Elijah Agyapong, Ph.D., Assistant Professor, Robertson School of Government, Regent University, eagyapong@regent.edu

Keywords: Representative bureaucracy, passive and active representation, education, gender, Ghana

Is Passive Representation Necessary for Active Representation to Occur?

The Case of Girl's Education in Ghana The theory of representative bureaucracy suggests that when a public service mirrors the social demographics of its population in terms of gender, race, and ethnicity (passive representation), bureaucrats are more likely to be responsive to the needs of all citizens, especially the historically marginalized population (active representation). For instance, recent studies in education have shown that increasing the presence of female teachers can have significant effects on girls' performance in public schools. The underlying mechanisms linking passive and active representation are, however, often proffered as theoretical explanations but not empirically examined. To help clarify our understanding of active representation in a non-Western context, this study examined the attitudes of a random sample of 200senior high school teachers in Ghana. The results indicate differences as well as similarities in attitudes between male and female teachers toward the importance of girls' education and the extent to which teachers perceive their roles as advocates or representatives of girls' interest. However, adoption of a "minority representative role "rather than gender predicts the potential for active representation, measured by a teacher's self-reported behavior in terms of taking practical actions to address the specific needs of girls. Although only suggestive, the findings in this study suggest that gender may be a weak predictor of active representation in education. Qualitative interviews from a selected sample of education officials corroborate the quantitative findings and provide new insight into why female bureaucrats may not adopt an advocacy role for women even in a highly gendered institution or policy area as education.

Dr Lauren Bailes, Assistant Professor, University of Delaware, US, lbailes@udel.edu and Dr Sarah Guthery, Assistant Professor, Texas A&M University –Commerce, US, sarah.guthery@tamuc.edu

<u>Keywords:</u> Gender equity Racial equity Workforce studies School leadership Principal promotion Labor studies Pay equity

The Costs of Systematically Delayed Principal Promotions: When the Odds are Never in Your Favor

High-quality principals are essential to school improvement (Bryk et al., 2010) yet structural biases keep qualified women and people of color from promotion to school administration (Williams & Loeb, 2012; Garn & Brown, 2008). The OECD cited concerns regarding principal retention internationally and suggests that role transitions in education are particularly problematic for women (Moller, 2002; Mulford, 2003). This study examines the rate at which women and people of color, equally as qualified as their white, male peers, accede to principalships from assistant principalships. Ample literature addresses patterns of movement among teachers, but fewer studies have attended to the ways in which school administrators move among positions (e.g., Kim & Brunner, 2009). To investigate questions of cost and equity in principal promotion, we analyzed a unique dataset of 4,689 assistant principals who made

principal from 2000 to 2004. We track four cohorts of approximately 1,775 new principals until 2017 to estimate the effects of gender, ethnicity and school type of the likelihood of promotion. We first used Logistic regression and determined which significant demographic factors predicted the probability that an assistant principal was promoted to principal. We then analyzed the differential effects of these characteristics on the time it took each assistant principal to advance using Kaplan-Meier survival analysis. We also calculated the average cost in lost wages to those whose promotions are delayed. Finally, we used a fixed Cox Hazzard model to obtain fixed effects of multiple covariates on promotion. Preliminary results indicate that race is a statistically significant predictor of promotion from assistant principal to principal and that Black principals are least likely to make principal and experience the longest wait for promotion, ceteris paribus. Our results indicate that race and gender remain salient to the study of principal selection and promotion and thus that equity gaps remain in patterns of promotion to school leadership.

Dr **Rebecca Blair**, Provost's Faculty Fellow for Accreditation and Associate Professor, University of Iowa, US, rebecca-blair@uiowa.edu

Keywords: conversation, community, active learning, interpersonal communication

The Conversational Contact Zone: Forming Essential Learning Community

As has been widely researched, the indirect nature of students' daily communicative interactions script them into social spaces that do not primarily include face-to-face conversations and cued personal interactions that scaffold communities of authentic relationships. Within higher education classroom spaces in which immediate relational, collaborative face-to-face interactions that are largely symmetric constitute the predominate interpersonal communicative mode (rather than communication being mediated by technology or asymmetry such as online or transactional modes), educators cannot take for granted that students possess in their communicative repertoires scriptings for personal conversations of this sort. Current research details strategies for addressing substantive personal classroom engagement as a mechanism to build authentic classroom communities. This research also discusses the connections between first-year college students' lack of facility with the kind of interpersonal conversation expected in college classrooms, their confusions about instructors' invitations to active learning and their variable facility with textual inquiry processes and strategies. Each of these contexts functions as a "conversational contact zone" that must be addressed to facilitate greater student success. Interpersonal conversation and collaboration underlie the development of essential habits of mind, the engaged use of active learning strategies, and the generative nature of communities of inquiry in higher education that higher education institutions seek to foster in undergraduate courses. In this context, instructors, particularly those teaching first-year courses, need to pay more attention to and devote more classroom focus to the meta conversation about the different expectations in high school versus college classrooms as we introduce active strategies and conversation in our classrooms. More particularly, we can build upon the rich complex of associative meanings in the phrase, "college is a common conversation," to integrate

active learning techniques that develop intertextual conversation repertoires, inquiry techniques that help students to engage in researched scholarly conversations, and relational techniques that use face-to-face conversation to build authentic community and interpersonal conversation repertoires.

Dr Sumita Chakraborti Ghosh, Professor, Tennessee State University US, schakraborti@tnstate.edu

<u>Keywords:</u> Strengths Based Instruction Universal Design for Learning Differentiated Instruction Students, Content, Process, and Outcome Inclusive Education Assistive Technology

Strengths Based Instructions (SBI): A Pathway to Success for All

Strength Based Instruction (SBI) is a systematic approach of an instructional training model with a primary focus on identification of a child's strengths (Chakraborti-Ghosh 2013, 2019). The presentation will include a demonstration of the instructional approach for children and youth with exceptional needs through that is applicable to teachers, researchers and parents. SBI emphasizes the strengths of each child enhancing their self-confidence, and self-esteem. This instructional practice prepares teachers to develop their lesson plan recognizing the strengths of all children in an UDL environment to establish a community of learners based on their strengths, learning styles and abilities. SBI impacts on confidence building, lesson adaptability, and adjustment of any students at any grade level including children from diverse cultural, linguistic and socio-economic backgrounds. SBI model is an instructional Training Model which has been used to train pre-service and in-service teachers across the curriculum. SBI has Four Elements: Students, Content, Process, and Outcome. The overall purpose of SBI is to establish a researchbased inquiry in STEM curriculum in a Universal Design for Learning (UDL) environment. As Rose and Meyer, (2002) pointed out that environment, using the multiple intelligences and strengths with technology as a tool for instruction, learning, and performances is a key to success. SBI is a one-step forward in that direction. The model was implemented using single subject design, during 2012-2013, with a high school student with Asperger's syndrome, who was musically talented. The result was significant because, the student's increased motivation impacted on her academic score in English. The presentation will include an interactive and engaging discussion of the strengths based instructional (SBI) model. Chakraborti-Ghosh, S. (2019). "Strength Based Instruction (SBI): A Systematic Instructional Model for Inclusive Education". Eds. Santoshi Haldar & Vassilis Aygyropoulos "Inclusive Practices, Equity and Access for Individuals with Disabilities: Insights from Educators across World". Springer International Publishing, Palgrave, MacMillan.

Ms **Bacui Chen**, Lecturer, Lingnan Normal University China / Hong Kong Baptist University, China 18438113@life.hkbu.edu.hk, Dr **Jing Huang**, Assistant Professor, Hong Kong Baptist, University China, peterjh@hkbu.edu.hk

<u>Keywords:</u> College English teachers; teacher identity; researcher identity; teacher agency China has been stepping up efforts to promote international competitiveness of its higher education through building "world first-class universities and disciplines".

An Ethnographic Study of College English Teachers' Identity Negotiation in a Mainland Chinese University

This government-led agenda and discourse, realized through institutional agenda and discourse, has given rise to heightened requirements of publication for academic staff in social sciences, and thus their struggling to make a choice between efforts on improving teaching and promotion-driven engagement in publication. College English teachers (teaching non-English majors) were once considered as teaching staff, yet it is not until the recent decade their obligations in conducting research have been emphasized by university administrators. It is against this background that this study intends to investigate how college English teachers perceive their roles in higher education and how they position themselves and exercise their agency to take control over their professional-personal development. Adopting an ethnographic approach, this study aims to document how college English teachers in a nonkey university negotiate and construct their teacher and researcher identities; and to explore how their negotiation and construction of teacher-researcher identities is afforded and constrained by the socioinstitutional environments. An initial data analysis indicates that college English teachers are much more engaged in teaching than in research. Guidance from experienced researchers and advancement in a doctoral degree are perceived to afford opportunities for forming a researcher identity. Personal and contextual factors such as limited knowledge in research, heavy workload, unequal resource allocation, and asymmetrical power relationships among colleagues, suppress their agency and constrain their professional development. Moreover, new institutional requirements for promotion with an emphasis on research productivity and quality might constitute both affordances and constraints upon their professional agency and identities. The research sheds light on understanding academic staff's varied pathways to professional-personal development in China and similar contexts and generates implications for higher education management worldwide.

Dr **Spencer Clark**, Associate Professor, Director Rural Education, Center Kansas State University, United States, <u>jspencerclark@ksu.edu</u> and Dr **Lori Goodson**, Assistant Professor, Assistant Director Rural Education Center Kansas State University, United States, <u>lagoodson@ksu.edu</u>

Keywords: Rural Education, Personalized Professional Learning, Teacher Efficacy and Retention

Implications of Participatory and Personalized Professional Learning for Educators in Rural Schools

Our paper will discuss findings and implications from research on a personalized professional learning model developed in response to issues currently affecting rural Kansas schools, and also reflects issues facing rural schools across the United States and globe (Reagan, et al., 2019; Walker-Gibbs, et al., 2018). We developed the model from field-initiated innovations that connected rural teachers through their professional learning to address teacher isolation (Reagan, et al., 2019; Trust, et al., 2016), situated professional learning in authentic classroom experiences through action research (Hardy, et al., 2018; Bullough & Smith, 2016), and engaged students in participatory action research as part of their teacher's professional learning (Jimerson, et al., 2016; Warren & Marciano, 2018). We utilized a digital platform to

achieve these innovations and to collect a variety of data for our mixed-methods study (surveys, interviews, documents, reflections). Our theoretical framework prioritized teacher learning as interactions from a situated sociocultural perspective (Russ et al., 2016). From this perspective, the teacher is more than an individual because they interact simultaneously with the classroom ecology (Biesta & Tedder, 2006; Russ, et al., 2016), works with tools to mediate interactions with students and their own learning (Russ, et al., 2016; Wertsch, 2009), and interacts within a community of teachers (Coburn & Stein, 2006; Russ, et al., 2016). After collecting data for two years, our findings indicate that personalized professional learning experiences for rural teachers increased teachers' sense of efficacy, teacher retention, and student achievement. Our paper will discuss the implications of this professional learning model for rural schools, which includes connecting rural teachers through situated practices, improving teacher retention through increased sense of efficacy, and increasing student achievement through teacher and students collaboratively improving instruction. Lastly, we will discuss the future role of a rural education clearinghouse for sharing teacher personalized professional learning experiences.

Dr Suzanne Eckes, Professor, Indiana University, United States, seckes@indiana.edu

Keywords: Equity, Sexual Orientation, Discrimination

Gender Equity in Schools Gender

In this session, I will provide an overview of the evolution of gender equity in U.S. public schools. This will include a recent study about how gender has been defined in litigation involving discrimination with regard to both students and teachers. At the center of this issue is whether the federal statutes that prohibit discrimination based on sex also protect other forms of gender discrimination. The two relevant laws are Title IX of the Education Amendments of 1972 (Title IX) and Title VII of the Civil Rights Act of 1964 (Title VII). For over forty years, students and school employees have successfully applied Title IX and Title VII to discrimination claims based on their biological sex. During the Obama Administration, federal agencies issued guidance clarifying that Title VII and Title IX could be interpreted to prohibit discrimination based on sex more broadly for employees and students. For example, transgender students and employees would be protected from discrimination under federal law. However, under the Trump Administration, much of the Obama-era guidance has been rescinded and efforts are currently underway to limit the federal definition of sex discrimination such that transgender school employees and students would not be protected under Title VII and Title IX. Using legal research methods, I provide an analysis of several recent decisions that impact school policy. Although the session is based on U.S. case law, the topic will be of interest to an international audience. For example, the presentation will reach beyond case law to discuss international findings as they relate to gender equity in schools throughout the world. I should note that my co-authored study on a related topic was recently published (2019) in the Oxford Handbook of U.S. K-12 Education Law at Oxford University. This previous study will help inform my current presentation.

Dr. **Denver Fowler**, Chair, Ed.D. Program & Professor, PK-12 Educational Leadership, Franklin University, US, <u>denverfowler@gmail.com</u>

Keywords: Leadership; Administration; School; Ethics; Superintendent; State; District; United States

An Investigation of State and District Superintendents in the United States: Ethical Leadership Perspectives, Leader Demographics, and State/District Characteristics

The aim of this research was to determine the ethical leadership perspectives of state and district superintendents in the United States. Furthermore, the research sought to determine whether or not there was a significant statistical correlation between the ethical leadership perspectives of state/district superintendents and their leader demographics and state/district characteristics. The researcher maintained a mixed-methods research approach utilizing both surveys and interviews in the studies. In the study on district superintendents, all district superintendents in the state of Ohio and state of Mississippi were surveyed and interviewed. In the accompanying study on state superintendents, all state superintendents in the United States (including the District of Columbia and Department of Defense) were surveyed. The findings indicated the ethical leadership perspectives of the superintendents were in fact significantly statistically correlated with certain leader demographics and state/district characteristics.

Ms **LuzV Garcia-Felix**, TC-Columbia University, PhD Candidate, United States, lvg2106@tc.columbia.edu

Keywords: cognition, computer-simulation, language, Latino student, science education

Latinos are not Engaging in Stem Careers

The U.S. Census Bureau records Latinos population increase in the United States (US), identifying as the largest and fastest growing racial/ethnic group in the US and predicts that by 2060, 25% of the total population in America will be Latinos. In 2010 U.S. National Center for Education Statistics reports the educational performance in public schools of Latinos, lag behind Whites in scores of mathematics and reading. As the US Education system focus on preparing future generations into the advancement world by preparing students for careers in Science, Technology, Engineering and Mathematics (STEM). An extensive literature addresses the negative aspects of Latinos as a cause for their education problems. The purpose of this paper is to bring some understanding to the question: "Why Latinos continue lacking interest in STEM fields?" by presenting how the Latinos population data, their career distribution trends, and efforts of supportive laws and programs like multiculturalism continue the status of Latinos low scholastic achievements. First, it discusses a brief history of law, reporting, policies, and important findings that shape the present status of limiting Latinos interest in STEM. Secondly, it sorts in three critical factors: Institutional, Educational and Latinos, the difficulties, controversies, and barriers Latinos face in their pursuit of a STEM career.

Valbona Hoxha, PhD student, Sigmund Freud University, Vienna, Austria

The Effectiveness of Work on What Works (WOWW) Approach in School Setting: A Pilot Study Conducted in Albania

Many aspects of education have been at the focus of research aiming to maximize the gains during the learning process and to improve the emotional and cognitive abilities of students. The impact of the teacher's personal characteristics and communication style has been identified as one important factor that could bring changes on students' academic performance and emotional development.

This study aims to investigate the impact of teacher's communication style on student's behavior focusing on discipline, respect, and cooperation. In particular, it focuses on Work on What Works (WOWW) approach as a method of communication that promises to bring positive changes to the group as a whole, including the teachers. This program, characterized by an egalitarian nature is delivered to three groups of fourth and fifth graders, of ages between nine and eleven years old randomly selected from a mainstream school in Tirana, Albania, historically characterized by a political and social authoritarian system.

Differently from other studies on WOWW, this study targets the effect of the program on students and not the teachers. Similarly, a same cohort group is randomly assigned to the control group. Measures of the behavioral aspects are collected at three points in time (pre-intervention, post-test and follow-up) based on Likert-like scale self-administrated questionnaire on indicators of discipline, respect, and cooperation. The method of difference-in-difference is used in order to estimate the impact of the program on the pool of repeated cross sectional data generated.

The outcome of this study shows that the WOWW program has a statistically significant negative impact on two indicators of discipline at post-test and no significant changes on other indicators of interest at two measures post-treatment, contradicting the proposed positive impact of the program. The unexpected outcome of this program could be due to cultural aspects and differences between Western and Eastern education philosophies, as well as to the short period of time expected to influence significant changes which may be foreign to the culture. However, these findings could be also attributed to the characteristics of the students of this particular school. Hence, a future direction of this research study would be a larger sample size selected from different schools and different cities, in order to generalize the outcome at the national level.

Dr **Jing Huang**, Assistant Professor, Hong Kong Baptist, University China, peterjh@hkbu.edu.hk and Ms **Bacui Chen**, Lecturer, Lingnan Normal University China / Hong Kong Baptist University China, 18438113@life.hkbu.edu.hk

<u>Keywords:</u> school-to-college transition; (T)EFL learning; affordances; identity; agency Drawing on the affordances theory,

First-Year (T)EFL Experiences in a Chinese University: An Affordances Theory Perspective

This article reports on two studies carried out at two different times in a mainland Chinese university (LU), to explore and compare the school-to-college transition experiences of different cohorts of (T)EFL learners enrolled in LU's same BA TEFL degree programme over the past 15 years or so. "(T)EFL learning" refers to learning (learning to teach) English as a foreign language. Study 1 was an ethnographic study of the (T)EFL experiences of the 2002-2006 cohorts in years of 2005-2008, with the findings that students' first-year learning was characterized by a general sense of "loss, confusion and puzzlement" and their subsequent lack of actions and personal efforts to change the status quo (Huang, 2013). Study 2 was a revisit to the same research site to collect new data with 2014-2017 cohorts in years of 2016-2018, with the purpose of comparing possible changes of learner trajectories over the past 15 years. Three themes emerging from initial analysis of the data (e.g. in-depth interviews) collected with cohorts of 2014-2017 - lack of oversight; lofty goals, empty actions; and social media and technical distraction characterized first-year experiences. (Re)examining from an affordances perspective, both studies found that students' first-year experiences in university are replete with two distinct types of affordances, i.e. individual and social affordances, goal and happening affordances. Affordances need to happen in "sets", instead of in isolation, to invite learner agency. Identity conception and imagination, in the form of "possible selves" and "future selves", might create positive affordances for student learning. This study demonstrates the usefulness of employing an affordances theory perspective to understand the difficulties and constraints in the school-to-college transition. It also contributes to a better understanding of the complex relationship between affordances, agency and identity in (T)EFL learning.

Jeremy Hughes, Instructor, Fort Hays State University, China, <u>jmhughes3@fhsu.edu</u> and **Jeff Bourgeois**, Assistant Professor, Fort Hays State University, China, <u>jsbourgeois@fhsu.edu</u>

<u>Keywords:</u> Faculty AND compensation AND branch campuses AND international AND factors AND pay AND Salary AND partnerships AND transnational AND higher education AND China AND Western

Factors Influencing Faculty Compensation at International Branch Campuses in China

With more than 60 government-approved transnational education institutions (TNEIs) and over 1000 transnational higher education programs operating in mainland China, an increasing number of institutions of higher education from multiple countries have identified the People's Republic as a viable financial and academic boon. This reflects a continued and sustained push toward internationalization in higher education in that past decade. This research explores the data of expatriate academics employed at such entities and investigates factors influencing faculty remuneration. To determine variables prioritized in decisions regarding faculty compensation at international branch campuses (IBCs) in mainland China, the researchers employ a quantitative design consisting of a series of multiple regression analyses of individually and institutionally defining variables gathered from a team-developed survey instrument, review of publicly-accessible institutional websites, and institutional reports. While the current study focuses solely on faculty salary structures and practices in China, it may initiate further investigation of faculty salaries on IBCs worldwide and the management of these important entities in the future.

Miss Ogechi Ibeanusi, Graduate Student, St. John's College, US, ibeanusi@usc.edu

Improving Education in America with Design Thinking

In the 1970s, the US was the number one country in the world in terms of educational attainment by every measure that was available. Now we rank anywhere between 21st and 39th in math and reading scores. Countries that build strong educational systems take care of their children and address poverty. Currently, in the United States are educational system isn't equitable and often times, your zip code determines whether or not you get into college. Homelessness has increased astronomically as well as food insecurity. Yet, in nations with strong educational systems like Canada and Japan, they take care of children and make sure they have food and housing as well as providing a high quality education. In my presentation, I will propose solutions that deal with poverty in the US for children who are at risk for lower literacy and mathematics rates, lower high school graduation rates, and higher dropout rates. I will also propose newer solutions such as Design Thinking that challenges the traditional rote memoralization tools teachers use to educate their students. Rote memorization alone is not enough to educate US students or prepare them for the skills needed to manage and handle new technologies in computer science, innovations in healthcare, or big problems that haven't been able to solve yet. Often times, the curriculums in the United States are so rigid that they don't address the problems students will face in the future or even address the socio-emotional growth of students. Design thinking is an innovative way to systematically extract, teach, learn and apply human centered techniques to solve problems in a creative way- in our designs, in our businesses, in our countries, in our lives. Design Thinking seeks to understand the user, challenge assumptions, and redefine problems in an attempt to identity alternative strategies and solutions through empathizing with your users; defining your users' needs, their problems, and your insights; ideating by challenging assumptions and creating ideas for innovative solutions; prototyping to start creating solutions; and testing solutions. In my presentation, I will propose that more US schools should incorporate Design Thinking to make learning engaging, improve US standards of education, and make the US more globally competitive.

Prof **Francis Adewunmi Adesoji**, Professor of Chemistry Education, University of Ibadan, Nigeria <u>francisadesoji@yahoo.com</u> and Dr **Mabel Ihuoma Idika**, Doctoral Graduate, University of Ibadan, Nigeria, <u>maybella06@yahoo.com</u>

Keywords: Inquiry learning, learning cycles, solubility, students' interest, exhibit stage

Boosting Students' Interest in Solubility Concept Through the Usage of 8e Learning Cycle Model-Based Strategy

The 8E learning cycle model-based strategy used in this study is an expansion of the 7E model once proposed by Eisenkraft. Although, research showed that 7E has positive effect on a number of students' learning outcomes, we observed that this model lacks a stage where students' alternative conceptions are directly addressed; hence, the rationale behind the proposed 8E, which specified 'Exhibit' stage. This study determined the efficacy of 8E model in boosting students' interest in solubility concept.

One hundred and eighty-one senior second year students sampled from four public secondary schools in Ibadan, Oyo State, Nigeria were used for the study. The pre-test, post-test quasi experimental design was adopted for this study. Two intact classes from two randomly selected schools were taught solubility and its related topics using lesson plans for 8E learning cycle model-based strategy (experimental group) while the other two intact classes were taught using lesson plans for traditional teaching method (control group). The Interest in Solubility Questionnaire (ISQ) was administered before and after the intervention. Analyses of pre-test and post-test interest scores of experimental and control groups indicated that while 8E was significantly efficacious in improving students' interest in solubility, the experimental group did better than the control group. We therefore concluded that the addition of 'Exhibit' stage to 7E learning cycle model as a way of directly addressing students' alternative conceptions in solubility, needs to be further looked into as it has been shown to make students' interest in the concept better.

Ava Javid, Doctoral Candidate, Teachers College, Columbia University, US, amm2276@tc.columbia.edu
<u>Keywords:</u> Science Education, Induction, Mentoring, Technology

Beginning Science Teachers' Agency: An Exploratory Study of Choice and the Role of Technology for Continued Learning

Despite a steady stream of new science teachers joining the K-12 education workforce, the rate at which beginning science teachers (BST's) stay in the classroom long-term is shockingly low. With such a low rate of retention, it is important to examine these teachers' experience in the formative first years of teaching after completing a formal pre-service program in order to observe their continued learning inservice. Though much attention has been given to formal mentoring and induction programs for BST's, little is known about the ways which these teachers choose to continue learning to teach. Especially little is known about how technology is able to facilitate their continued learning. In this mixed-methods exploratory study, I followed a group of BST's to find out how they exercise choice and agency in the period of rapid learning that occurs during the first and second year teaching science full time, using a Self-Efficacy theoretical framework to examine their learning. Beyond collecting data from surveys, observations, and interviews, I employed asynchronous technology to collect journal data as a method for engaging teachers with technology for learning. Preliminary results show that BST's continue learning primarily through systematic reflection on their performance and experiences, and through frequent and consistent interactions with more experienced teachers. Additionally, technology is a source of continued learning mostly due to its ability to deprivatize teaching practice. The results demonstrate trends in teachers' choices based on their self-efficacy and particular school settings that can lead to more targeted support for BST's going forward.

Dr **Kathryn Kaiser** Director Teachers College, Columbia University, United States kkaiser@theschool.columbia.edu

Diversity in the Digital Age: Integrating Pedagogy and Technology for Equity and Inclusion

Technology, diversity, equity, inclusion This interpretive case study explored the perceptions of how and why teachers might integrate technology to support their goals of equity and inclusion with a group of teachers who identify as culturally responsive in their pedagogy and describe themselves as fluent in the use of technology in school. An "extreme case sampling" of teachers working with students of diverse backgrounds in this study were chosen and a "snowball" approach was utilized in order to interview experienced and pedagogically aligned participants. In-depth interviews with teachers were the primary method of data collection. These interviews were augmented with a focus group. Class artifacts and document review provided data on each of the participants' use of technology. Examples of technology projects and applications, as well as background and environmental factors that may have influenced the participants' technology use, were reviewed. These three different data collection methods helped provide a more complete understanding of how teachers perceived uses of technology resources in culturally responsive classrooms. The four key findings were that participant teachers conceptualized technology as a tool for learning, described their specific uses of technology as learning enhancements such as knowledge building and knowledge sharing strategies, indicated positive outcomes of their use of technology and that they learned about the use of technology resources for culturally responsive approaches through informal means. Teachers' choices for technology use that supports equity and inclusion goals were guided first by their perceptions that technology is a learning tool that allows students of diverse backgrounds to experience academic success and develop critical consciousness and second by their preference to learn to use technology largely through informal approaches, in particular with peers they see as culturally competent and aligned with their own thoughtful practice in service of their beliefs and values for equity and inclusion.

Ms **Siaw Hui Kho** Instructional Coach/ PhD Candidate, Universiti Sains Malaysia Malaysia kylin11@hotmail.com and Ms **Thapanee Khemanuwong**, Lecturer/ PhD Candidate, King Mongkut's Institute of Technology Ladkrabang, Thailand, thapaneekhe@gmail.com

<u>Keywords:</u> Instructional Coaching, Teacher Education and Professional Development, Qualitative Research, Partnership, Elementary Education and Teaching, In-service Teacher Training, Coaching and Mentoring in Education

What does Instructional Coaching Look Like in Sarawak?

Despite the press for instructional coaching as a form of effective teacher professional development, there is still a need to understand what instructional coaching and its operations look like. Meanwhile, the coaching literature provides scant guidance particularly about the coaching implementation in the Malaysian context and how the coach-teacher relationship is established to enhance the coaching experience. For the purpose of this study, we explored the process of instructional coaching in East Malaysia. We described how coaches established relationship with the teachers in the coaching process. Employing a qualitative descriptive research, we conducted non-participant observation on coaching conferences of four coach-teacher pairs on a one-to-one basis. We analysed the data obtained using Braun and Clarke's (2006) six-phase thematic analysis. The findings suggested that

the coaching cycle consisted of three components: pre-observation conference, classroom observation and post-observation conference. In developing the coach-teacher relationship, the coaches engaged in conscious effort to build shared understanding with the teachers. For future research, we offer recommendations of larger-scale studies to discover the impact of instructional coaches that employ the quality of building coach-teacher understanding on the improvement of teacher instruction and student achievement. We would also suggest studies based on comprehensive theories and empirical evidences into the development of fully-articulated models of instructional coaching related to the Malaysian context.

Gonçalo Lima, Research Fellow, Nova School of Business and Economics, Portugal, goncalo.lima@novasbe.pt

<u>Keywords:</u> School starting age; student achievement; regression discontinuity; local-linear regression; local-quadratic regression

The Impact of School Starting Age on Student Achievement: Evidence from Portugal Using School Entry Laws and Exact Birth Dates'

We study the causal impact of school starting age on short- and long-term student outcomes, by exploring exogenous variation induced by school entry laws. We use a rich administrative dataset from Portugal, leveraging detailed information from the universe of public-school students in the country since 2006. We find that being one-year older when entering school entails large and significant cognitive benefits in Math and Language throughout compulsory schooling.

In spite of the large short-term gains, cognitive benefits quickly fade from Grades 4 to 9. Nonetheless, the effect persists on the long run through institutional features. Students predicted to start school one-year later are less likely to repeat grades, more likely to graduate from lower secondary education, less likely to dropout, more likely to be tracked into academic and scientific curricula in high school, have better application scores to higher education and enroll in more selective tertiary education courses.

These findings may motivate policy responses at odds with an optimal choice by parents. Strategic parents may respond to evidence of benefits of being relatively older through delaying enrollment of their children. However, children who start school a year later will typically remain in pre-school environments whose quality for learning will be more strongly correlated with family background. Both parents and policymakers should thus appropriately weigh costs associated with an additional year of childcare outside formal schooling environments and shorter work careers. Alternatively, to changing policy in school entry laws, policymakers should also consider other ex-ante measures, namely early childhood interventions aimed at addressing school readiness gaps across children from different socioeconomic groups.

Saeid Safaei Movahhed, Head of Strategic Education and Training Studies, Iranian Curriculum Studies Association (ICSA), <u>s s movahed@yahoo.com</u>

<u>Keywords:</u> theory-generation, educational theories, grounded theory method, e-grounded theory, qualitative research

E-grounded Theory: Developing Theories in Educational Research

Although five decades ago grounded theory emerged as a theory-building strategy in social science, but it gradually permeated other disciplines like management, nursing, cultural studies, political sciences and education. Undoubtedly, GTM has been playing a prominent role in theory-generation in education, but it seemingly may not be deemed as an all-inclusive strategy in this discipline due to essential miscellary of educational theories. Assuming this as an important shortage, I try to put forward a new strategy for theory generation in education. Hence, six types of educational theories are initially introduced, namely chronological, analytical (taxonomic), historical, critical, explanatory, and normative (prescriptive). Afterwards, necessary and logical steps are mentioned for building theories based on the proposed strategy as follow: theoretical sensitizing (what type of theory is probably to be made), data collection, conceptualization and monolithic networking, contextualization and representation. It is noteworthy to consider that the steps are not linear, data collection and data analyses occur simultaneously, and the resulted theory owns an essential nature. Once an essential theory is formed by this strategy, it ought to be validated against criteria such as clarity, parsimony, structural corroboration, referential adequacy, and procedural validity. If the resulted essential theory is to be promoted into formal level, the studies must be replicated in various contexts and be approved by communities of related scholars. As educational theories are both descriptive and normative in nature, it is believed that this new framework helps educational researchers take a broader view of various types of theories in education and perceive a clear view of how to generate them based on the research questions.

Dr William Owings, Professor of Educational Leadership, WOwings@odu.edu and Dr **Leslie Kaplan**, Education Writer, Old Dominion University, US, Issaelan@cox.net

International Comparisons: What's Wrong with the American Public Education System

International assessment results have become like educational Olympics, a source of national pride or embarrassment. On average, American students tend to fare poorly on Program for International Student Assessment (PISA) or Trends in International Mathematics and Science Study (TIMSS). But these international comparisons are misleading: no "average" American student exists. Rather, students are residents of 50 states and the District of Columbia with their own education systems that vary significantly in their policies and practices for 1) preschool access and enrollment, 2) compulsory attendance, 3) instructional standards, 4) school funding, and 5) student outcomes. The variance in state requirements and student outcomes is a high-stakes equity issue that can only be solved state-by-state. Rather than comparing students internationally, answers to improving American education lie closer to home.

Mr Habib Qazi, Final Year Student (PhD), University of Leicester, United Kingdom, mhg3@le.co.uk

Practices of Gender Inclusive Education- A Case Study of Pakistani State Schools in Islamabad

<u>Keywords</u>: Gender Inclusive/Exclusive National Education, Classroom Practices, Religion, Culture, Patriarchy, Gendered Social Roles, Pictorial Invisibility, Inequitable Share The notion of inclusive/exclusive education is generally contextualized in the framework of children's equal access to education beyond sexual orientations, economic constraints and other socially ascribed categories/differences.

This paper, however, investigates the Government of Pakistan's current National Education Policy (2017) and its mandated compulsory textbooks for grades IX-XII to analyze how these conceptualize/represent women in their discourses, employing inclusive education lens. Taking insights from Foucault's ideas of technologies for making individuals subject and Butler's performativity, it also explores discursive social practices involving Pakistan's education-system-actors for gender formation in six state-schools located in Islamabad, the capital of Pakistan. For this purpose, the study gathers direct data using the interview method with 12 teachers, 6 students' focus-groups and classroom participatory activities with 442 students. The findings identify a complex interplay of technologies perpetrating gender discrimination in schools which are already sex segregated. The prescribed textbooks promote specific dress-codes for girls and regulate their social conduct using the metanarratives of religion and culture, mostly representing them in stereotypical gendered domestic/supporting roles and as a subordinate to male patriarchs. Other areas where she is 'officially' marginalized include textbook authorship and pictorial representation. The teachers reinforce textbook-promoted exclusionary gendered trends through classroom instructions which encourage the student majority to view her as a gazing object within a particular frame and subject her to their formally constructed parochial standards. Its implications include social othering within the community and beyond, fostering ethnocentricity, distorted worldviews, and self-righteousness. This education policy and its mandated textbooks with camouflaged illusory educational parlance of equity and inclusiveness also have implications for women empowerment and sustainable development.

Sabrina G. Raimundo, Environmental Education specialist, <u>sa.goncalves@usp.br</u> and Dr **Flávio S. Berchez**, University of São Paulo, Brazil, fberchez@ib.usp.br

Keywords: higher education, perception, knowledge, global climate change

Does Knowledge Drive Global Climate Perception in the Higher Education Public?

Global Climate Change (GCC) knowledge may be a potential factor for public perception. The more ones acquire knowledge; the more ones might become concerned about GCC. This study explored the relationship between Knowledge and Perception in the academic public (undergraduates, graduates, and professors) from Biology of University of São Paulo (Brazil) and Marine Biology of University of Magallanes (Chilean Sub Antarctic Region). Questionnaires were developed to raise GCC Knowledge (divided into four sets: Climate/Weather, Greenhouse Effect, Impacts, and Extreme Events) and Perception of current GCC causes. Knowledge was graded from 0 to 10, and perception was reached using the Likert Scale (1: skeptic to 5: anthropogenic perception).

PerMANOVA and Spearman Correlation Tests were run with the collected data. All groups presented anthropogenic profile, totalizing more than 90% of public agreement. Excepted from UMAG undergraduate (5,74 average), more than 50% of each group scored around 7 and were not meaningful different among them. In both universities the lower grades were obtained regarding Extreme Events, varying from low (2-4) in undergraduates and graduates to intermediate (4-6) in professors. Undergraduate from both universities presented a weak positive correlation (USP: ρ =0.34; UMAG: ρ =0.37). The other general correlations resulted null. Taking Climate/Weather set and anthropogenic perception, all groups showed to be weakly negative correlated.

On the other hand, all samplings presented a weak positive correlation taking Impacts specific knowledge. So, knowledge and perception may be correlated, as long as specific knowledge is taken. Those findings can be embodied to GCC communication strategies and also to approaches for higher education, since different bits of knowledge may raise an academic, public perception, regardless of its location.

Dr. **Amy Ruffus-Doerr**, Professor, Fontbonne University, Harris Stowe State University, United States, aruffusdoerr@fontbonne.edu

Turning Students into Knowledge Workers Are Educators Prepared to Teach Students for the Knowledge Age?

<u>Keywords</u> 21st-century education, knowledge work, problem-based learning, teacher epistemology, Understanding by Design, science education, communication arts, pedagogical practices, educational taxonomies

There is a growing trend in the business literature; education is not preparing students for the Knowledge Age. The literature further states the foundation of a successful Knowledge Economy and the production of its knowledge workers is education. Considering that the school system is a foundation for learning, it is a startling revelation that education reform has not focused more explicitly on knowledge work. If we expect to be successful in the Knowledge Age, a new conception of knowledge and learning is necessary, and will aid in the development of new knowledge workers. This further necessitates a more in depth understanding of what epistemological beliefs, and corresponding pedagogical practices would foster students who can work successfully in the Knowledge Age. This collective case study explored four teachers' understanding of knowledge and pedagogy using an adaptation (Keefer & Ruffus, 2004) of the Approach to Knowledge Scheme (ATKS) (Bereiter & Scardamalia, 1998) and the Principles of Knowledge Building (Scardamalia, 2003). Data collected from the study of two English/Communication Arts teachers and two Science teachers included unit plans, pre-observation interviews, observations and postobservation interviews. Thematic analysis was used to examine teachers' epistemological beliefs and pedagogical practices, and revealed major themes by both sets of teachers. These themes were useful in understanding how the ideas of the Knowledge Age and knowledge workers can be implemented in schools. Content Analysis demonstrated the ATKS was a useful tool to use with teachers, with modifications. By using this theory and scheme it was possible to see how these teachers' views impact

what knowledge they found valuable; in so doing, provided an opportunity to see how knowledge work could be translated into education.

Dr **Vicki Sherbert**, Assistant Professor, Kansas State University, United States, sherbev@ksu.edu and Dr **Todd Goodson**, Assistant Dean, Kansas State University, United States, tgoodson@ksu.edu

The Rural Arts Day: Reflections on an Innovative Model Providing Field Experiences in Rural Schools for Teacher Candidates

<u>Keywords:</u> teacher candidates, field experiences, diversity, rural schools, identity, agency, place-based education, arts education, rural arts day

Our paper will discuss findings and implications from research on an innovative model providing field experiences in rural schools for teacher candidates. As teacher candidates prepare to meet the needs of all learners in their future classrooms, it is critical that they consider the diverse lived experiences of students and their families. More than 8.9 million students attend rural schools in the United States, and of that number 7.1 million are enrolled in rural school districts (Showalter, Klein, & Johnson, 2017); however, geographic status (e.g., rural) has only recently been recognized as a form of diversity in American education (Miretzky & Stevens, 2012). The footprint of Kansas State University's College of Education includes 63% of the counties in the state, the majority of which are comprised of rural communities. The Rural Arts Day research project was designed to measure impact of exposure to rural schools on teacher candidates while bringing place-based arts integration experiences (Lundahl, 2011; Gruenewald, 2003) to students in small, rural K-12 schools. In this phenomenological study, we collected data through anecdotal field notes, observations, and reflections. These data were analyzed through a sociocultural lens (Lewis, Enciso, & Moje, 2007; Alsup, 2006; Gee, 2000), focusing on the identity and agency of teacher candidates (Graue, 2005; Wenger & Dinsmore, 2005) as they planned learning activities for and engaged with rural students (Donovan, 2016; Corbett, 2009, Theobald, 1997). After collecting data from two events, our findings indicate these experiences provide unique opportunities for teacher candidates to develop their identities and enact agency as educators by engaging with diverse learners in rural schools. Additional findings indicate a positive impact on students and faculty within these schools. We will discuss the implications of this study as we develop a more expansive model to offer field experiences in rural schools.

Dr L. **Kathleen Sheriff**, Associate Professor of Special Education, Stephen F. Austin State University, sherifflk@sfasu.edu

Service-Learning Via Distance Education for Special Education Pre-Teacher Candidates and Their Self-Efficacy Regarding Typical Book Adaptations for Young Children with Disabilities

Pre-Service special education teacher candidates in an online early childhood special education course participated in a grant-funded service learning project regarding the adaptation of a typical children's book in an effort to support a child with a communication disability to be able to access an on-

grade level text. Teacher candidates participated in online training within their college course and participated in a mixed methods study regarding their self-efficacy in adapting typical books for young children with disabilities in inclusive educational settings. The presentation includes book examples for conference participants to view.

Dr Calvin Simpson, N/A, Delaware State University, United States, calvin simpson@hotmail.com

<u>Keywords:</u> Support, Security Policy, and Security Education, Training and Awareness within the Federal Government Information Security Culture Unauthorized disclosure; sensitive and classified information; information security culture; federal government; security policy; leadership support; Security education, training and awareness.

Unauthorized Disclosures of Sensitive and Classified Information: A Meta-Synthesis of Leadership

This meta-synthesis study examined U.S. federal government information security culture through the factors of leadership support, security policy, and security education, training, and awareness (SETA). The occurrence of unauthorized disclosures is a continuing and increasing problem within the federal government, and end-users are identified as the weakest link. The federal government not only remains unsuccessful in its efforts to prevent unauthorized disclosures in previous years, it acknowledges this threat will persist in the future. Selection of studies used in support of this meta-synthesis consisted of two subject matter experts who served as raters that determined inter-rater agreement. Inter-rater reliability was achieved using Cohen's Kappa while ATLAS.ti 8 supported the semantic coding process. Semantic coding of the 13 studies selected for this research resulted in the identification of 4 networks consisting of 36 total nodes (5 - information security culture, 13 - leadership support, 7 - security policy, and 10 - SETA). A total of 398 total sub-nodes selected across selected studies. The findings indicate that the greatest positive influences on information security culture and end-user threat-response behaviors were leadership support and SETA. However, these influences are offset by employee behavioral conflicts, inconsistent leadership involvement, varying degrees of policy awareness and non-compliance, and ineffective training. An emphasis on teamwork was noted at all levels across the federal government. There was an overwhelming consensus for tighter controls to protect information. In the area of policy, there is an admitted lack of awareness for the policies, consequences, and penalties associated with security violations. To prevent the occurrence of future security incidents, a better understanding of information security culture within the federal government is needed to assist in further refining and implementing organizational information security programs. This study separates itself from other studies by presenting a new research model supported by a theoretical framework.

Prof Shirley Sommers, Professor, Nazareth College, United States, ssommer4@naz.edu

Keywords: Service-learning, Urban Education, Reflection

Service Learning in Education: The Role of Reflection

The presentation draws from a four-year study of a service-learning course for pre-service teachers. The course was offered in partnership with four urban schools in upstate New York. Preservice teachers were required to spend a minimum of two hours per week, for 14 weeks, in schools working with assigned classroom teachers. The objective of the study was to find out the efficacy of employing reflection modes to increase levels of understanding sociopolitical issues impacting urban education in a service-learning course. Three modes of reflection assignments, namely, mirror, microscope, and binoculars to gauge students' levels of growth and development in their understanding of teaching and sociopolitical issues around education. The study employed mixed methods as a research methodology, students' journals, surveys, and classroom discussions were used for data sources. The findings of the study showed that reflection is not only a salient component of service-learning, it is also an effective method of teaching about connections between classroom dynamics and larger sociopolitical issues. The poster presentation will (a) differentiate between practicum and service-learning in the context of education, (b) delineate findings from the study, and (c) provide implications for the role of service-learning in teacher education.

Dr **Suzanne Stewart**, Professor, University of Toronto, <u>suzanne.stewart@utoronto.ca</u> Mr **Robert Sleeper**, Research Coordinator, York University, Canada, <u>rsleeper@yorku.ca</u>

Keywords: Indigenous; decolonization; international education; ethics of education

Decolonizing Education: Canadian Perspectives on Indigenizing Higher Education

Theories and models for Indigenous education in Canada continue to populate the literature and identify "best practices." The onus of understanding and working with issues of Indigenous education rests with all citizens of a country, as all citizens reside on traditional Indigenous lands and within the context of current and historical treaties and agreements with Original Peoples. Statistical data amply supports the "failures" of Indigenous students in postsecondary studies yet little data enlightens with solutions and successes based on traditional cultures and identities of Indigenous young peoples. This paper fills this gap in knowledge by identifying the strengths young adult students bring with them into higher education contexts based on two empirical qualitative studies conducted in a large Canadian urban area with Indigenous youth and adults who work with them on their education needs. Results of both studies include metathemes of traditional Indigenous knowledges, cultural identity, racism and oppression, healing, intergenerational trauma, and mentoring and modeling. Implications related to practices for pedagogies, administrators, and policy makers illuminate the context of the results as they apply to educators and researchers, including the importance of community collaboration, changing policy and protocols, and negotiating the tensions between Western and Indigenous theories and practices. Ultimately, addressing Indigenous issues and creating a decolonizing education framework will enhance and improve Indigenous students' academic needs, but these can also benefit all students, many of whom are also failed by the current Eurocentric, colonial system of higher education.

Dr **Tayyaba Tamim**, Associate Professor, Lahore University of Management Sciences, Pakistan, tayyaba.tamim@lums.edu

Re-Considering the Question of Languages in Education for Sustainable Development

The new 2030 Agenda for Sustainable Development clearly reflects the urgency to respond to environmental, social, economic and educational issues with a focus on inclusivity, social justice and equity. Central to this is the role and responsibility of education in not only responding to sustainability problems but also in preventing them and in creating more sustainable futures. Although aspects of Education for Sustainable Development are much discussed, what remains underexplored is the role of languages in education within it. The current paper re-positions the question of languages in education, with reference to UNESCO's aims to engage the learners in: learning to know, learning to be, learning to live together, learning to do and learning to transform oneself and society. The paper uses Amartya Sen's Capability Approach to Human Development to analyze literature to argue with general reference to the Global south and more specifically to Pakistan, that although neoliberal ideologies and globalization give a hegemonic significance to English and underplay the role of local languages, with an emphasis on global citizenship, it may be misleading. This work in progress strongly indicates that if Sustainable Development Goals are to be met, education needs to recognize and embrace multilingualism as a norm and not dismiss it as an aberration. This in turn needs to be supported by the prevailing language policy on our path towards a critical global citizenship responsive to both local and global contexts.

Dr **Huixuan Xu**, Assistant Professor, The Education University of Hong Kong, Hong Kong, hxxu@eduhk.hk

<u>Keywords:</u> service learning, exploitative partnership, transactional partnership, transformational partnership

Examining the Nature of Two Relationships in a Service-Learning Project: A Qualitative Study in Hong Kong

The present research aims to explore the nature of two relationships in a service—learning project involving two universities and one youth development center in Hong Kong through the lens of E-T-T partnership, say exploitative, transactional, and transformation partnership. A service-learning project that involved two universities and one youth development center in Hong Kong were examined. The center has provided tutoring service for school students over years and has a need to improve their service for students, who attend their afterschool programmes and are from families with low social and economic status. A group of undergraduate students, who were recruited from the two universities in Hong Kong, served as tutors to supervise those children's completion of homework, aiming at enhancing the capacity of self-regulated learning in that group of children. The service run for 8 sessions within 4 weeks, lasting two hours per session. Qualitative method was employed in the research. Individual interviews, learning journals, and observations were applied to collect data from 2 center staffs, 2 university course lecturers and 27 university students. The nature of two relationship:

community and university, university students from the two universities. The nine attributes that distinguish exploitative, transactional and transformational partnerships (Clayton, Bringle, Senor, Huq & Morrison, 2010) guided the development of research protocols and data analysis. The findings showed that university students developed a transactional or transformational relationship with their team members. The center perceived their relationship with the universities as being transformational, while the universities reported only exploitative relationship with the center. The factors that fostered or impeded the development of quality relationships were identified. This research informs the complexity of SL partnership between university and community.

Dr **Xiaochen Zhou**, Postdoctoral Fellow, University of Hong Kong, Hong Kong, <u>yanning8107@hotmail.com</u>

Cultural Capital, Social Face and School Choice in China

Unlike educational systems elsewhere, China does not have school choice programs for compulsory public education. However, due to the school quality disparities, Chinese parents are still attempting to make choices in a no-choice public educational system. This study is interested in one popular form of school choice emerging in the Chinese society in recent years, which is purchasing a property in the catchment area (Xue gu fang) of preferable schools. By moving to the catchment area of better schools, the Chinese parents manage to enroll their children into high quality schools. Inspired by the Bourdieusian framework, this study attempts to explore the relationship between family cultural capital and school choice. It also investigates the role of parental value of social face in affecting parental school choice decisions. Primary survey data (n=1,123) from one provincial capital city in eastern China is collected. The findings suggest that school choice in China shows similar characteristics to other contexts, with, not surprisingly, privileged families having a higher possibility of pursuing it and thus, exploiting the better educational resources. School choice is found to be one of the determining factors in the stratified pattern of education. The study outcomes illustrate the prevalence of parental school choice in China's official 'no-choice' system, and empirical evidence is provided regarding the persistent inequality of educational quality. Moreover, the research reveals the moderating roles of parental attitudinal factors (e.g. social face) on the relationship between family capital and school choice, which it is anticipated will enrich understanding of the educational decision-making model in the Chinese context.