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Enhancing The Science Of Social Work Through Doctoral Education And How Social Work Research In Transitional Countries Can Be Expanded

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This paper compares the status of social work as a science within the American and European contexts and discuss the ways of increasing visibility of Social Work as a science in transitional countries (e.g. in Georgia, former Soviet Union Country). Insight into Doctoral education and its influence on the development of science in social work is underlined. In addition, social work research characteristics are discussed and the most appropriate types of social work research (e.g. translational research) are prioritized to build the models for bridging the science and service communities and to directly affect the provision of services across different social work sectors. The role of institutional investments is considered as key for improving the scope and quality of social work research in transitional countries. We also discuss the main characteristics of social work research as well as the role of institutional investments in developing social work research scholarship.

This paper also discusses the ways of increasing visibility of Social Work as a science in Georgia, the former Soviet Union Country, where social work is a newly established discipline. It highlights the needs and priorities for social work doctoral education in Georgia and its influence on development of the profession and science of Social Work. Evidence Based Practices in the Georgia Social Work community is made up largely of master's-level practitioners who, as a group, do not have the research sophistication that is found among doctoral graduates from other fields (Witkin, 1995). One of the strengths of a profession depends on its empirically derived knowledge base as it informs its practice and empowers practitioners through research. Despite its venerable history, Social Work still struggles with its professional identity, remaining sensitive to the allegation that it lacks a unique subject matter or methodology, which creates a void in creating evidence based practices. However, the social work profession is made up of "knowledge", "values" and "skills", but also includes "science" (Fong, 2012). Therefore, it is very critical to emphasize social work as a research science in its mission statements in   National Association of Social Workers (NASW), Council on Social Work Education (CSWE), International Association of Schools of Social Work (IASSW) and International Federation of Social Workers (IFSW), to create the conceptual context in which social work educators can design and deliver solid evidence based social work educational programs. It is very critical for doctoral education to enable doctoral students' who are transiting to

their roles as scholars and social scientists. Thus, Social Work as an applied social science should underline and applied research science as social work prioritizes the research done by social work practioners/scholars. Thus, Schools of Social Work in research university settings play the most important role in developing a science of Social Work (Reid, 2011).

Study of a Social Support Program Designed to Maintain LGBT Clients with Mental Illness in the Community

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Lesbian, Gay, Bisexual and Transgender individuals are often faced with societal challenges that can lead to mental health or substance abuse issues. The dual stigma of mental health problems and their sexual minority status may lead them to be shunned by both mainstream agencies and the LGBT community. Unfortunately, they are often misunderstood or mistreated in the mental health system because of a lack of training in offering culturally competent care by service providers. A program, The Rainbow Heights Club, was developed in 2002 to support and advocate for LGBT individuals with an Axis I mental health diagnosis. All of the members are in treatment for their mental health and/or substance abuse problems, but do not have a place to feel accepted, supported or have a sense of community. Rainbow Heights was developed to serve as a support and advocacy program, offering groups, social activities and informational discussions geared to LGBT individuals with mental health, developmental and/or substance abuse disorders. Club members were surveyed in 2013 to find out if the Rainbow Heights Club was helpful in maintaining themselves in the community, and following their treatment plans. Results indicated that 75% of members are more consistent in following prescribed treatments keeping them free from inpatient hospitalization, and 79% reported being clean and sober since coming to the Club. This presentation will report on these findings and others in greater detail. Participants will learn how to provide services to this population in a culturally competent way.

An Over Representation of Incarcerated Youth and Adults with Traumatic Brain Injury: How Should They Be Identified and Served?

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For nearly a quarter of a century, both psychological and neurological researchers have used various clinical instruments to identify specific characteristics of traumatic brain injury (TBI) that may be related to learning processes that distinguish individuals. One such approach (e.g. the biological approach) evaluates brain functioning in part through the approach known as "brain mapping." With advanced technology, this approach has become sophisticated enough to examine the living brain by non-evasive techniques. By observing living brains, we can determine how it interacts with the sensory environment. Estimates range anywhere from 25% to 87% of individuals who are incarcerated have a TBI, depending on whether they are incarcerated in a county jail, or a state or federal prison. Unfortunately, many of these individuals are incarcerated with an identified or an unidentified TBI while others sustain some type of head injury during their period of incarceration. The purpose and intent of this presentation is to discuss the types of services and supports not often associated with incarcerated individuals with developmental and/or psychological disabilities. The discussion related to TBI will focus on outlining the difficulties in accurately estimating the percentage of individuals with TBI and the challenges of identifying TBI among incarcerated youth and adults. The final discussion will center on the need for screening, assessment, and treatment of individuals with TBI receiving services within the correctional system. Further research in the field of cognitive neuroscience is necessary to determine fully how TBI manifests itself to specific regions of the brain. Ultimately, this will provide a better understanding of how interventions can be made to better assess and treat individuals with TBI within the correctional system.

Improving the Health and Safety Behaviors of Home Care Workers

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Home care workers supporting elderly and disabled clients with in-home services represent an expanding worker population at risk of injury and illness. Their physical job demands result in lost-work injury rates triple the national average and frequent migraines, arthritis, and high blood pressure (Denton et al., 1999). Their remuneration averages $10 per hour (Bureau of Labor Statistics, 2014), often too low to obtain adequate health care coverage (Butler et al., 2014).

In Oregon, home care workers are licensed by the Oregon Home Care Commission and represented by the Service Employees International Union, both of which offer training and other support. However, gaps in the system were revealed in a two-part study of COMPASS (COMmunity of Practice And Safety Support), a peer-led group intervention designed at Oregon Health and Science University to support caregivers. A randomized control trial analyzed participating caregivers' health indicators (Olson et al., 2015), followed by qualitative research focused on the demands and stresses they experienced. Data revealed inadequate safety equipment in caregivers' isolated and unregulated work environments, and absence of policy provisions for advocacy or appeals. Intense

stresses originated in interactions with home-bound clients and, conversely, in the lack of interaction with peers or case managers. Caregivers typically experienced "job creep" when, for financial reasons, they dared not refuse demands that exceeded job requirements. Home care workers regarded the networking and brainstorming featured in COMPASS sessions as unique opportunities for social support, so valuable that some caregivers organized regular contact with teammates afterward.

Beliefs and Behavior of Nurses Providing Healthcare Services to Gay and Lesbian Individuals

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Melanie Brewer

Problem statement. The majority of persons who are lesbian, gay, bisexual, and transgender (LGBT) have experienced discrimination from healthcare providers.

Aim. To assess the beliefs and behavior of nurses when providing healthcare services to gay and lesbian individuals using the Gay Affirmative Practice (GAP) scale.

Methods. A convenience sampling of registered nurses in a southwest urban hospital system was conducted utilizing an anonymous Qualtrics survey, that included demographic questions and the Gay Affirmative Practice (GAP) Scale; analyzed using descriptive statistics.

Findings. Respondents were 89% female, 91% Caucasian, 90% heterosexual, and 84% Christian. Average age was 49; 76% had baccalaureate or master's degrees; 71% had a nursing certification; 60% had friends or family members who are gay or lesbian; and 61% believed a cultural competence course would benefit them professionally. The mean GAP score was 110. Belief scores were higher than behavior scores (63 and 49, respectively, of 75 total in each category), likely representing nurses' positive beliefs and their requirement for education to increase behavior scores.

Conclusions. Recommendations include development of an assessment tool that has language more reflective of nursing and is inclusive of bisexual and transgender questions; and promote cultural competence courses with definitions of LGBT terminology and how to ask sexual orientation- and gender identity-questions in an inclusive and optimal manner.

Implications of Facebook for Counselors: Social Networking in the 21st. Century

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Argosy University

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Twenty percent of the world's population log onto social networking sites such as Facebook. This has huge implications for clinicians must deal with Facebook issues in their respective counseling practices. Recently a questionnaire was distributed among licensed clinicians which yielded more than 150 responses. These surprising results gives new implications regarding privacy and ethical issues for the counselor as we move into the 21st. Century.

An Outcome Evaluation Study of International Service Learning Abroad Program: Summer 2015 in Seoul, South Korea

Kui-Hee Song
California State University

This presentation focuses on an outcome evaluation of Intercultural Social Work Education Abroad Program that was provided for 11 student participants from the United States during June 1 to 27, 2015 in Seoul, South Korea. The program outcome evaluation includes quantitative and qualitative findings. The quantitative findings were drawn from data collected from host country local practitioners using a survey questionnaires. Eleven participants (directors, supervisors, and staff who worked closely with student participants) reported the responses pertaining to student participants' level of course competencies in relation to specific Practice Behaviors using four different levels in the ordinal scale 1-4. A paired samples t-test was used to see pre and post-test differences for the responses. The result shows the improvements of all 15 questions relating to course objectives and practice behaviors from all respondents and the improvement is statistically significant with less than .5 significance. The findings suggest that there is a real effect of the program on all 15 questions for student participants from two different means.

Qualitative findings were gathered from multiple sources of data, including survey open-ended questions, student participants' reflective journals entries, and international social jus-tice diversity projects, and observation. Qualitative data were collected with open-ended questions as part of the program outcome evaluation research. Eleven local professional practitioners (directors, supervisor and staff) at the four different human services agencies during the program in Seoul, South Korea, participated in this study. The four local service learning field sites were Guru Community Mental Health Center, Good Friend Disability Day Care Center, Office of Congressman Choon-Jin Kim, and Open Radio for North Korea. These qualitative findings also include analysis of student participants' reflective journals. Broadly, analysis of interns' journals identified types of gains derived from participation primarily in the local service learning and a variety of local community field visitations during the program. Using coding and thematic analysis methods, qualitative data were sorted according to textual content into four distinct categories: student participants' effects, effects on hosting local community partners abroad, challenges facing participants in the program, and suggestions for the improvement of future programming. Qualitative findings presented include actual examples of comments that reflect the concept being coded. It elucidates the connection between the open text comments analyzed and the coding structure imposed in analysis. The individual concepts and themes that I found are combined to build an integrated explanation, which are interpreted in the light of the literature and the theories presented in my theoretical framework. This process allowed me to develop some over-arching themes that can be helpful in tying the individual pieces of my data together (Rubin & Rubin, 1995).

The presentation discusses issues of human services organizational and academic institutional challenges in establishing international collaborative partnership during the intercultural social work

education program implementation. It also provides insightful practical suggestions that may be used strategically to establish a newly planned and implemented intercultural education program course development in successful and sustainable ways.

Stereotypical Attitudes and Social Distance between Israeli Women and Female Migrant Workers

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Ashkelon Academic College

The purpose of the present study was to investigate whether contact with female migrant workers would decrease stereotypical attitudes toward them. The hypothesis examined was that Israeli women who do not employ female migrant workers held more stereotypical attitudes of this group than women who do employ migrant workers. It was also assumed that the level of willingness to establish social closeness is higher among Israeli women employers than among non-employers, whereas female migrant workers will adopt the stereotype attitudes that the Israeli women hold on them.

The Bugardus social distance scale questionnaire and a stereotypes assessment questionnaire were distributed to 168 subjects: 55 women who employ migrant workers, 58 women who do not employ any and 55 migrant workers.
The results indicated that employers and non-employers did not differ in their social distance toward migrant workers.

With regard to stereotypes, it was found that employers and non-employers thought of Israelis as better behaved than did the migrant workers, while among migrant workers, the longer they were in Israel, the less they perceived Israelis as being educated and sociable.

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Happy to Be Aboard ... Or Thinking of Jumping Ship: Factors Affecting Newcomer Retention in Business and Educational Settings

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Kenneth Guy Berry
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   The intent of this study is to examine how beginning employees in business and educational settings make sense of the changes, surprises, and challenges of entry-level work and the impact of their "sensemaking" on their retention in the organization. Employee retention is a subject of concern nationwide. Searching for, hiring, training and supporting new employees is costly for organizations. New employees in some fields report isolation and inadequate support as reasons for their disillusionment with employment. However, a theory purported by Meryl Reis Louis (1980) contends that traditional group approaches to socialization (such as mentoring) are unsuccessful, because they fail to address the individual nature of the newcomer experience. This is a qualitative phenomenological study which examines that experience from the viewpoint of new employees in a variety of settings.

Development of Students' Forensic Accounting Skills with the Use of Interactive Case Studies

David Glodstein
State University of New York

Forensic accounting is a relatively new field. It falls within the field of fraud examination. Universities are developing fraud examination and forensic accounting programs at both the undergraduate and graduate levels. There are numerous books in circulation that provide students information in this field, which include some case studies. The cases studies in most books are known as 20-20 hindsight cases. They provide all the case background facts, red flags, outcomes and conclusions. These cases can be read by students and discussions can occur, but there is little room for them to make decisions on how to investigate, gather documentation, interview potential witnesses, write their findings in a report, and present their findings of the respective case.

The medical field has used case studies and simulations for many years in order to give medical professionals practical examples of how to diagnose and treat patients even before they actually treat patients. This is a good model to consider for use in fraud and forensic accounting courses. Students need to develop the fraud and forensic accounting skills they learn in the classroom and from textbooks. These include problem solving, investigation, analysis, interviewing, report writing, and testifying skills. The problem is that there are limited interactive case studies available. To assist in the development of these skills students need to move from a passive role to active participation. This development can be accomplished through the use of practical, "mock", or 20-20 foresight case studies. These type of case studies let the students formulate their own direction of the case and report their findings in the forensic report and ultimately present their findings by providing expert testimony. Results will be different based on the documentation requested for their investigation, the information gathered based on the interview of witnesses and possible suspects.

To develop a wide range of interactive case studies to be used in various fraud examination and forensic accounting courses, a relationship needs to develop between academics and practitioners. Without these interactive cases, it will be difficult for students to get practical experience before they enter the workforce.

Using Brand Equity and Personality Metrics to Predict the 2016 U.S. Presidential Election

Richard J Monahan
American Public University

In this study, a multidimensional brand equity and a brand personality construct was employed to compare the brand strength of two candidates for the U.S. presidency in 2016 (i.e., Hillary Clinton and Donald Trump) among registered voters. The study was conducted to judge the predictive quality of these two metrics. Clinton scored higher than Trump on brand equity and personality but the margins were relatively slim especially with Independent voters.

"The Platinum Rule in Personal Selling - A Rule or a Myth?"

Kim Tan
California State University

The cornerstone of "The Platinum Rule" or any system for understanding how to accommodate others is adaptability. Research has discovered the use of the "The Platinum Rule" in adaptive selling where "treating others the way they want to be treated" as the new self-centered rule adopted by many successful sales professionals in their personal selling pursuits. In most high level professional selling situations, the "The Platinum Rule" is often used to create personal chemistry and productive customer relationships. Using this rule, successful sales professionals have reported having a greater understanding of what drives their customers and what it took for them to sell to their customers successfully. This study investigates the extent and practicality of the use of "The Platinum Rule" by professional sales personnel in their selling efforts. Is "The Platinum Rule" a required prescription for successful selling or just a myth?

Industry Evolution: A Case of China's Air Purifier Industry

Chuanyin Xie
University of Tampa

Air purifiers appeared in China in mid-1990s. There were only a few firms competing in this industry at that time. The industry had been too small to attract new firms for more than a decade. In 2011, heavy smog engulfed a large part of China, which triggered the interests of numerous firms, from multinational corporations to small entrepreneurial firms, in this industry. As of 2013, there were already 151 firms competing in this industry. In 2014, new entries surged, with the number of competitors reaching 556. Firms continued to enter this industry in 2015 and the number of brands reached 836. Despite the surge of entry, the air purifier penetration rate in China is still very low compared with that in developed countries, so the market seems to be huge. However, only a very limited number of firms have achieved success so far. Most competitors are struggling. Actually, nearly 20% of competitors already exited the industry in 2015. This study investigates the industry's evolution in the past two decades and how it might evolve in the future. It focuses on three key influencing factors: competition, demand, and the macro environment. Based on archival and interview data, this study suggests that the three factors influenced the industry's evolution differently in the past and their influence is likely to change as the industry continues to evolve. I argue that industry consolidation might not happen in the near future, though exits have already started.

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Teacher Candidates Sense of Efficacy in a Full-Year Student Teaching Placement

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Abstract

With more emphasis on student achievement in schools today, teacher education in universities need to meet the demand of cultivating highly effective teachers. Ensuring that teachers feel confident in their ability to teach, one university has implemented a yearlong student teaching placement. However, there is very limited research on the impact of yearlong student teaching on a teacher's' sense of efficacy. The purpose of this study was to compare the efficacy in teacher candidates placed in a yearlong student teaching placement and teacher candidates placed in a traditional one semester placement. In addition, this study examines perceptions of their efficacy in student engagement, instructional practices, and classroom management. The results of the study indicated that preservice teacher candidates in a yearlong student teaching placement were more efficacious in engaging students and managing classroom behavior than teacher candidates in a one semester placement.

Background

Preservice teachers and self-efficacy

The profession of teaching is leading the way in stressful occupations (Johnson et al., 2005). If teaching is stressful then it would make sense that preservice teachers would also experience stress in a field placement that in most cases, from our experiences, is in a school culture they don't know and with a cooperating teacher they have never met. In Bandura's (1997) study of preservice teachers, he found feelings of repeated success were helpful in managing teaching stress. Although student teaching is generally associated with positive emotions for preservice teachers (Hascher & Hagenauer, 2016; Hascher & Wepf, 2007), other emotions like "anxiety, nervousness, and worry" are also present. (Hascher & Haagenauer, 2016, p. 22). According to Graham (2006) student teaching is most important in preparing preservice teachers for the role of teaching and also for retaining teachers in the field. Preservice teachers need to feel connected and have a sense of self-efficacy for the responsibilities they face when teaching (Ryel, Bernsaushen and van Tassell, 2001). This is important because the key motivating factor that empowers preservice teachers is self-efficacy (Arnold et al,

2011). Moulding, Stewart & Dunmeyer (2014) define self-efficacy as the "teachers' belief in his or her ability to successfully perform the tasks of teaching" (p. 61) and according to many research studies, student achievement and self-efficacy are related (Guo, Piasta, Justice & Kaderavek, 2010; Woolfolk Hoy, Hoy & Davis, 2009, Shoulders & Krei, 2015). In a similar study by Tschannen-Moran and Woolfolk Hoy (2001), student achievement and motivation to learn was influenced by teachers' self-efficacy.

Preservice teachers' self-efficacy may also be compromised by where their student teaching placement occurs. One study shows that preservice teachers placed in an urban school for their student teaching experience had lower self-efficacy in classroom management and student engagement than their counterparts placed in suburban and rural locations. According to Woolfolk Hoy & Burke-Spero (2005) "teachers with a strong sense of efficacy are more enthusiastic, more open to new ideas, and more willing to use complex strategies" (as cited in Mouldings, Stewart & Dunmeyer, 2014, p.61) which is also related to student achievement.

Self-Efficacy and Teacher Mentors

In a study by Woolfolk Hoy (2005), a positive relationship was found between a preservice teacher's self-efficacy and support from their teacher mentor. Also, related to preservice teachers' self-efficacy were the amount of support and the type of guidance from the mentor teacher (Hamman et al. 2006).

Bonnie Bernard (1995) found pre-service teachers need to have opportunities for participation that are meaningful Pre-service teachers must develop strategies to maintain their enthusiasm for teaching. (He, 2009). Success of the first year teacher is linked to quality mentoring experiences. According to Ambrosetti and Dekkers (2010), mentoring usually occurs during student teaching of the pre-service education programs. Pre-service teachers placement may vary in length therefore; the types of mentoring relationships that are formed may be significantly different. According to Lai (2005) "mentoring plays an important role in enhancing novice teachers' opportunities to learn."(as cited in Ambrosetti and Dekkers, 2010, p. 44). Lave and Wenger (1991) identified a community of practice consisting of old and new members who share a common passion. New members are those members that gain valuable experience and knowledge when interacting with others and modeling older members. When we apply this practice to a student teaching, it is thought that the new members, whom we will call the pre-service teachers and the older members, whom we will call the teachers interact for a common purpose. The senior members are considered those who have gained knowledge and have more experience teaching and the new members are those students who have little to no experience teaching. Ideally, this positive social interaction between the two groups help the pre-service teachers (new members) overcome any barriers because they would have access to the teachers (seniors member) knowledge and experience; therefore lending to a positive relationship for both.

Self-Efficacy and Teacher Retention

Teachers do not come into their classroom as blank canvases but as individuals with not only hours of field experiences in their teacher education program, but also as students who come to teacher profession with a distorted view of what good teaching really is about (deJong, Mainhard, Tartwijk, Veldman, Verlop & Wubbels, 2013).

The discrepancy between what preservice teachers felt would happen their first year of teaching and what actually does happen lead to what is termed "reality shock" which results in high turnover and low retention of beginning teachers (OECD, 2005, Sinclair, 2008). Kim & Cho (2012) define reality shock for teachers as "a gap between what they learned in the teacher education programme and the reality that they may face during the first year of teaching, with respect to the work of teaching the context in which teaching will occur" (p. 68). Studies such as Ingersoll & Smith (2004) and Johnson and Birkeland (2002) suggest that new teachers with a high sense of self-efficacy will stay in the profession. According to Klassen et al. (2012) self-efficacy beliefs of preservice teachers "provide a protective shield against low commitment and teacher attrition" (p.1303). Low commitment to the teaching profession during this first year has been linked to decisions to leave the profession in the first 5 years (Rots et al. 2007). Teachers with self-efficacy would not be anxious or fear unexpected challenges because they believe they have the ability to deal with anything that comes their way (Kim & Cho, 2012). In an early study by Fuller & Brown (1975) that supports this, self-efficacy was important in teachers' first year survival in the classroom. According to Freedman and Appleman (2009), when teacher education programs provide field experiences & coursework based in urban schools preservice teachers can develop a sense of being called into the profession which is related to retention, especially in high poverty, low income schools.

Self-Efficacy and Effective Teacher Education Programs

"The necessary qualifications by which a preservice teacher will learn to become an effective teacher in the future are attained through teacher education programs" (Temiz & Topcu, 2013, p. 1435). Characteristics of teacher education programs like length of field placements and practicums, the relationship between the university and the district and the school's climate and acceptance of the preservice teacher can have an effect on their learning process and success (Hascher & Kittinger, 2014).

Chan (2003) believes that Teacher Education programs need to include how to manage stress for preservice teachers. Klassen et al. (2012) takes it a step further by adding that teacher education programs should address the following:
"(a) explicitly discuss the key types of stress (from student behavior and workload) and (b) focus on developing strategies to manage student behavior and the subsequent stress" (p. 1303). Kim & Cho (2012) believe that effective teacher education programs should prepare students to be resilient and have high self-efficacy by building successful teaching cohorts so student can share their teaching experiences and, address the issue of reality shock and how common it is on first year teachers, and

to prepare preservice teachers with extensive field experiences in school classrooms. In a study of teacher education programs by Ronfeldt, Schwartz & Jacob (2014), their findings suggest that teacher education programs "can improve teacher preparedness and persistence by increasing the amounts of practice teaching and methods coursework that they require" (p.39). In another study by Huang & Waxman (2009) their research suggests that the school where student teachers are placed is important and matters in terms of satisfaction of the student teacher and commitment to the profession. This is important because according to Ciani, Summers & Easter (2008) a supportive environment in which a preservice teacher experiences a positive teacher community may help to strengthen their self-efficacy. According to Knoblauch & Chase (2014) that even though research indicates that teacher education programs must have multiple field placements in diverse settings like high minority, high poverty, inner city schools, there is little evidence of preservice teachers' sense of self-efficacy with these additional challenges.

Yearlong Student Teaching

In the University used within this study developed a yearlong student teaching program. The yearlong student teaching program was a product of a meeting of area K-12 administrators, the teacher education department faculty, and other faculty at the university who taught prospective teacher candidates. In the meeting faculty sat with K-12 leaders and were instructed to "Dream" about the possibilities of our teacher education program. Out of that meeting came four areas that were thought to be worthy of further conversation. The four areas were: meaningful and purposeful partnerships with K-12 school districts, a year-long student teaching program, new dispositions for teacher candidates and recruitment of teachers from area high schools. In the subsequent meetings held with one superintendent and teacher education faculty, the purposeful partnerships and year-long student teaching was combined into the Teach Now: Transform Tomorrow program, a pilot program for 15 students. These students would complete a year-long student teaching program starting at the beginning of the school year for the K-12 district in one of two high-poverty, low income K-8 schools. The students were given a stipend of $465.00 from an innovative grant of $7000 from two faculty members and a loan of a Ipad to do their coursework. The students were selected based on courses needed in the semester before they student taught. The principals of the two schools interviewed the students to match them with a master teacher. Students were invited but not required to attend a 3-day new teacher workshop before school began. Five courses that most students needed were provided online and aligned to what they were doing in their student teaching classroom. One faculty and one staff member oversaw the students in their coursework and in supervising them during student teaching. The first semester students were given an extended lunch for two days a week to work on their courses. Some student had to leave during the day to take a course that was only offered at the university. The second semester students took the regular 3-hour evening course that all student teachers take.

Method

An exploratory study was conducted to compare the efficacy in teacher candidates placed in a yearlong student teaching placement and teacher candidates placed in a traditional one semester placement.

Participants

A total of 144 undergraduate teaching candidates at a mid-sized, public, NCATE accredited, university in the Midwest participated in this study. Each participant had completed the requisite teacher preparation and content area coursework, finished all field observation experiences, and participated in pre–student teaching practicum teaching in the public schools and were fully eligible to student teach. Each participant completed the survey at the end of their student teaching placement, fall and spring semesters. Teacher candidates in the one semester student teaching placement were asked to participate after completion of their student teaching in both the fall and spring semesters. Teacher candidates in the yearlong student teaching placement were asked to participate at the end of their year-long student teaching placement in the spring semester. The teacher candidates then completed the 24 question Teachers' Sense of Efficacy Scale survey along with nine demographic questions at the end of their student teaching placement. This survey was completed on the final night of their coursework before graduation during their seminar course.

Instrumentation

The Teachers' Sense of Efficacy Scale (TSES) was used as the instrument to survey teacher candidates within this survey. The survey was developed at Ohio State University by Tschannen-Moran and Hoy (2001) and is used to measure teacher attitudes towards working with students and measures the areas of student engagement, instructional practices, and classroom management.

The questions represented within this survey are designed to depict distinct areas of teaching and activities associated with teachers' work life (Tschannen-Moran & Hoy, 2001). Specifically, the questions are designed to represent essential tasks in teaching such as assessment, differentiating lessons for individual students, dealing with students with learning challenges, repairing student understanding, and encouraging student engagement and interest (Tschannen-Moran & Hoy, 2001).

The long form of TSES was used in this survey and consisted of 24 questions that used a 9-point Likert scale for the responses. The responses ranged from 1— nothing, 5—some Influence, to 7—quite a bit, and 9—a great deal. Sample question items include: To what extent can you use a variety of assessment strategies? How much can you do to control disruptive behavior in the classroom? How much can you do to get students to believe they can do well in schoolwork? Tschannen-Moran and Hoy (2001) found the reliabilities of using the TSES scale as listed in Table 1.

Table 1

Reliabilities of the Teachers' Sense of Efficacy Scale

	Long form		
	Mean	*SD*	*Alpha*
TSES (OSTES)	7.10	.94	.94
Engagement	7.30	1.10	.87
Instruction	7.30	1.10	.91
Management	6.70	1.10	.90

Limitations

The results from this study are not generalizable to the population of all preservice teacher candidates. Results can be summarized for the sample participants used within this study. Differences among states in funding, training, and teacher requirements for licenses are among the conditions that prevent the study from being widely generalizable to all other universities. A purposive sample was created by selecting one university in Indiana as a subset of the large population of all universities and teacher candidates. Once the purposive sample was selected, convenience sampling procedures were used because participating preservice teacher candidates were volunteers. Therefore, the results are generalizable only for those research participants within the selected university. The participants used within the sample only represented a very small number of the population of teacher candidates who student taught.

Surveys were used as the instrument to gather the perceptions of the teacher candidates within the study. There was not a one-size-fits-all approach to measuring the construct of self-efficacy. Surveys have limitations relative to the content of the items used. Nonresponse bias was considered on the basis that it is impossible to control for a participant's bias when taking the survey. Furthermore, despite the varied social-economic status of the population of the university surveyed, racial diversity among the population was limited.

Results

An independent samples *t* test was conducted to evaluate the impact of yearlong student teaching on the efficacy of teacher candidates in student engagement, instructional practices, and classroom management are shown in Table 2. Levene's test evaluates the assumption that the population variances for the two groups are equal. The variances are very similar and, consequently, the standard *t* test and the *t* test for unequal variances yield comparable results. Since the variances for the two groups are not different, but the sample sizes are different, the *t* value that does not assume equal variances will be reported, thereby avoiding the homogeneity of variances assumption. Teacher candidates in a yearlong student teaching placement (*M* = 7.96, *SD* = .69) reported significantly higher levels of efficacy in student engagement than teacher candidates in a one semester student teaching placement (*M* = 7.52, *SD* = .78), *t* (23.746) = -2.125, *p* = .04. The 95% confidence interval for the differences in means, ranged from [-.86189 to -.01240]. Preservice teacher candidates in a yearlong student teaching placement feel more confident in their ability to engage students than those that only had a semester long student teaching placement.

Similarly, teacher candidates in a yearlong student teaching placement (*M* = 8.18, *SD* = .47) reported significantly higher levels of efficacy in classroom management than teacher candidates in a one semester student teaching placement (*M* = 7.56, *SD* = .80), *t* (37.443) = -3.828, *p* = .00. The 95% confidence interval for the differences in means was ranged from [-.94101 to -.28981]. The yearlong teacher candidates felt very efficacious in their classroom management skills versus the one semester teacher candidates. Conversely, teacher candidates in a yearlong student teaching placement ((*M* = 7.98, *SD* = .72) and teacher candidates in a one semester student teaching placement (*M* = 7.62, *SD* = .77) showed no significant difference in their efficacy in instructional practices, *t* (22.733) = -1.683, *p* = .11. Both groups of teacher candidates felt very efficacious in their instructional practices.

Table 2

Differences in Efficacy for Teacher Candidates Based on Student Teaching Placement

Variable	Yearlong student teaching placement		One semester student teaching placement			
	M	SD	M	SD	T	d
Efficacy in student engagement	7.96	.69	7.52	.78	-2.13*	-.28*
Efficacy in instructional practices	7.98	.72	7.62	.77	-1.68	-.23
Efficacy in classroom management	8.18	.47	7.56	.80	-3.82*	-.42**

*p < .05, **p < .01.

Discussion

Results of this study suggest that teacher candidates in a yearlong student teaching placement are more efficacious in their ability to engage students and manage classroom behaviors than preservice teacher candidates in a traditional one semester placement. It could be said that this is from their extended stay in the classroom and working with highly effective cooperating teachers. Starting the school year at the beginning of the school year and working with those students throughout the year, thus leading the yearlong teacher candidates to feel very confident in their ability to manage behavior in the classroom. The yearlong teacher candidates had more time in the classroom than the one semester teacher candidates, therefore; they may feel they have learned how to engage students and thus feel more confident in doing so.

Moreover, both groups of preservice teacher candidates have a strong sense of efficacy in their ability to use effective instructional practices in the classroom. Not only do preservice teacher candidates report a higher sense of efficacy, preservice teacher candidates that participated in a yearlong student teaching placement *perceive themselves* more prepared to teach; therefore, ultimately providing school districts with new teachers that are highly efficacious in student engagement,

instructional practices, and classroom management along with a year of teaching experience in a classroom setting.

Research has shown a link between teacher efficacy and student achievement (Anderson, Greene, & Loewen, 1988; Goddard, Hoy, & Hoy, 2000; Tschannen-Moran & Barr, 2004). While these results are not a direct link to student achievement, school leaders who hire highly efficacious new teachers can hope that this leads to higher student achievement and effective teachers. In return, when school districts are hiring new, effective teachers that have a high sense of efficacy, they will recruit from higher education institutions that are cultivating these new teachers. The impact of a preservice teacher candidate, who had a yearlong student teaching placement, can be measured by employability skills. These employability skills are often associated as traits of effective teachers. Yearlong student teachers, with a high sense of efficacy in student engagement and classroom management, may be consider for employment more than their peers who did not have a yearlong student teaching placement.

The implications of this study relate to both teacher education and K-12 school districts. This study provides quantitative information about the perceptions of preservice teachers' efficacy in student engagement, instructional practices, and classroom management who are placed in a yearlong student teaching placement versus a traditional one semester placement. A higher education initiative in teacher education could be designed so that all preservice teacher candidates are placed in a yearlong student teaching placement. In addition, providing professional development opportunities in the areas of student engagement and classroom management to preservice teacher candidates could dramatically increase that teacher candidates' efficacy in those areas. Further research is necessary to determine the specific attributes of the yearlong student teaching placement that would be most effective in promoting this type of reform in higher education.

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Curriculum and Community Enterprise for the Restoration of New York Harbor with New York City Public Schools

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Research consistently shows that children who have opportunities to actively investigate natural settings and engage in problem-based learning greatly benefit from the experiences. They gain skills, interests, knowledge, aspirations, and motivation to learn more. But how can we provide these rich opportunities in densely populated urban areas where resources and access to natural areas are limited? This project will develop and test a model of curriculum and community enterprise to address that issue within the nation's largest urban school system. Middle school students will study New York harbor and the extensive watershed that empties into it, and they will conduct field research in support of restoring native oyster habitats. The project builds on the existing Billion Oyster Project, and will be implemented by a broad partnership of institutions and community resources, including Pace University, the New York City Department of Education, the Columbia University Lamont-Doherty Earth Observatory, the New York Academy of Sciences, the New York Harbor Foundation, the New York Aquarium, and others. The project focuses on an important concept in the geological, environmental, and biological sciences that typically receives inadequate attention in schools: watersheds. This project builds on and extends the Billion Oyster Project of the New York Harbor School. The project model includes five interrelated components: A teacher education curriculum, a student learning curriculum, a digital platform for project resources, an aquarium exhibit, and an afterschool STEM mentoring program. It targets middle-school students in low-income neighborhoods with high populations of English language learners and students from groups underrepresented in STEM fields and education pathways. The project will directly involve over forty schools, eighty teachers, and 8,640 students over a period of three years. A quasi-experimental, mixed-methods research plan will be used to assess the individual and collective effectiveness of the five project components. Regression analyses will be used to identify effective program aspects and assess the individual effectiveness of participation in various combinations of the five program components. Social network mapping will be used to further asses the overall "curriculum plus community" model.

Networked Learning Environments

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Abstract

In the digital age of social media, the act of learning has become transformed. In particular, the network offers unprecedented access to informal learning, to the point where the value of formal learning is being openly questioned. Informal learning can be understood as a multi-dimensional construct, and its various manifestations in networked environments carry multiple opportunities as well as very real hazards. Traditional definitions of learning and knowing are being challenged by the emergence of networked learning environments. Similarly, the skills and awareness of the learners themselves must be examined in light of the features of the new learning environment.

Introduction

In today's networked world, informal autonomous learning is emerging as a promising new paradigm in educational practice, whether we call it "self-directed learning", "self-managed learning", "personal learning environment", or even "*heutagogy*" (i.e, self-teaching: Hase & Kenyon, 2000). The new communities of learners are surpassing in quality, quantity, and sometimes usefulness the offerings of most pre-packaged institutional programs, as well as online managed learning systems using available software such as WebCT or Moodle. One reason is that all things now being easily interconnected, learners can structure their learning in much more fluid, effective and personalized ways than with any other previously known method. Further, it is now possible to join communities of learners and benefit from the power of the collective (Surowiecki, 2005). One implication is that by all expectations, educational institutions now face the same threat of redundancy as newspapers, and roughly for the same reasons, namely that networked alternatives to learning provide superior value, and at a lesser cost. (Shirky, 2008; Siemens, 2008; Brown, 2000; Kvavik, 2005; Oblinger & Oblinger, 2005).

However, the notion of "value" of learning carries various meanings (Kop & Bouchard, 2011). For example, one can attach value to increased happiness and well-being, or the actual things one can accomplish thanks to the new knowledge one has acquired (and perhaps the income that it generates). On the other hand, one can also be tied to the necessity of obtaining formal schooling credentials, without which no real benefit can be derived from the learning, economically speaking. Here lies the foundation of the current struggle between formal and informal learning. This struggle is as ancient as Aristotle, but it is now growing to new proportions with the advent of open and accessible learning networks.

The battlefield for control over the learning environment is the network itself (Mejias, 2009). On the one hand, the appeal of the new interconnected environment is that it constitutes a vast horizon of opportunities for learners, independently of any kind of hierarchy or authority. On the

other hand, the network creates opportunities for extreme concentration of power and control into the hands of very few (McSherry, 2001; Castells, 2011) and this is the Achilles' heel of the World Wide Web. The question here is not so much who will emerge victorious from this tug-of-war (the current power concentration on the web leaves little doubt as to *that* outcome), but rather this: how can informal learning be revitalized so that persons, in their networked learning communities, benefit fully from an open and free learning environment?

Informal learning

Informal learning is poised to challenge the legitimacy and usefulness of traditional learning institutions. This change is largely social-political in nature, and does not represent a quantitative shift by any measure. In fact, informal learning has always constituted the bulk of learning activities throughout a person's life, from birth to old age (Marsick & Watkins, 1990; Eraut, 2004). What is emerging today however, is the questioning of the role of formal institutions in light of the growth of online informal learning. While it is largely recognized that institutions play a crucial role in credentialing acquired knowledge, the question is: what other usefulness can they bring in a world of networked knowledge and freely shared expertise?

It is apparent that informal learning is growing in importance in the new environment. However, little has been done to provide a theoretical view of informal learning itself, and in particular on its relation to networked learning.

A first observation is that informal learning can be defined as any learning that is *not* formal or... non-formal. Formal learning refers to the accumulation of a sequence of credentials from hierarchically structured learning institutions. This includes schools and colleges, but also trade schools and the growing sector of technical credentialing (e.g., certified software technicians). Non-formal learning, on the other hand, includes all forms of organized learning that does not lead to an academic or technical credential. It covers diverse activities such as tennis lessons or boy scout meetings, as well as many instances of workplace training. Some loosely organized learning networks such as MOOCs (Massive Open Online Courses) can be placed in this category. Also, much of the primary schooling offered in developing countries is considered non-formal, since it is often given by volunteer instructors without government supervision or accreditation.

Informal learning, by contrast, is what is left after formal and non-formal have been considered, and it is an integral part of almost all of human experience. It comes from what we do in our everyday lives, and it is linked to our ongoing concrete existence. Obviously, formal and non-formal learning do not constitute the entirety of the human learning experience, and informal learning accounts for a good part of it. We learn every day from life occurrences, from our own curiosity and explorations, and from each other, and sometimes without even realizing it. Schugurensky (2000) proposed that there are three types of informal learning: 1) self-directed learning; 2) incidental learning; and 3) socialization. When this typology was first published, opportunities for learning had not yet been opened to networked interactivity, data sharing and mining. The question is, has the networked learning environment changed the nature of informal learning, and does it change our understanding

of it?

The first type of informal learning - self-directed learning - enables individuals and groups to intentionally devise ways to acquire some specific knowledge or skills using methods and tools at their disposal. Thus, the *intention* to learn is a first feature of self-direction in learning. Some authors have pointed out that SDL must also include the learner's own *initiative* (Candy, 1991), as a distinct concept from intention. Based on this criterion, many instances of so-called self-managed learning are lacking the initial participation of the learner. For example, many forms of workplace learning require that employees conform to defined learning objectives, and subsequently are left to themselves to find the means of doing so. While the learners display the intention to learn, it is not always at their own initiative.

Another feature of self-directed learning is that many of the tasks normally devolved to a teacher are left to the learners. Teachers typically set learning goals, select the sequence of learning events, establish their pacing in time, and choose the materials the learners will need. In a self-directed environment, these "teaching tasks" become the responsibility of the learner. Early research in SDL showed that while some learners report that they have successfully accomplished these tasks (Tough, 1965), a good number describe their learning as much more fluid, unplanned, and "environmentally determined" (Spear & Mocker, 1984). It is expected that this is a feature of informal learning that will be boosted in networked learning environments, where knowledge is built in communities of learners that are not subjected to an imposed curriculum or a designed method. It is one of the features of networked learning that radically sets it apart from other forms of learning.

The second form of informal learning - incidental learning - illustrates that persons often learn things without setting out to learn in the first place. This is one feature of incidental learning: it is not directly linked to the intention of the learner. This type of informal learning literally permeates our lives and is prevalent in almost all networked activity. We visit a page or a blog and we learn something new, whether we attribute value to it or not. Sometimes it takes the form of dialog and involves persons learning from each others' perspectives. It can also be the result of carefully orchestrated messages placed along the path of directly or indirectly related content. In this case, the incidental learning is not so incidental.

Incidental learning carries the possibility of being *incremental*, when new knowledge is juxtaposed, or "added on" to pre-existing notions in a process described as scaffolding in constructivist learning theory (Boud & Middleton, 2003). Since it is unintentional, and therefore unpredictable, incidental learning can also be *transformative* in the sense that an entirely new perspective can be acquired, resulting in an important paradigm shift for the learner (Mezirow & Taylor, 2009; Fisher-Yoshida, 2009). However, the chances of transformative learning occurring as a result of networked interaction is reduced by the fact that people tend to aggregate in forums that confirm or support their world-view. It is a feature of networks that they foster a form of close- knit tribalism that encourages adherence to self- proclaimed truths (Norris, 2001; Barabási, 2003). There is currently a movement to devise ways to automate serendipity in Web-based recommenders, as a means of counteracting the "clan" effect (André *et al.*, 2009).

While both self-directed learning and incidental learning in some measure find their way into the learner's own awareness, socialization is a type of learning that often is not conscious at all (Schugurensky, 2000). There is some controversy however in this assertion which originates in the difficulty of defining scientifically the concept "unconscious" (Shanks & St- John, 2010; McLaughlin, 1990). For now, let us refer to the term as meaning any acquired perspective that goes unquestioned and unnoticed. All persons are socialized to develop a particular world-view that is shared in their environment. The food we eat, the clothes we wear and our opinions of others are conditioned throughout our lives by what we believe are normal standards in the community of which we are part. These unquestioned assumptions account at the same time for the homogeneity of beliefs within communities, and the diversity of beliefs between each of them. Networked learning follows a similar pattern. On the one hand, it tends to blur the distinction between community members and non-members, since anyone with a computer can join in the communication, while on the other hand it risks enabling communities of like-minded people to develop self-perpetuating, unchallenged discourses that are shared among themselves and never confronted to alternate points of view. In this way, serendipity as a useful and perhaps essential component to any learning, is compromised in networked environments.

Another important aspect of learning by socialization is that while it is neither intentional nor conscious on the part of the learner, it can easily be intentional and conscious on the part of someone else (Seitz & Dinse, 2007). It is a well-known fact that by carefully manipulating people's cognitive and affective environment, it is possible to subliminally instill in them beliefs, aspirations and behaviors that would not have come about otherwise (Bernays, 1928: 1965; Bernays, 1961). This principle is the central tenet of the advertisement industry, which
has become the most important motor behind Web development. It is safe to say that subliminally acquired learning is not about to disappear from our networked environments.

Redefining Learning
Throughout history, there has been recurring relationship between new technologies and learning theories, in that the former usually inform the latter to some degree. For example Friesen (2009, p. 72) reminds us that "in different historical periods, different technologies – such as the clock, camera, and the computer – have provided powerful ways of understanding the mind", and that "the history of memory is a little like a tour of the depositories of technology museum (from Draaisma, 2000)". Here, we could add that there is much to be said about visual memory being "discovered" alongside the daguerreotype, and the behavioral "feedback loops" emerging just after the two-way telegraph. Similarly, Pribram's (1971) "holonomic brain theory", which describes human memory as holistically rather than neurally situated, was a contemporary of mathematical research on fractals and holograms. Friesen further quotes Gergen & Gigerenzer (2000) who observe that "it is only *after* the computer became entrenched in everyday laboratory routine that a broad acceptance of the view of mind as a computer followed".

So far, the mind-as-computer metaphor has known three distinct incarnations. First, around

1960, the unheard-of memory storage capacity of even the most primitive computers struck our collective imagination, and textbooks began using expressions such as the human brain's capacity for information "storage and retrieval" (i.e. computer-as-memory). Then, with the advent of powerful database software, we saw the emergence "information processing" (computer-as-organized-mind). Then, procedural programming trees gave us brain "mapping" and cognitive "schemata" which quickly became textbook fare (computer-as-cognition). And today, with the interconnectedness made possible by Web 2.0 and social media, the third metaphor enabled by connectivity is, "computer-as-society".

One of the most interesting things about these developments of new communication technologies throughout history, is that they have repeatedly challenged us to redefine what we mean by knowing and learning. Today we are faced with fluid knowledge being constructed in networked environments that know no boundaries of space, time, or connectivity. This has been said to re-define the very relationship of individuals with their own knowledge, since there is no need in a connected world to actually use our minds and brains to 'store' information and ideas, as these are as easily retrieved on line as in our heads. This is what prompted Siemens (2010) to launch the somewhat quirky idea of "external knowledge". Even without going as far as to say that knowledge now resides "outside" of humans, it is still evident that with the kind of infinite information that search engines make available at our fingertips, our relationship with "how we know" has been basically transformed.

In fact, the emerging learning theory of Connectivism does not hesitate to compare the functions of networked information on the Web with the functions of neural cells in our brains. Just as the Internet is depicted as holistic linking of boundless connections on the Web, our own brains can be seen as a similar kind of network. The new learning theory posits that network theory enables us to better understand human learning, and also that the very *act* of learning is transformed by virtue of our connectedness. Therefore, the act of learning needs to be understood as an act of networking.

Nevertheless, networks are not to be construed as omniscient depositories of infinite knowledge, but rather as the space where understanding is constructed through our interaction with a world of fluid and infinite possibilities.

We do not consume knowledge as a passive entity that remains unchanged as it moves through our world and our work. We dance and court the knowledge of others—in ways the original creators did not intend. We make it ours, and in so doing, diminish the prominence of the originator (Siemens, 2005, p. 49).

In other words, if they are to be applied to self-managed learning, knowledge networks must be approached with an already well-developed notion of what it means to learn and to know, accompanied by a reflection on the relationship between the knower and the 'weak ties' that comprise the learning environment.

Network limitations

Each type of information sharing technology presents some inherent features that distinguish it from all others. For example, video does not allow for learner-interaction, informal chat-rooms do not lend themselves to extended exposés, while asynchronous weblogs lack in spontaneity, etc. So we might ask, what are the inherent features and limitations of networked learning?

It is tempting to answer that since the Web is truly multi-media, it must share all the strengths of each medium, thereby enabling each of them to cancel out the other's limitations. While this is true of first-degree multi-media applications such as text, audio-video and synchronous /asynchronous correspondence, some features of networks transcend the particulars of any single medium. The interconnectedness of all objects and all people – what is most often called P2P networking or Web 2.0 – presents some inherent characteristics and limitations, which learners should be aware of, lest they expose themselves to the perils of disinformation, inaccuracy, or superstition.

This is one reason that Selwyn (2009) admonished that we should "challenge the orthodoxy within the education community that Internet connectivity is somehow leading to new and improved forms of education". More specifically, the access to unlimited and unfiltered sources of information requires new definitions of what it means to learn, and what it means to know. Learners in many contexts are turning to the interactive Web as an important learning resource. One assumption is that the degree of familiarity of the learners with the intricacies of networked learning will to a large extent influence the quality and the outcomes of their learning endeavors. But will it?

How we are 'linked' together on the Web is quite different from how we are 'linked' in the real world. While I can say for example, as most people can, that I maintain a committed and empathic relationship with relatively few persons (family, friends, colleagues), it is equally true that because of my computer network connection, I am routinely linked, on a daily basis, to literally hundreds of persons, organizations, and materials. While my few "strong ties" are valuable to me on a personal basis, it is on the strength of my "weak ties" that I build my understanding of the world each day (Granovetter, 1973). The interconnectedness of the network provides the possibility of reaching out to, and to be reached by a quasi-infinite number of persons and pieces of information.

A network can be understood as the potential linking of nodes in any possible – indeed an infinite – combination between them. This means that on the network, "the distance between two nodes – regardless of their physical location – is practically zero" (Mejias, 2007, p.2). One mathematical property of large networks, is that a purposeful connection between two nodes, no matter how distant they may appear, only requires a small number of steps. This is what has been called "Six degrees of separation" referring to the idea that everyone is on average approximately six steps away from any other person in the world, or from any node on the network. For that reason, regardless of its size or the number of its nodes, a flat network is also a "scale-free" network.

This feature, the flatness of the network, or its property of offering the same connectivity to any two of its nodes, enables the "random" feature of networks (Barabási, 2003). However, while it is true theoretically that networks can be randomly connected, in practice nodes are almost always intentionally seeking their connections, rather than being directed at random. This makes the

network vulnerable to several drawbacks.

This description of network interactivity depicts some kind of ideal democratic environment that provides endless possibilities for interconnectedness and ultimately can be seen as a revolution in access to materials and persons, and a quantum leap for self-directed learning, in particular. This is all true, but only to a certain extent.

There are some limitations to this scenario, and it is important that networked knowledge seekers understand them. Since networks are not born from some kind of big bang, but they grow slowly over time, each new node that appears on the network will tend to aggregate to those nodes that already have the most connections. In this way, strongly connected "hubs" are reinforced, while weaker nodes are increasingly left in the background. This is reminiscent of the Pareto law in economics, also called the 80-20 law, which explains how for example 80 percent of the world's wealth is owned by 20 percent of individuals. A more recent mathematical explanation of the unexpected co-existence of very rare, extremely large events, along with the more usual existence of average events, but which cannot be accounted in a probabilistic bell-curve, is called the "power law" 22.(Barabási, 2003). As Jones (2004) wrote it, Scale-free networks show a degree of organization, in particular they display a power-law distribution. Those nodes with only a few links are numerous, but a few nodes have a very large number of links. (p. 86)

It becomes clear that some natural laws of tendency apply to networks just as they apply to the worlds of politics and commerce, and probably affect them in a more profound manner, as networks rise and collapse very quickly, thus circumventing many of the checks and balances found in "real-life" economics.

As such networked learning is part of a hegemonic discourse not simply in educational terms but as part of wider debates concerning the nature of social processes, power and culture. (Jones, 2004, p. 87)

In the information network, the new currency is the attention of the information seekers. This gives rise to an "economics of attention" (Hagel, 2006), where the perceived relevancy of an object largely outweighs its actual informational value. In this environment, "stuff" tends to recede in importance as "fluff" increases in importance (Lanham, 2006).

A study of learners

Regardless of their previous experiences, each person entertains specific ideas about the nature of truth, knowledge and learning. In some interesting experiments, Perry (1970) found that college students hold four different sets of assumptions regarding the validity of knowledge: dualism, multiplicity, relativism and commitment. Young people start out believing that everything is either "true" or false", and as they evolve in maturity, they construct more complex assumptions about what criteria they should employ to estimate the validity of propositions. In a self-directed environment such as the Web, learners run the risk of overlooking the richness of dialectical views if they have not reached some higher point in their epistemic development.

Another feature of the new unbounded connectivity is the deep-rooted anthropological fact

that people seek relations with those that they perceive as trustworthy. The problem with this tendency, is that trust is often built on superficialities such as personal identification with like-minded or similar-looking persons, and this in turn is not likely to procure diversity of point of view. As one author admonishes, rather than shunning the unfamiliar, we should in fact seek it out at every opportunity:

The moderating influence of diversity is not prominent when we can shape our dialogue spaces to suit our views. Accidental diversity must now give way to intentional diversity (Siemens, 2006).

This "fetish of familiarity" is a basic instinct shared by all of humanity. It is at the root of what Sen (2007) calls the "illusion of destiny" in the sense that human identity is normally understood as something shared with others of "similar" ascent or construct. On the network, it not only acts as a firewall against impinging competing views, it can also carry the threat of outright deceit or agression. It is not rare, in fact, that strangers present themselves on the network as colleagues or friends-of-friends with the purposeful goal of harming others. We should be reminded that

> ... this fetish for the familiar is fundamentally tribal and resistant to diversification. A
> network of trust is the real invisible hand behind every act of deceit, fraud and
> betrayal. (Stephenson, 2004, p.40)

Beyond the epistemic and the social growth that are required in order to effectively engage in online learning, a number of "multiliteracies" need to be developed throughout one's lifetime (Street, 2009). Online environments offer more than large amounts of information. They also offer entirely new semiotics and communication pragmatics. For example, hypertext does not provide a relatively fixed and linear meaning in the same way as text does. Depending on how they are used by the learner, hyperlinks can enhance an original text, or on the contrary spoil or damage it for its user. Hypertext can be seen as a series of useful additions to an original item, or on the contrary as a mish-mash of poorly organized data. It can also appear as an indicator of the credibility of the information found on a Web page, inasmuch as the reader can assess the credibility of the hyperlinked material, as well as the original author's intention in including them.

In a survey of required skills for effective online learning, Pegrum (2011) identified no less than 14 different types of literacies: text, hypertext, media, technical, search, tagging, filtering, attention, presence, networking, participation, attention, remixing and intercultural. These sets of skills require that the learner be aware of the evolving relationship between traditional media and Web media, master the complex skills for successful aggregating, and develop strategies to avoid familiar Web pitfalls such as disinformation and data overload. Furthermore, networked learning is best understood as a participation in a community of weak ties. It is not a passive endeavor and is not limited to consuming information. The network offers the possibility of actively contributing to the ongoing, collective building of knowledge and understanding, and of "remixing" in new and creative forms the information that was aggregated. This feature is perhaps what distinguishes the network best from all other learning environments.

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Building Collaborative Relationships with Parents: Online Professional Development for Rural K-12 Teachers

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The importance of supporting students through engagement with families is well document. However, there is little literature focused on technology-supported professional development aimed at building collaborative relationships with parents of students with disabilities. The topic deserves more attention, particularly in rural areas where professional development needs are high but resources limited. Technology has reshaped professional development by increasing access to information, enabling sustained follow-up efforts, and fostering teacher reflection and collaboration. This study examined the perceptions and attitudes of educators and principals toward collaborating with parents of children with disabilities. Utilizing a digital documentary and online curriculum for professional development, educators were provided an innovative approach that enabled them to develop collaborative partnerships with parents. Contained in the digital documentary were the stories told by families about the joys and the dynamics of raising a child with a disability. Parents and their families were provided the opportunity to recognize the power of their stories about their experiences of raising a child with a disability. Educators learned from parents to broaden their perspective by listening to families' stories and in doing so, appreciate the need to form empathy and value the importance of communication and collaboration with parents. Results from this study indicated that teachers and principals who participated in the online professional development project showed an increased recognition of the importance of collaborating with families. Access to the online documentary and accompanying curriculum is available for educational purposes to schools districts interested in delivering professional development.

The Post-Participation Impact of Consulting-Based Action Learning Projects: A Ten Year Program Review

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Since 2005, the educator/researcher has been facilitating consulting-based action learning courses in conjunction with EdVenture Partners. These real-world courses focus on real world problems from real world client, and projects provide real world solutions that are researched, tested and reported. Approximately 250 students have participated in the highly selective courses. Major goals for the course include development of skills and learning in project management, communication, problem solving, decision making, teamwork and leadership. The researcher is gathering data on the post participation impact of the programs. Research design is both structured and exploratory. Data gathering will be done on three levels: through a survey sent to all prior participants, through focus groups and through conversation and feedback at a networking reception. Data will be gathered between February and June 2016. It will then be analyzed qualitatively for themes and patterns, as well as statistical results. A draft of the initial survey, including a client listing, appears below. Two focus groups will be conducted, one with older alumni, and one with younger alumni.

Research questions include:

1. How was the experience applied in a graduate's post participation career?
2. How did the experience affect a participant's career readiness and choices?
3. How did the experience compliment classroom learning and other experiential activity learning, such as internships?

This study will help curriculum revisions for the course, recruitment of both students and clients, benchmarking for other consulting-based courses, and evidence for overall program impact and success for future grants and funding. It also has potential impact on institutional advancement for fund raising and alumni involvement. Analysis will be done, results and conclusions drawn and documentation written over the summer 2016.

Is Online The Way to Go for Developing Countries?

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Adugna Workneh

E-learning is here to stay in the developed countries. In the past decade, more and more people are preferring E-learning over live classes. Many research including this one, indicate that a very well organized E-learning has a lot to offer. Respondents emphasize that online courses provide them opportunities for self-paced learning as well as more flexibility. Some respondents value the fact that online education enable them to work on discussion questions, assignments and quizzes ahead of time; they do not need to wait until assignments are available by the teacher. For those who made the efforts to drive hours to get to their colleges, e-learning,undoubtedly, help them save money on travel, gas and time. For parents who juggle life, career and education, the ability to work on courses late in evening or very early in the mornings and the capacity to still have a job and family is a dream come true. E-courses could be improved if there is consistency in teacher and student interaction, consistency in course shells, and if instructors diligently respond to emails and address students' concerns. It is essential for the instructors to be available and be responsive to inquiries within the class. Assignment instructions need to be explicit and due dates need to be clear. Rubrics are tremendously helpful, if enough time is dedicated to create a comprehensive sort of rubric. Since the bulk of the communication occurs online, professors need to be particularly careful to encourage student questions and avoid belittling or becoming impatient with students. In the absence of body language and facial expression, E-learning could be ineffective. Education courses always point out the need for teachers to vary presentation styles, and not cramming too much information in a small amount of time, and provide ample time for questioning. The respondents emphasized that the best E-courses are those in which a professor understands that he/she is instructing a class full of students who are not tech savvy and have the access to technology.

The paramount question is: Is E-learning essential for developing countries? This qualitative research paper investigates the need for e-learning at Addis Ababa University, Ethiopia. Ethiopia is one of the developing countries where access to Internet cannot be taken for granted. For most part, the teachers and the students are not technology savvy. Nonetheless, getting on the new e-learning bandwagon has been the talking point for sometime in most higher education institutions. Consequently, a survey was conducted on 90 students, faculty and staff at Addis Ababa University to investigate the needs and perceptions of the students, faculty and staff of Addis Ababa University. A qualitative research method was used to analyze the data. It seems that there is a huge interest in e-learning at Addis Ababa University. The respondents have indicated that some of the benefits of e-learning include convenience, capacity to reach large number of users, addressing the needs of fresh graduates who need on the job training, addressing the professional needs of trained personnel, in a short period of time, as well as the opportunity to get expatriate faculty who could teach online courses on part time bases. The research findings also indicate that there is a huge deficit in technological

capacity of Addis Ababa University since its technological capacity is not strong enough to run a smooth e-learning program.

The Ground on Which We Stand: Finding of "Teacher Voice"

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Tanya Coffelt
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This presentation explores how the impact of measuring candidate dispositions has interfered with teacher preparation programs' capacity to facilitate development of candidates' authentic "teacher voice". Presenters will discuss program practices that challenge and promote the organic process of teacher formation.

This study examines the obstacles teacher preparation programs must confront in the implementation of the promising practice of teacher formation. The presentation will be conducted by two presenters and will be interactive. Participants will, in effect, become a part of the extended research as the presenters gather their ideas. After framing the dilemma, the presenters will involve the audience in examining the critical question of the formation of teacher identity and integrity. Presenters will facilitate a discussion regarding effective strategies for overcoming the obstacles that have collectively led us to a place where it is quite likely that the "teacher voice" we have taught candidates to harness in the classroom is drowning out their (and our own) inner "teacher voices". This is an on-going action research project that over a three year period has led us to the question, "have teacher preparation programs been challenged to suspend the moral dimensions of teacher development?" The research began with the study of "apprenticeship of observation" and the influence that collective faculty have on teacher education candidates' dispositional development. We then expanded the research question to examine not only the "how" we assess dispositions but questioned the "what" in determining how they are defined as well as the "why" the prescribed dispositions are determiners of the effectiveness of a teacher in the classroom. We extended the study even further to ask the ethical question of whether we, teacher preparation faculty, "walk the walk" -- thusly exploring the ethical dimensions and pursuing the possibility that we are holding our students to a different standard than ourselves.

Student Assessment in Our Multi Cultural Classrooms

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Traditional methods for identifying and rewarding student performance based on specific cultural norms is both unrealistic and unfair to our increasingly diverse student population. In an effort to recognize multiple "norms" for student success, I did research in the area of student feedback within diverse work teams. It was my goal to recognize unique skills and qualities that have not historically been benchmarks for performance.

Over the course of three terms, Junior and Senior level students in one section of an Organizational Behavior class were asked to assess peer performance in three specific areas: Character, Interpersonal Skills, and Motivation/Leadership. Specific skills within these areas such as listening, patience, and conflict resolution were given as prompts. The control groups consisted of sections of the same class, taught in the same term, by the same instructor. These students were given the traditional peer evaluation forms, addressing areas such as meeting attendance and communication.

The results went far beyond my hopes and expectations. Students in the test groups consistently indicated that they had experienced the best work team environment of their academic career and reported that contributions by all members were both valued and necessary for success. They overwhelmingly indicated that they would like to work with these peers again in the future. The same was not true for the control groups.

This study allows us to see growth in students' performance through their awareness of the value of diversity.

Supports and Experiences that Contribute to Effective Teaching as Identified County Teachers of the Year

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Since the year 2000, over 90 alumni from the National University Sanford College of Education have been recognized as County Teachers of the Year in California. The purpose of this study is to discover from the perceptions of this population, what experiences and supports at different stages of their career continuum led them to be a effective teachers.

The study uses a web-based survey and focus groups to gather data. Responses are confidential and data aggregated. Data will be analyzed using descriptive statistics and qualitative analysis. The study is currently underway, and will be completed prior to presentation at the International Academic Research Conference in October 2016.

The findings will have implications for strengthening teacher preparation programs at both the initial and advanced levels. Findings will also inform how universities may be able to better support practicing teachers during progressive stages of their teaching careers.

Transforming Higher Education: Applying the Degree Qualification Profile to a Homeland Security and Emergency Management Program

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Given the recent attention toward accountability in higher education, the challenge facing colleges and universities is developing a common set of competencies that will make graduates competitive in their employment and that are easily understood. Historically, higher education has defined these requirements in their own terms often through learning outcomes specific to a course, degree or discipline. The Lumina Foundation's Degree Qualification Profile (DQP) is one way to accomplish this through five learning competencies. This paper will discuss how the DQP has been applied to two degree programs to help better define the five learning areas and meaning of the degrees. The research will discuss how the programs identified and categorized the five learning areas and used them for continuous improvement.

Communication in Cyberspace – Promotion of Best Practice

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According to the Pew Report "Digital Divides 2016," digital divides now involve digital skills and readiness. As a part of a state mandated core curriculum update a previously required computer literacy course was eliminated from the core. This course elimination placed at a disadvantage freshman and sophomore students who were not computer savvy and did not have the computer skills and readiness necessary to succeed in college. To address this disparity, the authors devised two new courses that would embed computer literacy and readiness within the context of communication. Each course was offered as an option to fulfill a Component Area Option of the core curriculum at a 4-year public urban university in Texas. One of the courses, Communication in the Age of the Internet, was developed for freshman students; and the other course, Going Virtual: Communication in Cyberspace, was devised for sophomore transfer students who had not yet completed their core curriculum requirements. Both courses were taught by the Information Systems faculty.   The content of these courses were a combination of four major topic areas -- computer literacy, skills for success, general communication conventions, and effective communication using Internet and various technologies. Students enrolled in these courses gained the necessary computer skills to perform various tasks including using Internet to conduct research and use computer tools for data analysis and reporting while effectively communicating with their teammates and other audiences in cyberspace. This paper reviews course contents, teaching pedagogies, and best practices that have made these courses successful.

Effective Kindergarten Readiness: What about Collaborative Preschool Interventions?

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Dr. Julie Hentges, Associate Professor, University of Central, MO (UCM) is a certified teacher and a certified K-12 reading specialist in Missouri. Dr. Hentges holds a Bachelor's and Master's degree in Education as well as an earned Doctorate with an emphasis in teacher education. She has worked as an educational consultant for a state reading initiative providing literacy instruction and intervention services to support teachers across the state of Missouri. This is Dr. Hentges' ninth year at the University of Central Missouri as an undergraduate and graduate level instructor. Julie has presented at state and national conventions to offer best practice instruction to accelerate student engagement and achievement.

Dr. Nancy Montgomery, Associate Professor, University of Central, MO (UCM) earned a Bachelor of Science and Master of Science in speech-language pathology. She earned her PhD from the University of Kansas. She has worked as part of an interdisciplinary team member and in private practice providing speech and language evaluations and services for children preschool through school age. She taught for nine years at the University level, teaching in the areas of articulation, language and literacy, and hearing loss, as well as supervising many graduate research projects. She has also previously worked as a clinical supervisor for undergraduate and graduate students. Nancy has presented at many state and national conventions.

Abstract

The focus for this research is to answer the question: Effective Kindergarten readiness: what about collaborative preschool interventions? Notably, researchers (Gunn, Vadasy, Smolkowski, 2011) recommend young children should be prepared for Kindergarten through Pre-Kindergarten type settings. Language and literacy support at an early age can influence the child's success in

Kindergarten. Specifically, researchers recommend (2011) children in a Pre-Kindergarten literacy program should be provided with rich, hands-on activities learning opportunities. Admittedly, the organizers of this project acknowledged the importance for stakeholders who work with preschool students to engage in a collaborative service learning project. The purpose of this research was to determine the perceived impact of these intervention sessions. After the sessions, research participants reflected on their perceptions of the influence of the collaborative opportunities with responses to a question type survey. This summary will present research findings of perceived effective interventions with a preschool partnership initiative.

Keywords: Collaborative, preschool, interventions

Introduction

Many educators agree early childhood intervention helps to support preschool learners. During a collaborative initiative between the University of Central Missouri undergraduate and graduate students, preschool parents, and teachers/faculty of preschool students, stakeholders worked with preschool students to appreciate literacy and language opportunities. During these service learning opportunities, research participants were asked to reflect and respond about their perceptions on an open ended question survey. Purposely, for the focus of this article, the researchers studied the perceived impact of a collaborative initiative to determine a perceived impact on early learners' Kindergarten readiness.

Literature Review

Research reveals children in a pre-kindergarten literacy program should be provided with hands-on engaging activities. These opportunities should promote rich vocabulary and language development (Gunn, et. al, 2011). Just importantly, reading and writing should be addressed in the early years. Lonigan and Shanahan suggest, "reading and writing are developed in the years from birth to age 5". These early learners should have the opportunity to engage in activities so they can start to make connections with early learning literacy skills (2009).

Parents are an important component to students' success (Hara, Burke, 1998). Due to this point, they are considered to be strong advocates and stakeholders in students' academic success. When stakeholders are included in the process to promote student learning, researchers (Lonigan and Shanahan, 2009) recommend the focus should be on professional development to enhance any collaborative initiative toward enriching academic success for young learners. Essential to an early learner's success is his/her ability to observe and grasp an understanding of language. Vygotsky (1986) offers "the only good kind of instruction is that which marches ahead of development and leads it" (p. 188). During the early years, researchers (1998) offer, "early learners should be given opportunities to learn while parents and/or preschool teachers observe their language and literacy skills." Consequently, it is important for teachers to not only determine where the needs of the students lie, but to be there ready to offer explicit instruction that complements those needs and leads the learning process. Researchers (Justice, L. M., Kaderavek, J. N., Fan, X. Sofka, A., Hunt, A.) suggest providing preschool students with explicit print-rich environments to promote student engagement (2009). Specifically, researchers recommend (2011) children in a federally funded literacy program should be provided with rich, hands-on activities to accelerate the impact of structured learning episodes.

Methodology

At the onset of this research, the focus was to review the perceived impact of early learning interventions in a collaborative setting. An area of need in federally funded pre-school programs was identified in the authors' geographic area. Through various interactions with university and federally funded programs, it was identified that there was not a strong collaborative component with the university students, federally funded preschool personnel, and pre-school parents. Although each group organized to support the early learner, there were little to no opportunities for these groups to collaborate. As a result of this observation and feedback from the preschool staff, a service learning project was designed that would encourage adults in these children's lives to meet and work together to support the needs of these preschool students. The researchers wondered if collaborative preschool intervention opportunities could be identified and then designed activities to promote effective kindergarten readiness experiences for preschool students in other geographical areas.

Ultimately, the focus was to provide learning opportunities that would promote kindergarten readiness in a very real and authentic way. So this study was begun "with the end in mind" (Covey, 2004). Would a collaborative intervention focus provide effective kindergarten readiness opportunities? It was believed that this was a valid research focus. Partners in this process were identified in the communities and the consent to participate was obtained for this research from a local charter school, a local head start preschool, university students, and preschool teachers and/or faculty. Once the University's International Review Board (IRB) authorization was obtained, the intervention sessions could begin.

The primary method to collect the research was with an open-ended question survey during Head Start and Charter School Parent meetings and local library Saturday Stories & Slices events. Parents of preschoolers, preschool faculty, and university students were invited to these events. Questions on the survey were designed to encourage research participants an opportunity to reflect and respond on their individually perceived ideas of the service learning experience. After each session, the participants were offered an opportunity to voluntarily complete the questionnaire.

Results/Findings

Out of the representative sample of research participants, one fifth of the research study participants were preschool teachers/faculty; one fifth of the participants were university students (undergraduate & graduate); three fifths of the participants were parents of preschoolers.

Data collected during this research project included questionnaire results pertaining to the perceived impact of the early learning strategies on preparedness of Kindergarten students from federally funded preschools. The question prompts were open ended to encourage comments pertaining to the kindergarten readiness collaborative event sessions. After signed consent to participate documentation was completed, all participants were encouraged to complete the questionnaires.

Noticeable patterns evolved from the question prompt responses. Remarkably, all of the participants responded in a positive way. There was no evidence to suggest there were any type of problems identifying and supporting the needs of young leaners in the collaborative learning opportunity sessions. Additionally, strong indicators of perceived impact of success revealed effective kindergarten readiness initiative. Interestingly, there was a noticeable spike in participants'

responses to questions coded to address language learning opportunities. The following areas were perceived to yield the highest level of impact on these young learners' kindergarten preparedness: between language-learning opportunities, literacy achievement opportunities, and student engagement in the learning process for these young learners.

Specifically, the University students reported that the interactions with children and their families helped them identify ways in which they could support early language and literacy development in children and their families. The students reported that conducting the sessions as a group helped them to identify ways to incorporate parents and siblings into the learning process.

Most importantly of all, the preschool parent's responses identified an interest in having their children continue in these beneficial collaboratively organized sessions. Overall, the research participants' perceived theory on the impact of service learning opportunities as positive. The collaborative events were perceived as an effective way to promote effective kindergarten readiness.

Discussion and Summary

From the data collection process, several coded strands appeared pertaining to the questionnaire responses. There was clear evidence research study participants identified they perceived student engagement during the sessions. The participants' responses identified perceptions that these pre-school children experienced a positive learning experience. The preschool students' mood was noted as positive during the event. The results revealed a perceived notion that the reading sessions with their peers were enjoyable and engaging. Literacy learning, language experience, and student engagement were all identified as areas perceived to be the most beneficial to the preschool students' achievement.

As a result of this research, areas for future research were revealed. Future research plans include an investigation of patterns between language learning opportunities, literacy achievement opportunities, and student engagement for Kindergarten students who participated in federally funded preschool settings.

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Identification Procedures and Program Options Available for Nebraska Gifted Junior High/Middle School Students: 1990-2016

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Closing the decade of the 80s was the report publication by the Carnegie Task Force on Education of Young Adolescents, Turning Points: Preparing Youth for the 21st Century. Recommendations were geared to improve the educational experiences of middle level students, but would most greatly benefit the students who were considered at risk. Too often, the students who are overlooked are the gifted. The purpose of the study is to re-examine the Nebraska schools that were surveyed in 1990 regarding their procedures for identification and available program options for gifted middle level students. Surveys were mailed to principals in Nebraska AA accredited junior and middle schools. Only schools that provided the best educational experiences for their students were selected to receive AA accreditation. Twenty-six years later, there is no AA accreditation, but the research was replicated with the same schools, contacts and questions. Respondents from the 1990 survey were the sample of the 2016 survey. It is a qualitative study using information collected electronically. The data from the surveys are compared to identify similarities and difference for the past twenty-six years. The study is beneficial in that it will inform current practices on how districts in 2016 approach gifted education for their students and if the gifted education focus is on a curriculum commensurate with the individual student's ability.

Early College High School Achievement Outcomes in North Carolina: End of Grade and ACT Performance

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Fayetteville State University

The emphasis on improving college access for students has now become a statewide initiative including all high schools with the recent redesign of the North Carolina high school accountability model that includes scores from the ACT for college bound students and the WorkKeys® for those students contemplating attending community colleges and maintains a focus on course specific exams. This present study looked at the early college high school (ECHS) model to determine if the early college model has an effect on a measure of college readiness, as defined by improved performance on the select course specific exams and ACT.

The North Carolina school accountability model has been revised several times since its inception in 1996 (NCDPI, 2015). In its current version the new accountability model evaluates schools on the degree to which students are ready for the future and in the case of high schools whether students are either career or college ready. Key to this model is the incorporation of ACT performance benchmarks. The utilization of the ACT to gauge college readiness is supported to predict student success when coupled with high school grades, which the current accountability model substitutes for with end-of-course scores. Research suggests the NC, model that if successful could contribute to better prepared students and increase college participation.

The ECHS model in North Carolina is designed to provide students who are traditionally under-represented in post-secondary settings access to rigorous educational opportunities by supporting academic attainment in high school and beyond. The ECHSs are required to adhere to a list of principles (NCNSP, 2008). Given at least in design, North Carolina seems well positioned as a state to increase college access and the representation in higher education of minorities and child of poverty. This study used multilevel regression modeling (linear and nonlinear) on panel and cross sectional data.

RQs

1.What if any relationships exist between attending an ECHS and achievement as measured across select end-of-course (EOC) scores?

2.What if any relationships exist between attending an ECHS and achievement as measured across select ACT scores?

Mixed Model Results

The results for the four years of EOC data shows the results for the unit averaged model. Comparing odds ratios is highly problematic and no agreement currently exists comparing the coefficients across models. The effect of school attended on algebra performance is not consistent implying that the probability of passing algebra was not able to be predicted by the type of school a student attended. Middle school performance for reading and math both were positively associated with increases in the odds that a student will pass algebra. For three years Black students had a lower log odds of passing as compared to majority students (Asian and White).

Attending an ECHS increases the odds of passing. A more interesting and informative analysis occurs in 2010, when several predictor variables are significant. For Black students, attending an ECHS reduces the odds of failing such that in a EC school, Black students are more likely to pass than their traditionally prepared peers are. The effect is present for Hispanic students but at a much smaller amount. Female students have a large benefit from attending an EC. Finally, in 2010 students of poverty have greater odds of passing while attending an ECHS ceteris paribus. The influence of the EC on English performance is not consistent and many of the student centered variables are not significant predictors (fixed effects model will be run).

Biology had many significant student level variables and several significant school effects. In two of the three years the school effects change in odds for Black students is dramatic, implying that Black students attending an EC perform better as compared to their traditionally prepared peers all else being equal and the performance gap between Blacks and majority students is reduced. Female students benefit from attending an ECHS that when the school coefficient was significant, it was larger than the coefficient for female, eliminating the gender differences between males and females. Student poverty was not found to be a significant predictor of biology performance except for one year, 2009. For Hispanic students, only in 1 of 12 analyses was the coefficient found to be significant. The results show that in all six cases, students attending an ECHS had higher ACT scores as compared to their traditionally prepared peers. The greatest advantage is seen in in English where ECHS. The smallest advantage is in writing albeit still positive and significant and this test showed the fewest significant effects for student race. The influence of previous school achievement implies for students who had higher scores on their middle school assessments ACT performance is predicated to increase although small in magnitude indicating that students starting off with higher scores will on average continue to hold that advantage regardless of what high school they attend. The influence on race on ACT performance shows that in nearly all the cases, students of color perform lower than the academic majority students. In all but one case Black students show the highest achievement gap among all minorities with only for English, did another group show a greater disadvantage, that being Hispanics. Black students performed the poorest of all subgroups (writing), in fact were the only group that had a significant coefficient. The model does imply that the achievement gaps in performance are moderated some for students attending an ECHS, with in several cases that the effect for attending an ECHS was larger than the racial effect. The influence of race on achievement is present in all high schools, but larger for non-ECHS. Economically disadvantaged students attending an ECHS do better. Student gender also was seen as significant predictor in 5 of the six cases with one indicating that female students will perform lower on the ACT than their male counter parts in math. Female students do show an advantage in science. Female students have a large and significant performance advantage compared to male students in English. For this group of schools, the results suggest that students attending ECHSs exhibit greater "college readiness" than do their traditional high school peers. ECHS students showed a mixed performance advantage on the EOC but clear on the ACT. If the ACT can be a useful determinant of college readiness a view held by the State of North Carolina, then ECHSs are predicated to have a clear advantage in meeting the revised accountability standards and their students will have a marked advantage in being successful in post-secondary environments. These findings point to a more promising future for children attending ECHS as these school are predicted to attenuate several barriers facing minority and poor students in terms of college attendance. The results in this study

and others seem to support the notion that as a high school reform, the early college model is quite effective in increasing student achievement and as defined in the context of North Carolina, it produces more college ready students. If the early college model is as effective as shown by the study, either continued expansion of the program is warranted or determining those salient programmatic processes and features that yield these outcomes need to be better understood and scale up conducted to provide these opportunities to more students.

The Effective Dispositions of Northeast Arkansas Literacy Coaches

Ryan R. Kelly
Arkansas State University

This presentation explores an array of effective dispositions of literacy coaches in Northeast Arkansas. Utilizing case study methodology, this inquiry uncovered key factors at the core of their work, and further examines the nature of these "multiple hats" worn by literacy coaches in relation to current literacy coaching theory and practice.Literacy coaching is a highly collaborative task, multifaceted in nature, and works logistically toward a common vision (McKenna & Walpole, 2008; Vogt & Shearer, 2011). Literacy coaching exists among the background context of a district and its curriculum (McKenna & Walpole, 2008) and is ultimately directed at school improvement and professional development (Moxley & Taylor 2006). As a pedagogical practice, it shifted from "reading coaches" when it took on greater emphasis on teaching strategies and collaborative reflection (Dole, 2004). It is a fluid and evolving pedagogical practice, often confounded by ambiguity and conflict (Walpole & Blamey, 2008). It is a collaborative, data driven practice, which requires school leadership (Morgan & Clonts, 2008). In my own work I have noted that effective literacy coaches firmly understand the literacy program of their native school, and summon the courage to passionately step outside their comfort zone (Kelly, 2011). Ultimately, it is a practice of collaborative reflection, teacher-driven authenticity, and extended accountability (Kelly, Martin & Spillman, 2015).Stemming from a growing shift in the field of literacy coaching, this research is deeply interested the nature of this shift away from the original theoretical models of literacy coaching. The implications in this shift have significant impact on the training of literacy coaches to meet current demands placed upon them by their school districts and by current public policy. The challenge for teacher education units and advanced training programs is to be able to provide the most accurate support possible to literacy coaches and their field. Utilizing a case study approach with multiple literacy coaches in Northeast Arkansas, this research sought to examine the following questions: a) what is the authentic context of current literacy coaching in several Northeast Arkansas school districts; b) to what extent has literacy coaching practice fallen along successful lines; and c) to what extent have the realities of current literacy coaching practice pulled the work away from established theoretical aims? Data collection that this presentation will share involved multiple data sets, from semi-ethnographic observation at the research sites, to semi-structured interviews at the onset of the research, as well as concluding interviews. Initially, this research identified four key "hats" worn by these literacy coaches, representing a variety of administrative and professional tasks (e.g. that of an interventionist, administrative facilitator, designer of professional development, and program reformer). Drawing linkage to these "multiple hats," this research identifies four key dispositions of effective literacy coaches (e.g. a disposition of data, a disposition of strategic decision-making, a disposition of courage, and a disposition of professional passion). This presentation will share numerous examples of discourse data from the case study research, which supports the identification of these dispositions, as well as the linkage between the "multiple hats" they wear. The implications of this research to the preparation of professionals in the field of literacy coaching touch upon a number of areas. A more accurate understanding of the realities of literacy coaches and

their work has a direct impact on the ability to provide accurate training and professional development support. Additionally, it may impact the facilitation of professional networking and recognition, and the connection to additional resources supporting their work. Yet, ultimately, the implications point toward the improvement of schools, districts, and their many learners that literacy coaches hope to reach as they work with classroom teachers.

Cultivating Mindfulness in Teacher Candidates: A Meaningful Approach to Teaching and Learning or A Big Ol' Waste of Time?

Carol Klages
University of Houston
Jane Devick-Fry
University of Houston

Teaching carries with it a complicated mix of challenges. Some challenges are teacher turnover, accountability, changing student populations and student expectations, scripted programs, and budget pressures.

Teachers need to teach in the moment to support the artistic nature of teaching and learning by modeling calmness and peace.   Teaching students how to reach this peace is defined as "teaching mindfulness." Peaceful students with a peaceful teacher create a positive learning environment. At issue is the idea of developing mindfulness in as an aspect of teacher education programs as a means of better preparing future teachers for the challenges of the profession. Ellen Langer (1986) in her book Mindfulness discusses cognitive states of mindfulness as opposed to mindlessness. Mindfulness is a cognitive state where one would be flexible enough to be aware of the environment and situations in a classroom.

This research investigation began three years ago with researchers practicing mindfulness in their professional roles. Next was to introduce the concept to instructors in the education program. Currently, teacher candidates were introduced to mindfulness in undergraduate education courses. One course was an introduction of teaching, the second was a literacy methods course, and the third a social studies methods course. In each course, a survey was given asking every student about his/her current knowledge of mindfulness. The students engaged in mindful practice in their educational coursework, wrote reflective journal entries, and then incorporated mindful practices into mini-lessons in a field-based setting. This conference presentation will share the results of this investigation with the audience. It is significant to note that the previous two stages of this investigation have been presented at the last two CSI national conferences.

Using Skilled Dialogue to Mentor Student Teacher Supervisors

Lucinda Kramer
National University

A critical challenge in the field of special education is the development of educators who are well qualified and committed to the profession. With the ongoing support of a Clinical Practice Supervisor university programs are more likely to develop a successful teacher preparation program with a lower attrition rate (Morsink, 1982; Smith-Davis & Billingsley, 1993; Smith-Davis, Burke, & Noel, 1984). Ongoing university faculty mentoring of Clinical Practice Supervisors is, therefore, critical to meeting the highly individualized needs of candidates. This session describes a pilot study using the Skilled Dialogue Dashboard by a special education faculty member responsible for mentoring nine Clinical Practice (CP) Supervisors in a university teacher preparation program. The CP Supervisors in this program were all licensed special education teachers; four were retired special education administrators; all had at least five years of classroom experience in the credential area they were supervising. Each CP Supervisor was responsible for mentoring a university student completing either 12 weeks of student teaching or a 1-2 year teaching internship. CP Supervisors' own mentoring took place in the context of their relationship with the directing university faculty, with whom they met both formally and informally. Formal group meetings took place three times a year while less formal individual meetings were ongoing throughout their assignment.

The Skilled Dialogue Dashboard was used to address targeted mentoring areas specific to miscommunications, personality conflicts and differing ethical beliefs and practices, which posed particular challenges to the Practice Supervisors. The results of the pilot study will be presented.

Teacher Attitudes Toward Students with Disabilities

Marie Kraska
Auburn University

Melissa Sylvester
Auburn University

The problem for this research was an investigation of teachers' attitudes toward students with disabilities. The purpose of the study was to identify teacher attitudes toward students with disabilities in an elementary and secondary-level school in the southeastern United States. Legislative changes have had a great impact on the number of students with disabilities being served in the included classroom. In 2013, the National Center for Educational Statistics noted that almost 95 percent of students with disabilities were taught in regular classrooms by 2009. Thus, the increase in special populations in the included classroom caused concerns for students and teachers alike. There is a lack of information related to the attitudes of teachers toward students with disabilities. A 30-item survey form, "A Survey of Teacher Attitudes Relative to Serving Students with Disabilities," was distributed in person to 84 teachers during a staff development workshop**.** All of the teachers returned completed and usable survey forms. All survey data were anonymous. Results of the study revealed that in general, teachers' attitudes toward students with disabilities were mostly positive. Calculations of mean scores and standard deviations indicated that female teachers, older teachers, elementary-level teachers, and teachers who had received training related to teaching students with disabilities had more positive attitudes. A multiple linear regression model did not yield statistically significant results for gender, years of experience, grade level taught, extent of contact with individuals with disabilities, training about students with disabilities, and teachers' perceptions toward their own level of expertise.

Adapting to New Educational Accountability Requirements

Linda Mabry
Washington State University

Provision for public education is reserved to the states by the US Constitution but, in 1965, the Elementary and Secondary Education Act (ESEA) began to provide federal funding and oversight for educational programming in the form of entitlements, initially limited to Title 1. The federal role in public education increased in 1994 when ESEA was reauthorized as the Educate America Act, informally known as Goals 2000 in recognition of the six goals to be attained within 16 years. These goals had not been attained when ESEA was again reauthorized as the No Child Left Behind Act (NCLB) in 2002 and the federal role in education became a hostile take-over of state assessment systems. The latest reauthorization of ESEA, the Every Student Succeeds Act (ESSA) of 2015, scales back the federal incursion. But to what?This presentation will briefly review the rise of standardized testing since its arrival in education in the 1920s, showing increasing dependence over time on test scores to determine educational accountability, the raising of penalties on low-scoring students and their schools and educators, and the centralization of local education to the state and federal levels. With NCLB, high-stakes state testing requirements became high-stakes federal testing requirements that, as predicted by measurement history, no state could attain. ESSA returns the US to high-stakes state testing, similar to the 1990-2002 policy environment. ESSA's newly imposed requirements and constraints will be presented, with discussion of their predictable impact and recommendations for how schools and districts might reasonably respond and adapt.

Adding Value to Higher Education Through Study Abroad Travel

Warren Matthews
Belhaven University

People have different kinds of minds, and their minds perform and learn differently. Teaching methods that work well for some, may not work well for others. Educators have struggled to better understand the learning process so learning can be achieved by everyone. Educational benefits of travel have been widely recognized for hundreds of years. The spread of industrialization around the world has reduced cost, political, and technology barriers that limited travel in the past. World trade is exploding, and the need to understand and deal with people from other nations has never been so important. This paper presents the academic literature on learning through travel, and the necessary requirements for developing a rigorous academic study abroad experience. Most importantly, the paper demonstrates the impact that study abroad programs provide in strengthening educational value for students with different learning styles.

Using Instructional Rounds to Foster Transdisciplinary Collaboration

Linda Rae Markert
State University of New York

Quick Synopsis: The presenter will discuss the findings of an innovative pilot study she conducted regarding the use of instructional rounds in a rural high school during the entire 2015-2016 academic year. A group of transdisciplinary teachers voluntarily participated in this inquiry-focused study to initiate a thriving culture of collegiality and revitalize their own teaching strategies.

Overview of Content: The Hannibal Central School District is one of nine districts located in Oswego County, a mostly rural region of upstate Central New York. At 33%, the turnover rate of teachers, who have less than five years of experience in this district, is the highest in the county. Partially in response to this talent drain, a small group of high school teachers agreed to participate in an Instructional Rounds Pilot Study (n=6).

In education, instructional rounds have been found to be an enlightening tool for instructors who are dedicated to excellent teaching and also interested in improving their own pedagogical practices. Some school districts have attempted to require teachers to participate in instructional rounds, and these efforts have been met with varying levels of acceptance/resistance. In Hannibal, the process of conducting a series of rounds (voluntarily) over the course of several months actually served as a vehicle to develop a culture of collegiality and collaboration, and to build an esprit de corps among a group of individuals who previously had not worked together all that closely.

At Hannibal High School during 2015-16, many hours of instructional rounds were conducted primarily for the small group of teachers to visit each other to compare their own instructional practices with those demonstrated by their colleagues. They were not designed nor intended to provide feedback to the teacher who was doing the actual instruction; however, this ultimately became something everyone desired. Our sessions typically lasted 30-40 minutes [although in practice they could be more like 15-20 minutes]; when possible, the visitors tried to include a short block of time at the end of the session for all to share their notes, insights and reflections.

Instructional Rounds were scheduled and facilitated by the presenter (Markert) who has studied this process, and has hundreds of hours of experience visiting and observing faculty members across the P-16 spectrum. She acted as an objective colleague who was not in any way involved with the district's formal APPR (Annual Professional Performance Review) procedures. Although the school district recently switched rubrics from the NYSUT Teacher Practice (New York State United Teachers) to Danielson's Framework for Teaching, the team collaboratively developed its own instrument for note-taking during their visits. As we designed this tool, we deliberately avoided the use of words like observe, observer, observation, evaluate, evaluator and evaluation. We instead used the words visit, visitor and visitation to provide a clear, open-minded and non-threatening context for our investigatory work together.

Students who were studying in the classroom venues selected for instructional rounds were naturally curious about why they were suddenly being accompanied in class by their teachers from other disciplines! We therefore devised a standard method for alerting them about the scheduled visits. Teachers each explained that several of their faculty colleagues along with a college professor would occasionally be visiting because we were actively trying to learn new skills and strategies from one another, just as students do when they work together collaboratively during class.

During this presentation, insights regarding both the challenges we experienced, and the discoveries we made during this pilot study will be delineated. Several cross-disciplinary themes emerged as we collectively reviewed the many pages of notes we kept during the visitations, including: enlightened respect for creativity, uses of common vocabulary, small group vs. whole class instruction, connecting subject matter in class to students' everyday life experiences, creating opportunities for role playing, and providing authentic cases for students to solve. Most importantly, these teachers learned that instructional rounds are an incredibly powerful mechanism for improving practice and enhancing student learning across several disciplines.

At the time of this proposal (April 2016), the team is already investigating ways to expand the size of their group, maintain the frequency of their scheduled visits, and possibly move the process into the district's middle and elementary schools. The team is also going to assess the extent to which this study has: 1. actually motivated them to change their own teaching practices, 2. enhanced their ability to collaborate across their transdisciplinary classrooms, and 3. created an avenue for instructional rounds to become a systemic and sustainable model across the district. All new research findings will be summarized and included in this presentation.

Goals of the Presentation & Opportunities for Interaction:

1. Provide an avenue for discourse regarding innovative ways P-12 schools can partner with higher education colleagues to design authentic learning opportunities for diverse groups of talented teachers, allowing and enabling them to take charge of their own professional development.

2. Inform practicing P-12 educational leaders and college faculty members, about strategies that will allow them to incorporate Instructional Rounds into their own building schedules, or within the higher educational teaching venues.

3. Facilitate an interactive discussion among participants about how this pilot study can be scaled up to become sustainable across several school buildings.

Tools, Ideas & Strategies Participants Will Take Away from the Session:

1. Participants will acquire information about budgetary implications regarding the implementation of this instructional intervention across a school district.

2. Our Classroom Visitation Guide for Instructional Rounds (integrative connections focus) will be distributed to participants.

3. Brief video clips of interviews with the teachers and students will feature anecdotal comments about their experiences and observations during this pilot study.

Manpower: The Story of Male Teachers During The Vietnam War

Joseph McKinney
Ball State University

Thousands of young men became teachers during the Vietnam War. Teachers were eligible for draft deferments during most of the Vietnam War. Women were not subject to the draft. The employment deferment was most often preceeded by a student deferment. These men who became teachers during the 1960's and early 70's faced unprecedented social, political, economic and educational change. The escalating war in Vietnam, the draft and anti-war protests, sit-ins, and race riots coincided with the civil rights movement, President Johnson's War on poverty and the integration of America's public schools. My presentation is based on interviews and surveys taken by the men who began teaching during Vietnam Era. It is the story of young men coming of age forced to make decisions because of the draft, Choose a career that you really are not interested in to avoid the draft, and knowing that less privileged men would be drafted and sent to the bloody fight in Vietnam.

Preparing Master's Programs to Foster Change and Improve Teachers

Jay Meiners
Southwest Minnesota State University

In the United States, the majority of teachers have a master's degree or higher. However, there exist concerns that having an advanced degree does not make teachers better. There thus needs to be a way to improve the outcome of a master's degree in education so that teachers advance their practice and bring change to their classrooms. By focusing on the use of action research in a learning community, the intent of the present phenomenological study was to discover changes that occurred in teachers while obtaining their master's degree. Based on the extant literature, it was expected that the changes experienced by the teachers may include variations in their teaching practice, professional development, collegial relationships, and leadership roles. The results of the study confirmed these changes and highlighted the development of personal control as an essential quality of effective teachers.

Design Elements for Team Projects in the Virtual Classroom

Theresa A. Moore
Daytona State College

This presentation will identify key best practices in assignment design for online team projects for online courses. The presentation will identify key differences between designing and facilitating in person student-team assignments vs. online student teams. Presenter will highlight key learning outcomes that students will take away from the online team experiences and how to purposely write the assignment to ensure the learning outcomes will be achieved. The presentation will provide best practices for managing and facilitating student teams in the online class format and how to execute to the team assignment in the online environment.

Key Design Elements of the Team Assignment:
• Trust between the students is often a large obstacle
• Communication issues are prevalent
• Heightened feelings of stress and anxiety compared to in person teams
• Administration of the student teams is more taxing on the instructor in online teams

Key Learning Outcomes in Online Team Assignment Design:
• Online (remote access) presentation skills
• Teamwork in an online modality
• Leadership in an online modality
• Creativity
• Communication in an online modality
• Introducing and/or improving technology-based team communication skills (discussion forums, email, adobe connect)

Tips for Facilitating Online Teams:
• Clarity of assignment's purpose and deliverables
• Clearly defined instructor's role is in the team's progress and tasks
• Clear expectations of team's responsibility for all tasks and consequences if task is not fulfilled
• Dealing with invisible or non-performing team members
• Manage expectations of fairness in grading a team project

Perspectives on The Future Of Latino Leadership, Community and Commitment: Kansas City Latino Leaders Speak Out on Their Educational Preparation

Uzziel Hernandez Pecina
University of Missouri
Dea Marx
University of Missouri

Kansas City, Missouri Metropolitan area has been in the midst of a constant and rapid growth among the Latino population. The Latino community, comprised mostly of Mexican immigrants, in the Kansas City area has a long history of immigration and migration since the turn of the last century. Within the last two decades, the Latino population has grown 50.17% in Kansas City, Missouri and 129% in its sister city, Kansas City, Kansas, demonstrating a significant growth (US Census Bureau, 2000, 2010). Even Olathe, Kansas, a suburb of the sister cities, had a 5% increase among their Latino population within the last decade (U.S. Census Bureau). The U.S. Census Bureau (2015) projects Latino population growth in the Kansas City metropolitan area over the next 25 years to exceed 800% (Garcia, 2012). Fortunately, Latinos in the Kansas City metro area have demonstrated increased college attendance and completion over the past four decades, but not at a pace in comparison to Whites and Blacks (Gonzalez, 2015, U.S. Census, 2015), which points directly to the need for intentional and sustained Latino leadership development for the region.

Nationally, postsecondary college and university attendance has increased within the last decade, but college completion rates among Latinos still lag behind their Black and White collegiate peers (Fashola & Slavin, 2012; Loza, 2003; Calderon, Calder¢n, Slavin, Calderon, & Calder¢n, 2012). The Latino population (54 million) is 17% of the total US population. This is the largest ethnic or racial minority in the nation. Worldwide, only Mexico has a larger Latino population than the US. Only 13.8% of the Hispanic population 25 and older held a bachelor's degree or higher in 2012. In 2012, 23.3% of the elementary and high school students were Latino, but only 6.8% of the college students. Additionally, 35.6% of the 54 million Latino population are foreign-born. (U.S. Census Bureau, 2015). By 2060, the projected Latino population will be 128.8 million which will be 31% of the total population. With this significant growth projection, it is essential that metro and regional civic, community, and institutions of higher education, provide culturally competent, critical, and responsive systemic supports for Latino students (Gonzalez, 2014; Loza; Ortiz, 2004) promoting and sustaining the future growth of Latino leadership in the KC metro area and region.

Statement of the problem: Bodies of evidence present the need for PK-20 projected, planned, and purposeful systemic changes leading to academic success for culturally diverse underserved populations (Loza, 2003; Ross, Rouse, & Bratton, 2010; Caldron et. al., 2012). Although there has been sustained growth among local and regional Latino college attendance, studies continue to demonstrate dismal dropout and non-college completion rates among Latinos from various generations (Loza, 2013; Fashola & Slavin, 2012). This study proposes interviewing ten current intergenerational, regional Latino leaders in both public and private sectors, all with earned advanced degrees with at least five years of demonstrated sustained and successful leadership

experiences. These Latino leaders will represent first generation college attendees from both native and immigrant born populations. The authors will conduct an epistemological qualitative study of critically reflective experiences related to high school postsecondary preparation and experiences, community and/or family supports, collegiate campus and networking experiences, employment influences, mentorship, and critical reflective advice for institutions of PK-20 education as it relates to Latino leadership success (Rodriquez, Martinez, & Valle, 2015).

Theoretical framework: The authors will use Latino Critical Race Theory, Institutional Culture, and Community Cultural Wealth as frameworks to inform the direction of the study and provide the theoretical lens for the discovery of themes that the qualitative analysis will provide.

Critical Race Theory, and more specifically Latino Critical Race Theory (LatCRT) focuses on the uniqueness of the Latina/o population. This theory will be used to understand how Latino leaders negotiate through issues of racism, language barriers and acquisition, the implications of immigration status, opportunities for advancement, and outcomes for Latino leaders. LatCRT will help deepen the "understanding of Latina/o students' experiences in school by allowing for critical perspectives to emerge" (Rodríguez & Oseguera, 2015, p. 132).

Institutional Culture refers to "values, beliefs, and processes that characterize institutional life" (Rodríguez & Oseguera, 2015p. 132). The collective climate, social groups, and normative beliefs about who warrants success, including modes of communication and interactions among various people in the organization all contribute to institutional culture. In educational settings the beliefs teachers/faculty hold in regards to their responsibility to students, how students form identities, and how meaning is negotiated all contribute to the institutional culture. Simply stated, Institutional Culture is how things get done, how policies are made and the politics of the institution (Deal & Bowman, 2013; Rodriguez, Martinez, & Valle, 2015).

Community Cultural Wealth is a framework to promote the understandings of the unique assets of students through cultural values being viewed as strengths (Saladino & Martinez, 2015). This method provides deeper understanding of how students connect with the adults in their communities who believe in their chances for academic success as resources. Students use their communities to navigate through and make sense of racial, social, political, and gender issues. Community Cultural Wealth is used as a way to counter the belief systems of others who see their culture as a deterrent (Liou, Antrop-González, & Cooper, 2009). Yosso, Smith, Ceja, & Solórzano (2009) suggest this framework to gain a deeper understanding about how low income students of color "enact their information seeking behaviors by developing alternative social networks that enable their academic success." Latino students "seek out family and a sense of community to cope with a campus climate that marginalizes their experience." (Kouyoumdjian, Guzmán, Garcia, & Talavera-Bustillos, 2015).

Methodology: Authors will conduct a purposeful selection of ten metro area Latino leaders to interview using appropriate qualitative methods to gather, code, and report findings which may inform discussions and recommendations to Latino seeking postsecondary educational institutions.

Implications: Our study seeks to inform post secondary preparation and recruitment initiatives, admission and retention programs, ethnic and underrepresented college student leadership development programs, pk-12 high school officials and leadership, civic leadership, honors programs and undergraduate to faculty pipeline programs. Ultimately, the authors seek to provide recommendations for university programs seeking to recruit, retain, graduate, and launch Latino students to become successful leaders in service to a local, regional, national or global multicultural

community. Information to give university programs that will better serve and prepare Latino college students to become effective, advocates and successful leaders for the greater community. Target audience will be university who are seeking to recruit, retain, graduate and launch Latino students to become successful Latino leaders to serve a global multicultural community.

Addressing Disparities in the Health Workforce: Development and Outcomes of Two University-Based Programs

Penny A. Ralston
Florida State University

Currently, lack of diversity in the healthcare workforce continues to be a major problem in the U.S. Universities can play an important role by developing programs to address this problem. This paper highlights the curriculum-related development of two university programs at Florida State University to train undergraduate and graduate students for the health workforce, and reports on the outcomes of these programs. The mission of MEntoring Multicultural Students for the Health Professions (MEMS), established in 1993, is to increase the number of trained professionals for the health. This paper will highlight the need, course development, and outcomes for MEMS that has reached over 150 students. Secondly, the training program in the Center on Better Health and Life for Underserved Populations (BHL Center), established in 2006, includes three components: understanding the medically underserved, experience in community-based research, and development of a project of focus. This paper will highlight the courses associated with this training program and the outcomes thus far for over 40 students impacted. Lessons learned will be discussed.

The Impact of Dual Language Education on American College Test (ACT) Performance for English Language Learners

Gina Garza-Reyna
Texas A&M University

The purpose of this quantitative study was to track, compare, and analyze the college readiness of two cohorts of Hispanic English Language Learners (ELLs) by examining scores on the national college entrance exam, American College Test (ACT). One cohort was enrolled in the early-exit Transitional Bilingual (TB) Education program, while the other cohort was enrolled in the two-way Dual Language (DL) Education program. Both cohorts enrolled in the same Texas school district. The research question that guided the study was: Is there a statistically significant difference between the ACT college entrance exam of ELLs educated through a TB program and DL program in the areas of Reading and English? Descriptive and inferential statistics were run on the collected data. The results of the inferential statistics showed a statistically significant difference between the two comparison groups in the ACT examination for English and Reading. Descriptive statistics complement the inferential statistics. Over all, the results of this study support the conclusion that the DLE program participants in this study are better prepared academically than those that were educated through the TBE program. The idea of developing academically ready students for college in the U.S. is one area that researchers in the field of higher education have begun to explore more rigorously. However, even in the existing studies there is little research specifically on the Hispanic minority and their overall levels of academic college readiness; this research attempts to help fill that gap.

Teaching Thinking through Play: The Interactive Book Report

Marjorie S. Schiering
Molloy College

This interactive presentation focuses on how to teach thinking through use of teacher or student-made interactive instructional resources. The reciprocity of thinking with beginning awareness, critical and creative thinking and then meta-cognitive processes are addressed as occurring simultaneously. Learning through play is given attention through "The Interactive Book Report: Playing the Pages." Student created artifacts will be displayed and used for participants engagement in this learning strategy. The Reciprocal Thinking Phases will be explained and distributed with instructions for making interactive instructional resources being provided for a take-home to use with teaching and learning about developing thinking skills through play.

Engaging & Effective Strategies for Teaching Literacy to All Learners

Megan J. Scranton
Neumann University

Today, more than ever, it is difficult to define the "typical" student. These students vary in their strengths and weaknesses; some are gifted in their literacy abilities, others significantly struggle to learn to read and write. In addition, the statistics are clear, by 2030, more than 50% of the school-age (K-12) population in the U.S. will be English Language Learners (Herrell and Jordan, 2016). These ELLs speak more than 460 different primary languages and are extremely diverse in their experiences, cultures, and skill sets. All teachers must be responsive to each of their student's needs in addition to exhibiting extensive content knowledge and effective pedagogy grounded in engaging and research-based instructional strategies, particularly when it comes to literacy.

AN INVESTIGATION OF FACTORS CONTRIBUTING TO DISSERTATION COMPLETION: DOCTOR OF EDUCATION STUDENTS

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Abstract

Literature regarding advanced degree completion illustrates multiple factors attributing to completion or abandonment of dissertation research. Contributing factors are typically linked to the environment associated with the institution in which a doctoral candidate is enrolled, or personality characteristics held by individual candidates. The purpose of this qualitative case study was to gather data from current doctoral candidates and recent doctor of education degree graduates regarding factors that facilitated or inhibited their completion of the Ed.D., and specifically the dissertation.

Responses from participants appear to confirm findings from similar research studies exploring dissertation completion. Most participants noted primarily *personal factors* for non-completion, and *institutional factors* for completion--specifically program structure factors. In order to improve the success rate of doctoral degree completion, it was important to explore further the factors influencing completion and non-completion among candidates, including specifically examining the transition from coursework to independent (dissertation) research, sometimes reported as the most challenging part of the Ed.D. completion process.

Keywords: dissertation completion, doctoral, degree completion, environmental factors, personal factors

Introduction

In most cases, the doctoral dissertation is intended to embody a superior example of a student's ability to engage in self-directed, rigorous research. Indeed, Jones (2009) outlined the major purpose of dissertation research as a student's demonstration of his or her ability to think and write critically, develop and demonstrate research skills, and to contribute to the knowledge base of a given field. However, students often encounter numerous difficulties when engaging in dissertation research. Environmental factors, such as institutional program structure, curriculum, expectations, and communication can affect doctoral candidates' completion, as well as student-related factors (Green, 1997), such as personal attributes, demographics, motivation, and persistence (Lovitts, 2008; Spaulding & Rockinson-Szapkiw, 2012). These issues, and others, contribute to only 56.6% of doctoral students in the United States completing their degrees within ten years of enrollment in doctoral programs (Sowell, Zhang, Bell & Redd, 2008).

Literature regarding advanced degree completion illustrates multiple factors attributing to completion or abandonment of dissertation research. Contributing factors are typically linked to the environment associated with the institution in which a doctoral candidate is enrolled, or personality characteristics held by individual candidates. Examples of environmental factors include, but are not limited to: program type and structure, such as distance learning, cohort, or residential programs, curriculum, expectations, and support from program advisor or staff members (Spaulding & Rockinson-Szapkiw, 2012). Student-related factors may include personal attributes, such as intelligence, motivation, procrastination (Green, 1997), persistence, ability to balance responsibilities, and coping skills, particularly in stressful situations (Spaulding & Rockinson-Szapkiw, 2012).

Purpose

As providers of the highest level of education in the United States, doctor of education degree programs serve to produce education leaders. Educational leaders, in turn, are responsible for "the thinking and research that underlie the philosophies and theories of education, the foundations for the policies, structures, and programs of education" (D'Andrea, 2002, p. 42). When doctor of education students fail to complete the degree, consequences can extend beyond the students themselves. Doctor of education graduates often serve as administrators or teachers of elementary and/or secondary level administrators and teachers, and when a failure to graduate occurs, the link can be broken. Other consequences of the failure of a student to persist to graduation include economic factors for both the student and Ed.D. program, and damage to the college reputation (Baird, 1993; D'Andrea, 2002; Katz, 1997).

In spite of the consequences, it can be difficult to predict whether a particular candidate will successfully complete the entire process at the time of enrollment. University faculty can provide valuable insight by contributing their perspectives regarding why some of their candidates are able to fulfill all dissertation requirements, while others do not (Lovitts. 2008). However, though faculty may be keenly aware of contributing institutional factors, and may also recognize contributing personality traits, they may not have firsthand knowledge of factors influencing their candidates' ability to follow through to conclusion. Therefore, the purpose of this study was to gather data from current doctoral candidates and recent Ed.D. graduates regarding factors that impacted, or are currently impacting, their completion of the doctor of education (Ed.D.) degree, and specifically the dissertation. To that end, the following research question guided this study: What factors inhibit or contribute to degree completion among doctor of education candidates?

Method

A qualitative case study methodology was used for this study as it allows for the exploration

of a phenomenon, within the context of the phenomenon, using a variety of research tools and data

sources (Baxter & Jack, 2008). According to Yin (2003), a case study approach is appropriate when the

researcher desires to investigate the 'why' of a phenomenon, and seeks to uncover contextual factors

believed to be important to the phenomenon under study.

Case Identification/Participants.

Participants for this study included Ed.D. students who persisted to doctoral candidate status

but failed to successfully complete the dissertation (non-completers). In addition to degree non-

completers, participants also included students who recently completed an Ed.D. program. All

participants were from one small, private university, located in the southwestern United States.

Data Collection.

Data collection for the current study was divided into two stages. Stage 1 consisted of the

creation of an anonymous, open ended survey, distributed electronically in Spring 2015 to all

candidates who failed to successfully complete the dissertation process (non-completers, *n*=8). All

survey items were based on factors for non-completion suggested by current literature on the topic

(e.g., Green, 1997; Lovitts, 2008; Spaulding & Rockinson-Szapkiw, 2012). Non-completers were given

a total of three months to respond to the survey, with reminder emails sent at monthly intervals.

Following the three month period, *n*=5 non-completers provided responses to the survey, for a

response rate of 62.5%. Data collection in Stage 2 included a second open ended survey and was

distributed to recent Ed.D. graduates (completers). All students having successfully defended their

dissertations between December 2012 and August 2015 were initially contacted for participation in a

focus group. Based on potential participant feedback, it was determined participants (*n*=13) would

instead be provided an open ended survey. The survey was disseminated electronically to students

in September 2015. The survey was available to participants for a period of three months, during

which time three reminder emails were delivered. Of the (*n*=13) potential participants, 8 responded,

for a response rate of 62.5%. Results presented herein are based on data collected in Stages 1 and 2

and include responses from 13 participants.

Data Analysis.

In an effort to enhance data credibility, in addition to survey responses, other data sources

were consulted. These included published program details, and interviews with faculty and program

directors. Data analysis and collection was concurrent and ongoing. Open-ended responses were

reviewed, analyzed, and categorized further, in an attempt to narrow specific and common themes

present in the data.

Results and Conclusion

Non-completer Results (n=5)

Survey responses from current ABD candidates (non-completers) indicated *institutional factors*

affected completion of the dissertation. Specifically, factors associated with university faculty, staff,

or advisors, and factors associated with their research topic were reported. For example, one

participant responded that a "lack of timely communication as stated by university faculty in

response to the candidate or in work submitted" affected completion, also noting "frustration with

communication overall from committee." Further, students reported difficulty transitioning from the

coursework phase to independent research phase, or lacked the intellectual curiosity necessary to

engage and explore their own research topic (Lovitts, 2008). One participant pointed to a lack of

structure affecting progress, explaining, "I need structure. I think a scheduled time each week to have writing sessions would be greatly beneficial." Also, one doctoral candidate contributed, "The limited background information on my topic has made it difficult to research."

Responses from candidates also indicated *personal factors* affected completion of the dissertation such as "factors associated with my personal life," and "factors associated with my personality." All candidates selected "factors that are beyond my control" as a reason affecting dissertation completion. One participant volunteered information about her personal life that contributed to non-completion, stating, "During this process, I have been married, divorced, and [I am] now re-married. I have moved 4 times in 2 years and all the while I had a small child, my nephew, in my care….Additionally, after writing 3 chapters, my life turned upside down. The process of editing and changing the dissertation while feeling how I did in my personal life was too hard…I could not endure another 'this is not good enough' response from my chapters during that time in my life."

Other responses from candidates indicated additional personal factors, such as work, interfering with completion. Further, personal factors such as a "lack of focus and resources especially with technology at home" were also reported. Although all participants chose to select, "Factors that are beyond my control," only two provided more detail. One respondent explained, "Job requirements and changes have impacted my time and opportunity to finish the dissertation," while the other merely wrote, "Work."

Ed.D. Graduate Results (n=8)

For the recent Ed.D. graduate survey, participants were first asked about what worked well for them during the dissertation process. Responses fell generally into three response categories: chair interactions and feedback, committee feedback, and program structure.

Chair interactions and feedback dealt primarily with the dissertation process organized and facilitated by the chair. For example, graduates reported "constant and consistent correspondence from chair," and "researching and writing within incremental steps set by chair," also "never missing deadlines set by committee chair," and "[chair] knew my learning style and provided guidance, which aligned with optimal conditions for my success," and the like.

Committee feedback responses discussed feedback and input provided by other members of the dissertation committee. Graduates reported, for example, "input from committee and outside professors was critical to my success," and "when they [other committee member] provided critical analyses of my work, they acknowledged positive aspects along with highlighting areas to strengthen my writing, methods, evidence, and findings."

Graduates also indicated program structure features aided completion of the dissertation. For example, "small classes, cohort and professors overwhelmingly understanding that we are all full-time professionals," and "the most helpful part of the entire process was the orientation meeting at the beginning."

Next, recent graduates were asked how the dissertation process might be improved. Responses to this question fell generally into two response categories: more structure for the dissertation process and issues with committee members (other than chair).

More structure for the dissertation process responses involved participants requesting a specific class be implemented for the proposal writing process. Examples of comments made by

graduates, "I can't suggest enough that I believe there should be a class specifically for chapters 1-3 rather than simply having dissertation begin with committee" and "Ideally, I would have it be a semester class that meets in person once per week. Candidates present progress and share with one another allowing for feedback from professor and colleagues."

Issues with committee members (other than chair) comments detailed specific challenges with committee members and included items such as: "would have liked for my committee members to have all been from [University]," and "had one committee member who was at another school/university, and it made communication very hard. I also feel like I didn't really know her and she didn't know me, so there was no connection there."

Finally, recent graduates were asked about program experiences which best prepared them for the dissertation process. Responses to this question overwhelming referenced coursework. Specifically, students indicated research courses and/or courses where parts of the research proposal were discussed/taught/practiced. These included an introductory research course, quantitative courses, qualitative research, educational law, and a curriculum course where the theoretical framework was taught and the writing of such practiced. However, responses also included a broader view of other courses and their role in preparing students for the dissertation.

Table 1
Summary of Findings

	institutional factors
	• lack of communication with chair
	• lack of communication with committee
	• more structure in dissertation phase
Non-completers	personal factors
	• work
	• lack of focus
	• lack of resources at home
	• change in family structure

	institutional factors
Completers	- chair interactions and feedback - committee feedback - program structure and features - more structure for the dissertation process - issues with committee members (other than chair) - coursework

Discussion of Findings

As in the current study, numerous factors can contribute to varied experiences and outcomes for students during the dissertation process. Environmental factors, such as institutional program structure, curriculum, expectations, and communication can affect doctoral candidates' completion experiences (Lovitts, 2008; Spaulding & Rockinson-Szapkiw, 2012). Also to be considered are individual, student-related factors (Green, 1997), such as personal attributes, demographics, motivation, and persistence (Lovitts, 2008; Spaulding & Rockinson-Szapkiw, 2012).

Results from our study supported findings from previous literature (Green, 1997; Lovitts, 2008; Spaulding & Rockinson-Szapkiw, 2012). Students reported institutional factors such as chair support, chair interactions and chair communication as the primary factors facilitating dissertation completion. Examples of student referenced support included consistency and structure, providing timelines for completion, timely and detailed feedback, flexibility in scheduling, and one on one attention. Faculty who model academic behaviors, coach, and communicate with students may be more effective in guiding students through difficult sections of the dissertation process (Lovitts, 2008). Secondarily, students reported input from and contact with committee members as important to their dissertation completion process. Conversely, when students did not experience high quality and meaningful input from the chair and/or committee members, completion of the dissertation was

hindered. Program structure and organization was indicated as a positive factor in the completion process (e.g., cohort model, small classes, professor access). However, both groups of participants also reported a desire for more explicit coursework and instruction related to the dissertation, and in particular for the proposal writing process. For example, while program coursework was cited as very beneficial to dissertation completion, participants also requested additional courses in proposal writing, the literature review in particular, and dissertation seminars.

Our findings also seem to echo relevant literature indicating students may have difficulty transitioning from the coursework phase to independent research phase (Lovitts, 2008). For example, Labaree (2003) reported students felt a sense of developmental discord as they move from "normative to analytical, personal to intellectual, and experiential to theoretical" (p. 13). Our students' focus on the desire to have structure during the dissertation phase, whether imposed from the dissertation chair or through coursework components, seems to provide support for Labaree (2003) and others.

For the current study, non-completer participants noted *institutional* and *personal factors* for non-completion, while completers referenced factors primarily related to *program structure*. In order to improve the success rate of doctoral degree completion, it is important to explore further the *personal* factors influencing completion among candidates. Gaining insight into characteristics possessed by Ed.D. completers may provide faculty and program directors direction regarding types of assistance that may benefit non-completers most. Further, because the transition from coursework to independent research was referenced by both groups, this area could specifically be examined in an effort to create program structure that would aid all students in degree completion.

As Ed.D. programs admit, guide, and work to facilitate degree completion among their students, it is important to understand factors associated with student success, or lack thereof. Continued study is needed to explore common methods and factors which may inhibit/enable students' progress to degree completion. Further research in this area may provide insight for Ed.D. programs seeking additional support for students striving to overcome environmental and personal challenges during the dissertation phase.

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Comparison of "Community" between online education and grounded programs in Social Work

Courtney Wiest Stevenson
Saint Leo University

Cindy Lee
Saint Leo University

The presentation will discuss the findings from a study which examined sense of community for traditional foundation (BSW) social work students compared to fully online (MSW) foundation students. The literature highlighted mixed findings related to sense of community in the online setting. Along with the mixed results, the literature discussed the controversy of online learning in a "people profession." The study had a total of 90 participants and utilized the validated Classroom Community Scale by Rovai (2002). The study found there was a significant difference between the traditional face-to-face BSW program and the online MSW program. The MSW group scored higher in both the Connectedness and Learning subscales. As for the findings related to employment and age range, there were no significant differences in either the Connectedness or Learning subscales. The presentation will highlight the current MSW program platform which is a fully blended online platform that fostered a significantly higher level of Classroom Community. The presentation will explore: How the MSW program development, management, and teaching has cultivated this level of engagement and community?

Problem Solving Without Figures

Joseph W. Spadano
Rivier University

This presentation will introduce the pedagogical ideas of the book, Problem Solving Without Figures, as well as teaching and learning in a problem solving educational orientation. Participants will be provided a practical, field-tested system for teaching and learning mathematics.

Effects of Literacy Software for PreK Students

Judy Trotti
University of Mary Hardin-Baylor

Christie Bledsoe
University of Mary Hardin-Baylor

This mixed methods study was conducted with Pre-K children from impoverished backgrounds who were missing critical literacy skills necessary for success in kindergarten. School district leaders sought to find an intervention that would boost the literacy skills of Pre-K students, so that these marginalized learners could be included in a successful schooling experience. The purpose of the study was to compare the effectiveness of two computer programs on literacy learning. Two research questions guided the study: 1. What are the differences in attainment of critical literacy skills of Pre-K students using literacy software? and 2. How did the teachers perceive the effectiveness of the software for literacy development?

Pre-K students in a half-day program received daily instruction using either Imagine or Waterford software, and a control group received teacher-led classroom instruction without a designated literacy software. Pre-and post-tests using mCLASS: CIRCLE were used to measure seven literacy skills. Teachers participated in a semi-structured focus group to share experiences. An ANOVA indicated that instructional approach had a significant effect on literacy composite gains. Students using Waterford software had higher post-test literacy composite mean; however, differences in means were not significant. Qualitative data includes positive and negative perceptions in addition to suggestions for implementation. Findings support the decision to discontinue use of either software and instead focus on research-based strategies delivered by classroom teachers. This study provides evidence that the classroom teacher provides as much or more instructional support when compared with computer-assisted instruction in early literacy development.

Literacy Coaching: Motivation, Perceptions, and Expectations

Tina Selvaggi
West Chester University

The researcher examined the motivation, expectations, and perceptions of the graduate students enrolled in the first course (EDR 602) of a new Literacy Coaching Endorsement program at a comprehensive higher education institution to understand how best to meet the needs of these students in subsequent classes.

Children's Ability To Recognize Implicit and Explicit Reasoning of Story Book Characters

Zsuzsanna Szabo
Marist College

Nora Brakas
Marist College

This research study looked at children's ability to recognize implicit and explicit reasoning as presented in Sufi story books. Sufi tales are specific teaching stories that focus on the wisdom that is presented in their message. Participants were children in Kindergarten to fifth grade at an elementary school in Nort-East of United States. Children were individually tested by asking them to listen to a randomly assigned Sufi tale read from a picture book. Then they were asked questions inquiring about their ability to recognize information from the story book. There were four different Sufi story books used in the assessment of children. Information presented in the story books and corresponding questions were categorized as implicit or explicit. Data analysis was conducted by grade level, gender, and story book. Book type was considered as a covariate in the comparison between grade levels. Results show that there is a difference in grade level among children's ability to understand explicit vs implicit information. There was no gender difference among children at different grade level. Results inform classroom teaching, especially with the purpose to teach reasoning in children with the use of diverse teaching materials.

Principals and Communication in High Achieving Schools

Dawn E. Tyler
Randolph-Macon College

This presentation is intended to assist leaders in education to design effective school principal preparation modules. Characterized by low achievement scores among Title I schools as reported by the United States Department of Education (2014), motivating teachers to work for student achievement in this environment is a significant challenge. This phenomenological qualitative research examined self-reported communication behaviors of 8 principals who have led their Virginia Title I schools to excel beyond minimum competencies on state tests and have been noted as Distinguished or Highly Distinguished Title I Elementary Schools. Through examination and analysis 5 themes of leadership communication were revealed. This research reports on how these principals practiced a student-centered approach to decision-making; used transparency in decision-making; shared decision-making with their teachers; how they earned faculty trust; and the significance of mentoring during their leadership preparation. Further revealed were consistent communication behaviors that contributed to a culture of school success. Frequent face-to-face and personal communications, minimal use of whole-school meetings, and weekly principal participation in grade level meetings were consistent among all participants in this study. Additionally, state approved principal certification programs were reported to have had little impact on the participants in this study in the area of communication skill development. Finally, the critical importance of mentoring and school-division based training in the area of communication development were revealed. Effective communication behaviors were determined to be an important element in motivating teachers in these high poverty schools to meet the needs of students and led to high achievement.

Special Education Teacher Evaluation:Measures Of Teacher Effectiveness

Merissa Waddey
Indiana Wesleyan University

This study evaluated the student growth and observation measures of the Teacher Professional Growth and Effectiveness System (TPGES), a comprehensive evaluation program modeled after the expectations of Race to the Top and No Child Left Behind, as it relates to special education teachers. While accountability systems seek to improve the academic achievement of all students, including students with disabilities, the components have not been adequately investigated for special education. If special education teachers are to receive the necessary feedback to drive their improvement and subsequently begin to close the achievement gap for their students, then these measures must align with special education settings and student needs. Student growth percentiles were analyzed for 435 students with disabilities to compare against state test expectations for teacher effectiveness. Results of the independent samples t-tests revealed significant differences in student growth percentiles between middle school and elementary students with disabilities. Significant differences in descriptive statistics between results for students with disabilities and the published state test results also were identified. To examine the observation instrument used in this comprehensive evaluation program, administrators were surveyed regarding their preparation and confidence in observing special educators. Independent samples t-tests revealed significantly different expectations for classroom environment and instructional expectations among administrators based on years of experience. Implications for the achievement gap and student growth, student motivation, teacher morale, collaborative partnerships, and retention of special educators will be discussed, along with directions for future research.

Raising Student Achievement in Mathematics through Teacher Training

Joseph J. Walsh
Brandman University

Woodlake Unified School District is located in Tulare County, California. It is a high-need school district which is located in a rural area that is poverty-stricken. It is comprised of 3 K -6 facilities, 53 teachers, 9 administrators, and 1,263 students. Its test scores are extremely low in the area of mathematics. It is felt that the students' test scores will improve if the teachers' level of knowledge is heightened in math content, as well as pedagogy. As a result, Woodlake Unified School District applied for a California Elementary Mathematics and Science Professional Learning Initiative (CEMSPLI) grant and was awarded one. In addition to many other events the teachers will go through intensive training in mathematics content and pedagogy for a five day period during the summer of 2016. As a result it is believed that the teachers' better understanding of mathematics content and sound pedagogy gained through the training will translate into increased student test scores and understanding of mathematics and eventually into broader participation and success in higher levels of the integrated math curriculum, including AP Calculus. Teacher confidence levels will be measured pre and post training as well as their math ability levels. Student achievement will be evaluated at various stages during the year through various means as well as through standardized testing.   The presentation will include components of the training, survey and test results, and any student progress that was made up to that point. It is felt that there will be much to be learned through this study.

Experiential Learning: Taking Special Educators to the Next Level

Kris Ward
University of Mary Hardin-Baylor

This presentation is a case study that will describe the development of an application lab for pre-service undergraduate students certifying in special education. Data regarding pre-service teacher self-efficacy as well as anecdotal evidence will be provided. Pre-service teachers training to teach children with disabilities are challenged with acquiring skills necessary to accommodate the needs of a broad spectrum of students. The public school lifeskills classrooms are often self-contained requiring teachers to be proficient in teaching academic content as well as functional skills. During the preparation period, professors must instruct pre-service teachers in best practices in such a way as to provide for generalization of skills following graduation and acquisition of employment. Many preparation programs require field observations prior to student teaching, however the pre-service teacher is often limited to observation and anecdotal information. The problem exists when special education pre-service teachers graduate and have had minimal experience planning for the instruction, behavior management, and efficient coordination required in a lifeskills classroom. The UMHB Special Needs Lab was designed to provide the pre-service teacher authentic, hands-on interaction and experiential learning with children with disabilities in an effort to develop proficiency in the skills learned in the classroom resulting in increased self-efficacy. Additionally new teachers should see a decrease in the amount of time required for proficiency as a professional special education teacher. Session participants can expect to gain information on the development of a university based laboratory for interaction between pre-service teachers and children with disabilities. Additionally, participants will obtain a greater understanding of the need for experiential learning in preparation programs to generate learner ready special education teachers.

Effective Strategies for Developing a Culturally Inclusive Communication Zone: One IEP's Team's Critical Reflective Map on Tact Training

York Williams
West Chester University

This study compared tact training with and without the supplemental question in terms of acquisition and maintenance. Overall, the authors found that Two of 3 children with autism acquired tacts more efficiently in the object-only condition and the remaining 2 children acquired tacts more efficiently in the object þ question condition which included questions about home, family, loved ones, friends, and interests in order to promote successful dialogue within the inclusive classroom environment. What is unique about this research study is the use of culturally responsive and inclusive supplemental questions during tact training.

Research Problem and Purpose of the Study

Traditionally, the problem with inserting supplemental questions during the entire tact repertoire could produce a learner who is able to talk about his or her environment only when asked to do so with similar questions. As such, the authors contend that in order to resolve the controversy around utilizing supplemental questions during Tact training requires researchers to consider the numerous problems that may arise, and although some limited studies have included the use of supplemental questions in training trials, the research is limited and thus the topic requires further investigation. The overall purpose of the study was to compare the outcome between using the rate of acquisition and subsequent maintenance of tacts taught using only a nonverbal SD (i.e. Object only) with tacts taught using a series of culturally relevant and student-centered questions (''Who is your best friend? What is his name? Where does he live? Who is this in the picture?) in conjunction with the nonverbal SD (i.e., object þ question).

Sample and Methods

The sample comprised of two boys and one girl who were diagnosed with autism. The dependent measure reported was the frequency of correct tacts in nine trials. During baseline the sessions the participant's response was scored during each trial. Point-by-point interobserver agreement was calculated for the sessions by dividing the number of agreements by the total number of trials and converting the ratio to a percentage. Additionally, a multiple-stimulus without replacement preference assessment ("MSWO") was conducted to identify preferred items that would be delivered as programmed consequences during the sessions.

In order to acquire appropriate base lines, the teacher and paraprofessional experimenter randomly alternated between baseline sessions of the object þ question condition and the object-only condition. During tact training, the participants were exposed to two tact-training conditions using random alternation. The trial ended when a participant emitted a correct tact (independently or prompted) or failed to respond after the single echoic prompt. Tact training ended (a) when the participant correctly emitted all nine tacts in two consecutive sessions or (b) when the stimulus set in

the object þ question condition was acquired and responding in the object-only condition remained stable with no evidence of improvement for 10 consecutive sessions. Maintenance evaluation was assessed following end of baseline training. Procedural fidelity was assessed during baseline, training, and maintenance-evaluation.

Results, Findings and Conclusions

The object þ question condition produced more efficient acquisition with two (Matty and Grace) of the three participants, perhaps because the supplemental CR questions enhanced attending to the object as a result of prior instructional programs that included only verbal SDs. For the other participant (Paul), the supplemental questions did hinder acquisition. The authors concluded that tacts were maintained at end-of-training levels in both conditions, suggesting that, although CR supplemental questions did appear to affect acquisition idiosyncratically, the absence of supplemental questions did not hinder maintenance consistently. Further, the author's finding suggests that by including CR supplemental questions during tact training that such inclusion may not always interfere with the development of the tact repertoire, at least with respect to maintenance as noted here. The authors resolve with one implication for the research; that although practitioners should base their tact-training programs on the existing literature, they also should evaluate each student's response patterns and adjust or modify the program to maximize positive training outcomes at the individual level always inclusive of the students needs across the classroom, home and community in order to develop a balanced lexicon that the student can utilize.

MULTIDISCIPLINARY
OFFICIAL ONLINE
PROCEEDINGS

All papers were presented at the
Center for Scholastic Inquiry
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If no manuscript is submitted,
we print the presentation abstract.
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No alterations are made to the manuscript content.
With the exception of minor typesetting, manuscripts are
printed as submitted.

Mindfulness Practices in Education

Sally A. Creasap
Capital University

The need for mindfulness training and education is ever growing in the 21st century technology-driven world. On a daily basis, people find themselves in a multitasking turbulence of activity where we are always doing something, but rarely just being in the moment. While most see this ability to multitask as a strength, the truth is that it makes people less productive, less effective and more likely to experience burnout (Michie).

Some research goes so far as to suggest that the education system may be at least partially responsible for our mindlessness. With an outcome-based orientation, educators are often guilty of presenting facts unconditionally with no opportunity for questions or alternative ways of thinking (Langer, 1989). The various causes of mindlessness such as repetition, premature cognitive commitment, belief in limited resources and a powerful influence of context go against what is developmentally appropriate for young children, and yet are all ever prevalent in the today's educational arena.

The purpose of this research is to introduce mindfulness practices to teacher education candidates. Qualitative data will be collected and analyzed throughout the pilot project.   Incorporating mindfulness into the teacher education curriculum could have a positive trickledown effect. Training preservice teachers to practice mindfulness would likely result in more teacher effectiveness and reduce the stresses of the classroom. As future teachers, they would be better equipped to guide their students through mindfulness practices particularly to relieve test anxiety and other stressors that they may face in the classroom and community.

Breaking the Barrier: Inclusion for Children with Autism in Churches

Rebekah Dyer
Grand Canyon University

Autism is a serious neurodevelopmental disorder that falls under the broad category of Autism Spectrum Disorder, which is characterized by delayed language skills, and an impaired ability to interact with others and communicate (MacDonald, 2013). Children with Autism often have difficulty in social situations. They do not know how to carry on a conversation, develop friendships or understand social rules. In addition, children with Autism can develop repetitive patterns of behavior and can be very sensitive to multiple sensory inputs.   The challenges that are created by having a child with Autism can greatly influence parents' lives in a variety of ways. Parenting of children with Autism can be exhausting both emotionally, financially and physically (Lee, 2008). Many families attend church each week and there are many valuable and specific programs in which their children can participate. In 2010, The National Organization on Disability along with the Kessler Foundation conducted a survey regarding attendance of religious services. Fifty-seven percent of individuals without disabilities reported attending a religious service at least once per month, while individuals with disabilities only 50%. The gap is larger when the severity of the disability is taken into consideration (Griffin, Kane, Taylor, Francis, & Hodapp, 2012).

Parents of children with Autism can attend the same churches with parents of non-disabled children, but programs for which their children can participate may not be guaranteed. The potential lack of participation for their children in church programs can add to the stress level for parents because they want their children to have the same opportunities to participate in programs as their non-disabled peers. Parents of children with Autism were reported to attend religious services less frequently, possibly due to the difficulty associated with removing the child from their home environment (Lee, 2008).   In addition, the parents can experience relief from the stresses of having a child with Autism when they are able to attend a church service, while their child with Autism participates in a separate activity specifically designed for them. Having a specific program that will support children with Autism can possibly relieve the parents stress in two ways. They will be able to attend a church service without their child where they can focus, while knowing their child is able to participate in a church activity that is designed for their specific needs. However, research indicates that the majority of parents of children with special needs do not feel supported by their faith communities, which can add to their distress and isolation (Speraw, 2006). Distress and isolation can both lead to more stress in the parents' lives.

Support can mean many different things depending on the situation. The support needed for parents of children with Autism is going to be unique. Johnson (2013) discussed the needs of parents with Autism as involving support networks and social acceptance. The stress that parents' of children with Autism experience can lead to anger and aggravation.

This study will seek to determine what exactly it is that parents seek from churches. What type of support can be provided to parents of children with Autism to relieve some of their stress? In addition, this research study will collect experiences from parents of children with Autism in churches to determine what is currently being provided to allow children with Autism to participate. Webb (2012) conducted a research study with one family of a child with Autism. The research

reviewed the family's experiences in churches. The participants in the study reported their experiences in church to be non-supportive. Webb gathered information from the staff of different churches to find out their level of awareness with regards to the needs of children with Autism. The findings showed that the majority of the churches were aware of the support needed for families of children with Autism and they provided specific training and programs. Perhaps this paragraph should be included in the next section. For this introduction, you want to introduce the topic of "experiences of children with Autism in attending church.

According the Collins & Ault, 2010 while churches may have a desire to communicate unconditional love to everyone who comes through their doors, there may be unintentional barriers for individuals with disabilities. There are a variety of ways that churches can create an environment that is welcoming to individuals with disabilities. They can ensure that all areas of the grounds are physically accessible. In addition, they can include specific programs for individuals with disabilities. These programs are often segregated, and they do not allow for relationships to be developed …….. Individuals with and without disabilities can both benefit from being included in the same programs. The inclusion of children with disabilities creates a positive environment in which relationships can be developed (Collins & Ault, 2010). (perhaps this paragraph should be included in the next section where you present the background research that leads to the problem statement.

Previous research has explored the rate of participation of individuals with disabilities in religious services (citation), the perspectives of individuals with disabilities in their church experiences and the perspectives of church members regarding the participation of individuals with disabilities in church programs.

This study seeks to review the types of experiences parents of children with Autism are currently having in churches. The parents will share what it is like to take their child to church. Do they feel like their child has an opportunity to participate fully like other children? Do the parents feel that the staff members are aware of what their child needs? In addition, the research will determine what the parents of children with Autism seek from churches with regards to support and inclusion of their child with Autism.

The AREA Method A Good Process + Good Information = Great Decisions

Cheryl Strauss Einhorn
Columbia University

My talk will focus on my research and decision-making framework called the AREA Method. I initially developed AREA to limit some of my own decision-making mistakes in my professional work as an investigative journalist, teacher and consultant. Yet the process has turned out to be a valuable tool for my students at Columbia, my diverse mix of consulting clients, and for my friends in need of solving complex problems. For what I've realized is that even if you have a history as a researcher, the steps to a good process and a sound decision are not obvious.

It can be messy and overwhelming to figure out how to solve thorny problems. Where do you start? How do you know where to look for information and how to evaluate it? How can you feel confident that you are making a careful and thoroughly researched decision? I've found that the AREA Method provides people with both comfort and know-how to do just that.

The AREA process gets its name from the perspectives that it addresses: Absolute, Relative, Exploration & Exploitation and Analysis. A, or Absolute, refers to primary, uninfluenced information from your research and decision making target itself. R, or Relative, refers to the perspective of outsiders around the target. Its secondary information. E, or Exploration and Exploitation, are the twin engines of creativity, one being about expanding your research breadth and the other about depth. Exploration is about listening to other people. Exploitation is about examining your own assumptions and judgment. The second A, or Analysis, synthesizes all of these perspectives, processing and interpreting the information you've collected.

Together the "A" and the "R" provide you with the tools necessary to create a framework for gathering and evaluating information. The latter part of the AREA process, the "E" and the "A," provide detailed examination tools learned from experts in other fields such as investigative journalism and intelligence gathering.

The AREA framework of perspective-taking reduces bias by making it easier to see insights and understand the experiences of others. It helps you check your ego, better judge others' incentives and explore a situation more objectively. It builds self-awareness and empathy. Thus it's not just a process that you apply, it is a muscle that you are building and it can become second nature. It can be part of the frame you bring to the world around you.

A good process + good information = Great decisions

Hygiene for the Homeless: Using PBL to Inspire Student-Driven Service Learning in the Elementary Classroom

Gracie Grimes
Middle Tennessee State University

Layla Smallwood
Middle Tennessee State University

Problem Based Learning (PBL) can be used as an impactful means to inspire student-driven service projects that extend beyond the classroom and into the real world. In a case study using PBL methodology, students were tasked with working together to pinpoint a common problem within their local community, "How does proper hygiene affect the homeless population?" and then further design and carry out a service-based solution.

In March of 2016, 6th grade students in a Middle Tennessee middle school were posed the question: "How does proper hygiene affect the homeless population?" From this question arose a hygiene drive, "Hygiene for the Homeless," a student-designed and –driven service-learning project. The project was carried to fruition using research, collaborative problem solving, and public speaking skills.

Topics covered:
- What is PBL?
- PBL framework
- Impact on learning
- Empowering future leadership through PBL-based service projects
- Children as natural problem solvers

Background of the Problem: Homelessness is a well-documented issue within the United States. In Middle Tennessee alone, the National Center on Family Homelessness reports that over 28,000 children are without housing periodically in the calendar year; over 800 of those children are located in the Rutherford County and Murfreesboro City Schools school districts.

Adjunct Faculty Members' Perceptions of Online Education Compared to Traditional Education

Diane Hamilton

Ashford University

Due to the growth of online courses and universities, the quality and benefits of distance education warrant scholarly attention. Previous researchers have focused on students', employers', and traditional professors' perspectives of online courses. Although adjunct professors teach the majority of online courses, few researchers have explored their opinions of online education compared to traditional, face-to-face education. Also lacking is information about online instructors' perceptions of the online teaching position. The purpose of this report was to present online adjunct faculty members' perceptions of online education in relation to traditional education. Sixty-eight adjunct faculty members who were recruited through LinkedIn voluntarily completed an instrument that was developed for this purpose. Given that this report represents an initial attempt to understand this phenomenon, preliminary results are reported as descriptive statistics. Overall, the online adjunct faculty members held favorable opinions of online education and believed that others did as well. Although they reported grading similarly in online courses as in traditional courses, the online adjunct faculty members reported that students thought that online professors graded more easily.

From Idea to Patent!

Tracey Huddleston
Middle Tennessee State University

Gracie Grimes
Middle Tennessee State University

"If I get really rich with inventing, I might have a really big farm and sell cattle and stuff. I don't want to get too rich though. Just rich enough so I can retire when I'm 30."
Maddox Prichard
Invention Convention, 2016

The Invention Convention:
Tennessee's only Invention Convention is entering its 25th year and is held annually at Middle Tennessee State University. This competition is for fourth, fifth and sixth grade teachers in public and private schools in middle Tennessee. An invitational brochure is sent to teachers early in the school year. Interested students prepare a description and picture of their invention for the first round of judging. Finalists are identified and teachers are notified of students invited to participate. All students display their inventions with a prepared presentation for the judges on the day of the convention. Students explain the problem or need for their invention, how the idea originated as well as the process of making the invention.
In addition to over thirty trophies and ribbons being awarded to students, every student receives the 'featured invention' for the year and a certificate of participation at the conclusion of the judging. Tennessee anticipates sending twenty students to attend the 2017 National Invention Convention held in Washington DC.

Maddox:
Maddox Prichard, a fourth grader responded to his teacher when she challenged her class to think of an idea to make life easier, with what is now known as the "Measuring Shovel".
After earning first place in his grade level at the regional competition, Maddox joined fourteen other students in traveling to Washington DC to participate in the National Invention Convention. There, he won the Household Organization and Tools Award, sponsored by Stanley Black & Decker.

The Presentation:
This presentation will share how Kathy Vantrease, Maddox's teacher weaves the annual Invention Convention process into her curriculum. How she integrates the process of developing an invention with content areas to accomplish necessary standards. This case study will follow the teacher and the student through the invention process and explain how content is not sacrificed but enhanced while developing a new invention.

Cultural Differences in Young Adults' Perceptions of Disability in South Texas

Patricia R. Huskin
Texas A & M University

Christine Reiser-Robbins
Texas A & M University

Soyoung Kwon
Texas A & M University

This research was a study in south Texas of university students' conceptual perceptions of disability, including what disorders, diseases, and conditions they consider to be a "disability" and how these perceptions relate to attitudes toward education, employment, and social relationships with individuals experiencing disability. The goal was to identify cultural, age-based, and major/career-based differences in young adults' perceptions of disability, including notions of what 'counts' as disability, perceptions of education, employment, and social relationships with individuals with disabilities. Many studies have focused on societal treatment of individuals with disability, services delivered to these individuals, and the effects of disability within families, fewer studies have focused on how younger generations today perceive disability broadly. This research sought to contribute to this gap in the literature by investigating whether there are nuances in the perception of disability among young adults based upon cultural/ethnic background, socioeconomic background, religious affiliation, and major course of study and/or planned career path, among other demographic variables. Whereas many studies target participants with personal connections to individuals with disability, this study targeted conceptual perceptions of the young adult public broadly, regardless of personal connection to individuals with disability. The study used a quantitative survey to assess which conditions, disorders, and diseases students perceive to be a 'disability,' utilizing a survey instrument adapted from an international public study. More than 770 surveys were distributed to purposively selected classes and all grade-levels representing service-oriented majors/fields of study and non-service oriented majors/fields of study. Results of significance will be presented.

Promoting Social Justice Through Civic Engagement

Teresa Kruizenga
Minnesota State University, Mankato

Guided by my own practice as a K-12 teacher, literacy coach and teacher educator, I sought what Erickson (1986) describes as "divulging the journey of the participants from the actors point of view " (p.119) to understand the lived experience of nine college students who actively sought wide, deep, and thoughtful engagement with what it means to practice civic engagement.

This qualitative study uses B. Jacoby's definition of civic engagement.   This is a focus on: (a) Learning from other, self, and environment to develop informed perspectives on social issues; (b) recognizing and appreciating diversity and commonality; (c) behaving, and working through controversy, with civility; and (c) taking an active role as a change agent. In an attempt to engage in ethnography that Fetterman (2010) calls telling a credible, rigorous, and authentic story I collected the following data: field notes, students' writings, video and audio recordings of university course work, and unstructured interviews.

My findings give us new stories to consider when thinking about higher educations historic role to encourage students to view themselves as problem solvers and to invest in developing the civic knowledge and skills needed to work with others to make a difference.

Research shows significant benefits for college students taking classes on equity and social justice that include not only reducing prejudice and improving cultural and racial appreciation, but also increasing cognitive sophistication and greater civic engagement (Bowman, 2011; Bowman, Brandenberger, Hill, & Lapsley, 2011; Lee, Williams, & Kilaberia, 2012; Martinez, 2014). In some universities, multicultural education is a stand-alone 3-credit course, most often emphasizing race/ethnicity "followed in order by special needs, language, economics (social class), gender, and finally sexual orientation" (Jennings, 2007, p. 1264).

The need for courses in equity and social justice increases exponentially as the population in the United States becomes less white within the next decades with the majority of the student population will be children of color; already, 40% of the school aged population is from racially, linguistically and culturally diverse groups (Dedoglu & Lamme, 2011; Villegas & Lucas, 2002). Despite this increased diversity, the level of integration among K-12 students of various races and ethnicities had decreased since the 1980s. Therefore, many university students enter with very limited in-depth exposure to people unlike themselves (Dillon, 2005; Frankenberg, 2009). Among students at my institution, the great majority claimed their high schools to be over 80% homogenous.

Teaching a course on human relations in a multicultural society at a Midwestern university whose students are overwhelmingly white and Christian poses challenges.   First, students' beliefs are deeply embedded and often are resistant to the topics of the course, with students remaining steadfast in their initial beliefs (Joram & Gabriele 1998; Martinez, 2014; Pajares, 1993; Wubbels, 1992). The challenge is compounded because many students are surrounded entirely by others like them,

their only "experiences" with people of other races, ethnicities, languages, and religions coming from popular culture or their shopping excursions. Second, in addition to ignorance, many students are apathetic about issues of social justice. When confronted with issues, they often lack self-efficacy, believing that there is nothing they can do about society's problems related to diversity.

While initially designed for education majors, the human relations in a multicultural society course I taught was open to non-education honor students. I created the course to be highly interactive in which students worked in small groups, journal, discussed issues using instructor supplied readings, as well as, provided opportunities for students to use story and storytelling as a vehicle to develop a deeper understanding of the lived world of people unlike them.

Story sharing and storytelling happened in several ways. First, the students took part in a field trip to a Green Card Voices event. Green Card Voices is a non-profit organization that has "recorded the stories of 109 first-generation immigrants from 60 different countries" (www.greencardvoices.com). Recorded stories are presented in a museum like fashion displaying large beautiful posters of the storyteller. On each beautiful poster the viewer will find a QR code next to each essay that links the viewer to the video interview. Second, students were given the opportunity to hear first hand stories from several different perspectives (i.e., immigrant, Native American, and local community members). Thirdly, students were invited to interview several different community members. I used the power of the story and storytelling to help my students make meaning-- a way of understanding the lived world outside of their experiences. My hope was that meaning would be more than what the story was actually about. I wanted to use the power of story and storytelling to affect the listener personally and resonate on a personal level. My students were moved and surprised by the stories shared. This exposure to the immigrant situation conflicted with their assumptions about the world and challenged them to explore further. This disruption of assumptions about the world provided the conditions necessary for the students to be willing and able to engage in civic engagement.

The combination of the immigrant stories shared by the Green Card Voices, local immigrant residents within the community, family, friends and international students within the university promoted an understanding of their own racial socialization process and prompted these students to move from awareness to action. Several students stated they felt a social injustice was being committed. They were upset and began a dialogue challenging current policies and ideas that impacted immigrants. This dialogue quickly moved from one of theory to action. Students and instructor began to redraft the syllabus to reflect assignments that would bring the Green Card Voices to campus as well as to highlight the stories of several immigrants that live in the community. This presentation shares the story of that process and the transformation of the students who took a leadership role.

Transformational Teaching Through Graduate Learning Communities

Dennis Lamb

Southwest Minnesota State University

Sharon Kabes

Southwest Minnesota State University

John Engstrom

Southwest Minnesota State University

Quantitative data collected from graduates of the Southwest Minnesota State University Master of Science in Education program examined the impact the Learning Community Model had on their professional development. Specifically, the results showcased the success of the learning community model in facilitating personal and professional growth and transformational teaching practices. Essential elements of the program examined their transformational teaching practices and how they have become change agents in their classrooms, schools, and communities. The data collected from student surveys over a five-year period indicated a high level of impact on their empowerment and transformational practices.

Tech Breaks Increase Student Attentiveness in the College Classroom

Sherry Long
University of Cincinnati

Cell phone use by college students in the classroom is on the rise. This quantitative study examined the effects on student behaviors when using "Tech Breaks" in two college courses. Participants included 37 Freshmen through senior level college students. Participants completed a survey constructed to obtain data on cell phone use in and out of the classroom as well as behaviors and feelings when cell phone use was encouraged and prohibited during class time. Students were provided a 3-minute "Tech Break" 25 minutes after the start of a 50 minute class during the semester. Results indicated cell phones are predominately used to send and receive text messages; send and receive pictures; and access Facebook at a rate of 26 or more times per day for each use. Results also indicated a decrease in negative behaviors and feelings such restlessness, impatience, anxiousness, and trouble concentrating when "Tech Breaks" were implemented in classes. In addition, negative behaviors and feelings were lower in the two courses with "Tech Breaks" compared to other courses they attended where cell phone use was prohibited. Students also reported feeling more attentive before and after experiencing a "Tech Break".

Analytics for Sustainability

Dennis F.X. Mathaisel
Babson College

Sustainability and sustainable development have become popular but elusive goals. They can be elusive because the concepts are difficult to sell to those who are resistant to sustainability concepts. However, business analytics can play a role. The sustainability of an enterprise should include the ability of the entity to meet its development goals while remaining productive long term, minimizing waste, conserving resources, and creating value. To be sustainable, the ecological, environmental, human, or business enterprise must possess five "abilities": availability; dependability; capability; affordability; and marketability. Availability is access to the right technology, materials, facilities, tools, and people that makes sustainability possible. Dependability concentrates on the reliability of the services or products. Capability is about performance metrics, measures, and management. Affordability concentrates on life-cycle cost. Marketability deals with defining the market for the products or services, understanding consumer needs, managing changes over time, and identifying improvements for the benefit of the stakeholders. Analytics is the use of technology, historical data and models to research potential trends, to analyze the effects of certain decisions or events, and/or to evaluate the performance of a given scenario. This paper will investigate how the current popularity of business analytics can be used as an innovative tool to promote sustainability and the sustainable development of an enterprise.

Beyond Lecture: Best Practices for Engaging Generation Z in Higher Education

Kimberlee Mendoza

San Diego Christian College

Research shows that student learning is linked to student engagement. Though this is not a new concern for professors, the newest generation's reliance on technology offers further challenges to address. Research of Generation Z is still in the infancy stage, as psychologists seek to understand and connect with this demographic raised on the Internet. From the studies conducted, it is already apparent that the dissemination of information in the form of traditional lecture is not the most effective way of stimulating Generation Z's engagement. Because of Generation Z's desire for instant gratification and constant distraction by the convergence of technology, new teaching practices that implement active and applied learning are needed.

The Application of Edward Debono's Six Thinking Hats in Crafting Discussion Prompts and Designing Class Projects and Activities in an Online Graduate Course

Joyce E. Kyle Miller
Texas A&M University

The use of discussion to develop interpersonal relations, reflection and a sense of belonging has been addressed by numerous researchers (Cox & Cox, Hulkari & Mahlamaki-Kultanen, LaPointe & Reisetter). What are the characteristics of discussion prompts and posts in an online graduate gifted education course which can impact interpersonal relations, trigger reflection and create a sense of belonging? What types of discussion prompts trigger critical thinking in online classes? What types of discussion prompts cause students to connect, to apply and to create novel ideas? A qualitative analysis of the discussion prompts and posts from selected online graduate gifted education courses taught since 2007 was conducted. Edward DeBono's Six Thinking Hats was used as a strategy to classify the discussion posts. DeBono uses White Hat Thinking to represent thinking that reveals the facts only; Yellow Hat Thinking looks at the benefits, the possibilities while Black Hat Thinking looks at the negative side, why something may not work; the Red Hat Thinking signifies feelings, hunches, intuition, emotions; Green Hat Thinking creates new thoughts or ideas, and Blue Hat Thinking is reflective and considers all previous types of thoughts shared, summaries and gives directions and raises questions as to what additional issues may need to be addressed. Application of DeBono's strategy revealed that discussion prompts designed to yield critical thinking accomplished its purpose. The application of Edward DeBono's Six Thinking Hats, a strategy from the field of gifted education, resulted in the demonstration of how teachers can use the strategy in crafting discussions, class projects and activities appropriate for the gifted and talented student.

Teen Mothers Graduating from an Alternative School: A Counter Discourse to Prevailing Negative Perceptions

Olivia P. Modesto
Texas A&M University

Teenage pregnancy and childbirth are important societal concerns in the United States because of its prevalence and the difficulties associated with these phenomena. While the teen birth rate has decreased, the United States still has the highest number of teen childbirths among industrialized nations according to the United Nations Statistic Division. This situation is a public concern because teen childbirths increase the risk of public assistance use and lower educational attainment. Many studies support the recurring theme that due to early childbearing, the education of teen mothers is jeopardized. Negative stereotypes towards them also prevail representing the view that teen mothers are wayward, divergent, and burdensome to society. However, there is support from the literature that the majority of them maintain career and educational aspirations. Moreover, access of pregnant minors and teen mothers to public education is guaranteed by law. With this in view, the researcher explored the educational experiences of teen mothers, particularly those who chose to enroll in and eventually graduated from an alternative public school that exclusively serves this population. A hermeneutic phenomenological approach was used in interviewing seven teen mothers who recently graduated from an alternative school. This qualitative method was useful in understanding subjective experiences, forming insights about individuals' motivations and actions. The participants were selected by purposive sampling. The interviews were transcribed and coded; data with the same code names were analyzed inductively. Analysis of the data indicated that attending an alternative school provided academic engagement, structure, motivation, and a safe and caring learning environment for the participants. The most pivotal component of a caring learning environment was the quality of teacher interaction with students. Through the conveyance of nonjudgmental attitudes towards teen mothers, the teachers in the alternative school were able to draw their students towards active school participation. This study makes a contribution to the scant literature about the educational experiences of teen mothers, providing evidence that they strive to succeed and can succeed educationally. The conclusions serve as a counter discourse to the prevailing negative perceptions towards this challenged population.

Applied Assignments for Business Law Courses

Theresa A. Moore
Daytona State College

This presentation will provide examples of applied assignments designed for undergraduate business law courses. Examples will include creating a civil mock trial assignment, a legal essay exam, and an employee legal training manual. The examples will discuss how the assignment assesses and reinforces student learning outcomes in the course, and, because it is an applied assignment it is more powerful than memorization and testing. Learn how to lead a mock trial assignment that starts with a set of facts, have students role play discovery and depositions, and carryout a full mock trial with attorneys, judges, witnesses, and jury members. Does your final exam need some updating? This presentation will discuss ways to make a final legal essay exam relevant, engaging, and comprehensive for your law course. Finally, have your students take away a deliverable that they can use in the future for their own business or implement in their current positions with the legal training manual. The legal training manual is another comprehensive review assignment demanding application of concepts to the real world and to their own businesses; this gives them a concrete view of how the concepts they study in class play out in an actual business setting.

To Infinity and Beyond: Bridging STEM Opportunities for Underserved and Underrepresented Students

Michelle Peters
University of Houston-Clear Lake

Antonio Corrales
University of Houston-Clear Lake

For more than 50 years leaders in American industry, military, education, and politics have focused considerable attention on STEM (science, technology, engineering, and mathematics) education. In the past, traditional K-12 school settings have been the primary avenue for promoting STEM educational experiences. However, over the past several years, science camp programs have emerged across the nation and are providing another means for students to encounter positive STEM experiences. The purpose of this study was to examine the influence of attending a science camp program for underserved and underrepresented students during middle school on the selection of high school STEM coursework, finding out about STEM careers, and pursuit of a STEM related career. A purposeful sample of 1,444 underserved and underrepresented high school students, who attended the ExxonMobil Bernard Harris Summer Science Camp program as rising 6th, 7th, or 8th graders, were administered the *EMBHSSC Alumni Survey* to examine the influence of camp participation. Findings indicated that participant exposure to successful role models, feeling a personal sense of belonging, and experiencing college life and STEM related learning events had a positive influence on student selection of high school coursework, finding out about STEM careers, decision to attend college, and pursuit of a STEM related career.

Keywords: engineering, high school, science, mathematics, summer camp, technology

Introduction

Given society's need to maximize the usage of human capital in an increasingly technological world, an extensive background in Science, Technology, Engineering, and Mathematics (STEM) related coursework is necessary and vital for many career and job opportunities (Augustine, 2007). The demands of our growing technological society are requiring more and more college graduates each year with expertise in STEM-related fields. Reports, such as "*Rising Above the Gathering Storm*" (National Academy of Sciences, 2005), argue that increasing the number of STEM graduates is essential to America's economic future and well-being (National Science Foundation [NSF], 2014; U.S. Department of Labor, 2007). The importance of STEM education has encouraged the federal government to legislate billions of dollars to fund STEM research and education (Lips & McNeil, 2009).

In the United States (U.S.), of the 1.84 million bachelor's degrees awarded in 2012-2013, only 16% of them were in STEM degree fields (National Center for Education Statistics [NCES], 2013a). These statistics clearly show that the majority of students are choosing not to pursue STEM related

careers. More specifically, minority and female students are still largely underrepresented in the STEM fields (Crisp, Nora, & Tagart, 2009; NCES, 2013b). Of those 2012-2013 college graduates, STEM degrees were awarded to 64.9% male, 35.1% female, 67.9% White, 7.5% African American, and 8.8% Hispanic. These findings not only point to the importance of recruitment in STEM, but to the underrepresentation of minorities and women in STEM.

In the past, traditional K-12 school settings have been the primary avenue for promoting STEM educational experiences. However, over the past several years, science camp programs have emerged across the nation and are providing an alternate means for students to encounter positive STEM learning activities. For many, participation in a science camp can have the ability to positively influence someone's self-efficacy at an early age and thus motivate his or her interest in pursuing STEM related coursework. This coursework, particularly taken in high school, is known to predict future career choices (Simpkins, Kean, & Eccles, 2006; Updegraff, Eccles, Barber, & O'Brien, 1996).

Unfortunately, academic achievement scores in STEM related coursework for minorities, women, and students of low socioeconomic status tend to be lower than average (National Science Board, 2010; NCES, 2012). As a result, many tend not to pursue science and/or mathematics-related coursework and thus do not major in STEM related career fields. Middle school is a crucial time for students to participate in college intervention programs geared towards assisting them in making informed decisions concerning their future choices (Gibbons & Borders, 2010). Students tend to make their career and educational plans long before they enter their high school years and these selections tend to stay constant over time (Hossler, Schmit, & Vesper, 1999). As a result, most students make their academic decisions concerning their educational future between the 8th and 10th grade making it more difficult to influence their future career decisions. Given this, the following research questions guided this study: (a) How has camp participation influenced the participants' high school choices?, (b) How has camp participation influenced the participants' perceived future career choices?, and (c) In what ways do the camp participants describe the camp as being influential on their lives?

Theoretical Framework and Related Research

Self-Efficacy

An individual's level of self-efficacy affects his or her behavior in many ways in that it influences the choices that a person will make and the courses of action he or she will choose to pursue. A person's self-efficacy is a major determinant of whether there will be persistence in a given task, how much effort will be expended toward the task, and whether a person will even attempt it (Bandura, 1986, 1997; Pajares, 1996). People tend to avoid tasks for which they feel less competent and confident, but do engage in those tasks in which perceived competence and confidence is high. Research suggests that the higher the self-efficacy, the greater the effort and persistence expended toward a given task and that self-efficacy is a mediating factor for academic outcomes, cognitive engagement, and career choices (Fast et al., 2010; Hackett, 1985; Lent, Lopez, & Bieschke, 1991; O'Brien, Martinez-Pons, & Kopala, 1999; Pajares & Miller, 1994; Patrick & Hicks, 1997; Randhawa, Beamer, & Lundberg, 1993; Stevens, Olivarez, Lan, & Tallent-Runnels, 2004; Zeldin, Britner, & Pajares, 2007).

Role Models

Bandura's Social Learning Theory (1977) suggests that people have the ability to learn from other people. Research findings have documented the relationship between the influence of role models and educational aspirations and career decisions (Hackett, Esposito, & O'Halloran, 1989). Role models that have been successful in their careers may be influential to others' self-efficacy; thus increasing the interest and persistence toward various career fields (Lent, Brown, & Hackett, 1994). Research also indicates that the scarity of same-race role models might be hindering the career development of minorities (Chung, Baskin, & Case, 1999). Successful minority role models can provide valuable information about the outcomes associated with pursuing a particular career field.

Sense of Belonging

Providing educational opportunities where students can experience a strong sense of belonging by allowing students to meet other students with similar interests and thus possibly motivate them to pursue particular coursework/career routes. Maslow's *Hierarchy of Needs'* (1943) third stage of growth, *Love and Belonging,* claims that humans need to feel a sense of belonging and acceptance. In many instances, the need to belong can often overpower safety and physiological needs. Research indicates that there is a relationship between feeling a sense of belonging and one's level of intrinsic motivation and self-efficacy (Freeman, Anderman, & Jenson, 2007; Osterman, 2000). A sense of belonging can also enable students to have positive attitudes and behavioral outcomes that ultimately enhance their learning (Osterman, 2010).

Method

Participants

Since 2007, The Harris Foundation, Inc. (THF), a 501(c)(3) non-profit organization based in southwest Texas, has teamed up with the ExxonMobil Foundation to create the ExxonMobil Bernard Harris Summer Science Camp (EMBHSSC) program (The Harris Foundation, 2016). The EMBHSSC program is a free, two-week academic program, which provides STEM experiences and opportunities for a large number of underserved and underrepresented[1] middle school students through summer science camps hosted at numerous universities across the nation. Each EMBHSSC must commit to a particular theme and core problem based on a Project-Based Inquiry Learning (PBIL) model and also meet the minimum number of contact hours within each core curriculum subject. Table 1 displays a list of the core curriculum subjects, along with the minimum number of contact hours each camp is required to include in their program. The core curriculum for the EMBHSSCs is based on the national standards for mathematics, science, technology, and 21st century skills (Foots & Griffin, 2009). All of the classes are designed and taught by university faculty and/or certified classroom teachers.

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[1] A camp participant must be eligible for free/reduced lunches and/or attend a Title 1 school to be classified as underserved. To be considered underrepresented, a camp participant must be a traditional minority and/or a female.

Table 1

EMBHSSC Core Curriculum and Minimum Contact Hours

Core Curriculum Subjects	Minimum Number Contact Hours (n = 56)
Physical Sciences (physics, chemistry, earth sciences)	10
Life Sciences (biology, environmental sciences)	10
Technology	10
Engineering (robotics and/or design)	10
Mathematics*	6
Communications (oral and written)*	6
College and Career Readiness	2
Health (nutrition)*	2

*May be incorporated into other subjects (Foots & Griffin, 2009, p. 11).

A purposeful sample of 1,119 entering high school freshman and 325 graduating high school seniors participated in this study. Table 2 displays the participant demographics regarding gender and race/ethnicity per grade level. From 2011-2015 volunteers were solicited late spring and early summer to complete an online survey from previous EMBHSSC attendees: (a) entering 9th grade[2], who were rising 6th through 8th graders during the summers of 2008-2014 respectively, and (b) recently graduated from high school[3], who were rising 6th through 8th graders during the summers of 2007-2011 respectively.

Table 2

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[2] In terms of gender, $\chi^2(1) = .071$, $p = .791$, and race/ethnicity, $\chi^2(3) = 5.241$, $p = .155$, the purposeful sample for the entering 9th graders was found to be representative of the EMBHSSC participant pool of the rising 6th through 8th graders during the summer of 2008-2014 respectively.

[3] In terms of gender, $\chi^2(1) = .071$, $p = .791$, and race/ethnicity, $\chi^2(3) = 5.241$, $p = .155$, the purposeful sample for the graduating 12th graders was found to be representative of the EMBHSSC participant pool of the rising 6th through 8th graders during the summer of 2007-2010 respectively.

Gender and Race/Ethnicity of the Participants (%)

	Entering Freshman (n = 1,119) 43 out of 46 camps	Graduating Seniors (n = 325) 36 out of 37 camps
1. GENDER		
Male	50.0	47.6
Female	50.0	52.4
2. RACE/ETHNICITY		
American Indian or Alaskan Native	4.8	4.5
Asian	10.7	13.2
Black or African-American	30.8	39.9
Caucasian or White	26.3	20.9
Hispanic or Latino	19.9	15.1
Native Hawaiian or Other Pacific Islander	0.2	0.6
Some Other Race	2.2	0.0
Two or More Races	5.1	5.8

Instrumentation

A researcher-constructed questionnaire, *EMBHSSC Alumni Survey*, was designed to examine potential influences the camp may have had on previous camp participants. Items for the survey were initially constructed by conducting a review of the camp's mission and primary components. Before administering the survey, the instrument was submitted to an expert panel of camp directors attending the 2009 ExxonMobil Bernard Harris Summer Science Camp Fall Forum for a validity review. Revisions were made based on their comments for improvements. After the survey was revised, the external program evaluator, National Program Director, and a survey researcher reviewed it once more.

The *EMBHSSC Alumni Survey* was broken into four sections. Section I, Remembering Summer Camp, consisted of items addressing the major camp components (e.g., Educational Presentations, Hands-On Activities). Section II, High School Choices, consisted of items dealing with how the summer camp influenced the participants' academic choices throughout high school (e.g., Selection of courses, Finding out about careers in STEM). Section III, Future Career Choices, consisted of items addressing the participants' thoughts about going to college and interest in future career choices (e.g., Do you plan on attending college following high school?). Section IV, Tell Us About Yourself, contained items requesting information such as the participant's gender, race/ethnicity, and summer science camp attended (e.g., What is your sex?, What is your race/ethnicity?). Participants were

requested to provide responses to a combination of 5-point Likert scale (1 = None, 5 = A Lot), yes/no, fill-in the blank, and open-ended response items.

Data Collection and Analysis

The survey was posted on The Harris Foundation's website using software provided by Survey Monkey. A postcard, containing a web address for the online survey, was mailed to all known members in the sample and a second notification postcard 30 days later. Following data collection, data was imported from Excel into SPSS for further analyses. The quantitative data analysis consisted of frequencies, percentages, crosstabulations, and chi-square goodness of fit. The qualitative data, obtained from the open-ended response items, were analyzed using an inductive coding process in an attempt to build an empirical understanding of what benefits were derived from participating in a summer science camp. Following the procedures outlined by Creswell (2013), the qualitative data were read and in-vivo codes or themes were assigned accordingly. Extensive peer-review coding was done to validate the findings.

Results

High School Choices

Participants attributed their increased interest and intent to pursue STEM related coursework to the EMBHSSC. A majority of the entering 9th grade participants claimed that the EMBHSSC had "More/*A Lot*" of influence in their selection of high school science (78.9%), mathematics (74.4%), technology (70.7%), and engineering (69.8%) courses. Additionally, 91.0% of those participants entering high school and 85.0% of those graduating from high school credit their experience with the EMBHSSC for impacting their decision or desire to take STEM related Honors, Pre-AP, AP, and/or IB classes in high school. Table 4 displays a list of coursework the freshman claim they will take in high school and the coursework actually completed in high school by the graduating seniors. For many of the participants not all of the listed courses were offered at their high schools.

Table 4
Honors/Pre-AP, AP, and/or IB Courses Participants Plan To/Did Take in HS

	Entering Freshman (n = 1,119)	Graduating Seniors (n = 325)
Honors/Pre-AP Geometry	55.2	42.8
Honors/Pre-AP Algebra II	63.4	52.0
Honors/Pre-AP Pre-Calculus	45.6	47.7
Honors/Pre-AP Biology	55.6	45.8
Honors/Pre-AP Chemistry	49.0	44.9
Honors/Pre-AP Physics	43.0	33.2
AP Calculus	41.1	44.3

AP Statistics	18.9	13.2
AP Biology	41.4	24.9
AP Chemistry	41.4	20.3
AP Environmental Science	24.1	9.5
AP Physics	36.4	24.6
AP Computer Science	31.8	7.4
IB Calculus	12.4	2.0
IB Statistics	7.8	2.0
IB Biology	14.0	2.9
IB Chemistry	14.5	2.0
IB Physics	12.4	1.6
IB Computer Science	16.2	1.2

Note: Participants marked all of the courses they plan on taking.
AP = Advanced Placement; IB = International Baccalaureate

When asked to elaborate further, the participant comments reflected the influence of the EMBHSSC on his or her high school coursework as demonstrated in the following quotes.

It opened my mind to taking more math classes. I used to completely dislike math, but in I love math and I know for a fact that I am going to study in a field that includes a lot of math. [Entering HS Freshman]

EMBHSSC made me a confident person. I went back to school excited to learn and with energy that I had never had before. It was when I got to high school that everything took off. I began to take honors classes right away. EMBHSSC influenced me when it came to choosing classes. After the program I knew that I wanted to do something that dealt with space so I took as many math classes as I could as well as science. Now that I have graduated from high school I am planning on going to ASU to major in aerospace engineering. [Graduating HS Senior]

In addition to discussing coursework, participants shared how the EMBHSSC influenced and inspired them to participate in extracurricular STEM activities (e.g., clubs, other camps, math/science competitions, etc.). For some participants, camp participation encouraged them to expand their horizons and further their self-actualization. One participant went as far to say, "EMBHSSC helped me become comfortable in a public setting and allowed me to interact and be more involved in high school than I was in middle school." Survey results reported that 73.3% of the participants claimed that the EMBHSSC had "More/*A Lot*" of influence in their participation in extracurricular STEM activities. Thirty percent of the qualitative responses focused on the impact of camp participation on his or her involvement with extracurricular activities as displayed below.

EMBHSSC influenced me to make a lot of decisions in middle school that I might not have done. After camp, I participated in the LA County Science Fair in Pasadena after winning the school science fair, doing an experiment involving Science and Marine Animals, and won a

certificate and medal for honorable projects. I have presented at the Cabrillo Beach Young Scientists Symposium and got a certificate. I was in MESA for a while and got an award. I also went to Catalina Island Marine Aquarium and participated in Sea Perch, along with attending VIVA Technology and winning a first place ribbon. [Entering HS Freshman]

It helped get me interested in STEM and extracurricular activities, which in turn led me to figure out what I want to do as a career. I would say that the camp had an influence on me joining a robotics team my junior year in high school, which I continued on in senior year, making it to the world championship, and helping me to decide for sure that I wanted to be an engineer or computer scientist. [Graduating HS Senior]

Future Career Choices

When asked if they planned on attending college following high school graduation, 97.8% of the entering high school freshman stated, "*Yes*." Of those, 49.6% were male, 50.4% were female, and 97.8% of the African-American, 96.4% White, and 98.6% of the Hispanic/Latino participants. Further, of the 97.8%, 75.5% credit the EMBHSSC for influencing their thoughts about going to college. Eighty-six percent of the entering 9th graders claimed that the EMBHSSC had "More/*A Lot*" of influence in their finding out about STEM careers and 80.1% are committed to pursuing a STEM related career. Of the 72.3% that plan on pursuing a STEM related degree at a four-year college/university, 51.5% were male, 48.5% were female, and 68.3% of the African-American, 72.4% of the White, and 73.1% of the Hispanic/Latino participants.

In comparison, 93.0% of the graduating seniors plan on attending college following high school graduation. Of those, 49.8% were male, 50.2% were female, and 91.3% of the African-American, 93.0% White, and 90.9% of the Hispanic/Latino participants. Further, of the 93.0% attending college this fall, 84.5% credit the EMBHSSC for influencing their thoughts about going to college. Seventy-seven percent of the graduating seniors claimed that the EMBHSSC had "More/*A Lot*" of influence in their finding out about STEM careers and 77.5% are committed to pursuing a STEM related career. Of the 71.7% that plan on pursuing a STEM related degree at a four-year college/university, 53.9% were male, 46.1% were female, and 73.4% of the African-American, 63.5% of the White, and 58.4% of the Hispanic/Latino participants. Table 3 provides the breakdown of participant training and educational choices the participants are most interested in pursuing following high school graduation.

Table 3

College Degree or Training Participants Plan on Pursuing Following High School

	Entering Freshman (n = 1,119)	Graduating Seniors (n = 325)
A. Pursuing STEM	80.1%	77.5%
STEM related four year college/university degree[1]	72.3	71.7
STEM related two year college degree[1]	2.2	3.1
Technical school training in STEM related areas[2]	3.3	0.9
STEM related training in a branch of the military service[3]	2.3	1.8
B. Pursuing Non-STEM	12.6%	18.1%
Non-STEM related four year college/university degree[4]	11.6	17.5
Non-STEM related two year college degree[4]	0.6	0.0
Non-STEM related training in a branch of the military service[5]	0.4	0.6
C. Other	6.7%	3.4%

[1] STEM college/university degree: engineering, mathematics, biology, computer science, etc.

[2] STEM Technical school: computers, nursing, medical technician, electronics, veterinarian technician etc.

[3] Military STEM training: aviation, computers, nursing, medical, telecommunications, veterinarian technician, etc.

[4] Non-STEM college/university degree: English, history, political science, business, etc.

[5] Military non-STEM training: logistics, military police, etc.

Freshman and seniors alike expressed their gratitude to the EMBHSSC for encouraging them to consider attending college and pursue a STEM career. Example comments elaborating on the influence of camp participation are displayed below.

> After attending EMBHSSC I really want to pursue engineering in college and as a career. I only wish there were more programs available to students like me who live in rural areas without access to these types of programs in school. It is hard to find programs to participate in and when I do find one it is very expensive and my parents can't afford them. I gained a

huge advantage and learned a ton by attending the summer program. I would have never learned about any of the things we studied during the program in school. Plus the teachers I worked with in the EMBHSSC program were fun and engaging, my teachers in school are not as into science and don't make it fun and interesting. [Entering HS Freshman]

The Exxon Mobil Bernard Harris Summer Science Camp influenced my future endeavors by helping me to realize that engineering and engineering technology was indeed a hidden passion of mine. I really loved this camp and helped me and strengthened my math and science skills overall. Without this camps motivation I wouldn't know what my future career would be. I'm so grateful to be a part of the prestigious group of alumni of the EMBHSSC!!! [Graduating HS Senior]

Most Influential Camp Experiences

For many, science camps provide experiences that can be very influential and life changing. These experiences can potentially lead to increased self-efficacy and thus an increased interest in taking STEM related coursework, attending college, and ultimately pursuing a STEM related career. Participants were asked to provide responses to the following question: *What was the most memorable experience you had at Summer Science Camp?* The participant responses resulted in the identification of four distinct themes: (a) participation in STEM activities, (b) feeling a sense of belonging, (c) experiencing college life, and (d) exposure to role models. The themes are listed below accompanied by participant quotes.

Participation in STEM activities. The majority of the participant comments dealt with how participating in hands-on activities and research teams increased his or her interest and learning of STEM content. Of those, 11.0% of the comments also dealt with the rewarding experience of working on a research team.

The most memorable experience I had at the summer science camp was when we had the opportunity to build bridges. We studied the history of bridges, their purpose, their different styles and how they distribute weight throughout the structure depending on their design. We paired up in groups, to see which group's bridge could hold the most weight. It was the most memorable to me because I had never had to opportunity to do such a thing, and I hadn't really experience much teamwork. It showed me, along with the other lessons that everybody's opinion counts, and if I wouldn't have listened and accepted what my teammates had to say, we definitely wouldn't have come in second place. I was so shocked our bridge did, what it did. Also, I loved the getting together, and writing down ideas process because of the mutual respect for other people's ideas and drawing it out. It also showed me what you could do and make, because of an idea. [Entering HS Freshman]

The entire camp experience was memorable for me. I especially enjoyed working with the different varieties of insects, creatures and organisms that were brought in for labs. I really enjoyed those hands on moments. When researching the animals I learned aspects about them and their habitats that I never would've know otherwise. Creating the robots to be more lifelike and to act like animals was fun and new. Working as a team to program the robots was

helpful to me. I learned about myself, my teammates, and being a team player while doing it. This camp was my first experience using that type of programming and software when programming robots. Overall, my experience at camp was something that I will never forget. It was phenomenal! [Entering HS Freshman]

The whole experience was memorable. I still remember it as the best time of my life. Although the whole experience was memorable, the time we visited the planetarium was just magical. I had no idea what the planetarium was until the day that we went to visit it. Once we were sitting and the show began, I just couldn't believe my eyes. The sunset that was taking place was so beautiful and real that it took my breath away. At that moment, I knew that whatever my future had in store for me, space would be a part of it. [Graduating HS Senior]

My most memorable experience at the camp was building a raft to hold pennies out of four straws as some sheets of aluminum foil. We competed with other groups and my group won, our raft holding over $6.00 in pennies. Later, when we were talking about and reflecting on the activity (I believe Bernard Harris was speaking) I was called to the front to talk about our design. That was one of my first experiences of careful planning and execution leading to success, which laid the groundwork for some of my more recent successes. [Graduating HS Senior]

Feeling a sense of belonging. Twenty percent of the participant comments stressed the importance of interacting with "others" like them and how it provided them with a rewarding bonding experience that helped them realize they were not alone in sharing a common interest in mathematics and science.

The most memorable experience I had at EMBHSSC was meeting new people and working with them doing activities such as lab experiments, hand on activities, and just discussing thoughts with them. The two weeks I had was great, I got to meet new people and share the same experiences as them. I even met one of my now best friends there! [Entering HS Freshman]

Perhaps the most memorable experience that I had at summer camp was perhaps meeting new people from different people and getting to know them. It was great because we all had the same goal in mind: to become the greatest we could possibly be. It was all the more interesting because no matter how different we were we all had things in common and even though we didn't know each other very well, we worked in groups, succeeded, and made memories that will last forever. [Entering HS Freshman]

The most memorable experience I had at EMBHSSC was undoubtedly being surrounded by children my age who shared a collective interest in the sciences. I attended the camp as an upcoming 6th grader, and my time there pushed me to not only develop an interest in science, technology, and engineering, but also to work on my social skills and meet new people. Even today I still hold valuable relationships with the students I met and worked with, and I feel much more secure in that we've each taken steps in pursuing STEM-related classes and

embarking on such careers. Bernard Harris Summer Science Camp helped transform me from a timid and complacent twelve year old girl to a confident young woman who is eager to take on the world. [Graduating HS Senior]

Experiencing college life. Nineteen percent of the narratives dealt with living in the dormitories, attending college classes, and experiencing the college campus assisted the students in developing coping skills and preparing them for the future.

The most memorable experience I had at the camp was when we first got there and they showed us the dorms and gave us a key. It was the first time I was ever responsible for my own key. This camp showed me how to be responsible and how life in collage can be like. [Entering HS Freshman]

The most memorable experience I had at Summer Science Camp was learning about the college life. Sleeping in a dorm, learning to get along with people that I didn't know and having to live with them for a few days. Getting to go to classes in a college setting was so helpful in preparing me for the future and I will never forget it. [Entering HS Freshman]
The most memorable experience I had at the summer science camp would be the university life experience living, studying, and engaging on campus. I am going to be a freshman in college this fall, and my experience back in middle school at camp definitely helps my transition into the university. [Graduating HS Senior]

The most memorable experience that I had at summer science camp was staying in a dorm. It really gave me great idea of how college will actually be. It made me more excited to go to college. I also liked getting to know the people in my dorm and in the rooms next to me. It was nice to meet people who were interested in science like I am and who were experiencing dorm life for the first time as well. [Graduating HS Senior]

Exposure to role models. Ten percent of respondents claimed that meeting Dr. Bernard Harris, the first African-American to walk in space, and university professors inspired them to "dream big" and motivated their desire to follow in his footsteps.

The most memorable experience I had was when I was chosen to stand next to Mr. Harris while he explained what it was like to be in space. All I could do was smile in awe that I, a person so small and irrelevant, was standing next to a man who made history! And Mr. Harris had such a warm personality, and was so approachable, he just made you feel like you mattered and you could make a difference. That's when I started to believe it too. [Entering HS Freshman]

The most memorable experience I had at summer science camp was meeting Kent Wallace, a [AA] physicist at Fisk University, he taught a class on matter and performed many in classroom experiments and demonstrations that inspired me to look more into physics and increased my understanding of matter. I was also profoundly inspired by meeting Dr. Bernard Harris at summer science camp at Central State University in Ohio. At my school we did a Black History month contest that included an essay about an African American who has

inspired you. I selected Dr. Harris because his book is inspirational and I was awe struck that he would take time to help the students with the flight simulator. I submitted a picture of Dr. Harris and myself working on the flight simulator for the contest. I received an Honorable Mention for my efforts. [Entering HS Freshman]

My most memorable experience of my whole duration at the summer science camp was meeting Bernard Harris and having him talk to all of us kids about his life and for us to follow our dreams. I've always thought astronauts were amazing, so meeting him and taking a picture with him was surreal. [Graduating HS Senior]

The most memorable experience I had at the camp was the inspiration I gained from hearing Dr. Bernard Harris speak. Being in the same room as someone so accomplished not only made my heart skip a few beats but it gave me hope and a sense of power that I could reach for the stars and that the obstacles along the way are mere asteroids that I had the will to crush. Hearing him speak the first day and being at campus where he is an alumni from made me put my 110% into every activity at camp. However his speech did not just give me determination and inspiration for those 2 weeks but it continued to ring in my ears as I faced the challenges of high school and life itself. This is a kind of memory that will stay with me, even if I forgot everything else. [Graduating HS Senior]

Discussion

As this study has found, students participating in STEM learning activities such as educational presentations, hands-on activities, field excursions, and research teams increased interest in learning STEM content and the importance of team work. Policy makers may want to consider expanding funding to school districts and educational institutions in general for similar initiatives. Within this approach, it may be wise to expand the funding opportunities to not only initiatives during the summer but also during the entire school year. Such approach is congruent with recent nationwide efforts to increase the development and implementation of STEM programs across the schools, in order to primarily combat the shortage of STEM graduates (Best & Cohen, 2013).

Students participating in the STEM summer program were able to develop a sense of belonging, model successful experiences, and get motivated about the learning process. Policy makes and school leaders may want to consider replicating similar approaches with comparable intrinsic motivations not only on STEM subjects but also other academic areas, in order to increase academic performance and participation. This approach is aligned with the fact that merging project-based learning education with STEM may have a significant influence on student attitudes towards their future career choices (Tseng, Chang, Lou, & Chen, 2011).

Students participating in the STEM summer program were able to experience college life and increase their preparation and general expectations for the future. Policy makes and educational leaders may want to consider providing the necessary resources to implement similar initiatives throughout the year. A probable option could be establishing partnerships with colleges and universities in order to expose students to college life experiences, and allowing higher education institution to recruit future undergraduates. These types of initiatives could increase student

motivation and reduce the deficiency gaps in regards to minorities graduating in STEM fields (Eisenhart, Weis, Allen, Cipollone, Stich, & Dominguez, 2015).

Students participating in the STEM summer program were able to being exposed to successful individuals serving as role models with similar backgrounds and struggles. Policy makers and educational leaders may want to consider promoting similar initiatives and opportunities throughout the year by establishing systematic programs where successful role models can constantly mentor students on STEM subjects and tasks. Such approach can be based on partnerships with colleges and universities, educational foundations, local companies, as well as school and community organizations. Research shows that promoting cooperation and exposure to science may contribute with the academic success of minority students on STEM subjects (Ramsey, Betz, & Sekaquaptewa, 2013).

Given that the STEM summer program seem to have a positive impact on students' life and the decision making process in regards to STEM careers, future research ought to be conducted to explore whether similar experiences during the summer and throughout the year may have a positive impact on students' short term academic performance on STEM subjects, as well as STEM career choices. Future research could focus its efforts on examining the specific longitudinal impacts that STEM programs may have on increasing high school graduation rates of economically disadvantaged students, as well as measuring the impact of STEM programs to increase STEM graduates in general from colleges and universities. Finally, data should be collected to study the specifics in regards to the configuration, application, and funding of STEM programs when dealing with economically disadvantaged students and minorities.

This study is significant to the field of STEM education in that it provides insight into the influence of science camp participation on underserved and underrepresented students. Prior to attending the camp, many of these students might have thought that pursuing STEM related coursework and/or a STEM career seemed far from their reality let alone someday going to college. But camp attendance encouraged and motivated these students by exposing them to successful role models, college life, a sense of belonging, and opportunities working with STEM related activities. As a result, many of these students will take STEM related coursework in middle and high school, attend college, and pursue a STEM related career. With the increased use of technology and the growing number of STEM related careers, research such as this could provide valuable information on ways to increase minority participation in STEM related career fields.

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Words that Hurt

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Idiot, cripple, handicapped, autistic…retarded! We have all heard these words used by people who truly have no idea of the impact of these words and perhaps don't care. I have made it my mission to educate people about the power of words. Words can hurt…just as much as someone being physical with an individual. Words can NEVER be taken back…they are there forever. These words have a profound effect on how a person feels about themselves, how other perceive abilities and affects their daily lives in a multitude of ways. These words MAKE A DIFFERENCE.   People First Language puts the person BEFORE the diagnosis and describe what a person HAS not IS. The diagnosis should not define who the person is, which it does by robbing the person of defining themselves. The media also contributes to how individuals with disabilities are perceived.
This presentation will present how the media presents individuals with disabilities and how this affects how the public perceives these individuals. It will also present an alternative to putting or identifying individuals by a disability and recognize them as "People First".

Plants, Kids and Learning: Preschool through Higher Ed.

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0There is great concern by teachers, school administrators and parents regarding the increase in the number of aged students who exhibit challenging behavior in and out school settings(Benedict, Horner & Squires 2007). Research has also documented that complementary alternative therapies (activities), have been successful in providing children with opportunities to develop age appropriate academic, physical, social, and behavioral skills (Boso, Emanuele, Minazzi, Abbomonte, & Politi, 2007). Complementary alternative therapies include art, music, movement or horticultural activities. The activities suggested for this study incorporated the use of plants and/or plant materials in a variety of non-invasive activities that provided an opportunity for everyone in the class to participate.   Data collection methods included direct and indirect observations, college student interviews, surveys and classroom artifacts.

The researcher sought to uncover if pre service teachers, participating in horticultural activities in a teacher preparation science methods class would encourage positive attitudes and increase the willingness to teach science. These activities were modeled by the researcher who was not a horticulture therapist. The results were promising. It was determined through the course of the study that, task engagement and positive attitudes and willingness to teach science increased after the implementation of the horticultural activities.

The Political Economy of China's Energy Policy and 5-Year Economic Development Plans: Implications for the World's Energy Markets

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Deng Xiao-Ping replaced Mao as China's paramount leader in 1978. Economic restructuring and modernization in China began. Within a short span of three decades, China surpassed Japan in 2010 as the world's second largest economy. Unparalleled growth in energy consumption and needs have been accompanying China's unprecedented economic growth. Three and half decades after economic reform began, China is alkready the second largest energy consuming nation in the world. The prospect of sustained economic growth, ongoing industrialization and growing urbanization for a population in excess of 1.3 billion can cast a long shadown over the world's energy market. This paper proposes to analyze China's energy policy and outcomes in recent decades within the context of its 5-year development Plans. The paper will combine descriptive with quantitative analyses. The hypothesis is that intensified R&D activities into the conventional as well as renewable energy frontiers as stipulated in the official Plans and documents will enable China to achieve energy self-sufficiency in the foreseeable future. Furthermore, in view of China's aggressive policy for accelerating R&D into renewable energy forms in the most recent Plans suggests that in time China may be a net exporter of energy forms to the world's growing markets.

The effect of China's recent energy policy will significantly and invariably influence the future fabrics of global economic arrangements and political landscape. This paper presents a brief overview of the background information on China's energy sources, production, consumption and needs. It then examines China's new energy policy and practices and their implications.

A Guide for Teaching Character Development

Marjorie S. Schiering
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"A Guide to Teaching Character Development" is for everyone! It';s applicable for all school grade levels, home or workplace, regardless of where you work. The six international traits of being a person of good character (kind, fair, responsible, fair, respectful, caring) are the focus of this interactive presentation. Activities that call for instructor sharing of ideas, thoughts and even humorous anecdotes are provided as stimulus for participants trying the character development guidelines. The concept of: "You can only give to others that which you have for yourself" is presented through dialogue and role-play. Leave the presentation with feeling good about "you" and having the ability and skills to provide that feeling for others.

Leading from The Pack: Approaches to Leadership of Faculty Peers

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Most leadership positions represent attainment of a goal or provide a chance to rally others around a singular vision. However, academia presents an interesting dilemma for those in leadership positions. Faculty are usually quite proud of their independence. The career of an academic is built on flexibility and academic freedom. Most faculty do not often look to peers for guidance once they are no longer junior faculty. So how do faculty in leadership positions guide peers or, in some cases, senior faculty? How do faculty leaders bridge the gap between administrative goals and faculty motivation? The answer is often found idiosyncratically from university to university or college to college. There is usually no blueprint for faculty new to these positions other than putting a personal twist on the work of the person who preceded her or him in the particular leadership position. As a result, new faculty leaders spend a surprising amount of time finding ways to motivate their peers and hold them to a standard without alienating them. The stress that results is often overlooked when considering the workload of a faculty leader. This presentation delves into the unique approaches available to faculty leaders that set them apart from leaders in business or politics. The presentation also examines what traditional approaches are likely to work with independent-minded faculty from a psychological perspective.

Exploring a Peace and Human Rights Blog to Gain Insight for Social Implications that Affect Our Global Society

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"Human rights and fundamental freedoms are the birth right of all human beings" (Thakur, 1998) and recognized officially since 1948, this principle has been generally accepted in international instruments and has contributed to the substantive development of international human rights law for protection and promotion of both individual and universal human rights. However, individuals and groups around the world continuously become victims of human rights violations. In this regard, the hour to hour and daily reports of electronic and print media hearing and reading makes quite disturbing information for the world's people at large. This qualitative research explores issues of international human rights as is related to peace found on a designated Human Rights and Peace blog in order to investigate the needs and ways the protection and promotion of human rights for peace and development in the world are being presented electronically and publically. Therefore, this research seeks to understand what are the positions being expressed on the topic of human rights with regard to continuous world peace, as well as for sustainable development worldwide on the basis of this narrative study. The findings of this research study will offer insight into important social implications and recommendations that affect the global society as a whole in terms of human rights and peace.

Thakur, Ramesh, 1998. Past Imperfect, Future Uncertain: The United Nations at Fifty, Published By Macmillan Press ltd, London, Page 38.