviews and corresponded with 20 small, private liberal arts colleges. Among other things, we found that although many of the surveyed institutions pair students with a pre-major advisor--which ideally provides students with the opportunity to interact regularly and to develop meaningful relationships with their advisors--few of them actually detail the role of a faculty advisor. Excepting the handful of institutions that have implemented programs specially designed to ensure the success of minority, historically underserved students, most of the colleges we surveyed did not provide clear expectations or guidelines for faculty advisors to address the needs of underserved minority students. Additional studies are needed to evaluate the role that pre-major faculty advisors from small private liberal arts colleges play in the academic success of students.

Kyra Muhs, MAT Candidate, Fresno Pacific University School of Education
Motivating Students to Participate in Whole Class Discussions
This project was a qualitative observational action research study that investigated why some students remain silent and why some students dominate during whole class discussions. The study took place in a 10th grade English Language Arts classroom, using Socratic seminar as the method of discussion. The findings of the

study revealed there were several factors that impacted students' motivation to participate, including: the physical and social-emotional classroom environment; levels of self-confidence; past experiences; and personality of individual students. The findings also demonstrated how the teacher's role is critical in addressing these factors and creating balanced participation in whole class discussions.

Annemarie Newell, Emily Gilden, Lizzy Dutton, Vicki Laina, UC Berkeley
EDUC 224B "Problematic Didactical Mathematical Problem Situations" Fall 2016 — graduate student poster session
EDUC 224B is a graduate-level course on mathematical cognition. The full name of the course is Paradigmatic Didactical Mathematical Problem Situations, but it's usually called PDMPS. Every weekly meeting, students solve problems, reflect on their process and interpersonal interactions, and draw on course readings to make sense of these experiences. Each student then chooses one of the problems and becomes an expert on it, eventually trying it out on younger people. These trials are videotaped for analysis, and the term paper is an empirical research study of "something interesting" they saw in the video. For Research Day, we will have four posters along with artifacts that attendees can interact with and videos from the studies.

Alejandra Ojeda-Beck, Madeline Cline, Zoe Clark, and **R. Moute, A Bidias,** UC Berkeley
Impact of Tier 1 Vocabulary Knowledge on Growth of Academic Vocabulary
An substudy of Alejandra Ojeda-Beck's dissertation, Inferring Vocabulary Word Meanings in Graphic Novel Format: Incidental Academic Language Acquisition Through the Inferring of Word Meaning During the Reading of Graphic Novels.
  Mechanistically, the ability to learn new written vocabulary requires the cognitive mapping of a semantic concept to an arbitrary orthographic label. Ojeda-Beck's subjects spoke either English and Spanish, or only English. Intuitively, due to their knowledge of both an English and Spanish label for a semantic concept, bilingual speakers may have a more expansive lexicon than monolingual speakers. However, does this also suggest an enhanced ability to map new linguistic labels and/or create new concepts? As a substudy, we will ask if bilingual students with high tier 1 scores have a stronger ability to acquire incidental language, than monolingual students with similar scores. We will analyze the change in performance from pre- and post-

vocabulary tests among the two groups. We hypothesize that high tier 1 score bilingual students will improve more frequently and in larger increments than their monolingual counterparts. Our theoretical understanding of bilingual language-learning abilities and advantages come in part, from Viorica Marian and Anthony Shook's article, "The Cognitive Benefits of Being Bilingual," indicating that bilingual students have a greater "ability to focus on information about the new language while reducing interference from the languages they already know," which "would allow bilingual people to more easily access newly learned words" (Marian & Shook, 2012). Our study uses a subset of Alejandra Ojeda-Beck's dissertation data in order to determine incidental vocabulary acquisition of high tier 1 scoring students.

Hila Pazner, UC Berkeley
Keywords: Family Issues, Gifted Education, School and non-school Learning Contexts
In this two-part study, the association between parental autonomy support and academic achievement, commitment, and enjoyment was examined in two large groups of gifted adolescents enrolled in an academic summer program. Results from the studies indicate that students who reported increased parental autonomy support were more successful in their classes, and reported enjoying their studies more than students with lower levels of self-reported autonomy support. However, higher levels of autonomy support did not predict higher levels of academic commitment in gifted youth, as measured by the time students spent studying and completing assignments. The results of this study demonstrate the benefits of autonomy supportive parenting for high achieving populations. The implications and limitations of the findings are discussed.

Cyrell Roberson, UC Berkeley
Keywords: Cultural Identities, Educational Equity, Gifted Education
Grit, growth mindset, future orientation, ethnic identity, and other group orientation are five psychosocial variables that have been asserted to be a potential avenue to mitigate the achievement gap via their ability to predict academic achievement in adolescent populations. In a sample of 105 high achieving African American high school students (cumulative GPA >3.0), we examined the relationship between these five variables of interest and academic achievement in an effort to examine whether these variables account for the achievement of high achieving African Americans students as several scholars have asserted.. Results indicated that the

psychosocial variables were not significant predictors of the academic achievement of the high achieving African Americans students within this sample (all β's <.130 and all r's< 0). However, socioeconomic status as measured by parental education was a significant predictor of the academic achievement of the high achieving African Americans adolescents included in the sample (β = 4.23 and r=.44, a medium effect size). These findings suggest that current interventions focused on grit, growth mindset, future orientation, ethnic identity, and other group orientation may not be effective for and generalizable to this specific demographic of students.

Carolina Ramirez, Graduate School of Education, School Organization & Educational Policy Program, UC Davis **Stop-Out Behavior at Broad Access Four-Year Universities: Lessons From the California State University**
While previous work reveals that stopping-out is commonplace (Horn and Carroll, 1997; Herzog, 2005; DesJardins, Albergh, & McCall, 2006, Callahan, Scott, & Davis, 2011) it is dated and does not reflect the current demographic make-up of the undergraduate class (Strohl & Carnevale, 2013; NCES, 2014). This paper will provide a descriptive portrait of stop-out patterns at the nation's largest broad-access public four-year university and address the relationship between stop-outs and persistence.

Meghna Soni and **Yukari Okamoto**, UCSB
Improving Children's Fraction Understanding through the Use of a Number Line in the Context of Embodied Cognition
Fractions are complex mathematical concepts and learning about them is an obstacle for children in primary grades. Studies show that the number line can be a useful tool in fostering students' understanding of fractions. This study assessed if an electronic iPad game application, Motion Math, that utilizes the number line, scaffolding, and embodied cognition is more successful in helping 4th grade students improve their fraction skills compared to a paper pencil number line intervention using scaffolding but devoid of embodied cognition. Results from 51 students indicated that participants in both the Motion Math intervention group and paper pencil number line intervention group improved their fraction knowledge scores from pretest to posttest as compared to a control group over a 4-day period. The results suggest that both or either intervention has an added value in teaching fractions and can easily be used as a tool to supplement traditional classroom instruction.

Ann Veu Doctoral Candidate in Educational Leadership, CSU, Sacramento Assistant Principal/TOSA, Natomas Unified School District

Culturally Responsive Action Applied Research: Perceptions of a Culturally Competent Model

This study will explore how site administrators can support diverse, historically marginalized student populations by adopting culturally responsive leadership practices. The researcher will use an action applied research to understand stakeholders' perceptions of a culturally competent-based model at an elementary school and discuss how this conceptual framework might be applied to the practice of school leadership.

Anna Weltman, GSE, **Heather Fink**, GSE, **Rebecca Shareff**, GSE, **Elisa Stone**, Cal Teach, **Dor Abrahamson**, GSE, **UC Berkeley Building Bridges Deepening Knowledge: Engaging Novices, Practicing Teachers, and Researchers in Inquiry Together**

Whereas mentor teachers play important roles in preparing pre-service teachers (PST), their expertise is not optimally leveraged as contributions to teacher-training college courses in coordination with researchers/instructors. This project follows the implementation and evaluation of a new practice supporting productive collaboration among: (1) PST; (2) mentor teachers; and (3) teacher researchers/instructors. The design is the introduction of a collaborative inquiry project into a teacher education course (EDUC 130: Knowing and Learning in Mathematics and Science), where students serve placements in a Bay Area public high school. Funded by a Spencer Grant, the project seeks to address questions of both the theory and practice of teacher education situated across college and school settings, as the students negotiate their observations and developing ideas about teaching strategies with the experience of their mentor teacher. We use ethnographic methods to examine negotiations among the stakeholders in the experimental and comparison groups as they work to conceptualize and communicate about resources. Attempts to uncover the cultural practices, roles, and values that emerge from these connections have been facilitated through conversation guides, interviews, and pre-post semester surveys.

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