

The 15th Annual South Florida Education Research Conference



Saturday, June 4, 2016

Florida International University
Biscayne Bay Campus | Wolfe University Center Ballroom

Editor in Chief:
Sarah M. Nielsen, Ed.D.
Associate Professor, English, DeVry University

Hosted by:

FIU | Arts, Sciences
& Education
FLORIDA INTERNATIONAL UNIVERSITY

The South Florida Education Research Conference is hosted by Florida International University in partnership with Barry University, DeVry University, Florida Atlantic University, Florida Memorial University, Johnson and Wales University, Keiser University, Miami Dade College, Nova Southeastern University, St. Thomas University and University of Miami.

SFERC 2016

**Proceedings of
The 15th Annual South Florida Education
Research Conference**

**June 4, 2016
Florida International University
Miami, Florida USA**

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College of Arts, Sciences, & Education
School of Education
Florida International University
Ziff Education Building, Miami, FL 33199

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The 15th South Florida Education Research Conference 2016 Program

Acknowledgements

The South Florida Education Research Conference Steering Committee (SFERC) would like to thank the member universities and their faculty and students for supporting the fifteenth annual SFERC. The members of the steering committee include Florida International University, DeVry University, Keiser University, Barry University, Miami Dade College, Florida Memorial University, Johnson & Wales University, Florida Atlantic University, St. Thomas University, University of Miami, and Nova Southeastern University.

Special thanks must also go to Michael Record, Gerene Starratt, Sarah Nielsen and Lori Ann Gionti who have provided insights, stepped up to take on tasks, and given freely of their time and effort to make this conference a success.

Thank you to Keiser University for their new sponsorship of the Keiser University Graduate School Poster Presentation Award. Thank you to Michael Record (Keiser) for his organization and handling of all aspects of this award. Thank you also to Thomas Reio (FIU) and the Lorraine R. Gay Award for Excellence in Research/Scholarship Committee for their work.

Sarah M. Nielsen (DeVry) has served as editor of the proceedings for years, and now serves as editor in chief. Her attention to detail, editing skills, and patience have made the proceedings a quality publication. Teresa Lucas (FIU), Jacqueline Pena (MDC), Lori Ann Gionti (FIU), and Sarah Nielsen (DeVry) all co-chair the Paper Review and Selection Committee and facilitated the review process. This includes locating faculty to review, prompting reviewers to return reviews, being third reviewers when the student and faculty reviews are opposed, and doing additional reviews when reviewers fail to return their reviews. Lori Ann Gionti (FIU) also headed the poster review and selection committee.

Without the continuing support of so many, this conference would not exist, so thank you again for making our fourteenth annual conference so successful!

Tonette S. Rocco, Chair, South Florida Education Research Conference Steering Committee

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Keynote

Integration of Colleges

Kenneth G. Furton, PhD

Provost and Executive Vice President, Florida International University

Kenneth G. Furton was appointed Provost and Executive Vice President of Florida International University on July 2014. He is a leading scholar in forensic chemistry, specializing in scent detection. Dr. Furton has spent over 27 years at FIU. He was appointed the dean of the College of Arts and Sciences in 2007, where he transformed the university's largest college into three mission-based interdisciplinary schools to explore and address some of the biggest issues facing society today. During his tenure, the college of Arts and Sciences raised over \$41 million in philanthropic gifts and saw its research grants funding increase from \$27 million to \$60 million annually. Notably, Dr. Furton chaired the iREAL (integrating Research, Engagement, Assessment and Learning) Commission as Dean of the College to develop the vision paper that informed FIU's 2015-2020 BeyondPossible2020 Strategic Plan.

Having started at FIU in 1988 as an assistant professor in chemistry, Dr. Furton in 1997 founded FIU's International Forensic Research Institute (IFRI), which is globally recognized as one of the premier research and teaching institutes on forensic science. He subsequently served as associate dean of budget, facilities and research and remains director emeritus at IFRI, where he continues to be active, directing the research of graduate and undergraduate students and publishing papers and filing patents.

Dr. Furton earned a B.S. in Forensic Science at the University of Central Florida in 1983, a Ph.D. in Analytical Chemistry at Wayne State University in 1986 and completed post-doctoral studies in Nuclear Chemistry at the University of Wales, Swansea, and U.K in 1988. His expertise has led him to serve in numerous local, national and international professional organizations, including the National Academy of Sciences, the National Nuclear Security Administration and the Scientific Working Group on Dog and Orthogonal Detector Guidelines, which he chaired since its inception in 2004. He is currently chair of the Organization for Scientific Area Committees Dog and Sensor working group of the National Commission on Forensic Science.

Deeply committed to the academy, Dr. Furton is the author or co-author of more than 700 publications and presentations. His research projects have been continuously funded for more than two decades, totaling more than \$10 million in external funding. He has shared his expertise in forensic science through hundreds of invited talks nationally and internationally and has testified as an expert witness in dozens of state and federal trials.

Dr. Furton is the proud father of twins, Robert and Courtney, who are currently juniors attending FIU.

Lunch Panel Discussion

Crisis Management in Education: The Active Shooter Concern

Moderator:

Jennifer Kross, Director of Advisement and Career Services, Miami Dade College

Jennifer Kross spent 18 years as a hostage negotiator in the Iowa prison system, and she also developed and instituted the first prison hospice in Iowa. In her roles as a Family Program Assistant for the US Army Reserves and a Program Coordinator for Single Stop at Miami Dade College, she has worked directly with suicidal soldiers, students, inmates, and family members. Currently serving as the Director of Advisement and Career Services at Miami Dade College's North Campus as well as studying as a doctoral student at FIU, Jennifer continues to assist people in crisis on an individual basis in an effort to minimize mass casualty incidents in our Institutions of Higher Education.

Panelists:

Alexander D. Casas, Chief of Police, Florida International University

Alexander Casas was appointed to the position of Chief in September 2011. Prior to coming to FIU, he was the Acting Division Chief of Police at Miami-Dade Police Department, South Operations Division. He served for twenty-two years with the Miami-Dade Police Department and held a variety of positions and assignments throughout the County. He led daily operations to include police response, investigative response, crime prevention, community outreach, homicide investigation, sexual battery investigation, and community oriented policing. Additionally, he has served as an Adjunct Professor at FIU from May 2011 to present. Chief Casas participates in many professional associations and organizations including the International Association of Campus Law Enforcement Administrators, International Association of Chiefs of Police, Florida Police Chiefs Association, Miami-Dade County Association of Chiefs of Police, and National Association of Chiefs of Police. He is a founding board member and currently Chair of the Academir Charter School serving as a volunteer. He attended FIU attaining a Bachelor of Science in Criminal Justice in 2006 and received a Master of Science in Leadership from Nova Southeastern University in 2010. He has one son and three daughters.

Major Rick Rocco, City of Lauderhill Police Department

In 1995 Rick Rocco joined the Lauderhill Police Department. He has served as the Department's Training Coordinator, Road Patrol Sergeant, Professional Standards Unit/Internal Affairs Supervisor, Patrol Lieutenant/Watch Commander, Commander of the Support Services Bureau/Criminal Investigations Division, and Special Operations Division Commander. Currently he is the Commander of the Patrol Division, and oversees Special Events, Media Relations, and the Underwater Recovery Team. Major Rocco is a graduate of the Southern Police Institute's 31st Command Officer's Development Course, Nova Southeastern University Executive Leadership Program and holds a Bachelor of Science Degree in Business Management. He is the Co-Chair of the FDLE Region 13 Criminal Justice Training Council, member of the International Law Enforcement Trainers and Educators and Trainers Association, International Association of Firearms Instructors, Associate member of the International Association of Chiefs of Police, and Associate Member of the Broward County Chiefs of Police Association.

Dr. Edward Walker, Commander, Miami-Dade County Public Schools Police Department

Dr. Edward Walker has more than 27 years of experience in law enforcement and is an FBI National Academy graduate. Currently, he has been appointed as a Police Commander for the Miami Dade Public Schools Police Department in the Investigative Division. Serving as the Director over the \$4.6million NIJ Grant, Edward is leading the efforts for Campus Shield the Miami Dade Schools Police Department's Intelligence Center. Further he is retired Captain with the Marion County Sheriff's Department Indianapolis, Indiana and retired Army Reservist. His experience includes project management, operations management, intelligence management, and international leadership training and operations in Haiti, Europe, and the United States. As an experienced professor, law enforcement instructor trainer and former military trainer, he consults professional criminal justice researchers and serves as a consultant. His doctoral dissertation examined officer job satisfaction and leadership for leadership succession and officer retention. He has taught and managed criminal justice courses at Harrison College and Miami Dade College. Currently, Edward is also a faculty mentor with Walden University's College of Management and Technology, guiding students through the doctoral study process.

The Lorraine R. Gay Award for Excellence in Research and Scholarship

The purpose of the award is to acknowledge, in the name of L. R. Gay, outstanding research scholarship on the part of students and their supporting faculty presented at the Annual South Florida Education Research Conference.

L. R. (Lorrie) Gay, the founding professor of educational research for the FIU College of Education, was dedicated to students, to the rigorous pursuit of educational excellence and to research scholarship. She chaired the first doctoral dissertation awarded in the College of Education. She published textbooks in educational research, tests and measurement, and educational psychology. Her pen name was L.R. rather than Lorrie because the publisher felt a female author would not be as accepted as a male, so initials were used. The educational research text became the best-selling book of its kind and her publisher estimates that 1 out of every 2 students in the field has used this text.

The recipients of this award walk in the shadow of someone who cared for every student, and fought to make this course in educational research the best of its kind because she knew this was the way to best serve students. If you have taken the course you know what it requires and as you realize the skills you have attained through her efforts, you appreciate her efforts to this day, years after her passing.

It is anticipated that one award will be presented annually to the student whose research best exemplifies Lorrie's high standards. In the case of multiple authors for the same paper, multiple awards will be bestowed.

The awards are determined based upon papers submitted for presentation at the South Florida Education Research Conference. Award decisions are determined by the judgment of the faculty members serving as the L. R. Gay Award Sub-Committee.

L. R. Gay Award Recipients

- 2015 Mia R. Heikkila and Craig M. McGill, *A Study of the Relational Component in an Academic Professional Development Program*
- 2014 Althoff, J. *Non-verbal Aptitude and Academic Achievement at a Diverse Parochial Secondary School-A Correlational Study*
- 2013 Barsony, I. *Perceptions of French and Creole Among First-Generation Adult Haitian English Language Learners*
- 2012 Annika L. R. Labadie, Ilisa J. Lieberman, Kurt Vargo, and Olga Flamion, *The Use of Literature to Combat Bullying*
- 2011 Maria S. Plakhotnik, *A Geocentric Organizational Culture of a Global Corporation: A Phenomenological Exploration of Employees' Experiences*
- 2010 Martin J. Wasserberg, *"I'm Trying To Bring the Scores of My School Up, Man!" Standardized Testing, Stereotypes, and High-Performing African American Elementary School Students*
- 2009 Debra Mayes Pane, *Reducing the Discipline Gap Among African American Students: Learning in Classroom Communities of Practice*
- 2008 Antonio Delgado, *Speaking Up: A Phenomenological Study of Student Perceptions of Being Silenced in their Higher Education Classrooms*
- 2008 Tekla Nicholas and LéTania Severe, *School Segregation, Educational Disparities, and Impacts on Haitian Youth in South Florida*
- 2007 Liana Casbarro and Jemlys Jäger, *The Mistranslation of the ABCs: An American AIDS Education Campaign in Botswana*
- 2006 Suzanne J. Gallagher, *A Phenomenological Study of Learning Processes at Work; Confirming, Extending, and Challenging Holistic Learning Theory*
- 2005 Victoria A. Giordano, *A Professional Development Model to Promote Internet Integration into P-12 Teaching Practices*

- 2004 Kandell Malocsay, *The Effects of Cultural Distance on Student Socialization and Departure Decisions*
- 2003 Sarah M. Nielsen, *High Stakes and No Takers: The Impact of Florida Comprehensive Assessment Test (FCAT) Writing on Students' and Teachers' Perceptions of Writing*
- 2002 Loraine Wasserman, *The Effects of a Family-based Educational Intervention on the Prevention of Lead Poisoning in Children*

Barnes & Noble Best Faculty-Student Paper Award

The purpose of the award is to acknowledge, in the name of *Barnes and Noble*, outstanding scholarship on a paper written by a faculty-student(s) team and presented at the Annual South Florida Education Research Conference.

It is anticipated that one award will be presented annually to a faculty-student team. In the case of multiple authors for the same paper, multiple awards will be bestowed.

The awards are determined based upon papers submitted for presentation at the South Florida Education Research Conference. Award decisions are determined by a panel of faculty and students serving as the Barnes & Noble Award Sub-Committee.

Barnes & Noble Award Recipients

- 2014 Guise, A. & Valle-Riestra, D., *Supporting Students with Intellectual Disabilities in Higher Education through Mentoring*
- 2013 Chen, Z. and Bleiker, C. *Effects of Number-Way Curriculum on Pre-Schoolers' Mathematical Learning for Low Socioeconomic Status Children*
- 2012 Esther Fineus and Maria Lorelei Fernandez, *An Investigation of Participants' Perspectives About a Learning Assistant Program and Their Thinking about Becoming a Mathematics Teacher*
- 2010 Maria I. Bendixen and Martha Pelaez, *Effects of Contingent Maternal Imitation vs. Contingent Motherese Speech on Infant Canonical Babbling*

The Keiser University Graduate School Poster Presentation Award

The purpose of this award is to acknowledge, in the name of Keiser University, outstanding scholarship on a poster created by a student and presented at the Annual South Florida Education Research Conference.

It is anticipated that one award will be presented annually to a student presenter who, based upon the quality of his or her poster and presentation as a whole, meets all specified award criteria as determined by the South Florida Education Research Conference award committee.

Criteria for this award include, but are not limited to, organization, visual appeal, definition and clarity of the problem, clarity of research methods, interpretation and discussion of the results, and overall verbal presentation of the poster.

- 2015 Lilla DiBello, Ruth Ban, and Veronica Gesser, *How Graduate Professors and Students Understand the Relationship between Higher Order Thinking and Pedagogical Practice: An Exploratory Study*
- 2014 Walters, P. *The Effects of Intensive Interactive Writing Instruction and Self-Monitoring Skills on Students' Ability to Write Complete Sentences Independently*
- 2013 Spencer, T. *Developing Science Inquiry Skills in Developmentally Delayed Pre-Kindergarten Students Through Cooperative Learning*

Moderators and Volunteers

Session Moderators

Eric Feldman (FIU)
Lori Ann Gionti (FIU)
Salma Hadeed (FIU)
Jennifer Kross (FIU)
Tonette S. Rocco (FIU)
Gerson Sanchez (FIU)
Chaundra Whitehead (FIU)

Volunteers

Caprila Almeida (FIU)
Eric Feldman (FIU)
Carolyn Meeker (FIU)
Gerson Sanchez (FIU)
Chaundra Whitehead (FIU)

**South Florida Education
Research Conference
Peer-Reviewed Papers**

Construction of Stereotypes and Their Effects on Education

Indira Gil

Florida International University, USA

Abstract: This paper explores the construction of stereotypes through historical accounts and how these stereotypes have been manifested in education. It examines the choices students make and questions the validity of these stereotypes. The stereotypes considered are women as caretakers, men superior in the sciences, and Black and Latinos in need of control.

Stereotypes are the beliefs the greater population has that all of the people in a group share a single characteristic (“Stereotype,” 2015). These assumptions can be based on race/ethnicity, gender, sexuality, or physical attributes and may have a detrimental effect on the individuals from these groups. Stereotypes in education remain evident in academic performance, differences in self-efficacy scores, and disparities in standardized tests (Kurtz-Costes, Copping, Rowley, & Kinlaw, 2014). Many of these stereotypes are so rooted in people’s everyday lives that they go unnoticed and, as a result, become so accepted they may be taken as fact.

In education, there are several persistent beliefs that have negatively affected certain groups of people. One of these stereotypes is of males being better than females in the areas of science, technology, engineering, and mathematics (STEM), whereas women are better than men in the areas of communication, such as reading comprehension and writing (Kurtz-Costes et al., 2014). Hence, there is an underrepresentation of women in the STEM fields but, not so ironically, the stereotype of men being inferior in the communication field does not have a negative effect on males (Kurtz-Costes et al., 2014). Another stereotype is of Whites being academically better than Blacks and Latinos in all subject areas. This has a damaging effect on the academic performance, career choice, and self-motivation of Black and Latino students (Fabes, Martin, Hanish, Galligan, & Pahlke, 2015).

The purpose of this paper is to examine stereotypes in education and how they affect students’ performance and the areas they choose to study. It will explore the construction of stereotypes through history and connect these to stereotypes that remain apparent in schools. It will also question the validity of these stereotypes and their persistence in permeating the classroom as well as how students view their own ability to succeed academically.

Constructing Gender and Race/Ethnic Stereotypes through History

Throughout history, gender, race, and sexuality have been constructed as a means to create identities (Morgan, 1997). In the 1400s, as European explorers traversed the world, they encountered groups of people with vastly different cultures and ways of life. Instead of reacting with curiosity, they utilized these natives to construct a hierarchy in which they, the Europeans, were the norm and all other groups were deviations. As the explorers observed these differing customs, they developed assumptions which they imparted as representative of the rest of that particular population (Morgan, 1997).

The European travelers communicated their first-hand encounters through literature and art. These explorers did not take the time to understand the cultural significance of what they saw; thus they often misunderstood the physical attributes of the natives as monstrous (Morgan,

1997). In attempting to define these new groups of people they also sought to define themselves, and by doing so, they felt a superiority that would later shape how they treated the natives. These first encounters set the stage for the stereotypes people hold of varying groups today. In order to justify the conquering of natives, Europeans had to present the data to the rest of their counterparts in a way that the metropole would agree with the enslavement and maltreatment of these people (Schmidt, 2015). Concurrently, by viewing these paintings and reading these stories regularly, it would eventually normalize these acts of violence, hence validating the abuse Europeans would later impart when enslaving the natives.

Women were also considered inferior. Since they were seen as possessing a delicate nature, there was a limit to what women could do and learn. This limited the extent of their educational careers, thus assuring men remained in power. Women were also divided into different categories with savages at the bottom and civilized women at the top, and only the sensible, educated women worthy of inclusion (Moloney, 2005). Everything was analyzed and compared, from color to shape to girth, and these specifics were used to separate European women from the natives (Wilson, 2006). Men, in order to remain in the dominant position in society, had to maintain a careful balance between being sensitive and being effeminate. Overall, the race/ethnicity was constructed through a European lens and all variations were deviants of the European norm. The Europeans utilized gender, race/ethnicity, and sexuality to define themselves and build an argument as to why and how they were the norm and, by extension, superior.

Narratives from travelers served to elicit fear in European women and to portray natives as savages in need of control. These embellished stories were circulated in the 15th and 16th centuries throughout Europe, where they often hinted at the sexual assault of White women by indigenous men despite the lack of European female travelers (Burton, 1994). Thus, simultaneously, these narratives purported the need for European men to civilize the natives and protect European women from these men. Just as women were expected to be feminine, men were expected to be masculine. They were expected to display certain characteristics and pursue certain careers and hobbies in order to fit their role (Burton, 1994).

Definitions about what is normal were constructed by Europeans to benefit Europeans. The authors who defined what was normal and what was deviant were White, heterosexual men who ensured they were classified as the top of all hierarchies, and the result of this history is evident in how people who do not fit into this description are treated today (Carter, 1997). Stereotypes can be seen as a tool used to maintain the current power structure (Carter, 1997).

Since the Western nations were seen as more advanced in all areas, including material and the sciences, they were the ones in control of all enterprises, and they argued it was their job to put the less-developed people to work. Because of the laws put into place to keep the hierarchy intact, Asians and Africans had to agree on the superiority of the Westerners and request to be educated similarly. Adas (2004) noted how when some Africans came into contact for the first time with White men in the 15th century, they were so enthralled by the material positions they brought that they considered them two-legged gods.

Masculinity was constructed while the British Europeans were creating their own identities in comparison to the natives of the lands they were exploring. There were two extremes in which these people were gendered: On the one hand, they could be feminine or inadequately masculine, and on the other hand they could be hyper-masculine; in both descriptions, they were seen as childlike and in need of parenting (Patil, 2009). Explorers

continually marginalized the men they colonized by defining them as other than Europeans on the masculinity hierarchy. In order to legitimize their actions, colonizers argued they were assisting their dependent countries by training them for independence later on. Another argument was that since these were juvenile nations, they did not have the ability to be self-governing; thus the nation higher in advancement had to take care of its younger neighbors (Patil, 2009).

The privilege enjoyed by White men stems from White and male defining the norm for all groups (Carroll, 2011). White was defined as the center point, the normal, that which is used to define “other” versus what is abnormal; whiteness does not have to identify itself, as it is known as what everything else is compared to. Identifying as male plays a similar role as it is used to define everything else; thus it is also seen as the norm. To be the norm is to be at the top of the hierarchy; thus, by definition, to be White and male is to be superior. This method of producing stereotypes to organize the world remains intact and can be observed in the field of education. Teachers and students are as susceptible to stereotypes as the rest of the population, and this can be observed in the following section.

Stereotypes in Education

Stereotypes have been under construction since different groups of people encountered each other (Morgan, 1997). In order to make sense of these cultural differences, those in power created a power structure where they reserved themselves the top. In doing so, they marginalized those who were different than them. Women and people of color bear the burden. Gender was constructed through the differences between males and females, and race was constructed through the differences between Whites and people of color. In the process, countless stereotypes were developed which have spilled over to the area of education. These stereotypes are so pervasive that they remain evident in how students view themselves and how strongly they believe in their own ability to do well in school (Kurtz-Costes et al., 2014).

The separation of groups of people by category reinforces stereotypes because peers influence each other through imitation and modeling. The longer they are separated, the stronger their collective stereotypes, the more alike their attitudes, habits, and behaviors, and the more they influence each other’s social and academic development (Chang, 2004). A cycle is taking place where the more the stereotype is promoted, the more it is believed; hence the more it remains as part of the culture.

Women as Caretakers

In the 1400s in the Americas, men and women lived peacefully in gender-parallel societies where both sexes enjoyed self-governing their own lives (Overmyer-Velazquez, 2005). They viewed the body and soul as inseparable and sex as an essential part of life that was best when practiced in moderation. Descent of the female gender in this area of the world began when Christianity was introduced by European settlers (Overmyer-Velazquez, 2005). The idea of virginity was introduced, monogamy was imposed, and sex for pleasure was denounced. As a result, women were limited to the household and its responsibilities, whereas the men were expected to head the household in all aspects, including the actions of the females in their home. Thus, the idea of women as caretakers and men as breadwinners was extended to encompass a large part of the world.

The material/spiritual dichotomy was also used to construct gender roles, where men were seen as dominating the material sphere and women the spiritual sphere (Pratha, 1993). Women were used to create and represent what was good in the world and, as to ensure they

fulfilled this responsibility, the actions of women were controlled. Moreover, modesty and spirituality were necessary to contrast civilized behavior from that of animals, and since women were exemplary in these virtues, these corresponded to females (Pratha, 1993). They were expected to take care of the children and set an honorable example while doing so. Hence, women had to act and dress in a more modest and self-controlled manner than men.

The stereotype of women as caretakers is most evident in the fields of nursing and education. Ninety-two percent of nurses (Women's Bureau, 2003) in the United States are female, yet when looking at the reasons people become nurses there are few clear differences between the sexes. Boughn (2001) interviewed female and male nurses and found similar caring characteristics as well as strong desire for personal and professional power. One notable difference was the emphasis men placed on earning a competitive income to support their families and participants reported this as one of the main reasons they chose a career in nursing (Boughn, 2001). Thus, one can also observe the stereotype of men as breadwinners, or, more specifically, men need to be seen as the wage earners. Despite the lack of difference between the genders, nursing remains a female-dominated career (Women's Bureau, 2003) suggesting the stereotype of women as caretakers persists.

In education, 76 percent of K-12 teachers in the United States are female (National Center for Education Statistics, 2013). In 2007, women received 79 percent of bachelor's degrees in education (Planty et al., 2009). One of the arguments to explain this phenomenon is women's role as caretakers. Since women are still the main caretakers in their families, they find jobs with schedules that coincide with the schedule of their children (Rich, 2014). Not only are women still the caretakers at home, but also they are overrepresented in fields that work with children, reinforcing the caretaker stereotype.

White Men Superior in the Sciences

In the 1400s, the Western world was considered by the Europeans as technologically advanced in comparison to other nations; subsequently, it was assumed that European men were better in the fields of science (Adas, 2004). They were seen as superior in the sciences to all women and the men of other geographic areas such as Asia and Africa. The consistency of this belief carved a space for two stereotypes: men as better than women in the sciences and White men as better than men of color in the sciences.

The effects of stereotypes are most evident in the choices and performances of the groups deemed as inferior. When looking at the choices students make in choosing classes, women are more likely to take fewer science classes than men, but there is no difference in the choices men make when choosing classes (Jackson, 2012). In 2007, men earned 83 percent of bachelor's degrees in engineering, meaning only 17 percent were attained by women (Planty et al., 2009). Although women remain influenced by the stereotype of being inferior in the STEM fields, such as reporting less interest in math and science careers (Turner et al., 2008), men are not influenced by the stereotype of being inferior in the communications fields. The disparity of White men and men of color in the sciences can be observed in the test performance of students (Fryer & Levitt, 2004). Black children score significantly lower in all subject areas in the elementary years and the gap continues to widen as they get older (Fryer & Levitt, 2004). Factors such as lack of resources and high teacher turnover rate contribute to this difference, with the main reason being socio-economic status in Kindergarten, yet no significant factor was found in any other grade level (Quinn, 2015). The stereotype of White men as superior in the sciences is consistent throughout the career choices of women and the test scores of people of color.

Latinos and Blacks in Need of Control

There were two main arguments used by the colonizers to enslave native peoples. One was the need of supervision due to the natives' childlike attitude and the second was the need for control due to the natives' savage behavior (Patil, 2009). These justifications were needed to maintain the power structure and ensure people of color remained at the bottom of the hierarchy. The insistence and consistency of these arguments constructed the stereotype that people of color were not capable of managing their own lives and could not control their actions. In the K-12 classroom, this is manifested in the tracking of students, the structuring of classrooms, and the methods of teaching.

Oakes (2005) examined 25 middle schools and high schools in the far West, the South, the urban North and the Midwest United States and found the tracking of students based on test scores resulted in separating Black and Latino students from White students. Once tracked, students in the low-level classes received an inferior education, such as inadequate resources and less funding, when compared to those placed in the high-level classes. The self-esteem of those in low-level classes suffered immensely, they reported more negative attitudes and more feelings of inferiority, making it even more difficult for these students to succeed. The structure of the classroom and the pedagogy used by the teachers differed considerably, ensuring the students of color remained behind the White students academically. Tracking, despite the evidence against it, is still used in many schools throughout the United States as a means to control students. Low-level classes are consistently teacher-centered with little to no power of choice given to the students, and high-level classes are consistently student-centered with students being the main decision makers of what and how they learn (Oakes, 2005). When it comes to behavior, Black students are 3.5 times more likely to be suspended or expelled than their White counterparts (Wilf, 2012). The stereotype of people of color in need of control is still pervading the classroom.

Conclusion

Stereotypes are beliefs people treat as facts when considering the actions and lives of groups of people. Stereotypes can be negative and untrue and may serve a purpose for those in power. As seen in the historical construction of gender and race, stereotypes have more to do with the people who constructed them than the people they are about. White, heterosexual, male explorers made assumptions about everyone who was different and ensured these assumptions were spread and believed by their peers in their homelands. These constructed stereotypes served as a tool to justify what the explorers wanted to achieve, the conquering of nations and peoples. It was to their benefit for everyone, including the natives, to believe that the "others" of differing nations were of a lower class, primitive and uncontrollable. When observing these different cultures, they described them in part by what they witnessed and in part by what they wanted to portray. The goal of these explorers was not just to conquer these lands, but also to profit financially from their exploitation.

To keep the power structure in place, the Europeans used religion, in particular Christianity, to condition the natives into complacency. There was great emphasis on the roles of the genders with women being assigned lives in the private spheres and men being assigned lives in the public spheres. This created an imbalance of power as women were expected to take care of the children and household with little room for educational growth, and men were expected to provide financially for their families, which meant they were able to roam and expand their lives with little restriction. Women were expected to take care of the home, and it

was necessary to control their actions as those actions were representative of the culture. This limited women, guaranteeing the men remained in power. This is directly related to the stereotypes of women today. Women, despite many political and social changes throughout the last century, remain constrained to the role of caretaker. Moreover, since women represent the nation estate, they are expected to be humble, submissive, agreeable, modest, and likeable. These two stereotypes confine the actions of women; the former by limiting what people believe women can or should do, such as which careers to pursue, and the latter by restraining women's behavior to reflect what is expected by society. In education, this stereotype can be observed in the fields women choose to study, such as education and nursing.

The colonizers described Blacks as primitive, monstrous, beastly, and childlike. Hence, the natives were in need of guidance. With the excuse of Christian duty, the Europeans justified providing this control and did so by colonizing these nations and instituting slavery. They argued they were helping the natives by acting as the father figures of these children. With this argument came laws and policies that restricted the actions of the natives as they were assumed incapable of making important decisions, even those decisions that affected their lives and the lives of their families. By definition, the child does not have the same level of ability as the parent; thus people of color were seen as intellectually inferior. All these differences were necessarily established to create the illusion of a racial hierarchy. Today these stereotypes are still evident in the underrepresentation of people of color in positions of power, the overrepresentation of people of color living in poverty, and the lack of media attention on issues affecting these groups.

Stereotypes affect women and people of color in education in differing ways. In many parts of the world, women are denied access to education or denied the same quality of education available to men. In the United States, women can choose their careers and the extent of their education, yet because of the insistent stereotype of women as homemakers, there is an overrepresentation of women in caretaking roles, such as teachers and nurses, and an underrepresentation of women in positions of power, such as chief executive officers and political office holders. People of color do not graduate at the same rate as Whites and score significantly lower on standardized tests (Winters & Greene, 2002). Despite having access to education in the United States, people of color are less likely to attend institutions of higher learning and more likely to drop out of high school. When considering the history of this nation, the validity of these stereotypes must be questioned. There is no evidence suggesting innate characteristics are the reason why certain groups are more successful than others, meaning the solution must be in people's social construction.

Many attempts have been made to alleviate the inequalities between groups of people, but much more needs to be done. White, heterosexual men consistently negotiate their identities to remain in power; thus these attempts at creating equality have not been fully successful. Stereotypes are maintained through a lack of communication and cooperation between people of different cultures. If there is a consensus between people of different backgrounds to unite and get to know each other, many of these stereotypes will naturally disappear. Throughout the last decade, much attention has been placed on these issues, and this is the start to real change. Placing matters of sexism and racism at the forefront through media outlets increases their visibility and forces the masses to consider the importance and need for change. In the classroom, segregating students through tracking and zoning should be eliminated as to encourage multi-level, culturally integrated classes, representative of the population. Stereotypes

will only disappear if people make a conscious effort to challenge them.

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Using the HPST Framework to Improve Reading Comprehension with Students with Intellectual Disabilities in a University Setting

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Abstract: The Historic, Philosophic, Societal, and Takeaway (HPST) Framework, a guide developed for document analysis (Pombo, 2015), was implemented in *Panther LIFE*, a postsecondary transition program. The purpose of this study was to explore the necessary adaptations for implementation with students with intellectual disabilities as well as their reading comprehension outcomes.

With the implementation of Higher Education Opportunity Act or HEOA (2008), students with intellectual disabilities (ID) in postsecondary programs are accessing university courses and coursework across the nation. In the United States alone, there are approximately 242 postsecondary education programs in 47 states that have admitted students with ID (Grigal et al., 2015). Florida International University (FIU) in conjunction with Miami-Dade County Public Schools (M-DCPS) houses a postsecondary program titled Project *Panther LIFE*: Learning Is for Everyone. The program is in its fifth year of implementation and currently serves 30 students with ID from the Miami-Dade community in Miami, Florida. It has been the researchers' experience as educators in the *Panther LIFE* program that students with ID show poor decoding and reading comprehension skills, often with reading levels significantly below high school level. Because of this, a solution is required to assist the students in achieving comprehension via analysis leading to higher-order thinking in a university setting.

Czarniawska (2004) described narrative texts as a bastion of social life, articulating that individuals try to understand and make sense of their own lived experiences (and or personal reality) by creating biographical, auto-biographical, and ethno-autobiographic narratives. These types of text act as a source for knowledge because they serve as an organizing catalyst for "experiences using a schema that assumes the intentionality of human action" (Czarniawska, 2004, p. 7). Schunk (2012) conveyed that learning and development are not dissociated from interpersonal context and social interactions ultimately transform into learning experiences. Additionally, research has shown that narratives and expository texts can be used as a pedagogical tool to enhance students' overall comprehension in adults with ID (Reichenberg, 2014; Van Den Bos, Nakken, Nicolay, & Van Houten, 2007).

Pombo (2015) developed a pedagogical tool titled the Historic, Philosophic, Societal, and a Takeaway Framework (HPST) to be used and adapted for narratives. The model works on the assumption that narratives possess historic, philosophic, and socio-cultural components that when harnessed properly can directly catalyze comprehension. The purpose of this study was twofold: (a) to explore the adaptations necessary for the usage of the HPST Framework with students with ID; and (b) to discover reading comprehension outcomes of student learners with ID in the *Panther LIFE* program.

Program Overview

Project *Panther LIFE* is a postsecondary transition program for students with intellectual disabilities (ID) made possible through a partnership with FIU, M-DCPS, and Parent to Parent of Miami, Inc. (a nonprofit parent support agency). *Panther LIFE* is a non-degree certificate

program which allows students access to and participation in university courses and events with an ultimate goal of paid employment at program completion. Students in the program follow a program of study (POS) that includes university courses, M-DCPS online curricula (e.g., i-Ready), trainings and workshops (e.g., Money Management), and other program-related events (i.e., summer residential program). Students audit university courses in a variety of areas including, but not limited to Computing and Technology; Social Inquiry; Sciences, the Arts, and Health; and Nutrition. Supplemental academics are provided by the M-DPCS online curricula in the areas of reading, math, and independent living skills. Additionally, students are provided an array of support systems including an M-DCPS Project Coordinator, FIU student mentors, and faculty advisors. M-DCPS Project Coordinators assist *Panther LIFE* students on a regular basis with daily scheduling, time management, and instructional programming. FIU student mentors are comprised of peer coaches and academic mentors who meet with the students three times a week for one hour each session. Peer coaches assist with participation in campus life, and academic mentors assist with access to university coursework and academic independence. Faculty advisors meet with the students once a week for one hour per session to assist with appropriate interactions with professors in a university setting.

HPST Framework Description

The HPST Framework can be best described as a pedagogical tool used to interpret and understand narrative, producing an authentic learning experience. The purpose of the HPST is to serve as a guide for document analysis that when applied to a course's readings will help extract content knowledge, create higher-order connection making, be used as a platform for student dialogue, be utilized as a deliverable form of student assessment, and provide students with an authentic learning experience.

The HPST Framework resonates with the Common Core State Standards Initiative (NCSS, 2010). The Common Core espouses literacy competencies (or standards in the strand) which must be met. These standards in the strand are based on reading material that is to be analyzed by students so that a greater understanding of content can be achieved. The researchers believe that this Framework will help with the aforementioned process. Additionally, the HPST aligns with the National Council for Social Studies Standards (NCSS, 2002) by catalyzing: (a) meaningfulness via building curriculum networks of knowledge, skills, beliefs, and attitudes that are structured around enduring understandings, essential questions, and learning goals; (b) integration via drawing from history, political science, and sociology to increase the understanding of an event or concept and to provide opportunities for students to conduct inquiry, develop and display data, synthesize findings, and make judgments; and (c) activity via developing new understanding through a process of active knowledge construction through interaction in a cooperative group dynamic.

The HPST Framework works on two levels. The first is the interactive level, which is composed of three interconnected elements: author, text and reader/student. The second level is the analytic level. This level is created by the use and application of four perspectives or frames: historic, philosophic, societal, and takeaway. Figures 1 and 2 provide a graphic representation of the two levels. Within the historic sphere, it is imperative that the teacher embrace the idea (and transmit to the students) that this frame is based on a Historiographical Approach. This entails the presentation of history based on its critical examination, evaluation, and interpretation leading to student understanding. The who, what, where, and how are explored. Moreover, students will identify the context, causes, continuity, change over time (if applicable), and

periods of time. The philosophic dimension of this Framework will have students exploring the belief(s) of a time period, school(s) of thought, public opinion, and psychological paradigm. Students will discuss, within the societal frame, the underpinnings and cultural nuances of the period. Examples of possible topics can include food, religion, traditions, enclaves, morals, and values. Students will work in assigned groups and will create a deliverable using both the selected excerpts from the narrative itself and outside sources (i.e., visuals, auditory artifacts) that exemplify, describe, answer, and/or justify their assigned frame. Most importantly, a personal takeaway will be given by each student which will catalyze a student dialogue platform and/or practical assessment element.

Method

Description of Participants

Panther LIFE acquired Institutional Review Board (IRB) approval from FIU and all students were given the opportunity to opt in or out of any data collection activities at the beginning of each academic year via consent form. Participants were notified at the beginning of this study that they could opt out at any time. The participants consisted of four students ages 19-21 in the *Panther LIFE* program, of which three were females (75%) and one was male (25%). All students (100%) were in their first year of the program. The group's racial/ethnic composition consisted of three (75%) Hispanic and one (25%) Asian. Participants in this study were selected through a convenience sample. *Panther LIFE* students were asked if they wanted to participate in a short research study and those that volunteered to take part were selected.

Research Design

This qualitative study utilized a focus group format where the students met with the researchers three times throughout the Fall 2015 semester for approximately one hour each session to read, review, and respond to a selected text. The text selected for use in this study was the book *The Prince of Los Cocuyos* (Blanco, 2014). This text was selected because all *Panther LIFE* students had read the book as part of their introductory course prior to partaking in the study.

Previous to the beginning of the focus group sessions, the researchers met to highlight the desired content. A roadmap was developed from the content extracted from the text, composed of two elements: (a) background on the author, and (b) vocabulary, concept, essential questions, and terms. The focus group sessions were then broken down into three main topics: (1) an introduction to the author, (2) an introduction to a selected passage with vocabulary, and (3) a reflection on the selected passage. Figure 3 shows a detailed representation of each session. The first session opened with a slideshow of pictures of the author. Students were questioned about who the man was as a person, his authorship, and his career. Using technology, the students researched interesting facts about the author which catalyzed a discussion surrounding their initial impressions of him. The second session opened with a video clip of Mickey Mouse and a discussion about Disney World. The section of the book was read aloud as the students followed along. The students were given a word list and then participated in a discussion focused on students' reactions to the text in which they identified the content attached to each word. Reconvening within a whole group dynamic, the vocabulary words were discussed and analyzed. The third and final session opened with a brief recap of the selected text with rereads of target areas. The session then revolved around open-ended questions regarding immigration, Communism, and personal takeaways from the text.

Data Analysis

Each session was recorded and detailed notes were taken from observation. The researchers then used thematic analysis for each session a total of two times. The first thematic analysis examined accommodations within each session, and the second analysis scrutinized recurring patterns of student responses especially in the areas of making personal connections with the text and responding to societal themes.

Results

Adaptations to HPST Framework

Instead of having one academic class session, the accommodation was to break it down into three course sessions as the sample of students needed more time. The first part of the Framework, the interactive level, required little to no accommodation. This sample of students was able to accomplish what the Framework suggested which was to identify the author, to research background information, and to create a biographical profile that catalyzed a personal reaction within the student. The only accommodation in this level was the utilization of a simplified graphic organizer to record findings regarding the author's biographical profile. Figure 4 displays a sample of the graphic organizer.

The second part of the Framework, the analytic level, required accommodations. The first accommodation was using a twenty-page excerpt of the overall text. This accommodation was due to a time limitation with the sample of students. Due to a variation of word recognition levels within the sample of students, additional accommodations were put into place to assist with reading. The researchers read orally along with the group rather than having the students read on their own. Also, the researchers stopped occasionally to explain nuances of the text. This included having the students look up definitions of words using technology (i.e., iPhone, iPad), probing for understanding (i.e., colloquialisms, foreign language terms), and explaining significance of literary nuances (i.e., Confederate flag, Chevy Malibu). The next accommodation made was that the sample of students completed the terms and concepts list (see Figure 5) as a group employing researcher prompts. Moreover, the students were prompted to find the word in the text and find definitions and examples using technology; this led to a discussion focusing on students' reactions to the text. It is important to note at this point that this session required a greater amount of time than previous sessions because the students struggled with abstractions in the literary content (i.e., paradise, *gringa*).

As part of the analytic level, all three frames (historic, philosophic, and societal) are typically covered in one session. However, due to this sample of students, it was broken up into two sessions: one session covering the historic and societal aspects and one session covering the philosophic paradigm. Within this last session, the researchers first probed for literary content retention and discussed literary particulars in the assigned excerpt to regain interest. Then, the researchers introduced new terms and concepts. Since the underlying theme of the book was immigration due to Communism, accommodations had to be made to ensure student understanding. The researchers had to reconcile words (i.e., immigrant, immigration) in order to explain the philosophic underpinnings of Communism before the students were able to reflect.

The final part of the framework includes a personal student takeaway. Typically, this would be embodied in a formalized deliverable (i.e., presentation) where students elaborate on the three frames justified by the text. In this case, the researchers used an informal reactionary discussion in place of the aforementioned. This accommodation allowed the students to connect to the literature in a non-stressful environment that enhanced their higher-order thinking. Additionally, because of the time constraints, this was a viable option.

Reading Comprehension Outcomes

The researchers identified two main reading comprehension outcomes: (a) increased ability to find definitions of words via context clues and technology, and (b) increased ability to make higher-order connections without excessive prompting. During this exercise, students made connections with the text while also utilizing technology to compensate for any lack of content knowledge. An example of this occurred during the first focus group session when a student utilized her iPad to share a fact about the author before any prompt was formally given. The student said, “Richard Blanco met with Barack Obama in 2014 and he got his degree from FIU.” When asked how she knew the information, she identified an online source on her iPad. Another example included a student sharing that the author of the book was a Poet Laureate, and the student went on to explain that Blanco read an Inaugural poem. During the session where the terms and concepts list was expounded upon, the researchers found that the students identified the meaning of the word using context clues and reflected using their personal experience. When asked what the author referred to as “paradise,” one student reflected, “It is a place to stay forever.”

Beginning in the first focus group session, the students were making higher-order connections with the author and by the last focus group session, they were making the same higher-order connections in relation to the literary content with few prompts. One example took place in the first session when a student made a connection to the author without any prompts. The student said, “He is a world explorer like me and we love trying new things and meeting new people [...] He was born in Madrid [and] I was born [in] India. Richard Blanco was [a] famous writer [and] my dad is [a] PhD student and he loves to write and read.” In the last focus group session, the same student made correlations between her personal experience and the author’s experience in the text. The student commented that if she had to leave her home country due to a Communist dictator, then she would have to make a choice: “[I would have] to find a different place to live. Somewhere where they spoke my language at least.” Additionally, she shared that she would miss her country and she would struggle with her identity as an immigrant, forming new relationships in the new country, and paving a new life for herself.

Discussion

Based on these findings, the authors recommend that students with ID should engage in these types of higher-order thinking activities provided by the HPST Framework on a regular basis. The sample of students was able to synthesize what they were reading, and the goal of higher-order thinking and connection making was achieved that is a requirement of the university setting. Additionally, the nature of the Framework makes it adaptable to a myriad of student and teacher needs, thereby allowing it to be useful in multiple areas of *Panther LIFE* as well as other postsecondary transition programs.

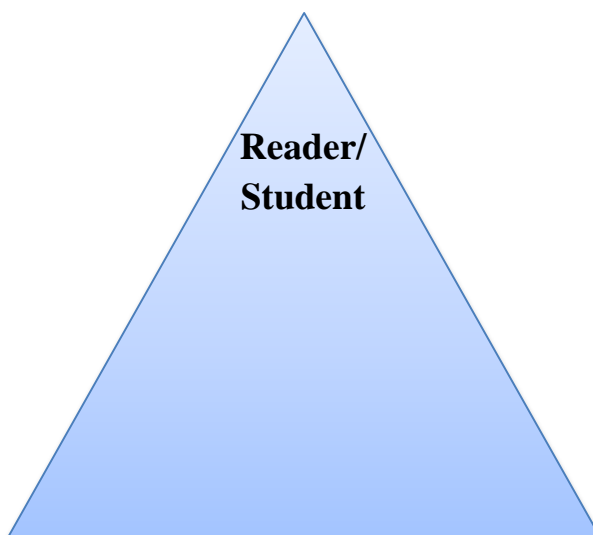
Given that it took three sessions to review a twenty-page excerpt of the assigned text, the time allotted in regards to the usage of the Framework would most likely need to be increased in further studies. This would entail a longer implementation, perhaps even a semester or an ongoing exercise with periodic evaluation. Moreover, the sample of students should be increased in further studies to examine group dynamics and additional adaptations to the Framework for a larger group setting. Ideally, the researchers would like to expand the Framework implementation to a whole group dynamic in *Panther LIFE* where the higher-functioning students would assist the lower-functioning students leading to a greater understanding and application of the concepts.

In conclusion, further implementation and research is necessary to explore if reading comprehension levels of students with ID would improve over time as well as to continue evaluating the HPST Framework in diverse implementation settings. Due to the nature of the population sampled in this study, a comparative study between multiple implementations of the Framework across diverse populations may also be required.

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Figure 1. Interactive Level



Text

Author

Figure 2. Analytic Level

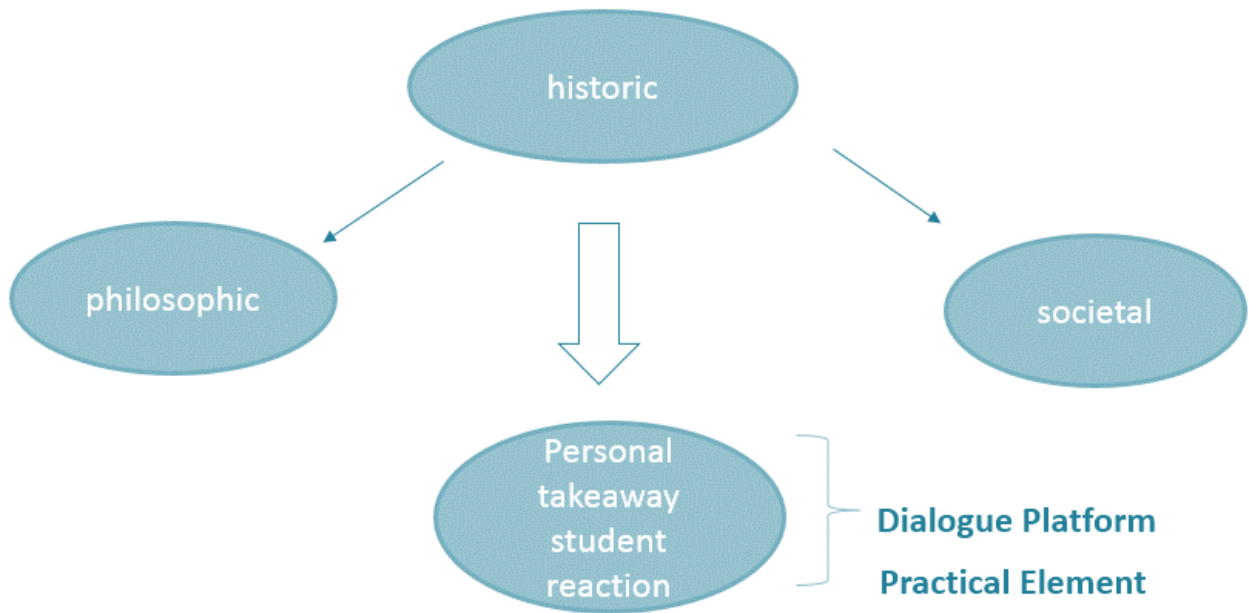


Figure 3. Detailed Representation of Focus Group Sessions

DAY 1: INTRODUCTION TO BOOK AND AUTHOR

Hook: Show picture of author.

Probe: Do you know who this is? What do we know about him?

Author Background: Who is Richard Blanco?

- Born in Spain
- Cuban descent
- Cuban parents
- Grew up in Miami
- Writer
- Poet
- Attended FIU – Grad 1991
- Read at inauguration for Barack Obama
- Has won many awards : Poetry prizes, Literary Awards, International Latino Award
- Lives in Maine and Boston
- Professional Life: Teacher – Georgetown University, American University
- Personal Life: Travels, has a partner

Personal Takeaway: What else can you find out about Richard Blanco?

Students search on iPad/technology for interesting pieces of information and fill in short worksheet.

DAY 2: INITIAL BOOK READING/TERMS

Hook: Show Video Clip – “Steamboat Willie”

<https://www.youtube.com/watch?v=qS87dfF4WSA>

Introduction: Excerpt of text – traveling to Disney World.

Probe: Who has been to Disney World? What do you think of when you think of Disney?

Reading: Pages 74-95

Students follow along on iPad or book as we read together.

Reflection on Terms and Concepts Worksheet:

Suburbs p.78

Chevrolet p.80

Gringa p.83

Magic Kingdom p.84

Monorail p.92

Paradise p.93

Castle p.93

Personal Takeaway: What words stood out to you and why?

DAY 3: SECOND BOOK READING/REFLECTION

Hook: Who has gone on a road trip/vacation? How did you feel? What was the car ride like?

Transition: Let’s think about how we felt on our trips while we follow along with the book.

Reading: Pages 74-95

Students follow along on iPad or book as we read together.

Probe: How was this road trip different from your experience?

Transition: Richard Blanco’s family immigrated from Cuba – he mentions this during this part of the book. What is immigration? How could someone immigrate from Cuba to US? Boat?

Plane?

Why do you think they left?

Personal Takeaway: This time imagine if your road trip was a permanent move. How would you feel? What would you miss?

Figure 4. Sample Graphic Organizer

Meet: Richard Blanco

Place of birth: _____

Date of birth: _____

Interesting Facts:

Figure 5. Terms and Concepts List

The Prince of Los Cocuyos
Terms and Concepts List

WORD	WHAT YOU THINK OF
Suburbs (page 78)	
Chevrolet (page 80)	
Gringa (page 83)	
Magic Kingdom (page 84)	
Monorail (page 92)	
Paradise (page 93)	
Castle (page 93)	

A Global Perspective and FIU Undergraduates: The Interpersonal Domain

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Abstract: Graduates of higher education institutions should attain a global perspective. However, there is limited research on the demographics and global perspective among college students. This paper analyzes Global Perspective Inventory subscales and associations between Florida International University students' gender, class level, and ethnicity. Findings include significant differences between groups.

One goal of American education in today's globalized world is for students to gain a global perspective. Many prominent organizations believe that attaining a global perspective is an important outcome of higher education (e.g. American Council on Education, 2012; American Association of Colleges & Universities, n.d.; Hovland, 2006; Olson, Green, & Hill, 2006). A global perspective is education that cultivates cultural relativism, acceptance of multiple cultures, and acknowledging the world as an interconnected place in which human choices influence the state of the world (Hanvey, 1976/2004). Education should develop these concepts and attitudes in students to prepare them to participate in a global society and work with people from different cultural backgrounds. American employers are seeking "global graduates" who are able to work effectively with diverse teams (Rimmington, Gruba, Gordon, Gibson, & Gibson, 2004, p. 1) and effectively communicate with those from other cultures is important for employability (Busch, 2009). Additionally, education that fosters a global perspective is beneficial for students' cognitive capabilities. Experiences where students directly interact with individuals different from themselves, as opposed to just being exposed to a diverse student population, have been shown to improve students' critical thinking capabilities (Bowman, 2010; Pascarella et al., 2014) and creativity (Leung, Maddux, Galinsky, & Chiu, 2008).

Motivated by their concern with global learning, Florida International University (FIU) made it the focus of their quality enhancement plan, *Global Learning for Global Citizenship*. Global learning is "the process of diverse people collaboratively analyzing and addressing complex problems that transcend borders" (Landorf & Doscher, 2015, para. 2). Beginning in 2010, this initiative requires FIU students to take two approved global learning courses as part of their graduation requirements (FIU, 2010). FIU is one of few universities to have an initiative that integrates global learning as part of students' curriculum. FIU also has a majority minority demographic makeup consisting of 83% minority students (FIU, 2010). Since 2010, FIU's Office of Global Learning has collected data using the Global Perspective Inventory (Braskamp, Braskamp, & Engberg, 2014) to assess the global perspective of students and improve student learning (FIU, 2010).

Understanding the significance of variables on attaining a global perspective is important due to the emphasis placed on it as an outcome of university education. The Global Perspective Inventory (GPI) measures the global perspective of individuals through three domains. The cognitive domain measures what students know and what they believe to be true and important. It is made up of the subscales cognitive knowledge and cognitive knowing (Braskamp et al., 2014). The intrapersonal domain assesses student awareness of self and personal values and

integrating them into their personhood. It is made up of the subscales intrapersonal affect and intrapersonal identity (Braskamp et al., 2014). The interpersonal domain measures an individual's comfort and acceptance of people with backgrounds or cultures different from their own. It is made up of the subscales social responsibility and social interaction (Braskamp et al., 2014).

Results from FIU, unique in terms of the Global Learning Initiative and ethnic make-up, can be helpful when compared to the results from previous research. Previous research found significant differences in the GPI in class level, gender, and ethnicity. Braskamp et al. (2014) found differences between the genders in the means of each of the six GPI scales. They found that on average female students scored higher than male students in the cognitive knowing subscale in the cognitive domain, the intrapersonal affect subscale in the intrapersonal domain, and the interpersonal social responsibility subscale in the interpersonal domain. The cognitive knowing subscale measures how complex and individuals' views are regarding the importance of cultural context in considering information that is important and valuable; the intrapersonal affect subscale measures respect and acceptance of different cultural perspectives and emotional confidence for complex situations and encounters with other cultures; the social responsibility subscale measures the "level of interdependence and social concern for others" (Braskamp et al., 2014, p. 5). Generally, they found that all students gain a global perspective over their time in college, except in the case of interpersonal social interaction. Their results indicate that students make the greatest gains between freshman and sophomore years, which is consistent with earlier results for traditional aged students (Braskamp & Engberg, 2011). In 2011, they also found differences based on ethnicity, but the results were inconsistent. Generally, Hispanic and African American students had higher scores on the interpersonal and intrapersonal scales than White students, and students older than 25 also had higher scores.

Purpose and Research Questions

This study asks the following research question: Among FIU students, do global perspective scores vary by sex/gender, ethnicity, and/or grade level? The following hypotheses are based on the results presented above: the global perspective scores of men and women at FIU will be different; upper classmen will have higher a global perspective scores than freshmen; and there will be differences in a global perspective based on ethnicity.

Conceptual Framework and Literature Review

The importance of students to understand and relate to others from different cultures is well documented in articles about intercultural maturity (King & Baxter Magolda, 2005), intercultural communication competence (Chen, 1990; 1991), intercultural sensitivity (Chen, 1997), intercultural competence as an outcome of university internationalization efforts (Deardorff, 2006; Olson et al., 2006; Olson, Evans, & Shoenberg, 2007), and the positive effect of diversity experiences on cognitive ability (Bowman, 2010; Pascarella et al., 2014).

What is a Global Perspective?

Robert Hanvey (1976/2004) was a strong advocate for teaching towards a global perspective in K-12 education. He believed that attaining a global perspective is essential due to new challenges of globalization, and that it is possible for students to acquire a global perspective over the course of their schooling. Hanvey (1976/2004) defines a global perspective through five dimensions: (a) perspective consciousness; (b) state of the planet awareness; (c) cross-cultural awareness; (d) knowledge of global dynamics; and (e) awareness of human choices, which involve acceptance of other cultures, reserving judgment on cultures different

from one's own, and seeing the world as interconnected. Education for a global perspective "is that learning which enhances the individual's ability to understand his or her condition in the community and the world and improves the ability to make effective judgments" (American Forum for Global Education, 2004, p. 1). This definition is the conceptual orientation for this paper.

University and a Global Perspective

Internationalization of higher education has become a central focus both in the United States and abroad (de Wit, 2011). The American Council of Education (ACE, 2012) and the American Association of Colleges and Universities (AAC&U, n.d.; Hovland, 2006; Olson, Green, & Hill, 2006) are focused on global learning and internationalization of higher education. For example, ACE (2012) believes that "high-quality undergraduate education must prepare students for a world in which they will be called upon to be effective workers and informed citizens who can think and act with global awareness and cross-cultural understanding" (p. x).

Courses and programs fostering diversity experiences and diverse college campuses have the potential to affect the cognitive abilities of all students. Bowman's (2010) meta-analysis to examine the effect of diversity experiences in university found that there is a positive relationship between diversity experiences and cognitive development, particularly in the case of interpersonal interactions with racial diversity. Structural diversity, or a substantial representation of diverse students, is a prerequisite for diversity interactions to occur; the presence of diversity provides conditions where development can occur (Gurin, 1999). Pascarella et al. (2014) also found statistical significance in their research on interactional diversity experiences on cognitive skills such as critical thinking, supporting the theoretical argument made by Gurin, Dey, Hurtado, and Gurin (2002). The results of these studies reinforce the idea that a diverse student population is beneficial for all students and provides a rationale for increasing student population diversity and opportunities for students to interact with diversity.

With the focus on how students should acquire a global perspective and what students should be able to do once they finish school, it is important to assess to what extent a global perspective is being acquired. FIU uses the GPI as a tool to want to determine the extent to which FIU students are acquiring a global perspective.

Method

Participants and Data

The GPI data are cross-sectional, collected during the 2013-2014 school year. The Office of Global Learning administers the GPI to a minimum of 10% of incoming freshmen and transfer students and a minimum of 10% of graduating seniors annually. The test has been administered since 2010, starting when the Global Learning Initiative began. FIU requires that all undergraduates take a minimum of two global learning courses prior to graduation. Courses are approved as global learning courses based on whether they include FIU's three global learning outcomes: global perspective, global engagement, and global awareness. A Faculty Senate Global Learning Curriculum Committee approves syllabi for the global learning courses and the Office of Global Learning trains faculty in techniques to help teach in ways that foster a global perspective (GP). To limit the scope, this study is only looking at one annual cross-sectional sample from the 2013-2014 year.

The total sample size was 3210 students attending FIU during the 2013-2014 year. Broken down by gender, the sample includes 1198 male students, 2000 female students, and 12 students who identified their gender as other (excluded from analysis using gender due to the

small sample size). There were 1192 freshmen, 391 sophomores, 534 juniors, and 1093 seniors. Class status was determined by number of credit hours. In the sample, 70.9% identified as Hispanic, 11.7% identified as African American/Black, 10.7% identified as European/White, 4.5% as Asian/Pacific Islander, 1.7% as multiple ethnicities, .2% as prefer not to say, .2% as other, and .1% as Native American. These data were later consolidated into the ethnic groups of Hispanic, African American/Black, European/White, and Other due to the small sample sizes of the other groups.

Instrumentation

Data was collected using the Global Perspective Inventory. The GPI was developed to measure the ability of individuals to take a GP at different points in life (Braskamp et al., 2014). In developing the GPI, Braskamp et al. utilized King and Baxter Magolda's (2005) model of intercultural maturity. This model builds on Kegan's (1994) constructivist model of lifespan development in their multidimensional model of intercultural maturity, which describes maturity as "self-authorship" (p. 185), which is made up of individuals' ability to organize and understand their lives through three human development domains: cognitive (thinking), intrapersonal (self-awareness), and interpersonal (interacting with others). King and Baxter Magolda's (2005) model of intercultural maturity consists of attributes and skills from each of the three human development domains as well as developmental benchmarks leading to intercultural communication. Essentially, as students develop intercultural maturity in each domain, they gain awareness and acceptance of difference, ultimately gaining the ability to act in ways that are interculturally appropriate or aware. Braskamp et al. (2014) used the cognitive, intrapersonal, and interpersonal domains in the construction of the GPI domains. FIU uses the 2010 version of the GPI to assess whether FIU students are acquiring a GP by the time they graduate.

The three domains of the GPI are each broken down into two different subscales and those subscales are measured by multiple questions. The respondents answer each question using a five-point Likert scale that includes *strongly agree*, *agree*, *neutral*, *disagree*, and *strongly disagree*. Averaged together, the mean of the scores of all three domains represents an individual's overall GP, but each subscale provides a more nuanced look at the students' gains. For each scale, the higher the score, the more the students' capability in that domain. These scales indicate students' GP and correspond to FIU's global learning outcomes: global perspective, global engagement, and global awareness. This analysis focuses on the effect of variables on students' overall GP scores and on the two subscales from the interpersonal domain, social responsibility and social interaction. The interpersonal domain measures the individual's comfort and acceptance of people with backgrounds or cultures different from their own (Braskamp et al., 2014). The social responsibility subscale measures the "level of interdependence and social concern for others" and the social interactions subscale measures the "degree of engagement with others who are different from oneself and degree of cultural sensitivity in living in pluralistic settings" (Braskamp et al., 2014, p. 5).

This analysis focuses only on the overall mean score of all six subscales and the subscales of the interpersonal domain. Although all three domains are important for developing a global perspective, the scope of the project was limited by narrowing the analysis to only one. Relating with others is an important capability that people need to live in a society that is multicultural and racially diverse.

Reliability and Validity

Braskamp et al. (2014) examined the reliability and validity of the GPI instrument (see pp. 10-11); therefore, this research does not address it. Reliability is consistency in responses during an administration of the assessment and if participants respond the same or similarly to the same questions over time (Braskamp et al., 2014). They found that for test-retest reliability the participants' answers were consistent. They used coefficient alphas to test the internal consistency of each scale and found them to be consistent. They also addressed validity, using the standards of the American Educational Research Association, American Psychological Association, and National Council for Measurement in Education (1999). According to these standards, validity is to what extent the interpretations of scores are supported by theory related to how the results of the test will be used. Braskamp et al. (2014) explain that the instrument is not recommended for assessing individual students, but rather should be used in aggregate to assess and evaluate program and institutional effectiveness. To test face validity, or the degree to which participants perceive the test as fair, Braskamp et al. (2014) sought feedback on each version of the survey from the pilot stage to the current version. They also address concurrent validity and construct validity (see pp. 11-12).

Data Analyses

This inquiry considered the research question: among FIU students, do global perspective scores vary by sex/gender, ethnicity, and grade level? This analysis used regression to answer the research question. Regression is appropriate for this analysis because it is used to estimate the effect of variables on the dependent variable. The variables considered for this analysis were class level, gender, and ethnicity. Class level is the year in school of the student: freshman, sophomore, junior, or senior. The number of credits determines year in school. Gender consists of male and female. Ethnicity is the self-reported response to the question "Which ethnic identity best describes you?" The choices are Multiple Ethnicities, African American/Black, Asian/Pacific Islander, Hispanic/Latino, Native American, European/White, I prefer not to respond, and Other.

Results

The research addresses whether there are differences in means that are statistically significant and whether the following variables are significant predictors of students' global perspective outcomes. For all analyses $N = 3198$. To contextualize the research, it is helpful to look at Table 1 in the Appendix of the means for class level, gender, and ethnicity.

Results from Regression Analysis of Overall Mean

The overall model with the independent variables (gender, ethnicity, and class level) successfully predicted the dependent variable (GP overall mean), which is indicated by F-value of 16.712 ($p < 0.01$) and R-square of 0.026 ($p < 0.01$). Looking at the contribution of each independent variable, class level is the significant predictor in this model. The coefficient of class level ($\beta = 0.043$) is significant ($t = 8.699$, $p < 0.05$), and this is also verified by the significant Pearson's Coefficient between class level and mean ($r = 0.156$, $p < 0.05$). The other independent variables were insignificant in this model, although gender indicated a significant Pearson's correlation coefficient with the GP mean score ($r = -0.044$, $p < 0.05$). See Table 2 the Appendix or a detailed report on correlations.

Results from Regression Analysis of Interpersonal Domain: Social Responsibility

This analysis addresses the research questions for the Interpersonal Domain, social responsibility subscale, which answers the questions "How do I relate to others?" (Braskamp et al., 2014, p. 5). The overall model with the independent variables (gender, ethnicity, and class

level) successfully predicts the dependent variable (social responsibility), which is indicated by F-value of 12.323 ($p < 0.01$) and R-square of 0.019 ($p < 0.01$). When looking at the contribution of each independent variable, all variables were significant predictors in this model. The coefficient of class level ($\beta = 0.026$) is significant ($t = 3.368$, $p < 0.05$), verified by the significant Pearson's Coefficient between class level and social responsibility ($r = 0.069$, $p < 0.05$). The coefficient of gender ($\beta = -0.108$) is significant ($t = -5.317$, $p < 0.05$), which is confirmed by the significant Pearson's Coefficient ($r = -0.100$, $p < 0.05$). The coefficient of African American ethnicity ($\beta = 0.161$) is significant ($t = 3.877$, $p < 0.05$), verified by the significant Pearson's Coefficient ($r = 0.034$, $p < 0.05$). However, African American ethnicity also has a reasonably high correlation with other independent variables with a tolerance value of 0.541. The coefficient of Hispanic ethnicity ($\beta = 0.123$) is significant ($t = 3.829$, $p < 0.05$); however, the Pearson's Coefficient is not significant ($r = 0.069$, $p > 0.05$). Collinearity also indicates a high level of correlation with other variables with a value of 0.450. The coefficient of other ethnicity ($\beta = 0.136$) is significant ($t = 2.819$, $p < 0.05$); however, the Pearson's Coefficient is not significant ($r = 0.008$, $p > 0.05$) and collinearity also indicates a high level of correlation with other variables with a value of 0.656. See Table 3 in the Appendix for a detailed report on correlations.

Results from Regression Analysis of Interpersonal Domain: Social Interactions

This analysis addresses the research questions for the Interpersonal Domain category, social interactions subscale, measuring "How do I relate to others?" (Braskamp et al., , 2014, p. 5). The overall model with the independent variables (gender, ethnicity, and class level) successfully predicts the dependent variable (social interaction), which is indicated by F-value of 20.546 ($p < 0.01$) and R-square of 0.031 ($p < 0.01$). When looking at the contribution of each independent variable, class level, Hispanic ethnicity, and other ethnicity were significant predictors in this model. The coefficient of class level ($\beta = 0.059$) is significant ($t = 8.247$, $p < 0.05$), verified by the significant Pearson's Coefficient between class level and social responsibility ($r = 0.145$, $p < 0.05$). The coefficient of Hispanic ethnicity ($\beta = -0.062$) is significant ($t = -2.066$, $p < 0.05$), confirmed by the significant Pearson's Coefficient ($r = -0.080$, $p < 0.05$). However, collinearity indicates a high level of correlation with other variables with a tolerance of 0.450. The coefficient of other ethnicity ($\beta = 0.120$) is significant ($t = 2.680$, $p < 0.05$), confirmed by the significant Pearson's Coefficient ($r = 0.074$, $p < 0.05$), but collinearity also indicates a fairly high level of correlation with other variables with a tolerance of 0.656. The coefficient of African American ethnicity ($\beta = 0.006$) is not significant ($t = 0.147$, $p > 0.05$), though there is a weak, but significant Pearson's Coefficient ($r = 0.031$, $p < 0.05$). African American ethnicity also has reasonably high correlation with other independent variables with a tolerance of 0.541. The coefficient of gender ($\beta = -0.033$) is not significant ($t = -1.741$, $p > 0.05$), though there is a significant Pearson's Coefficient ($r = -0.049$, $p < 0.05$). See Table 4 in the Appendix for a detailed report on correlations.

Discussion and Implications

The results of the analyses indicate that class level is a significant factor in a student's global perspective for all analyses. This is consistent with the findings of Braskamp et al. (2011; 2014), that GP increased over the course of a student's university career and that seniors had greater GP than freshmen. Regression indicated that freshman and sophomores had different GP than juniors and seniors, which is consistent with Braskamp et al.'s (2011; 2014) results that GP

increased over the course of a student's university career. Analysis of the social responsibility scale indicates that class, gender, and African American ethnicity had significant covariance, though African American ethnicity had somewhat high correlation with other variables and may not add much to the model. The results for social interaction found that class, Hispanic ethnicity, and other ethnicity were significant predictors, though both ethnicity variables were highly correlated with other variables and may not add much to the model. The results of the social interaction scale also showed class, Hispanic ethnicity, and other ethnicity as significant predictors of the model. This is consistent with the findings of Braskamp et al. (2011) that ethnicity was a factor in global perspective; in the case of the intrapersonal and interpersonal dimensions, African American and Hispanic students tended to score higher than white students.

These results tell us that class level is the most important predictor of global perspective scores for FIU students for all three scales analyzed. This seems logical since seniors will have taken more courses and therefore by the end of university will have engaged more with other students through classwork such as group assignments. Results also indicate that gender and ethnicity may play a role in the acquisition of GP, though in limited and different ways. In general, the findings are consistent with the contention that FIU students may be gaining a GP in the interpersonal domain during their education at FIU.

Although some results were significant, further research is needed to examine the global perspective of FIU students. It is possible that gender and ethnicity are significant in scales other than the ones examined here. Although class level was the significant predictor in all models, further analysis of the rest of the subscales would determine if this continues to be true across all domains. Analyses of cohort data may determine if these findings are consistent with other FIU samples or specific to the 2013-2014 year. Analysis of data with pre-test and post-test scores for students would also provide valuable insight into the change of GP over time.

The strengths of this study are in the statistical significance of the results. However, the study has limitations to interpretation and generalization of the findings. Among the limitations is that only one year of cross-sectional data were used in the analysis. Additionally, there were many more freshmen than seniors in the sample used; a more representative sample would have been better. It should also be noted that non-traditional aged students were not excluded; results may have been different without those cases. Further analysis with students who are not traditionally aged should be conducted to see whether that has an impact on correlations between age and social responsibility and social interaction. Further research should also be conducted with full-time and part-time students to see whether there is a difference between groups.

Conclusion

The results for all tests were statistically significant in terms of class level, and in some cases, ethnicity and gender. However, gender and ethnicity played less of a role than expected. Based on the results, there is some evidence that seniors have an increased global perspective than freshmen. These conclusions are tentative since the analyses were not conducted on all GPI scales and were only done with cross-sectional data. Further analysis is needed for stronger interpretation and evaluation of the effects of college on students' global perspective including: analysis of cohorts at FIU; comparison between FIU students and non-college students, community college students, or those at other colleges; comparing traditional aged students and non-traditional aged students to see if the class level results are still consistent; and analysis of students with international experiences to see if they make greater GP gains.

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Appendix

Table 1

Means of Overall Global Perspective, Social Responsibility, and Social Interaction

	<u>Overall Mean</u>	<u>Social Responsibility</u>	<u>Social Interaction</u>
Freshmen	3.770	3.804	3.675
Sophomore	3.784	3.806	3.662
Junior	3.854	3.921	3.823
Senior	3.897	3.881	3.839
Male	3.809	3.777	3.720
Female	3.841	3.893	3.773
Hispanic	3.827	3.857	3.727
African American	3.852	3.902	3.798
White	3.821	3.738	3.791
Other	3.831	3.870	3.900

Table 2
Correlations of the Overall Global Perspective Mean

	<u>Overall Mean</u>	<u>Hispanic</u>	<u>African American</u>	<u>Other</u>	<u>Class Level</u>
Hispanic	-.011				
African American	.023	-.567*			
Other	.001	-.420*	-.098*		
Class Level	.156*	.010	.008	-.038	
Gender	-.044	.044	-.040	-.002	-.109*

*p < .001

Table 3
Correlations of Social Responsibility

	<u>Social Responsibility</u>	<u>Hispanic</u>	<u>African American</u>	<u>Other</u>	<u>Class Level</u>
Hispanic	.018				
African American	.034	-.567*			
Other	.008	-.420*	-.098*		
Class Level	.069*	.010	.008	-.038	
Gender	-.100*	.044	-.040	-.002	-.109*

*p < .001

Table 4
Correlations of Social Interaction

	<u>Social Interaction</u>	<u>Hispanic</u>	<u>African American</u>	<u>Other</u>	<u>Class Level</u>
Hispanic	-.080*				
African American	.031	-.567*			
Other	.074*	-.420*	-.098*		
Class Level	.145*	.010	.008	-.038	
Gender	-.049*	.044	-.040	-.002	-.109*

*p < .05

Traversing STEM: Creating Pathways for Social Justice in the United States

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Abstract: The system that once motivated Americans to pursue science, technology, engineering and mathematics (STEM) careers now presents obstacles to racial and ethnic minorities, women, and the poor. This paper highlights both the advantages and hindrances inherent in STEM professions while advocating for improved access to these pathways.

The education system often finds itself at the heart of social justice movements, and with good reason, but the current narrative surrounding science, technology, engineering, and mathematics (STEM) education has yet to rise as the modern crux for access, equality, and equity for minority groups underrepresented in those fields (Cech, 2015; Gutstein, 2003). No one could argue that the federal government and many states have not purposely targeted the reduction of this underrepresentation (Gonzalez & Kuenzi, 2012), but the full-extent of STEM-for-all has not yet caught the attention of social justice activists doing more than simply advocating for more computers in schools (Vakil, 2014). This paper makes the case that STEM fields, more than any other, offer our children the greatest opportunities to find success in our technology-saturated global economy. When once jobs existed for those with varieties of skills, the demand for STEM skills, both in STEM and non-STEM careers, has almost ensured that unequipped young people will fall victim to nearly insurmountable class struggles (National Science Board, 2015; National Research Council [NRC], 2011). Although this holds true for all groups of people, in the United States, strong gender and racial divides create unfair disadvantages for many.

A Pattern of Discrimination

Historically, STEM fields have suffered from the same hegemony found in various facets of American culture. For example, outside of a few token female and racial minority scientists and mathematicians, the general population would be hard-pressed to name historically significant non-White STEM professionals. That does not mean that they did not exist, but walk into any K-12 classroom and ask students to draw a scientist, and quickly it becomes evident that when students think of science, they think of White males in lab coats (Finson, 2002; Steinke et al., 2007). These issues not only persist in our country's perception of who practices STEM, but they also play out in the workforce.

Men outnumber women in almost every field of STEM, especially in physics and engineering (Hill, Corbett, & St. Rose, 2010). Even in the few fields, like Biology, where the number of women majors matches that of men, women continue to face drastic underrepresentation at the tenured-faculty level—not to mention consistent income inequality (National Science Board, 2015). Some have gone as far as suggesting that this dichotomy exists not because of bias in the academic system, but because women have less capable brains than men do (Hill, Corbett, & St. Rose, 2010). Although women clearly perform just as well, if not better, than men on STEM-related assessments, much more continues to be expected from them (Hill, Corbett, & St. Rose, 2010). The social role of women as caretakers of the home and primary child-rearing parent has not changed much, nor does it change when they choose to

pursue careers in STEM (Xie & Shauman, 2003). Often women have to choose between a STEM career and a family. Those who have both face the high likelihood of carrying dual burdens.

Even more astounding things can be said about the dearth of participation in STEM from members of racial and ethnic minority groups. The culture of STEM in the United States extends out of a system propagated by White, Western Europeans (Heilbron, 2003), as evidenced by the famous scientists lauded in popular culture (e.g., Albert Einstein, Charles Darwin, Isaac Newton, Stephen Hawking, Thomas Edison, Bill Nye) and even famous fictitious scientists (e.g., Sheldon Cooper, The Doctor, Indiana Jones, Victor Frankenstein, Captain Nemo). Many have noticed the ramifications of this in the dismal representation of diverse groups. Just ten years ago, the number of people from underrepresented minority groups (i.e., African American, Hispanic, and American Indian) participating in STEM proportionately represented about a third of the total minority population in the country (NRC, 2011).

Nora (2003), a renowned expert for his work with ethnic minority student populations, made the case that Hispanic students lag behind the general population in terms of college preparation. Hispanic students drop out of high school at incredibly high rates (i.e., 46% between eighth and ninth grade, and 50% between ninth and twelfth) and enter college at much lower rates than their White or Black counterparts (i.e., 17% as opposed to 35% and 28%, respectively). Nora argues that the majority of Hispanic students choose to attend two-year institutions before transferring to four-year colleges. Nevertheless, he cites the transfer rate for Hispanics at only 10%. The transfer rate for the general population is 22%. At the time of his publication, the trends had not changed for twenty years. Fortunately, the drop out rate for Hispanic students has decreased by nearly half in the past ten years, but for other underrepresented groups, including Black students, they continue at the same level (US Department of Education, 2015). They paint a bleak picture for racial and ethnic minorities, especially when taking into account the almost ubiquitous requirement of four-year degrees in almost all STEM professions (National Science Board, 2015).

Moreover, an overrepresentation of White individuals exists in these fields—67.4 % in the general population and 74.5% in the population of the science and engineering workforce) (NRC, 2011). In fact, in 2015, people from minority groups earned less than 15 percent of Bachelor's degrees awarded in STEM fields with the smallest number of degrees in the physical sciences, engineering, and mathematics and statistics (National Science Foundation, 2015). These low graduation numbers stand despite minorities, as a whole, attending full-time, two-year and four-year institutions at just below the same rate as White students. In other words, the percentage of the minority population going to college mirrors the percentage of the White population going to college, but a much lower percentage of people from minority groups actually graduate.

Minority Groups and Poverty

Ethnic and racial minority populations in the United States face overcoming additional, serious disadvantages that hinder their ability to compete in the education arena. While racial and ethnic group categories often differ across studies (e.g., White, Caucasian, Black, African American), similar patterns emerge. Research published by the American Psychological Association (APA, 2013) points to significant correlations between belonging to a racial or ethnic minority group and classification under low socioeconomic status. African American children, for example, have three times the likelihood of living in poverty than do Caucasian

children, the study cites. Their parents typically confront double the unemployment rates than parents of Caucasian children. This association between identifying as a minority and having low income has repercussions on education. The same study revealed that more frequently than Caucasian children in similar contexts, African American youths, as well as Latino youths, attend low-income schools with fewer resources and teachers who expect less from them. A sizeable percentage of these young people end up dropping out of school altogether.

Overall, one out of every three children in the United States lives in poverty (DeNavas-Walt & Proctor, 2015). According to another study, children from Hispanic, Black, American Indian, or Alaskan Native families are more likely to live in poverty (Macartney, Bishaw, & Fontenot, 2013). These groups experience a nearly ten-point higher rate of poverty than the Caucasian population. Children living in these conditions must also battle poor health, low access to quality healthcare, lack of nutrition, and mental health issues (APA, 2013). Under these circumstances, the plight of youths from underrepresented populations pursuing STEM appears insurmountable. In addition to the fact that primarily White males designed the STEM pipeline they must traverse, youths of color who choose to tackle that unfamiliar labyrinth must bear the significant burdens to education brought on by poverty.

Fighting For a Cause

The bleak picture for minorities and women in STEM contrasts against the privileges experienced by STEM professionals. In 2011, the U.S. Department of Commerce projected 17.8% growth in STEM-related workforce needs, compared to 9.8% growth in non-STEM jobs (Langdon, McKittrick, Beede, Khan, & Doms, 2011). The White House Initiative on Educational Excellence for Hispanics (2012) presents data showing tremendous growth in STEM professions like biomedical engineering and system software development, which strongly outperform the overall expected occupational growth for 2020. Moreover, STEM workers earn on average 26% higher salaries than non-STEM workers (Langdon et al., 2011). These higher earnings remain true for those that earn degrees in STEM regardless of whether they pursue STEM related jobs. Data from 2012 suggests that the average science and engineering occupant earns twice as much as the average U.S. worker (National Science Board, 2014). At around the same time period, while the average unemployment rate hung at 9%, the unemployment rate for science and engineering workers was down to 4.3%, which reflects greater job security (National Science Board, 2014).

The global economy has shifted significantly toward favoring STEM-related jobs (National Science Board, 2015). These jobs range from non-degree-requiring to highly specialized employments. The need for these in the United States varies by sub-field and geographic location. The National Science Board heralds that a variety of business sector and research-field reports proclaim a growing demand for workers with STEM-related skills. From a global perspective, developed countries like China, India, and Brazil have diverted a large portion of funding toward generating highly skilled STEM professionals, increasing the pressure for the United States to maintain a viable STEM workforce.

Regarding this movement, recent national reporting confirms the persistent underrepresentation of women and minorities in STEM that would otherwise offer talent and help meet the country's workforce requirements (National Science Board, 2014). Women, overall, make up only 28% of the STEM workforce, and despite exhibiting equal and sometimes overrepresentation in certain fields (e.g., life sciences and social sciences, respectively), less than one in three persons working in STEM identifies herself as a woman. The picture is equally

bleak for African Americans and Hispanics who in 2010 made up 11.5% and 13.9% of the U.S. residential population, respectively, but only about 9.8% percent of workers in STEM fields pertain to both these groups (National Science Board, 2015).

Connecting to Access

For a few, the STEM fields have opened up avenues out of poverty. Groups of K-12 students across the country have experienced free STEM enrichment both in and out of school thanks to state and federal attention given to STEM. Many graduate students have enjoyed the benefits of fully paid tuition as a result of having chosen a STEM pathway. Faculty have grown their programs and have had their research paid for thanks to the federal attention given to STEM. The U.S. government spends billions of dollars a year funding STEM-related research. For example, the NSF and the National Institutes of Health (NIH) distribute approximately 40 billion dollars' worth of grants every year. This does not count federal research funded through agencies like the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), the Department of Energy (DOE), and the Department of Defense (DOD). The U.S. government directly employs approximately one quarter million scientists and engineers (Burrelli & Falkenheim, 2011).

In countries across the globe, the same opportunities exist. Countries like China invest in their STEM graduates, supporting their education overseas, often in the United States, and incentivizing their return to the home country. European nations have adopted the STEM rhetoric with similar fervor, devoting national attention to related programs and funding. International businesses, including a myriad of Fortune 500 companies, have partnered together to form groups like *Change the Equation* to promote STEM literacy at a range of levels, deliberately influencing students, educators, and policymakers.

Should not all have an opportunity to benefit? A significant portion of future jobs will require STEM skills and content knowledge (National Science Board, 2015). Given these twenty-first century changes, this nation must ensure that all children have the same preparation to pursue the kinds of jobs that will help them acquire success (President's Council of Advisors on Science and Technology, 2010). Our K-16 education system must change to accommodate the cultural context of the disadvantaged. To do so, the country must find ways to counteract the under-resourced educational experiences of children living in low socioeconomic circumstances. Leaders must approach the teaching and learning of STEM from a perspective that welcomes the variance in students' cultural milieu. Education practitioners must accept that the differences between those who are considered the successful students and the unsuccessful ones are not biological, but rather a result of changeable circumstances. More importantly, administrators and educators should feel confident that, given the right setting, all students could acquire skills, regardless of their learning preferences or backgrounds (NRC, 2012; NRC, 2000).

Solutions and Limitations

The short response to the circumstances presented above is simple: Funding and resources must be redirected to explicitly counter the cultural and gender-related imbalances in the STEM system. At the heart of this response lies the principle that change requires passion and love for the students in STEM classrooms. Still, even more specific, pragmatic solutions do exist. These can be divided into two categories: external and internal. Any one of them may find its implementation at all three levels of education administration: local, state, and federal.

Externally Oriented Solutions

The lowest hanging fruit for improving access to STEM education involves the adequate

implementation of reformed education curricula and approaches in related K-16 courses. Curricular changes that promote greater depth of content—rather than breadth—facilitate the development of critical thinking skills crucial to STEM professionals. Many states have seen this kind of change with the Next Generation Science Standards that build off *A Framework for K-12 Science Education* (NRC, 2012). These documents encourage curriculum builders to forego the typical wide, unreasonable scope of science classes. Covering such a broad range of context in any science or math course pressures administrators and educators to default to ineffective pedagogies of teaching, which include lecture, rote memorization, and basic summarization of content. Not only have these techniques proven to fail at increasing subject comprehension, they can also leave damaging impressions about science and math careers (Dou & Gibbs, 2013).

By contrast, student-centered teaching approaches facilitate improvement of students' comprehension, and also positively influence affective constructs like interest, performance goals, self-efficacy, and vocational outcome expectations—all of which contribute to a person's career decision-making process (Lent, Brown, & Hackett, 1994). Students should find themselves engaged in activities that promote learning through meaningful discourse, situated in contexts analogous to those of STEM professionals (e.g., moving away from “recipe” labs to more open-ended forms of inquiry using the tools of the field). Students should also be focused on knowledge building and creation rather than memorization, and deliberately involved in discussions about the hidden curriculum in STEM pathways that inadvertently dissuade women and minorities from traveling along them (Freeman et al., 2014; Hazari et al., 2013). These techniques will help generate positive experiences and attitudes with regard to STEM and STEM careers.

Inquiry-based approaches where the focus is on student-centered learning rather than teaching-centered instruction, have been a central tenet of science education reform efforts (National Committee on Science Education Standards, 1996). When compared to traditional instruction, student gains in knowledge, reasoning, and argumentation have been shown in multiple contexts to exceed those of traditional learning (Prince, 2004). In fact, research on these pedagogies has proven their effectiveness so much that to knowingly offer otherwise would represent malicious intent on the part of the instructor (Freeman et al., 2014). Inquiry-based learning is effective for students with different learning styles, and works across gender, race, and socioeconomic status (Tuan, Chin, Tsai, & Cheng, 2005; Wilson, Taylor, Kowalski, & Carlson, 2010), making this approach particularly appealing in the diverse domestic student population. Moreover, students who engage in inquiry-based learning maintain higher interest in and more positive attitudes toward science careers (Gibson & Chase, 2002)—key elements in shaping the future scientific workforce.

Although not all students may choose to pursue STEM careers, all deserve the opportunity to do so if they wish. Much research on the factors involved in the STEM career decision-making process continues to take place, but a large body of understanding already exists. Some of the most effective changes involve direct discussions of underrepresentation in STEM fields in classrooms across the K-12 range and recruitment of diverse K-12 STEM educators (Dou & Gibbs, 2012; Hazari et al., 2013). At the higher education level, changes should include hiring more diverse faculty and researchers, as well as explicitly addressing the implicit biases in graduate school programs. These biases exist at every point, from entrance exams (e.g., well-proven bias against people from minority groups taking the GRE) to

microaggressions coming from advisors and major professors (Gibbs & Griffin, 2013; Miller & Stassun, 2014; Solorzano, 2000).

Internally Oriented Solutions

Despite the many funding avenues that exist to create new STEM education programs directed at women and minorities, few of these require purposeful and transparent counteraction against systemic, academic prejudice. Without reforming the STEM pathway itself, prejudice may prevail in subtle, unexpected ways. This requires change at the individual level. Transforming minds to accept that all students, given the right resources, could and would succeed in STEM fields may have more powerful long-term effects on the number of STEM professionals recruited. This would require administrators, teachers and faculty to approach their practice introspectively, sensitive to their least successful students who may likely come from racial and/or ethnic minority groups, and recognizing that high performing individuals have learned to game the system and will succeed *despite* the instructor. This change in understanding will create a change in attitude, one that encourages a more proactive approach toward teaching struggling students. Such a state of mind may also result in changes to the policy of education, which plays a meaningful role in creating or removing barriers. Yet, tax dollars are rarely directed to address these obstacles. Funds should support workshops or conferences directed at STEM professionals working to promote inclusion in STEM fields, as well as nurturing communities of faculty, researchers, and educators that share the common goal of increasing access and generating context-specific solutions to local challenges.

Challenges

Like most things, talking about these ideas sometimes requires less effort than implementing them. The major challenges the country faces will always come from resolving individual and collective internal struggles. These include those listed above, but others, as well, such as changing the perspective some university faculty have about introductory STEM courses being “weed-out” classes as opposed to recruiting opportunities (Reyes, 2011), or changing the system that grants tenure to professors from valuing research and grant reception to valuing effective teaching (Baldwin, 2009). Although both should matter to the STEM enterprise, the latter will likely have greater direct impact on motivating diverse students to pursue STEM. More broadly, the issues brought on by poverty require creative and just solutions. Battling the system the underserved poor communities face via under-resourced schools requires complete overhaul at both administrative and political levels. By targeting needy communities, some of this positive change can begin to take place.

Final Words

As an ethnic minority in STEM, I experienced firsthand much of the antagonism described in this essay that faces students of similar backgrounds. While working for the federal government, I would later read about these issues in national reports, discovering that my experience was not unique. Somehow, I managed to travel down what some have called the STEM pipeline. Like more recent authors have noted, the pipeline is more like a series of unknown and sometimes unknowable pathways. Those that have traversed this difficult yet awe-inspiring landscape now have a moral responsibility to those that come behind. Having earned credibility in their communities, STEM professionals who resonate with this message of social justice have the power to facilitate positive changes. This will require making our voices heard and that of our students’, periodically reflecting on whether implicit bias exists in our teaching and mentoring practices or the practices of those around us, and, given the opportunity,

sponsoring reform. This movement should move beyond simply reducing underrepresentation in STEM. Rather, these concerns should be framed around issues of injustice and lack-of-access for women and those in minority groups. Much implicit and systemic prejudice continues to prevent individuals from pursuing careers that would otherwise allow them to enjoy benefits often reserved for the privileged. The country must raise an alarm that will be heard by more than just members of the STEM community.

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Writing the Literature Review Section: Teaching Undergraduate Psychology Students Scientific Writing

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Abstract: Many undergraduate psychology students write the literature review section of a scientific paper as a list of summaries without direction or coherence. This paper proposes to teach students to write the literature review section as an argument instead of following the traditional hourglass metaphor approach.

One of the required courses in the psychology undergraduate curriculum is the research methods course. This course teaches students the process of conducting an experiment and includes the writing of a scientific report. This requirement reflects the emphasis of scientific method and reasoning in the field of psychology. In order for psychology undergraduates to understand the subject, students need to know how to conduct research and report their findings. A research methods course teaches students to write an empirical paper, starting with a literature review section according to the format laid out by the publication manual issued by the American Psychological Association (APA). The purpose of the literature review section is to provide the reasoning for the study by reviewing past findings. It also provides the rationale for the experiment and establishes the importance of the experiment. One of the most commonly encountered problems when teaching students to write the literature review is that students often adopt a sequential summary style of writing. In other words, the literature review section often begins with a short introduction section, a series of research studies and their summaries, and a final concluding paragraph that includes the hypotheses. Students often fail to connect the list of study summaries together and state how these studies relate to the main purpose of the paper. The literature review section thus reads much as a list or an annotated bibliography without a coherent argument for the importance of the experiment. This paper seeks to identify the problem for this form of writing behavior and proposes a pedagogical direction that would help students write a more coherent literature review section in their research papers.

Argumentative Versus Expository Text Structure

An empirical paper within the field of psychology is generally divided into three major sections, including (a) the literature review and references, (b) method and results, and (c) discussion and limitations. Students are taught to follow an “hourglass” structure when writing a scientific paper, where the literature review section would start broadly and end with a narrow and specific hypothesis (Bem, 2004; Schulte, 2003). The end of the literature review section would thus be toward the middle of the hourglass where the hourglass is the narrowest. Although the hourglass visual illustration is useful, it does not necessarily help students operationalize the individual steps in constructing the literature review section and convey the purpose of the literature review. Most students, before taking the research methods course, have not practiced writing empirical research papers and do not know how to approach the task (McCarthy, 1987). It is thus the instructor’s job to define and teach the structure of a literature review section at the beginning of the semester. The literature review section of an empirical paper should argue for the importance and relevance of the studies conducted (Hart, 1998). The literature review section should therefore have an argumentative structure instead of any other

type of text structure.

Several types of text structures exist. The general classification of text structure is governed by schematic organizations called the superstructures (van Dijk, 1980; van Dijk & Kintsch, 1983). Superstructures refer to sets of conventionalized sections of a text and are useful in supporting reading comprehension (Kintsch & van Dijk, 1983; van Dijk, 1980). For example, a narrative superstructure has the basic conventionalized sections of setting, beginning, goal, attempt, outcome, and ending (Mandler & Johnson, 1977; Thorndyke, 1977; Rumelhart, 1975; Stein & Glenn, 1979). There are four main types of text structures based on these top-level superstructures. The four main types of text structures include narrative, argumentative, procedural, and expository (Mandler & Johnson, 1977; Meyer & Ray, 2011; Toulmin, 2003; van Dijk, 1980). The mistake that many students commit while writing the literature review section is that they would attempt to write the literature review using a narrative or expository superstructure. Sometimes students are even misguided by instructors to attempt to adopt such an incorrect text structure. For example, instructors might ask students to “tell a story” in the literature review. By saying this, the instructor intends for students to write a literature review with a main point and supporting facts and not necessarily generate a piece of writing that includes characters, conflicts, and resolutions. Of course, most students can distinguish the difference between a fictional paper and a research paper, and the mistake of adopting a narrative structure is rare. What is more prevalent is the usage of an expository text structure for the literature review section.

An expository text structure in its basic form is a network of topics and their respective elaborations (Karamanis, 2004; Mann & Thompson, 1988; Meyer & Ray, 2011; Richgels, McGee, Lomax, & Sheard, 1987). The elaborations are explanations or extensions of the topic, but they do not justify the validity or necessity of the topic. For example, a piece of writing could be on the topic of psychology, and the elaborations could include the various sub-disciplines of psychology, including cognitive, developmental, social, and so on. The various sub-disciplines are related, and they are all included within the field of psychology, but the expository text structure does not need to relate individual sub-disciplines to the main topic or to other sub-disciplines. This particular type of expository text structure is called a “collection” because the relationship among minor sections and the relationship between a minor section and the main topic are often not explained (Meyer & Ray, 2011). They are simply grouped together based on their similarities. The reader only knows that the minor sections fall within the main topic, but the minor topics do not necessarily justify or provide evidence for the main topic. Many students adopt this expository collection text structure in their writing, which causes the literature review section to be a collection of study summaries without much connection. Readers could often tell that all the listed studies were on a similar topic, such as text comprehension or memory. It is often not evident how individual studies relate to the main question that was proposed for the study.

Why Students Should Write Using an Argumentative Text Structure

The purpose of the literature review section of a research paper is not simply answering the question of “what,” but “why.” A good literature review section for an empirical research paper has an objective and should provide the motivation and rationale for conducting a particular research study. In an argumentative text, a claim provides the assertion of the author and is justified by pieces of evidence (Chambliss, 1995; Chambliss & Garner, 1996; Toulmin, 2003). For the literature review section of a scientific paper, the objective or the hypothesis of

the paper is the main claim; the importance and necessity of the hypothesis are supported by past research findings, which serve as pieces of evidence to justify the claim. This argumentative structure should provide the basic layout for the literature review section of a scientific paper. Instead, students' literature review sections often exhibit an expository collection structure, with one study summary after another without any justification or connection to the main hypothesis. It is therefore important to convey to students at the beginning that they should not adopt an expository text structure because such a text structure does not necessitate the usage of past studies as evidence to justify the main claim of the research paper.

The main difference between the argumentative structure and the expository collection structure is that past studies are used as evidence to justify the purpose of the study in an argumentative structure, whereas the study summaries are listed sequentially in an expository collections structure only because they are sub-categories of a larger idea. In the literature review section of an empirical research paper, the purpose of the paper is the main claim of the argument. For example, a hypothetical study might look at how pitch variations could affect comprehension by highlighting keywords in an audio book. In order for the purpose of this study to be justified, the authors need to reference previous studies that show the usefulness of highlighting keywords in print format. In this example, the results from past studies would serve as evidence to explain the usefulness of this type of highlighting technique for audio texts. The authors also need to show that the proposed experiment has not been attempted before and that the study is providing novel information. The summaries of past findings in the literature review section should serve as an argument for the proposed study and not merely as a sequential collection of findings.

It is likely that students write the literature review section as a list of summaries because they adopt a bottom-up writing strategy (Kirkland & Saunders, 1991; Rumelhart, 1984). In other words, students find studies based on the abstracts, attempt to comprehend each one, and then provide a list of summaries for the findings of each study. Students probably do not have a pre-conceived text structure for their literature review sections and the similarity to an expository collection structure is simply an accident. It is also possible that students intentionally use an expository structure because that is the basic structure of most college textbooks with distinct topics and explanations under each topic. Most college students are probably more familiar with the expository structure found in textbooks than the argumentative structure found in empirical research articles. Regardless of the actual cause of the writing pattern, instructors should ask students to take a step further than simply identifying the findings of individual studies and attempt to explain how each study relates to and supports the main purpose of the paper. The process of using past findings as evidence for the proposed study should start even as students read the assigned research papers and not just while writing the literature review section.

Instructions on Writing

Instructions on how to read empirical papers should precede the writing process. First, students should be taught the argumentative text structure using Toulmin's (2003) argumentative model. This background knowledge would allow students to understand the function of the hypothesis as the main claim and the function of past research findings as supporting evidence. Second, students should understand the rationale behind the hypothesis. This would include an understanding of the variables involved in the study and the design of the experiment. Using the example of highlighting audio texts, students should understand that the experiment seeks to test pitch variation's effect on memory. In the hypothetical study, pitch variation is the independent

variable and memory is the dependent variable. The highlighted portion of the text would have a lower pitch relative to the rest of the text, and participants would be asked to recall parts of the text with lower pitch. Third, students would need to search and find relevant studies to support the rationale of the proposed hypothesis. For every study, students should be able to answer three questions: (a) What were the questions addressed by the particular study, (b) What did the researchers find in their experiments, and (c) How did the findings justify the relevance of the currently proposed hypothesis? The first two questions require students to understand a particular study and its findings. The third question requires students to establish the logical and argumentative connection between a past study and the proposed study. These three questions would allow students to establish the connection between past research findings and the proposed hypothesis in the form of a coherent argument.

Once students understand the argumentative structure of the literature review section and can articulate the connection between past studies and the proposed hypothesis, instructors could guide students through the writing process by providing scaffolding questions. The first paragraph of the paper should answer two questions: (a) What is the topic that you are interested in, and (b) What is the purpose of this study? For example, the introduction of the literature review section of an empirical paper could describe audio text comprehension. The introduction would need to define audio text comprehension, describe the usefulness of highlighting techniques in printed texts, and state the lack of parallel highlighting techniques in audio texts. Subsequent paragraphs would provide evidence for the usefulness of printed-text highlighting techniques as evidence for the usefulness of highlighting parts of an audio text. Questions that require students to describe the problem, findings, and relevance of past studies could be used to scaffold this part of the writing process. Studies that show memory improvement as a result of highlighting keywords in textbooks would be considered relevant. Students should be able to explain not just what the findings were, but how the findings provide the motivation for the current study. For example, students could describe that highlighting keywords in printed texts promote comprehension and memory; therefore, similar highlighting techniques should also promote comprehension in audio texts but no previous studies have attempted to investigate this. In this example, the evidence of highlighting techniques in printed text provides the motivation for investigating highlighting techniques in audio texts. It also provides evidence that highlighting techniques could improve memory and therefore the newly proposed study concerning audio text is not without basis. The literature review section should culminate with the hypothesis, where the proposed study is the logical next step based the findings from past studies.

After students have produced their first drafts, students should be allowed to go through a peer review process. Peer evaluation is useful in writing because it benefits both the reviewer and reviewee (Lundstrom & Baker, 2009). Each student should receive an evaluation rubric that guides the reviewer through the process. The rubric would include basic formatting criteria for citations and APA-style formatting. The rubric would also include evaluations for content, specifically for the quality of the argument established by the paper. The section on content evaluation could be in the form of questions. The first question in this section of the rubric should ask the reviewer if he or she could find the main claim (hypothesis) of the study. The rubric should also gauge if the main claim was easily comprehensible, made sense, and did not miss any of the important information. Other questions in the content evaluation section of the rubric should ask the reviewer to identify the pieces of evidence that were used to support the

main claim. Reviewers should be able to identify several pieces of evidence, each supported by one or multiple studies. It should be clear to the reviewer how each piece of evidence justified or supported the main claim. For example, a student's paper could talk about how words highlighted by underlining caused longer eye fixation duration. This piece of evidence does not support the main claim unless the author makes the connection that longer eye fixation is an indication of increased attention and cognitive processing. Increased attention and cognitive processing should lead to better memory and therefore highlighting words by underlining should improve memory. The key evaluation point is if the justification of the main claim is clearly conveyed by the supporting evidence.

Conclusion

This paper has identified a writing problem that is common among undergraduate psychology students. Psychology students often structure the literature review section of their paper as a list of summaries without direction or coherence. The proposed solution is to teach students to follow an argumentative writing structure instead. A limitation to the proposed pedagogical change is that although argumentative writing structure is generally suitable for scientific papers, it is not always the best text structure. Experienced authors of empirical research papers have adopted different styles of writing depending on the content and the target audience. For example, certain literature review papers that simply provide an overview of a field of study would have an expository collection structure instead of an argumentative structure. An expository collection structure is suitable in this case because there might be diverse opinions within a field and the different opinions do not necessarily point to a coherent main claim. The majority of empirical papers, however, should adopt an argumentative style of writing because they are not simply a collection of past studies (Bem, 2004). Because the purpose of an undergraduate research method class is to provide hands-on research and reporting experience for students, instructors should teach students to write the literature review section of an empirical paper in an argumentative style. The key pedagogical steps should include (a) an explanation of the difference between argumentative and expository texts, (b) scaffolding questions that require students to use individual research findings as evidence for the main argument, and (c) some type of peer-review process that evaluates the coherence of the argument. By focusing on the argumentative structure in the writing instructions, students should be able to construct literature review sections that are more coherent and argue for the relevance of their proposed studies.

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Difficulties of Chinese Students with Their Academic English: Evidence from a China-United States University Program

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Abstract: This study was conducted with four Chinese international students who were enrolled in a China-United States university program. It examined their difficulties in academic English through interviews, and the data were sorted into four categories: listening, speaking, reading, and writing.

An increased number of Chinese students have come to the United States in the past decades. However, due to the possible language inadequacy, Chinese students encounter difficulties with their academic English while they study here. One issue is that the way students have learned English in their home country may not serve them well when they study abroad. Most Asian countries have been adopting a behaviorist approach toward English language education, from primary schools through college (Shih, 1999). Such an educational approach treats learning as a result of environmental stimuli, which requires few internal cognitive processes (Schunk, 2012). For English learning, the goal is to produce error-free sentences and give immediate Chinese-English translations (Shih, 1999). However, such an objective is generally achieved through students' self-study and by memorization of exemplary texts and vocabulary lists. The teacher's job is to explain grammar rules and examine students' learning results through quizzes and dictation. The construction of sentences is achieved by replacing words in the exemplary texts. English words are memorized without a clear understanding of their origins and semantic properties. When students study in the United States, they find that learning English is more than memorizing words; it is also understanding multiple meanings and contextual properties.

Difficulties encountered by ESL students could also be explained by Craig's (1999) communicative model. As Craig suggested, communication is an active information exchange process between the sender (speaker) and the receiver (listener). The sender generates thoughts and ideas, encodes them into words and sentences, and delivers them to the receiver. The receiver then decodes the words and sentences into his/her own understanding using his/her language knowledge; the process can be inhibited by several factors, such as background music, appearance of certain subjects, anxiety, and holding a certain stereotype. For ESL students, they often lack the background knowledge that can help them understand the language and worse still, they usually have high anxiety, which will hinder their understanding.

Speaking rate also becomes a problem for ESL students. Second language users generally require more time for the encoding and decoding processes (Braine, 1999). For them, neither encoding nor decoding occurs spontaneously, but by active reflection of language knowledge and use of cognitive skills (Chin, 2002). Also, students could experience negative feelings, such as anxiety and apprehension (Fu, 1995), which can further impede the learning process by increasing psychological noise.

Definition of Terms

The terms Cognitive Academic Language Proficiency (CALP) and Basic Interpersonal Communication Skills (BICS) were first introduced by Cummins (1979). As the names suggest,

CALP is referred to a “classroom language” or academic English, while BICS is a “playground language” or communicative English (Gibbons, 1991). Most English as a second language (ESL) students encounter obstacles in CALP because it has higher requirements in both literacy abilities and cognitive skills. To be fluent in CALP, users need to be able to use advanced vocabulary, be familiar with terminology in their specialization areas, and gain mastery in academic writing systems (Cummins, 1979; Scarcella, 2003). Users need to be capable of using higher order cognitive skills, such as creative thinking, hypothesizing, and deducting. In contrast, BICS only requires skills in conducting social conversations in daily settings, like a cafeteria, park, and school bus (Gibbons, 1991).

Research Questions

In this paper, the following research questions are addressed: (a) How do Chinese students enrolled in a China-United States program perceive the differences between academic English and communicative English? And (b) What difficulties with their academic English (in the areas of listening, speaking, reading, and writing) do they encounter?

Method

This study was an exploratory case study conducted with four Chinese international students who were enrolled in a China-United States university program. This program was a two-year joint program in Master of Science program in engineer management. It was organized between a well-known Chinese university located at Beijing, China, and its U.S. partner. Students would finish their first year at the university in China and then were transferred to and graduated from the U.S. university (in the second year). Such joint programs became popular in China because students receive two degrees—one from the Chinese partner and one from the US partner—and get exposed to two cultures and two languages (L1 and L2) within two years, a relatively short period of time.

In this research, we recruited four students (four cases). The four students were selected because they have similar backgrounds. We had four male participants, who came to the United States and began to study here in 2013. They all major in Engineering Management. The TOEFL (Test of English as a Foreign Language) exam scores ranged from 70 points to 90 points. Generally, none of them was confident about their academic English proficiency.

It generally takes ESL students two years to gain proficiency in BICS and another three years to be fluent in CALP if they are totally immersed in an English environment (Cummins, 1979). However, in our research, the participants were enrolled in a two-year program. They did not have five years to prepare themselves in CALP. The participants took classes in English and lived in the United States. They lived in an area that was predominantly Latino/Hispanic, so they heard Spanish more often than English outside the classroom. Furthermore, due to their low proficiency in English, Chinese people usually stay inside their Chinese community. Such a community helps satisfy their social needs (Maslow, 1968) as well as provides them with group power. Therefore, the participants were less willing to develop social networks with other classmates. The social and language limitations were most apparent in one participant, who spoke some Chinese when he was interviewed.

The research was conducted by two graduate students from the university. The face-to-face semi-structured interpersonal interview was employed as the data collection method. Before interviewing the four participants, we briefly introduced the background of our research. We also gave them time to ask questions. Participants were allowed to use Chinese if it made them feel more comfortable and talk more. Every participant was interviewed twice: the first

interview was for one hour and the second interview was for half an hour. After the first interview, the participants went to classes. We believed that after being interviewed, they would be more aware of their language difficulties, which would help them explain their difficulties more clearly for us in the second interview. Altogether, six hours of data were collected from four participants, one and a half hours for each participant. We transcribed the recordings into eight transcripts, and translated the Chinese parts into English.

Findings

After we finished the research, we found out that the four participants had four major difficulties in academic English, which are the themes: (a) the differences between CALP and BICS, (b) accent, (c) speed, and (d) culture.

The Differences between CALP and BICS

Grammar complexity. The first issue we discovered among the interviewees was that participants were not clear about what CALP was. Based on the above literature review, CALP occurs in academic settings. The high complexity of grammar and vocabulary are attributes of CALP but not necessarily a pre-requisite. However, we found all four participants misunderstood CALP as a language with high grammar complexity, regardless of settings.

Terminology. All four participants reported that academic English contained a larger amount of terminology than Chinese. The participants found words had more than one meaning, and some were used specifically in the academic context. Examples included “enquiry” instead of “search” or “look up”; “verify” instead of “check” or “look at”; and “retain” instead of “keep” or “stay.” It also seemed that a dictionary was insufficient in helping the participant solve this problem. As one participant stated, “[The dictionary] only shows the normal meaning, and I clicked ‘search more,’ and I found the academic meaning.”

Participant A was using a dictionary application on his smartphone rather than a physical dictionary. By using a “search more” function, the application would obtain exemplary sentences from Google and from its own online database. By doing so, Participant A was able to find the academic meaning of the unknown word. However, traditional paper-based English-Chinese dictionaries generally do not include academic meanings for words. Hence, though four students reported a tendency to use a dictionary in class, they were actually using the “search more” function to find academic meanings for words, rather than using the dictionary itself, which provided only meanings in communicative English.

Accent

The professor’s accent. The university in this program welcomes international students as well as international instructors. International instructors help students to see problems from an international perspective, to analyze issues from another country’s angles, and to be open-minded to multiple perspectives. However, like the ESL students, ESL instructors usually have a foreign accent, and sometimes their accents cause difficulties for students. The situation was more severe if the professor was teaching a social science course rather than a STEM subject. Because social science subjects require more reading and oral interactions, lecturing was the primary teaching method. Participant A perceived the Business Law course as “my most difficult course,” not only because of its content, but “the professor, Dr. S., is a Cuban American, and his English has a strong Cuban accent. I try to follow, but after 10 or 15 minutes, I am lost.”

My classmates’ accents. Two participants (participants C and D) had difficulties understanding Egyptian and Indian accents. Though they reported that they did not have many opportunities to interact with them, difficulties were encountered when they were doing a group

project together. All participants recalled a case where an accent impeded communication while participating were in a group project with students from a non- English-speaking country.

My accent. It seemed an accent was not a major barrier for Chinese students in expressing themselves. Participant C commented that “the professor doesn’t care too much about the accent because I am not a native here.” Participant D also indicated that “my Chinese accent is not a problem when talking with teachers. Just like we can understand people speaking Chinese with foreign accent, they can understand us.” However, all participants complained that their accents influenced their presentations in class. When participants were delivering presentations, peers could not understand them well.

Speed

ESL learners usually need to pay more attention to the speakers’ words to be able to understand them. There is a decoding process when information is received in a second language, and hence ESL learners usually get lost if the speaker speaks too fast. Such a problem was reported by all four participants. “The professor speaks very fast and I cannot understand him,” said Participant C. “When we Chinese speak English, we speak word by word, but Indians can keep on talking and they do not need to breathe,” said Participant A. “It is very difficult for me to take notes when the professor speaks fast, especially those with accents,” said Participant B. “I sometimes wrote down a wrong word because of the professor joined two words together; it should be ‘active reader,’ but I thought it to be ‘accident,’” said Participant D.

Reaction time. ESL learners also need more time in constructing their sentences before speaking. Such a coding time decreases as the learner becomes more fluent in L2, usually after a longer time in immersion. However, our four participants had been in the United States for just about one year and had no study-abroad experience before. They all reported that they need more time to think. Besides, unlike English, there is no verb tense in Chinese, and there are no clauses (like attributive clauses) used. Such a difference also causes Chinese students to have difficulties in constructing English sentences. Participant A perceived it to be a general problem among Chinese students: “I think they [his Chinese classmates] need more time to react. When you understood, they moved on to digest the information. They [the professor and native speakers] have already finished the topic.” He also concluded that this was why Chinese students did not participate in class activities often.

Vocabulary size. All four participants mentioned that insufficient vocabulary size caused some problems. They all admitted that when they listened to lectures in class, the peers or the professors used new words, and those new words would cause great difficulties in understanding. In order to understand better, the participants would use dictionaries a lot, and some of them confessed that they did not have enough time to use dictionaries. If they used the dictionary a lot, they would miss some content because the class lectures would not stop because of them. In their field, they had a lot of new words to learn. Another difficulty was that some words had multiple meanings, but participants only knew one meaning. However, the one meaning they knew was not the correct one; hence, they felt confused.

Culture

Language is closely related to culture. Two participants mentioned that some language difficulties were coming from cultural differences. As persons who were not born and raised in the U.S., they had great difficulty understanding culture-related information. When the professor explained a theory, he/she would use some examples. These examples were sometimes bound by culture. Participant C said, “I always find it hard to understand the examples given by the

professor, especially when the examples are related to culture.” He also pointed out that when the peers told jokes, he was always not sure what they were laughing at because humor is something that is heavily loaded with cultural elements.

Language structure. Chinese and English are from two different language families. The way English is organized is different from the way Chinese is organized. One big difference is that in English, there are a lot of clauses, like attributive clauses. When the participants read academic articles, they would see a lot of long sentences, which sometimes made up a paragraph. When they read these long and complicated sentences, they struggle to find the subject and predicate in the main sentence, which would make it impossible to understand the sentence.

Tense problem. Verbs in Chinese do not have any tense. No matter when the event happens, the verbs will always be in the original form. This is another difficulty the Chinese students encounter when they speak English. Three participants stated that they always used the original form when they used verbs. Sometimes they would realize the mistake they had made, but they did not have enough time to rearrange the sentences. They were trying to produce accurate sentences, which would make them pause a lot when they talked to others. And they were becoming less confident because of the pauses.

Background knowledge. One of the participants mentioned during the interview that some of his peers had been working for many years and were very experienced in the field. So was the professor. In some in-class discussions, their peers would talk about something related to their work experience. When they talked about this, the participant could not understand them and hence, could not contribute to the conversation.

Discussion

Language educators have long used the concepts of four basic language skills: listening, speaking, reading, and writing (Hakan & Azamat, 2014). So in this paper, we grouped the language difficulties in the four categories, too.

Listening

New words and terminology. Students perceived that academic English contains a lot of terminology. The meaning of those new terms could not be found in a traditional paper-based dictionary, but only through the Internet or in academic journals. Also, Chinese students reported having a limited vocabulary base; hence, many words used by the teacher were new to them.

Furthermore, one word in English has multiple meanings. In class, the teacher was using a word, but the meaning was not the common one, so the students felt even if they knew this word, they did not know what exactly the teacher was referring to without looking it up. Besides, unlike homework, class lectures are usually non-stop. Once the student stops to look up the meaning for new words, he/she misses the next sentence. To sum up, the number of new words, different meanings of one single word, and the inclusion of terminology made it difficult for Chinese students to fully understand what was lectured in class.

Speed and accent. We found speed and accent to be a significant factor in the area of listening. Because English is a second language to Chinese students, they need a longer time in understanding when information is received via listening. As one participant said, he needed to hear the full sentence and then was able to start the decoding process, while native speakers could start decoding while receiving new information. When they encountered professors who spoke fast, Chinese students would get lost. Therefore, it would become even more difficult for

them to catch up with what the professors said later on.

Also, when students pay attention to an accent, content is missed. There is a limit to people's cognitive load in their short term memory, and an accent can be perceived as an extra extrinsic load. In a class lecture, if the student pays too much attention to the accent, he/she probably loses the track of what the professor is saying. In class demonstrations or discussions, students cannot focus on the content as they pay too much attention to decoding the language, which makes them unable to interact. Moreover, speed and accent create a synergy, which makes the sentences even more difficult to understand.

Speaking

All participants had problems using academic English when speaking and wanted to learn it. Because of the differences between English and Chinese, Chinese students need more time to think and construct sentences before speaking. Most of them stated that although it was highly recommended that they should think in English, they actually could not. Also, accuracy and fluency were usually what they struggled with. Sometimes they needed time to produce accurate sentences, which was usually followed by a lot of pauses. All of the participants needed to do presentations in class, which was a big concern for them. They were nervous and lacked confidence in speaking in public.

Reading

Sentence structures are far more complicated in CALP than in BICS. Clauses and adverbials are used a lot in constructing sentences in CALP. When the participants read these sentences, they felt they were overwhelmed. In Chinese, there are no sentences like this. For them, it was not easy to tell the subject and predicate of the sentence when it is long and complicated with several clauses. If they could not find the subject and predicate of the sentence, they could not fully understand the sentences.

Writing

The difference between CALP and BICS. CALP is understood as a language used in classrooms and at conferences, while BICS is used in daily life with friends. The participants had a limited understanding of this difference and were confused about when to use CALP and when to use BICS. Students hence used CALP in settings where CALP was not necessary. In other words, they were extending the area of CALP.

Vocabulary for writing academic papers. As reflected by our four participants, there is more terminology in academic English than in communicative English. They tried to include terminologies into their own writings. They also perceived there was a need to use formal words and complicated grammar structures. However, they all felt less confident in using such words and grammar structures. The difference between the expectation and the actual ability caused difficulties in their academic writing.

Conclusion

It is true that all the students come to the United States to study with some language proficiency, but it is also true that the students are not as proficient as the native students here. Many course instructors take it for granted that all the students will follow what they say in class. According to our research findings, the students have a variety of difficulties that need the instructor's attention. We are hoping that this study can help the faculty be aware of the multilingualism of the classroom and of the students' language difficulties.

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An Analysis of the Connection Between Workforce Development and Higher Education Within State Policy and the Sharing of Best Practices

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Abstract: Workforce development policy is a major cornerstone for many governments. The success can be linked to educational programs that support the training of the workforce. Sharing of best practices among higher education institutions supporting workforce development can help newer institutions and support regional workforce development goals.

Workforce development policy has been a critical part of government structures worldwide. The success of these policies has been based on critical components, such as training and the increased knowledge of a societal segment (Giloith, 2000; Leigh & Blakely, 2013; Porter, 2000). There also has been a significant requirement within economic development policy to further develop or cultivate a workforce to support the focused industry (Giloith, 2000; Waits, 2000). This close attention to the education policy, its structure, format and sub-components, is important to best support the workforce development policy. The education portion of workforce development policy also demands involvement of educational leaders in the early policy framework (DeLeon, Haldane, Heldring, & Willis, 2014; Gabel & Scott, 2011). This involvement would include a determination by educational leadership of the education requirements of the government and business stakeholders, recommendations for crafting the educational programs, and the format to best support skills training (DeLeon et al., 2014; Gabel & Scott, 2011). This set of topics does not represent the complete set of factors that educational leaders need to consider in a workforce development program. However, to make sure that the policy framework is supported effectively, education leadership needs to be considered as essential stakeholders within the early stages framework of the workforce development policy (Waits, 2000). This is supported by many different research studies, and the connection between government, business community, and higher education within workforce development policy requires some examination into how information and best practices are shared among higher education institutions (DeLeon et al., 2014; Gabel & Scott, 2011).

This paper seeks to examine some of the key stakeholders required for the development of workforce development policy. Also, this paper investigates some of the structures used for workforce development programs and analyzes the role of higher education institutions in developing key parts of the training and education, specifically curriculum development. Furthermore, the importance of sharing of best practices is discussed. Finally, some recommendations are made on how best practices can be better shared between state higher education institutions, specifically in workforce development programs.

Typical Structures of State Workforce Development Programs

The structure of workforce development programs at the state level is usually decided upon by state level leadership. This decision in part or as a whole has a dotted or solid line to the governor's directions and goals for the state to grow economically. As a result, many of the goals reflected in any type of workforce development policy also have political components that can be at the core of the policy itself (Cooper, Cibulka, & Fusarelli, 2015; Porter, 2000; Waits,

2000). Most state governors have some appointed body or an elected official who acts as the chief agent in enacting workforce development policy. For example, many state governors appoint a Chief Elected Official under the Workforce Investment and Opportunity Act to fund programs (Glickman, n.d.). States may also have economic development boards or departments that lead and organize the entire state workforce policy's direction and structure. Educational institutions involved with the training and skills development of the local workforce would be involved to different degrees and at different levels within the state level workforce development policy. One key area of their involvement includes the organization of training and format for delivery. This is very important as the curriculum structure and pedagogy of instruction can impact the ability of the students within the program to apply the skills learned.

Participation of Education Institutions in Workforce Development Programs

Education institutions involved with workforce development programs can be tasked with many parts of the educational program structure. One of their main responsibilities is to develop the curriculum that delivers appropriate skills training and also to assess the level of student understanding and application of those skills (Koo & Miner, 2010). This may involve working with business and industry groups to identify the skills that the workforce would need and then crafting a curriculum from a fundamental or nonexistent framework (Jacobs & Dougherty, 2006; Koo & Miner, 2010). The ability to put together an education program with rigor is where the educational institution's value is really demonstrated (Koo & Miner, 2010). In addition to the curriculum development, subcomponents that also need to be considered include how to recruit teachers with the necessary skill set and professional experience for the program, how the structure of the workforce development programs may differ from traditional degree and diploma programs, and also how the school advertises the program to local businesses partners and candidates alike (Hung, Lau, Wei, & Wei, 2012). Such concerns and considerations for educational institutions can vary in the level of complexity and detail based on the local and regional demographics that surround the school. Some successful practices could be replicated in different regions of a state among educational institutions. Having some format or forum to share some of these best practices in some of these areas can prove very effective in helping other education institutions who are just getting started with developing their own programs.

Best Practice Sharing in Workforce Development Education Policy

The connection between workforce development and higher education in policy development is essential to the success of the policy. Also, critical to the success of the policy development process is the clear designation of the appropriate stakeholders at the state level, within the business community and the higher education environment (Bagin, Gallagher, & Moore, 2008; Bird, Foster, & Ganzglass, 2014; Hooper & Hughes, 2000; Nowlin, 2011). Also, educational partners and leaders need to be involved in the early framework development of workforce policy so that they can align the training provided with the goals of the program (DeLeon et al., 2014; Gabel & Scott, 2011). Furthermore, additional consideration should be given to the education structure, including the faculty and teaching staff within the workforce development program and key components that educational leadership within the higher education institution should review to make the workforce development faculty more effective (Cramer, Shealey, & Valle-Riestra, 2011; Hung et al., 2012; Parker, 2015). One key area where literature and research is lacking is how to propagate best practices for implementing workforce policy through a state organization down to local officials and leaders where different ideas and programs are to be developed. Most research within this area supports success of individual

programs, but research on better ways to promulgate successful ideas for workforce development and higher education programs is scarce. This paper attempts to lay a foundation for a need to examine the dissemination of the best practices for workforce development and higher education programs from the state and below.

The Stakeholder Types and Roles

Afdal (2013) identifies key stakeholders for any policy related to teaching staff and education policy, which closely follows the stakeholders necessary for the education portion of a workforce development policy. Certain key stakeholders should be involved in the policy development process at different levels at different phases (Afdal, 2013; DeLeon et al., 2014). Glickman (n.d.) organizes a complete layout of the Workforce Investment Act (WIA), renamed in 2014 as the Workforce Investment and Opportunity Act (WIOA), for state and local officials to understand the stakeholders from the federal level down and their roles and levels of involvement in the policy created for workforce development and higher education under the act. The governor has a major role in the use of funds for WIOA programming, and many of the policies are implemented through direct reports or other elected or selected state officials or business leaders (Glickman, n.d.). Though these studies present the main dynamics of the stakeholder involvement within policy in general and workforce development policy, additional research needs to examine the stakeholders' involvement in the dissemination of the best practices down through state structures to support local workforce development programs and policies that have worked well in other regions or scenarios.

Higher Education Involvement in Workforce Development Policy

Involvement of higher education partners and leaders at specific framework stages can be crucial to the success of the long term implementation of the policy. Eduardo Padron (2013), the current president of Miami Dade College, one of the largest higher education institutions in the U.S., highlights the connection the community college has to the local community and the role of the community college as a source for economic growth for the surrounding business community. Cooper et al. (2015) support the importance of early alignment of post-secondary institutional goals and business goals early within the workforce development process. Padron (2013) also discusses the impact of business relations on the school's success. Hung et al. (2012) further discuss the importance of the right set of goals in higher education institutions to support the most effective hiring of personnel. This supports the need for the involvement of school leadership early to make the best choice in workforce education structure to best meet the training and skills requirements for businesses and students alike. Constan and Spicer (2015) further emphasize the importance of having the right involvement from college and university leaders to best measure the effectiveness of the programs as the businesses and state involvement may not have the expertise to create efficacious assessments, especially within the technical fields, which many workforce development programs are developed for.

Partnerships between the local business and higher education community serve similar goals, and that for the partnerships to be successful within the workforce development area, the schools and business involvement in merging learning and practice is crucial (Bailey et al., 2007). Education leaders need to be involved in seeking out future staff as the dynamics of learning and training change (Bailey et al., 2007). This involvement would help create the formal structure for evaluation of the workforce development programs that meets the goals and needs of the training for the business community. Also, the involvement of education leaders can support the need for workforce development programs to meet the ever-changing need of the

business environment. Within the literature and research, much of the focus supports the need for the early involvement of educational partners and also how the involvement can support the workforce development goals. However, some additional research can be made into how the involvement supports dissemination of best practices down to local program and policy.

Additional Considerations

Educational structure that supports a workforce development program can vary based on the goals and complexity of the program. Different components of the educational structure, from the faculty, professional development, to hiring practices, support the program goals. Padron (2013) emphasized the importance of diversity, including diverse teaching staff. This teaching staff may inadvertently reflect a larger demographic within professional workforce field if not for strategic recruitment efforts on behalf of school leadership (Cramer et al., 2011; Parker, 2015). Creating a recruitment plan for recruiting minority and under-represented teaching staff can also help support efforts to recruit and retain students from these same groups into the programs and furthermore into the workforce. The actions and efforts of the educational institutions can benefit the overall diversity efforts with workforce development programs.

Teaching staff retention and professional development could be improved by mentoring, community building, and field experience. Bailey et al. (2007) suggests the use of metrics to recruit teachers who are able to effectively teach workforce development. Differences between traditional full-time faculty and the adjunct professional teaching staff can influence their retention (Bailey et al., 2007; May, Peetz, & Strachan, 2013). Adjunct workforce development staff could be given the same benefits, for example school sponsored professional development, as full-time professors and instructors (Bailey et al., 2007). They should have opportunities to refine professional skills to stay current on changing skill-sets within specific areas and also gain additional skills to support their classroom instruction and pedagogy (Bailey et al., 2007).

Faculty recruitment for workforce development programs tends to follow a traditional pattern. Recruitment efforts also are closely tied to program funding and course load. So retaining teaching staff could be hard when the number of courses and course types can vary from term to term in some cases. Also, the course hours can affect the availability of professional teaching staff. For example, if courses are scheduled in the middle of a typical work day, most professional teaching staff may be employed and unable to teach at these times. Proper scheduling of workforce development courses is also important in retaining teaching staff for workforce development courses like these.

Finally, educational program structure and delivery format itself is another key area that should be considered. Though many workforce development programs require a face-to-face format, some attempt to include hybrid or fully online courses to get students to practice skills very quickly after or even during the training (Alssid et al., 2002; Koo & Miner, 2010). Some instructors may not be able to use this type of educational structure because they may have come from traditional learning formats. Hence, some additional training could support the professional teaching staff within these programs. Also, students within these programs may need additional tutoring and assistance, especially if they have been out of traditional schooling or training of any kind for some time. Also, the support maybe needed to help students through online based instruction that requires them to be self-paced in their learning.

Recommendations

Sharing of best practices among education institutions could be improved based on known challenges and needs specific to a region or area of the state. For example, one idea

created at some higher government levels above the state is the periodic sharing of best practices with workforce development programs across the country. The U.S. House of Representatives sub-committee on Higher Education, Life-Long Learning and Competitiveness has held hearings on the best practices within Workforce Investment Act, now Workforce Investment Opportunity Act (WIOA) funded programs (Congress of the U.S., 2009). However, additional discussion is necessary to know how best practices about work strategies and areas of improvement are being shared among educational institutions. This sharing would take place at the state economic development directors, technical or community college presidents, and key business leaders. State level communication and sharing of best practices can impact the development of technical and community college workforce education programs. Lower level communication among education institutions, such as among school chairs, program chairs, and even key faculty members from different college campuses, can also help facilitate best practices. For example, a visit to a different campus or college could help them understand how to further develop a workforce program. These types of sharing engagements can be created routinely or as needed.

Conclusion

Workforce development and educational institutions have to communicate and work together develop a successful workforce development policy. In addition, further communication among state technical and/or community colleges within workforce development programs and sharing among school leadership, including school and program chairs, can help spread best practices across a state where some ideas may be better used in certain areas of the state than others. As the number of workforce development programs increases at the state level, so does the need for higher education institution to help deliver the necessary skills training. Therefore, increased communication and best practice sharing can help future programs be better developed and implemented to meet the state's workforce development goals.

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Higher Education Reform and the Increased Cost of Post-Secondary Education in the U.S.: A Review of Current Policy Plans and Policy Proposals

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Abstract: Within the last decade, there has been an ever-increasing attention on the need for higher education reform. Measures to mitigate the increased cost and different policy proposals have been introduced to increase the accountability and value. This paper examines current higher education policies and looks at some overarching ideas involved.

The U.S. has had many social, economic, and demographic changes, which have required that the federal government re-evaluate the structure of higher education. This re-evaluation also includes a re-examination of higher education funding and its connection with the federal government and individual state interest and needs (Bird, Foster, & Ganzglass, 2014; Campbell & Pence, 2004). These changes also require that any policy changes or reforms include the appropriate stakeholders and interest necessary for implementation. The policy goals must be clearly outlined before the development of the policy framework, and the proper involvement of different stakeholders at different points, along with an understanding of the level of involvement of these stakeholders during the policy process, is essential (Afdal, 2013; Bagin, Gallagher, & Moore, 2008). To increase options for higher education, states have considered the need for increased accreditation options for public and private institutions to meet their economic development education needs (Afdal, 2013; Bagin et al., 2008; Bird et al., 2014; Campbell & Pence, 2004). The federal government also has proposed measures to increase financial options for potential students that may not be able attend college due to the cost. Increased options for post-secondary education and more access to financial aid are major components in the federal government's effort to address the issues in the U.S. higher education system, and an examination into the latest policy under the Higher Education and Opportunity and Reform (HERO) Act is made below. In addition to this examination, an investigation into some of the issues facing higher education from some different perspectives is presented. Furthermore, some analysis is made into the goals, stakeholders, and interest that need to be incorporated into a higher education reform policy and the necessary steps to implement it and make it successful. Finally, some additional suggestions are made as to other components or processes that need to be included in the current higher education reform policy.

The Current Need for Higher Education Reform

The need for reforms within the higher education systems in U.S. has been voiced by many different sources with many different perspectives and viewpoints on how to tackle the issue (Burke & Butler, 2012; Center for Higher Education Reform, 2015; Office of Senator Michael S. Lee, 2015). Some of these viewpoints have been widely supported while other viewpoints have come from different perspectives on reforms necessary within higher education (Burke & Butler, 2012; Center for Higher Education Reform, 2015). One suggested viewpoint is that higher education should be re-structured as purely a public good accessible by any citizen, like the public library. Butin (2015) discusses this notion of higher education as a public good that not only equips students with a skill, but also provides them with the foundation to learn and

advance their skillsets. Some organizations focused on higher education reforms have identified core goals to guide the reforms (Center for Higher Education Reform, 2015). The American Enterprise Institute's Center for Higher Education (2015) has identified four core goals to guide initiatives: (a) increased options and guidance in selecting higher education institutions, (b) joint responsibility on the student and college to effectively play their part in a quality higher education transaction, (c) close and careful attention to the use of federal funding and financial aid for use where the most value is added, and (d) the investigation of the challenges that may inhibit advancement and creative thought within the higher education environment. This year, presidential candidates and congressional members also showed much interest in higher education reform. This includes the passing of the HERO Act sponsored by Senator Michael Lee and many other senators (Office of Senator Michael S. Lee, 2015). This act addresses problems such as higher education access, funding for students, and accreditation options that states could use to approve different types of higher education programs. Each of these different views offer answers to different problems and some of these are discussed below. Also, these problems are investigated as they relate to their impact on higher education reform.

Tuition at public and private higher education institutions has substantially increased and in most cases doubled ((Southern Regional Education Board, 2013). Cost for public higher education increased by over 130% from 1981 to 2012 (National Center for Education Statistics, 2013). For some families, if they were to have to pay out of pocket, this increase translated into over 149% of their income being used for just one child's education (National Center for Education Statistics, 2013; Southern Regional Education Board, 2013). These continuous increases in tuition could deter potential students and their families from post-secondary education altogether.

The Need for More Higher Education Accreditation Options

Most higher education institutions in the U.S. voluntarily submit to accreditation standards. Dickeson (2009) highlighted the need for reform with the voluntary approach to accreditation that higher education schools now have. One example is the need for certain degree programs in areas such as law and engineering to be accredited by some recognized body, which provides a standardization of the core competencies that must be covered in the coursework and instruction that students would receive. Some of the specialized accreditations are not focused as much on student knowledge and matriculation after completing the programs as much as they are on the faculty-student make-up and terminal degrees of faculty members (Dickeson, 2009). Birch, Cottrell and Miller (2010) found that proper accreditation supports the quality and rigor necessary for undergraduate and graduate programs. Dickeson's definition proposal for accreditation also helps support the individual institutional goals that guide the engagement with the local community (Bagin et al., 2008; Borchardt, Green, Fitzgerald, Raymond, & Paton, 2014).

Post-Secondary Education and Economic Development

Most states organize their degree and certificate programs of some or many of their post-secondary institutions around their goals for economic development (Bird et al., 2014; Campbell & Pence, 2004). The structure and organization of the education system at the state level can greatly impact the types of businesses that are located in a region or state (Bird et al., 2014; Campbell & Pence, 2004). It is necessary that businesses have the required local talent to support their staffing needs; hence, many states have developed components within their traditional post-secondary framework to create certificate and skills based programs that focus on

students having the skillsets to find employment (Bird et al., 2014; Campbell & Pence, 2004; Glickman, n.d.). To be effective, any higher education reform policy will have to take this into account as many of the state leaders will require that the economic development interest be observed with the higher education policy framework (Office of Senator Michael S. Lee, 2015). The focus on economic development has such a priority in itself that policy makers have created additional legislation under the umbrella of workforce development to help support economic development (Bird et al., 2014; Campbell & Pence, 2004; Glickman, n.d.). Furthermore, to make any policy effective, some fundamental goals must be identified for higher education reform, which are discussed below.

Proposed Goals for Higher Education Reform Policy

Higher education reform itself must address some fundamental goals to meet the broad interest of the groups and entities involved. One of the first goals is improved access to higher education options (Center for Higher Education Reform, 2015). Many students may believe that many schools are out of their reach because of their families' socioeconomic standing and may settle for second or third school options even though the students may qualify for scholarships and other financial aid (Burke & Butler, 2012; Center for Higher Education Reform, 2015). In some cases, students could decide to completely bypass post-secondary education as an option all together because of ineffective advisement, limited knowledge on their financial options, or no knowledge of the different degree and certification options that are offered in non-traditional education formats (Burke & Butler, 2012). Within the area of improved advisement, students need to have advisement that considers not only the family situation of the student as it relates to their current socioeconomic level but also helps the student develop a plan for their future and understand how any amount or type of post-secondary education may fit within the student's long term goals (Burke & Butler, 2012; Center for Higher Education Reform, 2015).

Another goal is helping students clearly understand their responsibility during their time as college students and the level of attention necessary for them to receive an education that supports their goals (Burke & Butler, 2012; Center for Higher Education Reform, 2015; Dickeson, 2009). This also involves the student's ability to evaluate the post-secondary institutions and their prospective programs of study to understand if they could help the students meet their personal goals. Another area of student understanding is the cost of the programs versus the value that the degree provides (Burke & Butler, 2012). This includes having some means to judge the school programs based on the outputs versus just the inputs (Dickeson, 2009). Both public and private schools should be evaluated with a clear set of measures to provide the student a clear picture of the quality, rigor, and focus of each program.

The next goal is tied to the goal discussed in the above paragraph and involves correlating incentives through federal or state funding, as an example, to a school's performance (Burke & Butler, 2012; Dickeson, 2009). This performance would be centered on the student assessments, specifically a student's abilities and mastered skillsets before graduation. For certain programs, a final project or capstone can be utilized to judge the program's level of efficacy. Requirements and guidelines for these evaluations or measures should be covered within the accreditation metrics that a school must meet. Such measures would provide some level of standards for schools within a specific degree area and enable the schools to craft their own formats for educational programs to meet these measures. Through these measures also, program rigor and quality can be tied to some form of support to grow the current programs or start others. To properly address these goals, stakeholders required for a higher education reform

policy need to be understood.

Key Stakeholders Within Higher Education Reform

Every policy development includes identification of the stakeholders involved, the point and degree of their involvement, and their impact in the implementation phase. In a higher education reform policy, the first level of stakeholders that need to be involved after the federal level are the state leaders, which include the governor, along with state house and senate leadership (Center for Higher Education Reform, 2015; Burke, 2015; S. 649, 2015). The governor would act as the main agent of the policy and would select elected or non-elected members to handle the regional implementation of the policy. At the state level, the state university leadership (i.e., higher education system chancellor) would need to be involved to make sure the interest of the schools is addressed. Also, the lead state labor agent would also need to be involved during the early framing of the policy to represent the interest of the business with the state. As the policy is translated into regional formats, the governor or his appointed higher education bodies would be responsible for setting guidelines for stakeholders, which could include everyone from local elected leaders such as city and county council members, business and economic organization leaders, and also university or community college leadership. Many of these same stakeholders would be involved with policies implemented under the HERO Act passed in 2015, and this act is discussed below.

Key Components of the HERO Act

The HERO Act was first created as the Higher Education Act of 1965 to improve access to higher education by regulating the administration of federal student aid (Burke, 2015; S. 649, 2015). One key component of the original Higher Education Act was Title IV, where it specifically discussed student assistance through federal loan and grant programs, such as the Perkins loan program, Pell grant program, the Federal Family Education Loan Program, and the Federal Direct Loan Program (S. 649, 2015). Title IV focused also on the institutions' eligibility to receive federal funds and the accreditation requirements for the programs that federal aid can be used for. The HERO Act of 2015 focused specifically on amending Title IV to open the accreditation more for states to be able to accredit their own education programs and apply for alternative program approval (Burke, 2015). Under the HERO Act, post-secondary institutions, entities providing post-secondary courses, apprenticeships, including private, public, non-profit, for-profit post-secondary institutions, must provide programs or course work that can be used toward completion of a post-secondary degree, diploma, or certificate program.

Conclusion

The HERO Act (2015) has many of the components necessary to address the proposed goals mentioned above. Two additional components that should be added to a policy under the HERO Act framework are greater visibility of school success metrics and more focus on advisement for new post-secondary students. With greater visibility into graduation success rates, mastered skillsets of students for employment, and degree value in the employment area, students are provided for additional means to make informed decision when selecting a school to attend. Also, first generation college students, for example, would benefit greatly from having guidance and advisement of the general steps that are necessary for college access and degree attainment. Such adjustments would better fine tune the current HERO act policy to address the needs for reform within the higher education reform system in the U.S.

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Improving Academic Literacy for EAP Students at the Postsecondary Level: A Literature Review

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Abstract: English Language Learners (ELLs) encounter many difficulties in regards to academic literacy (reading and writing) at the postsecondary level. Strategies such as close reading, extensive reading, information literacy workshops, learning communities, and vocabulary work to effectively improve the academic literacy skills of ELLs.

English Language Learners (ELLs) face many challenges in academic settings. It takes ELLs five to seven years to fully develop the vocabulary and literacy skills necessary for success in academic disciplines. This is true for any ELL student, regardless of age, but adult ELLs studying English for Academic Purposes (EAP) at the post-secondary level have an even harder time. They need to be able to read, decontextualize, analyze, write about, and apply critical thinking strategies to multiple sources across various disciplines; they need to possess academic literacy skills. In order to help improve academic literacy for EAP students at the postsecondary level, accurate definitions of academic literacy and EAP students must be established, the needs and challenges of EAP students must be understood, and effective strategies specifically for EAP students must be addressed. First, the definitions of academic literacy and EAP students will be discussed. Then, their specific needs and challenges they face will be addressed. Finally, specific strategies for improving the academic literacy of EAP students at the postsecondary level will be presented.

Definition of Academic Literacy

Carrell and Carson (1997) reported that in regards to postsecondary educational settings for EAP students, there was no one set definition of academic literacy. The differences between academic and nonacademic activities were recognized, but what was considered “academic” was not defined. Instead, there were various academic literacies: different reading and writing activities determined by specific disciplines, instructors, and class settings and dynamics (Carrell & Carson, 1997). Thus, it seems that any reading and/or writing activity assigned in a post-secondary classroom for an academic purpose would be considered an academic literacy. EAP students will encounter numerous integrated reading and writing activities (academic literacies) as they progress through their post-secondary classroom experiences.

Curry (2004) provided a more specific definition. She explained that academic literacy involves “specialized practices of academic reading, writing, and speaking that characterize college-level communication” (Curry, 2004, p. 51). These practices helped ELL students develop a particular schema for specific academic disciplines and in order to develop academic literacy, ELLs needed to do more than just learn how to speak, read, or write in the target language. They must know how to engage with and balance various academic discourses. Without abilities in academic literacies, ELLs will have problems passing “gate-keeping examinations, are at a greater risk of dropping out, and face other educational challenges” (Curry, 2004, p. 52).

Mahoney (2003) defined academic literacy as “learning to read, write, and speak the

language of the academy [college/university]" (p. 685). In other words, academic literacy is the ability to read, write, speak, and understand language used in academic, postsecondary settings; it is the use of written and spoken language necessary for success in academics.

Definition of EAP Students

Whether referred to as ELL, EAP, or ESL (English as a Second Language) students, for the purposes of this literature review, these terms are used interchangeably. The authors used a different term but all agreed that they are college students who are nonnative speakers of English. Additionally, these students are all from different parts of the world. EAP students may be international students studying in their host country on a temporary visa, recent immigrants or the children of immigrants, or students learning the language of their colonizers while remaining in their native homeland.

Badke (2002) discussed international students studying in the United States or in other countries on student visas. This was an ever-growing population of students (both undergraduate and graduate) who need support in developing their academic literacy skills. Over half (54%) of all international students were from Asia, 15% were from Europe, and the remaining 31% came from other parts of the world. Although Badke (2002) did not classify international students as ESLs or ELLs, they technically were because they were still learning the academic usage of the English language.

Bealle, Cash-McConnell, and Garcia (2008) used the term ESL to refer to students for whom English was a second language and who were attending an EAP program at Suffolk County Community College (in Selden, New York). A portion of the ESL students were recent immigrants to the United States and received a college degree or attended some college courses in their native countries. These students had social language skills on par with native speakers were placed in developmental courses because they had not acquired academic language skills. Some of the students took ESL courses in high school, and others took English language courses in other educational settings. Additionally, their purposes for taking EAP classes were different.

Chimbganda (2011) described the ESL students at the University of Botswana as native speakers of the African languages Setswana and Kalanga. They were all first-year college students, they studied English as a second language for 10 to 12 years in their native schools, and they received a mean grade of C on their high school English language public examination. Despite having studied English in primary and secondary school, most of these students came from schools with poor resources and were lacking the academic literacy skills necessary for success at the post-secondary level.

Curry (2004) addressed both first-generation and 1.5 or second-generation ELLs. The first-generation ELLs were foreign born, middle-aged, migrated adults, and were seeking post-secondary education at community colleges. They were not looking to assimilate into American culture but were only seeking to improve their employment and economic status. In contrast, the 1.5 or second-generation ELLs migrated as young children or were born in the United States, have learned English as a second language in K-12 schooling, were more assimilated, and were entering college straight out of high school.

Unlike the articles by Bealle et al. (2008), Chimbganda (2011), and Curry (2004), Maloney (2003) reported on so-called "at-risk," first-year college students. However, many of these students were ESLs. They were 1.5 or second-generation immigrants, and they spoke English as their second or third language. They were included with "at-risk" students because of their educational and economic disadvantages, and were commonly "the best graduates of New

York City's worst public high schools" (Maloney, 2003, p. 665).

Needs and Challenges of EAP Students

Regardless of their immigration status, educational backgrounds, and aspirations, the needs of all ESL/EAP students are the same; they all need improvement with their academic literacy. As stated in the previous section, the term academic literacy is multi-faceted, so EAP students' specific needs with different aspects of academic literacy will be varied. The articles by Badke (2002), Bealle et al. (2008), Chimbganda (2011), Curry (2004), Hartwig (2015), and Marsh (2015) addressed these various needs.

Badke (2002) equated international students' needs for information literacy with academic literacy together. International students' needs in academic literacy arose from their limited English proficiency, unfamiliarity with technology and the North American/European library system, and their attitudes and tendency toward plagiarism which are quite different based on culture. When it came to asking for help or looking for answers, international students lacked the academic vocabulary and discourse to speak with their professors and feared being seen as ignorant. Thus, they struggled when it came to asking questions and conducting research. Another difficulty they faced was the overwhelming amount of resources available in their libraries. International students may only have had access to libraries with limited resources and "restrictive regulation on library use" (Badke, 2002, p. 61). Lastly, educational philosophies differed in their attitudes towards authority, and this created a conflict for them. North Americans/Europeans viewed information as a tool, not as a goal, that was meant to be analyzed and critiqued. However, some cultures viewed knowledge as an "informational heritage" (Badke, 2002, p. 62) that was to be honored and not questioned. To them, information was the goal and was meant to be passed on, so many international students misunderstood the concept of plagiarism and unintentionally plagiarized. They believed they were to simply pass on the information they learned through a more descriptive style of writing than rather than a persuasive one.

Bealle et al. (2008) also noted ESL students' struggles with academic vocabulary, research skills, and public speaking and presentation skills. They suggested that ELLs need explicit instruction on conducting academic research, using MLA-style citations, identifying main points, and making connections between multiple texts.

In order to determine the needs of ESL students at the University of Botswana, Chimbganda (2011) conducted a study in which he asked students what they felt their needs were and assessed their writing samples. The results of the students' surveys showed that they thought they needed to improve in their writing, reading, and speaking skills. Specifically, they felt they needed improvement with using sources, making connections, grammar, and writing style. When the students' essays were analyzed, their difficulties in organizing ideas and grammar structure were revealed, and the results were on target with what the ESL students felt their needs were.

It is obvious that EAP students need help with their academic writing, but Curry (2004) stressed that they needed to learn how to write across multiple disciplines in order to improve their academic literacy. She stated that students in EAP and developmental courses were encouraged to take a personal approach to writing and relate topics to themselves; however, this style of writing stifled their academic literacy development. She wrote that "while appropriate personal subjects can serve as a useful starting point, if assignments do not support the practices

and genres of the disciplines, ELLs will be underprepared for academic writing in disciplinary courses” (Curry, 2004, p. 55). In other words, personalized writing would not help students know how to structure and word papers for a science class, history class, or another content area class. Students would not be able to communicate what they knew and what they were learning in their academic courses and would perform poorly on their written assignments as a result.

Hartwig (2015) also noted that first-year students were underprepared for college curriculum, particularly in regards to freshman composition. They entered college “with little knowledge of research or citation” (Hartwig, 2015, p. 39), especially in knowing that paraphrasing requires citations. This led to students unintentionally plagiarizing; most of their issues with plagiarism derived from their “lack of knowledge and skill rather than intentional subterfuge” (Hartwig, 2015, p. 38). Thus, students needed explicit instruction on how to use and when to cite references. Although Hartwig (2015) was not writing about EAP students, his observations about the needs of first-year college students also hold true for EAP students since many first-year students are at-risk English as a Second Language Learners (ESLLs) as reported by Curry (2004).

Another reason for plagiarism is the lack of connections students make between reading and writing. Many at-risk and ESLL first-year composition students do not know how to critique and cite evidence from their reading to support thesis statements in their writing. They may only know how to summarize or paraphrase and do not know how to isolate text for only relevant information. Marsh (2015) explained that successful students knew how to select relevant sources, how to make connections between multiple sources and how to incorporate sources into their own writing. Thus, at-risk and ESLL students do not fit into the profile of successful students because they lack these academic literacy skills.

Lei, Berger, Allen, Plummer, and Rosenberg (2010) addressed another area of concern for the academic literacy skills of ELLs: vocabulary. Limited vocabulary knowledge, particularly in academic, discipline-specific vocabulary, stifles the reading comprehension of EAP students in content areas. Lei et al. (2010) explained that while many ELLs had fluent Basic Interpersonal Communication Skills (BICS), they struggled with Cognitive Academic Language Proficiency (CALP), and postsecondary instructors must somehow fill the gap.

Strategies for Improving Academic Literacy in EAP Students

There are a number of strategies to help EAP students improve their academic literacy skills. These strategies mainly focus on integrating reading and writing together, and a few of them work on these skills in isolation. These strategies include close reading, extensive reading, information literacy workshops, learning communities, and vocabulary.

Close Reading

Close reading is a strategy that helps students see connections between reading and writing, and see how what is read can be incorporated into writing assignments. In a survey given to first-year composition instructors, many responded that “‘close reading develops the skills to analyze and critically think’; reading ‘encourages students to develop their own ideas’ and ‘prove their point of view—WITH EVIDENCE’” (Marsh, 2015, p. 63), which is what students do when connecting their reading to their written assignments. When using a close reading strategy, students are able to “replicate” the text structure of what they read into what they write (Marsh, 2015, p. 63). Furthermore, close “reading ‘prompts one to write and that writing helps one understand and analyze what one reads’” (Marsh, 2015, p. 63).

A close reading strategy involves students annotating and taking notes on what they read

(while reading) in order to make connections between the text and oneself, the text and other texts, and the text and the outside world; it involves an interactive approach to reading (Marsh, 2015). Annotation and notetaking are essential to close reading because they help to move “students beyond superficial understandings of both texts and the issues raised in texts” (Marsh, 2015, p. 64). These effective reading strategies are then transferred to effective writing strategies as students examine and elaborate on the issues in the texts and model the structure of the texts they read in their own writing (Marsh, 2015).

Unlike Marsh (2015), Maloney (2003) provided an overview of how to model close reading strategies for students. This included how to read critically, annotate text, generate questions based on annotations, and summarize. She described how she took a thematic approach to her composition classes while pairing fiction with non-fiction texts and taught students “to take active control of their learning through the instructional strategy of critical inquiry” (Maloney, 2003, p. 667), which included close reading. Maloney (2003) explained that “critical inquiry refers to a set of active reading techniques that compel students, particularly those academically at risk, to preview texts, take layers of notes from those texts, and to formulate questions from their notes” (p. 667), which they accomplished through multiple readings of the same text. During the first reading, students were explicitly taught (through scaffolding) how to skim in order to create familiarity with the text and then make their first annotations. They were instructed on which details to take note of (like plot features, main events, and confusing passages) and then they shared their annotations with one another. In the second reading, students were asked to look at the language for patterns, symbols, vocabulary (both familiar and unfamiliar), connections to other texts, and other literary elements, and for items of importance or interest. Annotations made during the second reading were then structured into questions for discussion and comparison to other works. Maloney (2003) argued that “by transforming the text in their annotations, students read with purpose and take ownership of comprehension” (p. 668). It was left up to the students how they wanted to annotate text; highlighting, underlining, bracketing, circling, drawing lines and arrows, numbering, and writing in the margins were all encouraged. If students could not write in their books, they also had the option of using Post-It notes. Questions based on these annotations were used “as guidelines for thinking about text” (Maloney, 2003, p. 668) and were related back into class discussions, written assignments, and assessments. In a follow-up activity (using narratives), students were explicitly taught how to summarize text, which they did working in small groups or working alone, following a four-step procedure. First, they listed events and then grouped those events into different episodes. These episodes were written in sentence form and were finally expanded into paragraphs. The summaries were then graded and could be rewritten for a better grade. Maloney (2003) concluded that through this approach “what may have been difficult at first becomes recognizable and solvable” (p. 669).

Extensive Reading

Close reading alone will not improve the academic literacy skills of EAP students. Not every text read can or will be closely read; reading multiple texts for multiple purposes, especially when done for personal enjoyment, can be beneficial. Carrell and Carson (1997) and Lei et al. (2010) elaborated on this.

Carrell and Carson (1997) stated that extensive reading involves rapidly reading large quantities of text for general understanding. The focus of the reading assignment is on seeking information or for entertainment, rather than in-depth analysis of the text. The benefits of this

kind of reading include increased enjoyment, improved automatic word recognition, enlarged vocabulary, built up background knowledge, sharpened comprehension, and cultivated motivation for continued reading on one's own (Carrell & Carson, 1997).

Lei et al. (2010) added that motivation is essential for “gaining a positive attitude toward reading” and that “reading attitude is an integral part of the development and use of lifelong reading skills” (p. 93). Extensive reading helps to encourage this motivation as well as to increase ELL students' reading fluency, vocabulary knowledge, spelling, grammar, and writing development. However, “extensive reading can only occur where there are 95% to 98% of the runnings [sic] words in the text are already familiar to ELL students” (Lei et al., 2010, p. 99), and teachers should allow class time for discussion and questions about what students read during extensive reading.

Information Literacy Workshops

In order to find literature to annotate and read extensively, EAP students need to know where and how to find accurate, credible information. However, many of them are quickly overwhelmed by the vast amounts of information online, in libraries, and in academic databases. They lack skills in knowing how to conduct specific keyword searches, to evaluate sources for relevance and bias, and to cite sources to be used as evidence in their academic writing. Badke (2002), Bealle et al. (2008), and Hartwig (2015) proposed information literacy workshops for teaching students these skills.

As stated previously, Badke (2002) related that many ELLs were unfamiliar with North American/European library systems and may have had a different understanding of what “knowledge” is. Thus, they often ended up plagiarizing unintentionally. In order to overcome these challenges, Badke (2002) suggested that librarians conduct training sessions on formulating keywords for searches and on how to navigate online databases such as LexisNexis. He added that ELLs also needed an introduction to North American/European academic culture in which the expectation is for students to question, criticize, and analyze sources. When students do this in written form, they need explicit instruction from their instructors on different citation styles and models of persuasive, rather than descriptive, writing (Badke, 2002).

Bealle et al. (2008) described specific information literacy workshops that they used in their ESL classes. They explained that they “developed a learning environment that requires students to: analyze and evaluate resources, explore the ‘learning resources in their technological and traditional environments;’ and create learning communities so students can engage with each other, [and] their professor” (as cited in Bealle et al., 2008, p. 56). In their first workshop, Bealle et al. (2008) introduced students to academic databases, but focused on databases with factual information such as almanacs and the U.S. Census Bureau. In the second workshop, students were directed to sources with more statistical information, and the authors described teaching how to evaluate and categorize information from such sources. During the third workshop, students learned how to evaluate websites for “authority and currency of the information” (Bealle et al., 2008, p. 57) and how to cite according to MLA guidelines.

Unfamiliarity with citation guidelines often leads to students unintentionally plagiarizing. To combat this tendency, Hartwig (2015) stated that students need workshops on conducting research and citing sources. A strategy known as patchwriting can be particularly effective for teaching these skills. Patchwriting refers to copying text while making slight changes such as a deleting or adding words and punctuation marks. However, patchwriting is only the first step in the learning process. To help students graduate past patchwriting, students need assistance in

synthesizing text for use in their writing. Librarians can assist by leading workshops on avoiding plagiarism, MLA and APA citations, and close reading (Hartwig, 2015).

Learning Communities

During the information literacy workshops designed by Bealle et al. (2008), students were grouped into learning communities. As students conducted research they “work together to sort through information, prioritize key points, and make connections in their research” (Bealle et al., 2008, p. 57). EAP students discussed their findings with one another and their instructor. In the learning community set-up, dialogue with open-ended question was encouraged.

Curry (2004) explained that learning communities are intentionally restructured to encourage active engagement between students and faculty over long periods of time. Learning communities can exist in any configuration but are most commonly made up of two to three linked classes with the same cohort of students. These communities are linked together by theme or discipline and prove to be more academically successful for students in the communities when compared to students not participating in them. Furthermore, when linked by discipline, learning communities improve the academic literacy skills of ELLs by “deepening [their] understanding of content” (Curry, 2004, p. 63).

Kasper and Weiss (2005) also linked ESL classes by content. They found that linking classes thematically in learning communities improved students’ English language skills, expanded students’ knowledge base, and developed students’ analytical and critical thinking skills. In their courses, students conducted discipline-based research for their semester projects; these disciplines came from ten content areas in the course textbook. Students arranged the ten different groups by disciplines. In their respective groups, students researched and wrote individually but came together to discuss and clarify their readings and to critique each other’s writing. Kasper and Weiss (2005) stated that they meet with their students separately, at first, in order to model and scaffold information and academic literacy skills. Kasper’s class was blended and utilized computer technology while Weiss’ class was face-to-face and used traditional, paper-based articles. Later on in the semester, both classes met together several times for students to work with their groups. Kasper and Weiss (2005) have found “that the peer group provides a comfortable context in which students feel freer and more able to express their ideas on complex issues” (p. 285).

Vocabulary

EAP students are unable to analyze what they read if they do not understand the words they are reading. Lei et al. (2010) devised strategies for improving the academic vocabulary skills of ELLs. They suggested that extensive reading was an effective way of increasing knowledge. In order to build their vocabulary as they read, Lei et al. (2010) recommended that ELLs be trained on how to use dictionaries and to keep vocabulary notebooks and word cards for new words they encounter as they read.

Conclusion and Recommendations for Further Study

The strategies and issues mentioned in these ten articles are not complete by any means. Academic literacy involves both reading and writing, so strategies are needed for both. The articles only mention a few strategies for improving reading but hardly mention any for writing. Furthermore, instructors may have a hard time implementing the suggested strategies in their own classes. Descriptions of the strategies were primarily given, and only a few explained exactly how the strategies were used in relation to curricula. EAP instructors unfamiliar with these strategies (particularly reading strategies like close reading), or those looking for directions

on how to use the strategies, may struggle with developing lesson plans of their own. They will be required to research the strategies and to develop their own activities and lessons based the strategies. However, the needs of EAP students discussed here provide a thorough guide for instructors.

Since strategies for academic writing were not discussed much, this would be a necessary area for further study. Strategies such as a writing workshop approach, using outlines and graphic organizers (for both reading and writing), analyzing different text structures and genres (also for both reading and writing), exploring purposes for writing and the writing process, and implementing peer evaluation would all serve as topics for further exploration.

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Public Middle School English Teachers Using LGBT Discriminatory District Curriculum “Multicultural” Guides

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Abstract: This paper is part of a dissertation in progress exploring why despite increased LGBT visibility and the legalization of gay marriage, in many U.S. classrooms, LGBT students are not provided the same level of representation in the English language arts curriculum that other oppressed groups enjoy.

Despite teachers’ recognition that Lesbian, Gay, Bisexual, and Transgender (LGBT) students face bullying and harassment, many teachers have been unsuccessful at addressing these problems. In fact, survey studies from the California State Safe Schools Coalition, the National Mental Health Association, and the Gay, Lesbian, and Straight Education Network (GLSEN) organization show a prevalence of students reporting a lack of educators’ effective use of interventions to stop bullying and other forms of harassment of LGBT students (Meyer, 2010). Part of the reason for this may be that sufficient information is not filtering into most schools. For instance, according to Meyer, (2010), even though there are 3,000 Gay Straight Alliances (GSA) registered in the United States with GLSEN, in a nation-wide U.S. survey, less than a quarter of students said they had a GSA in their school.

Moreover, according to Fredman, Schultz, and Hoffman (2015), despite it being one of the goals of these policies to include LGBT content in school curricula, the reality is when LGBT issues surface, many teachers report feeling unprepared and fearful of incorporating it due to the possible backlash from parents, administrators, and other students. Furthermore, relying solely on anti-discrimination policies in school districts is insufficient to combat the problems LGBT students face—especially in middle school. According to Kosciw and Diaz (2006), based on a national survey of 5, 420 students (58% female and 66% males with a mean age of 16), middle school students are at a greater risk for harassment and bullying than high school students.

Statement of the Problem

Equal representation in the district mandated English Language Arts (ELA) middle school pacing guides may help improve the lives of LGBT students; however, according to a Meyer (2010) study, curriculum representation of LGBT issues is lacking. This may be part of the reason when teachers and students think of the term “straight,” which they may never do unless it is in opposition to “gay,” they make what they consider pleasant associations, such as their parents and grandparents, families with kids, get-togethers, tradition, a host of romantic comedies, the first house, the first kiss, weddings, etc.; but when they hear “gay,” they think SEX, and not much else. At that point, all conversation stops because sex itself may be a taboo subject in their minds.

To combat this kind of attitude, it is important to understand how heteronormativity, heterosexism, and homophobia work in combination within schools to maintain the barrier of silence and invisibility that are the source of discrimination and violence against LGBT students. Heteronormativity is “a pervasive and often invisible aspect of modern societies” (Gunn, 2011, p. 280) which uses social institutions to maintain the belief heterosexuality is normal and homosexuality is deviant. For instance, as it is commonly known, the Catholic Church’s stance

not to marry people of the same gender may also be sending the message, whether they intended it or not, that heterosexuality is good and therefore sanctified, and homosexuality is evil.

Heterosexism is the default assumption that everyone one meets is heterosexual. For instance, when a teacher hypothetically refers to a male student's future wife or a female student's future husband without realizing that, (if the student even chooses to marry), it may be to someone of the same gender, that teacher is behaving in a heterosexist manner.

Homophobia is hatred or intolerance of LGBT people or any deviation from the accepted gender roles (Marshall & Hernandez, 2012), and it is a direct result of heteronormative and heterosexist attitudes. Indeed, much homophobia in middle schools is perpetrated by students who fear being labeled "gay" and thus become victims of harassment themselves. This may be one of the reasons particularly middle school boys do not join clubs or do activities typically associated with girls such as the glee club, the cheerleading squad, or the dance team.

In depth studies to understand how heteronormativity develops among middle school students are helpful to change the perceptions of the next generation. For instance, in a 2.5 year long ethnographic study, Mora (2013) examined how and why USA-born Puerto Rican and Dominican middle-school aged boys constructed their masculine identities in part by distancing and repudiating homosexuality, which "they perceived as a threat to their sexuality, personal safety, and physical dominance" (p. 340). The findings showed that the boys in the middle school where he conducted the study "affirmed their hegemonic masculinity by promoting compulsory heterosexuality within their group" (Mora, 2013, p. 347). In a similar study, Duncan and Owens (2011) compared girls in two demographically different high schools and the association between popularity, social power, and bullying behaviors and concluded that despite the differences, they all had one single factor: attractiveness to boys. What both of these studies have in common is the ways in which heteronormativity is enforced among middle school students of different genders. With this information, teachers could potentially design lessons that address these types of patterns among their students.

Statement of Purpose

The purpose of this case study is to describe the multicultural educational practices of public middle school English Language Arts (ELA) teachers who use district mandated pacing guides that discriminate against LGBT students by excluding them from any form of pedagogical or content representation. According to Banks (1995), multicultural education in general can be defined as an idea, a practice, a movement, a process, a framework, a way of thinking, or criteria for making decisions that serve the needs of diverse student populations. In this sense, multicultural education recognizes the value of cultural diversity in shaping "lifestyles, social experiences, personal identities, and educational opportunities of individuals, groups, and nations" (p. 28).

Research Question

Teachers in the classroom are expected by school districts to bring multiculturalism into the classroom and to represent fairly all kinds of diverse perspectives. Yet, in many of the textbooks, websites, and most notably, district created curriculum guides (standards, focus, exemplar lessons) in public schools around the country, LGBT people are left out. As a result, well-intentioned teachers who care about all their students may often be confused about what, if anything, they are supposed to do when confronted with LGBT issues in the classroom. This problem may be particularly pressing for ELA teachers who are tasked with exploring the more personal and psychological aspects of human nature through literacy. And so, the question must

be asked:

How do ELA public middle school teachers engage in all-inclusive multicultural curricular practices within a context of district mandated LGBT exclusionary pacing guides?

Theoretical Framework

This case study will use a critical theory framework that, according to Creswell (2013), will “critique the knowledge base, and [this way], reveal ideological effects on teachers, schools, and the culture’s view of education” (p. 31). In addition, to create relevant questions, deepen understanding of what a multicultural, LGBT-inclusive curriculum may look like, and analyze the pacing guides, Banks’ (2001) *Four Levels of Integration of Multicultural Content Model: The Contribution Approach, The Additive Approach, The Transformational Approach, and The Social Action Approach*, will be used.

Significance of the Study

This study may help teachers, parents, and administrators understand how anti-bullying policies are insufficient to create a positive environment for LGBT students to prosper; it may increase our understanding of the factors that prevent ELA teachers from addressing LGBT student issues in the classroom (e.g., lack of support from administrators, unpreparedness, and fear of parents; Meyer, 2010); and, in doing so, point to ways of supporting teachers, administrators, and districts to develop fairer, more inclusive pacing guides that address the diverse experiences of all students.

Literature Review

The Limits of Protective Policies: Teachers, Parents, and Administrators

Teachers, parents, and administrators play an important role in improving the lives of LGBT students by helping to create safer, more tolerant, and accepting educational climates for students (Fredman, Schultz & Hoffman, 2015). However, according to data from a study conducted in the UK, there is widespread disconnection between the policies that policy and practice in the field of education (Nixon, 2013). In other words, even though policy regarding LGBT issues seems to be more positive in the society at large, within the teaching profession itself, this does not seem to be the case; in this sense, according to Nixon, teachers are not unlike priests: impervious to legislative and cultural changes.

Further evidence for this disconnection can be found in a study of 18 urban schools that examined school avoidance and substance abuse among sexual-orientation victimized students in grades 8-12. In this study, the results confirmed that “adult support is an important contributor to school adjustment” (Hymel & Waterhouse, 2012, p. 381); yet, adult intervention is often not available in schools. For instance, in a 2007 School Climate Survey conducted by GLSEN, 82% of students reported their teachers “rarely or never intervene when hearing homophobic remarks” (Meyers, 2010, p. 103).

In the case of parents, their involvement is often negative or insufficient to make a positive difference for LGBT students. And when it is there, it is insufficient. In one study, after the stress of 15,923 adolescents in grades 7 to 12 were tested for the effects of homophobic victimization on educational outcomes by using *Meyer’s Minority Stress Model*, Poteat, Mereish, DiGiovanni, and Koenig (2011) reported that “parental support alone did not moderate the effects of homophobic victimization for LGBT youth” (p. 597). This means that teachers and administrators are often completely alone in their quest to help LGBT youth.

In many cases, families either blame the LGBT youth for what they consider indecent or incorrect behavior, or they may be completely unaware or in denial that there are problems. For

instance, in a recent study using data from the National Longitudinal Study of Adolescence Health, Pearson and Wilkinson (2013) explored the links between same-sex attraction, family relationships, and adolescence well-being in a sample of over 13,000 7th to 12th grade adolescents. Their research found also that “families were less protective of risk behaviors for same-sex attracted boys; and that same-sex attracted girls reported higher levels of depressive symptoms, binge drinking, and drug use” (p. 376).

Even though administrators are essential in creating a supportive climate for teachers and students to combat the more extreme forms of LGBT prejudice, according to Kearns (2014), a Canadian survey designed to understand school climate found 75% of LGBT students felt unsafe in their school compared to one-fifth of straight students--a reminder, according to the researcher, of the importance of affirming the lives of LGBT people in order to minimize regular instances of harassment.

Kearns also points out LGBT harassment and discrimination is one of the least understood and investigated phenomena. This may be one of the reasons there is such a large discrepancy between the amount and intensity of the harassment teachers and administrators report compared to LGBT youth. For instance, even though most principals have reported students been harassed for gender expression, only 12% believed it occurred “often” compared to 90% of LGBT students who say it happens “very often,” along with 62% of non-LGBT students agreeing with the LGBT reports (Marshall & Hernandez, 2015, p. 455).

The Limits of Multicultural Training: Pre-service and Professional Development

One of the ways teachers receive help to address LGBT issues in the classroom is through professional development. For instance, an Australian study found that professional development and access to teaching and learning resources such as professional development programs could “impact positively on teacher’s willingness and ability to include diverse sexualities in their...education programs” (Ollis, 2010, p. 217). However, in a study by the Illinois Safe School Alliance examining 57 Illinois university teacher preparation programs and their issues with LGBT invisibility, Horn et al., 2010 found that despite going through their preparation programs, teachers were often unaware there were problems concerning LGBT students, and therefore, do not seek support.

These findings may suggest some deficits in the type of pre-service preparation those teachers received in the first place. Still, in a study of teacher education programs, Kitchen and Bellini (2012) found teacher education programs play an important part in helping teachers understand LGBT issues and their obligation to prevent homophobic bullying. For instance, in a Canadian study conducted by Kearns, Mitton-Kukner, & Tompkins (2014), the researchers describe the impact of an integrated training program they called (Positive Space I and Positive Space II) on pre-service teachers’ understanding and abilities to create safe spaces for LGBTQ youth and allies. Their findings suggest that for the pre-service teachers they teach “the Positive Space program is needed if they are to be allies and to interrupt heteronormativity” (p. 1). The researchers noted how given the age of the participating students was in their early twenties, the researchers found it surprising a majority of pre-service teachers had not engaged with LGBT people.

Other studies find limitations with the type of multicultural education pre-service teachers receive. For instance, in a study based on interviews and observations focused on how conceptions of diversity affected the instructional decisions of two practicing secondary school teachers, Angus and de Olivera (2012) found many of these programs are often too general, tend

to exclude the LGBT component, or fail to help pre-service teachers put their learning into practice.

Moreover, in another study, Gorski, Davis, and Reiter (2013) explored the invisibility of sexual orientation, heterosexism, homophobia, and other LGBT concerns in U.S. multicultural teacher education coursework by analyzing 41 syllabi from multicultural education courses, as well as data from a survey of 80 teachers who teach multicultural education courses. In doing so, they uncovered how and to what degree these teachers incorporated LGBT issues into their courses. The findings: in a 45 hour course, on average, only 4 hours of class time is dedicated to exploring sexual orientation issues compared to 22 hours dedicated to race. However, the researchers concede that because of the nature of textual analysis, which requires interpretation on the part of the researchers, knowing how teachers actually conceptualize and operationalize the content in the syllabi would require more action-research and ethnographic approaches.

Method

Proposed Research Design

This will be a collective case study, in which a single issue (teaching English in a multiculturalist manner while using LGBT discriminatory pacing guides) will be explored by examining multiple cases of it (middle school English language arts teachers who use pacing guides). It will follow Banks' (2003) four *Levels of Integration of Multicultural Content* as the theoretical framework that will guide the studies' questions of the participants and the analysis of the pacing guides: *The Contributions Approach* (level 1), *The Additive Approach* (level 2), *The Transformation Approach* (level 3), and *The Social Action Approach* (level 4).

Participants and Sampling

The study will use public ELA middle school teachers who use the district mandated ELA pacing guides to conduct their lessons. They will be chosen from among various middle schools in the Pleasantville District (pseudonym) regardless of gender, sexual orientation, ethnicity, religious background, age, and years of experience.

Instrumentation and/or Materials

The participants sampled are a homogeneous group in the sense they meet the criteria of being ELA teachers who use pacing guides for their lessons and who teach at middle schools where the researcher has contacts that may facilitate the participant recruitment process. This strategy for selection allows for maximum focus, convenience, and simplification of the questions necessary to attain detail-rich cases. District mandated pacing guides 6th to 8th grade will be acquired by printing them directly from the Pleasantville Public Schools' Portal site.

Data Collection

Using a protocol which include open-ended, general, focused interview questions, the identified participants will sit down for a one-on-one interview at a time and place of their convenience. The interview will be recorded using two recording devices in the event one malfunctions. After arriving at the site, the participant will listen to the purpose of the study, the amount of time needed to complete the interview (an hour), and plans for using the results; at that point, the participant will sign a consent form.

Data Analysis and Interpretation

The method of analysis used in this evaluation is based on Patton's (2002) general guidelines of qualitative data analysis, which consist of coding, finding patterns, labeling themes, and developing categories. The general purpose of using this type of analysis is to simplify, make sense, and identify the information within the verbatim interview transcripts, notes, and

acing guides considered relevant to the questions. To that end, the researcher decides to (a) number the lines of each of the transcripts, (b) make margin notes, (c) identify words and phrases looking for information regarding the teacher practices, (d) correlate notes, (e) re-read, (f) identify key quotes, and (g) identify emerging themes.

Educational Implications

The study may have several educational implications: One, the findings may support the premise that teaching by using LGBT discriminatory pacing guides is ultimately problematic and unjust. For instance, conscientious students or teachers may take notice of the obvious contradiction in only learning about topics pertaining to discrimination regarding African Americans, Native Americans, and women—but not those of LGBT people. This means public schools may be vulnerable to legal challenges based on constitutional grounds, which they will be unable to defend.

Two, this study's findings may serve as a platform for advocacy in various district public school systems, which may lead to the fair and full inclusion of LGBT issues into the Pleasantville District ELA pacing guides. This means more comprehensive professional development and school programs that address how LGBT student issues fit into the multicultural content of schools, as well as help schools reduce the number of instances of bullying and harassment.

Three, these findings may help advance the research of multicultural researchers working to advance the cause of other oppressed groups. For instance, it may help answer the question as to why many teachers are reluctant to address issues of racism openly and honestly in the classroom despite having the consent of the school system.

Fourth, these findings may bring about changes in how teachers address matters involving human sexuality in the classroom. A greater understanding about sexuality may help all students--regardless of their sexual orientation--to more healthily and completely embrace who they are, such that a male middle school student can be in the dance team without fear of being called names, and a female student does not have to define herself based solely on her looks in order to be valued.

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Transitioning From Narrative to Expository in the Middle School: A Look at Boys' Preferred Writing Techniques

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Abstract: Studies indicate that boys do not excel in writing to the same extent as girls. This study examined 6th grade boys' experiences progressing from writing personal narratives to expository responses. The study suggests that employing boys' preference for writing narratives may improve their writing proficiency.

Studies have identified the existence of a chasm between boys' and girls' writing dexterity (Kim, Al Otaiba, Wanzek, & Gatlin, 2015; Peterson & Parr, 2012; Smith & Wilhelm, 2009; Younger & Warrington, 2007). This includes being able to write effectively in multiple genres from narratives of experience to critical analysis of historical and contemporary social and political events. Repeatedly, and around the globe, girls have come out on top in this literacy (Farris, Werderich, Nelson, & Fuhler, 2009; National Center for Educational Statistics, 2012; Peterson & Parr, 2012). This deviation begins as early as second grade (Kim et al., 2015). According to the National Center for Educational Statistics (2012), by the twelfth grade, 28% of boys score below the basic proficiency level in writing. This is twice as many as the number of girls. To produce advanced forms of composition, it is essential that students have the ability to implement different types of writing approaches. As children develop, their language matures and they are able to express themselves in different ways (Nippold, Hesketh, Duthie, & Mansfield, 2005). Sixth graders' thought processes, ideas about how they think of themselves and the world around them, is vastly different from even their previous year in elementary school (Schickedanz, Schickedanz, Forsyth, & Forsyth, 2001; Zins & Hooper, 2012). This includes an expansion on their ability not only to think abstractly, but also the ability to make connections that build upon their prior knowledge. Writing instruction mirrors this growth, preparing students with the simple narrative prior to introducing structured genres including expository writing. An additional rationale behind beginning with narrative writing is that beyond a writing style, narrative discourse also interplays with cognition. Research supports that among other positive attributes, sharing past and ongoing experiences aids children with their development of organizational skills in the areas of speaking and writing (Nelson, 1993).

Considering students are given the same instruction in writing, the discrepancy between girls' and boys' competence in composition writing may stem from sociological contexts (Newkirk, 2000). Engaging in advanced forms of writing composition involves taking on personas that may be different from the students' own including gender. For girls, this faculty may be viewed as a beneficial attribute of their prominence in writing. On the other hand, boys who face a more judgmental society may purposefully refrain from advancing in writing skills (Harrison, 2010; Millard, 1997). This could be due to the fact that in addition to skill, motivation and enjoyment also have an impact on improving writing abilities (Kim et al., 2015; National Center for Educational Statistics, 2012; Nippold et al., 2005; Villalón, Mateos, & Cuevas, 2015). Students who enjoy writing, statistically score higher on writing tests (National Center for Educational Statistics, 2012). Consequently, establishing the sort of writing boys deem enjoyable is of the utmost importance for the ELA community.

Even though numerous studies reveal girls outperform boys in this literacy, there is a dearth of research describing boys' experiences during their development of writing composition skills. It is therefore necessary to understand boys' writing experiences through their definition of expository writing and preference of writing style in order to be able to establish best practices in writing instruction. This study explored boys' knowledge of expository writing. The following questions: (a) How do 6th grade boys define expository writing? (b) How do 6th grade boys feel about themselves as writers? (c) With a choice between narrative and expository writing, which do 6th grade boys feel more comfortable with and why?

Method

This study is framed by the qualitative research methodology of phenomenology. Phenomenology involves understanding "several individuals' common or shared experiences of a phenomenon," (Creswell, 2013, p. 81). As such, this study sought to bring meaning to boys' experiences during the writing process in order to give insight to instructional practices that would contribute to boys' competency in writing composition.

A major component of trustworthiness is conducting an ethical study (Merriam, 2002a). In order to begin research, it was necessary to attain approval from the Institutional Review Board (IRB). The scope and sequence of the study was disclosed to the participants. The participants' identities are confidential. The students were able to select pseudonyms to replace their actual names in the study. All of the participants consented to these conditions. Parents received notification forms.

Description of the Researcher

The researcher is an 11th year reading and English Language Arts (ELA) instructor at a middle school. She is currently a doctoral candidate at a university working towards a degree in Curriculum and Instruction of English. The researcher teaches ELA and reading courses to students in grades 6-8. Additionally, she has received accolades for her students' achievement on state writing assessments.

Participants and Setting

In a phenomenological study, the inquirer selects participants who "have all experienced the phenomenon," (Creswell, 2013, p. 83). The intent of the study was to provide a better understanding of boys' experiences progressing from narrative to expository writing. Therefore, all twenty students selected for the study were male. All the participants had the same ELA teacher and were in one of two classes.

The school is located in Florida. The school's enrollment is over 1,300 students. The school is culturally diverse: 40% of the students are Hispanic, 26% White, 6% Asian, and 2% identify as multi-racial. Enrollment in the free/reduced lunch program is below 30%. Students' proficiency and yearly academic gains are evaluated by the state's standardized assessment. The majority of the students, 87%, are proficient in reading and writing.

Data Collection

As part of monitoring my subjectivity, as a researcher, I reflected on my definition of expository writing and my expectations of male students' writing abilities. This was also in order to bracket my thoughts prior to beginning the study. Moustakas (1994) refers to bracketing as *Epoche*: "In the *Epoche*, we set aside our prejudgments, biases, and preconceived ideas of things," (p. 85). I wrote in a reflective journal after each focus group discussion. Merriam (2002a) offers that an additional application of the reflection journal is to enhance the trustworthiness of a study. As part of my process for collecting data, in addition to the reflection

journal, I frequently engaged in peer review with my colleagues during ELA PLC meetings. I also held focus groups and took writing samples.

Furr (2005) and Dyson and Freeman (1991) fervently argue that it is imperative that writing should be personal and meaningful for inexperienced writers. The students wrote responses to both fictive and non-fictive texts they read from their county approved *Interactive Reader and Writer* workbook (Allen et al., 2008). At the end of each selection, the workbook provided writing practice for students in the form of a response essay. These writing prompts focus on real-life experiences that relate to the literature. For the initial essay, students read two selections from the same genre: “The Crain Maiden” (Martin, 2008), and the Puerto Rican legend, “Aunty Misery” (Cofer, 2008). After reading the two selections, students wrote to explain about a situation where they had to let go of something against their wishes and why it was difficult to let go of it (Allen et al., 2008, p. 147). A second essay responded to the reading “The Biography of Helen Keller” (2008). Students were required to think of a person who has had a positive effect on their life and to explain who the person is, how they know the person, and how the person had affected their lives (Allen et al., 2008, p. 165). A third essay required the participants to connect with a novel they read for the course, *Stargirl* (Spinelli, 2000).

Data Analysis

I took extensive notes during the focus group sessions. These were typed and coded. I used the horizontalization method to analyze the participants’ essays. This method begins with highlighting important phrases and then developing meaning from them (Creswell, 2013). The essays assisted in attaining a deeper understanding of the participants’ experiences with writing composition. Additionally, I employed the phenomenological reduction method to my notes from the focus groups, journal, and the students’ writing samples. Phenomenological reduction involves continuous immersion in the experience to create meaning (Merriam, 2002b). Through this process, categories began to reveal themselves.

Findings

The focus group discussions and participants’ writing samples offered meaningful insight into my investigation. Influential factors to the boys’ writing engagement added additional themes to the data. The boys preferred writing in the narrative to expository essays. They felt as though narrative writing gave them the freedom to express themselves without binding them to a set structure.

During the focus groups, the boys often gave answers and then sought confirmation through body language, head nodding or high-fiving. Often times the boys would talk over one another and needed redirection. Regardless of how they saw themselves as writers, they felt that transitioning to expository writing did not occur without effort. When they were required to switch over to expository writing, the boys’ main concern was complying with the format of a formulaic four-paragraph essay. With a show of hands, all of the boys agreed that expository was their preferred method of writing. This was evidenced by their writing samples wherein the boys maintained writing narratives, even including dialogue, when expected to respond expository prompts.

Defining Expository Writing

The participants provided definitions of expository writing in term of content and format.

Content. Jean opened the discussion regarding what types of details are requisite for an expository essay: “You know, it’s expository [to] want to explain or tell you about something.” It was also mentioned that when they were reading a passage, expository writing could be

informational. This prompted discussion comparing fictive and non-fictive texts where all students agreed (raising their hands) that informational text is usually non-fiction. Keenan explained, “It is not when you are telling a story, like one day I was walking through the woods and saw a snake. You have to explain maybe what type of snake it is.”

Format. The students also explained an expository essay adheres to a specific format that is comprised of an introduction, body paragraphs, and a conclusion. The boys discussed and agreed that the definition of expository writing is an “introduction, two main paragraphs, a restatement of the introduction and conclusion.” There was only one student who mentioned a connection between narrative and expository writing. Scrappy stated that in a good expository essay, “it’s like a hamburger using narrative as the meat between the bread.”

Though the students were able to verbalize their understanding of the components of an expository essay, this knowledge was not reflected in all the students’ writing samples. In response to the first writing prompt concerning letting something go that they did not want to, several students wrote about the loss of a pet. Aaron, Eduardo, Eric, Glen, Marc, Natan, Parker, Patrick, Robert, and Sam did not use the format for expository essays and wrote only in narrative. Additionally, left out all punctuation and skipped words. For example, Alex wrote,

While my training begins I had to learn to clear my mind so I thought I’ll go in the pool and go under water and feel the water rushing and pushing against my face. [Since it] felt nice at that moment I cleared my mind [and] the next step was to focus...

Glen’s writing sample was an example of holding onto narrative and not conforming to the four paragraph expository essay. “I thought long and hard about it [u]ntil I said to myself I’m going to give it to the baby. The next day I went to the house and knocked on the door with the teddy bear in my hands.” This writing sample contained a one sentence introduction, two sentences for a body paragraph, and a four sentence conclusion. Jack’s essay concluded with only a single line: “These two stories are true.”

Participants’ Writing Identity

The participants shared their journeys in finding who they were as writers through the focus group discussions and the writing essays.

Grades and scores. Two of the participants, Robert and Jason, excitedly announced that they had received the highest score on their 3rd grade standardized writing exam. Jean divulged that he usually received A’s on his essays in elementary school, but he had been receiving C’s on his expository essays. Ben and Parker suggested the focus group rate themselves as writers on a scale of 1-10. They each felt that they were somewhere between a 6 and an 8.

Conventions. Marshall expressed, “My ideas are great, but my spelling is not that great.” Eric consistently misspelled the word *since*: “Sence my father... Sense we paid...not even a year sence my grandpa had passed...” Generally, the boys wrote more akin to how they spoke than using standard formal English in their essays: “When my dad told [me] that I was moving to a different house. I was like ‘WHAT’ because I will miss all my friends” (Jean). “I know it sounds stupid to jump from a table to a branch but whatever,” asserted Karl. “I was gonna lose when my sword broke,” wrote Patrick. In Nathan’s paper, he wrote, “My Xbox was super fun to play with.” In Marc’s essay, he included, “So Kevin found this cat and it was really fluffy and round so he named it poof balls...” The writing samples exposed numerous errors in basic conventions such as capitalization, appropriate punctuation, and spelling.

Sociological contexts. When asked if he felt that writing is a feminine art, the participants answered, no. Scrappy pointed out there are “a lot of guy authors.” He followed up

his statement with, “Girls don’t come up with the ideas guys do. Guys think of everything. They think of guys stuff like adventure.”

Writing Style Preference

All of the boys agreed with a show of hands that narrative writing was easier and that they enjoyed writing in the narrative far more than in the expository. Keenan yelled out, “Hands down narrative!!” After this comment, I asked the participants if they agreed with the statement and they expressed themselves through head nods, raising their hands, and high-fives. Scrappy added, “Narrative writing is imaginative.” Regardless of how they saw themselves as writers, transitioning to expository writing did not occur effortlessly as the boys’ main concern was complying with a format. Many of the boys referred to this format as a formula.

Other participants offered alternative perspectives as to what writing format they preferred. Keenan stated, “Narrative writing is my style.” Robert, Aaron, and Eric qualified Keenan’s statement shouting out (trying to give their response before other participants) that with the narrative essay, they were “able to express our feelings freely,” according to Robert, and “without being confined to a set of specific rules,” explained Aaron. Eric referred to the format as “a formula.”

Imagination. Jace expressed that in narrative writing, “you can use your imagination.” Keenan added, “Not everything in narrative writing has to be real.” In the writing sample, Aaron including elements of creative writing including, “One night Me...and my friends... were [at a] party all night. We went to the casino and had a blast. In all me and my friends made 10,000 in poker.” Frank and Aaron incorporated luxury cars into their essays. “Once this boy woke in a lamborghini he found out it wasn’t his and had to give it away” (Frank). “The Bug[a]tti that I had to let go was amaseing...It was so fast and comfordle, and good looking” (Aaron).

Storytelling. During a focus group discussion, Dean stated, “Narrative is easier you can say what you want and make your own story.” The writing samples included examples of narrative story telling within them. Aaron wrote about a time when friends convinced him to jump from a branch to a table at the park, “Then, one day I got annoyed and tr[i]ed it again and I did it and it felt great to say I did it.” Sam attempted to begin an essay with a cliché, “It was a bright and sunny evening. I was in my room playing Call of Duty: Ghosts, [w]hen a crash came from my closet. ‘Who is there.’ ‘Woof woof.’ Natan told of how he took up playing soccer, “This accomplishment made my family proud. ‘Finally made the old man happy,’ I said. Now I play soccer with my friends.” In Parker’s essay about winning a baseball game he included, “[B]ut I think it’s had because you will have a lot on your mind like, ‘I’m their only hope.” When complaining about homework, Robert added, “One day, I was doing my homework and I didn’t understand the problem. After my mom helped me understood the problem.”

Descriptive language. There were only three participants who employed use of any description in their essays. Parker wrote, “On a Saturday at 3:16 p.m. once I saw this beautiful german shepard with brown eyes, brown hair (Fur) with white pockadots & flappy ears & I thought to myself what a great dog.” Sam described an experience he had with his dog: “I stood up and went to my closet. It was dark and dusty. I think I found what he was looking forEWw he was looking for that dusty soggy ball that I got him for Christmas.” Eduardo expressed his love and knowledge of boat mechanics, “My dad had just bought a 30 ft Avenger with 2 Mercury 275 hp...For the first engine we didn’t know where the bolt was to unscrew the engine.”

Personal Connection to the Writing Prompt

Robert, Aaron, Eric and Scrappy stated that they liked writing biographies. “I like biography writing. A biography is about someone” (Scrappy). Moe began a discussion connecting the biography project from the beginning of the year to the present conversation. The students’ writing echoed the opinions expressed in the focus group discussions.

Loss. The narrative writing included stories about situations that were obviously deeply meaningful to the boys. Moe, Paker, and Sam wrote about the loss of a pet. “As soon as I found out, I cried all day. [The dog] was like my little Brother and I will never forget my first pet” (Moe). “Til[I] this day I cannot stop thinking about my best friend... Rest in peace” (Sam). Eric and Armando cathartically told of a passing of a grandparent. “Once he died I was very sad because he [my grandfather] was like a father to me. S[i]nce my father left me when I was 3” (Eric). “I still love him and I want him to be here now. He is in my heart and always will be” (Armando). In one essay, Natan told about selling a materialistic item to help his family: “It was my Xbox 360, [and] I had to sell it so I can help pay some of my grandma’s hospital bill.” In response to the same prompt, Jean wrote of the loss of his family unit as a result of the dissolution of his parents’ marriage due to his mother’s drug addiction: “I was told that my mother was in the hospital and might die. That she had taken a bunch of pills.”

Positive influences. In an essay about influential people in their lives, Robert, Ben, Eric, and Jace wrote about their mothers. Robert was thankful that his mom was able to assist him with his homework, “I’m in an advanced math class so I get a lot of homework for that class. Whenever I don’t understand a problem, my mom helps me.” Ben expressed his gratitude for becoming the kind of person he aspires to be, kind, well-rounded, and self-sufficient. Eric explained, “She looks for the bright side in things.” Jace did not write about how his mom influenced him, but instead about how much he enjoys her cooking, “I love her bar-b-cue chicken.” Eduardo chose his dad and wrote about much time they spend together fixing boats. John expressed, “My brother is the best and without him I wouldn’t be me... My mom is a hard worker [and never home]. Also my dad is...not in Florida. So my brother is the person I see the most. During focus group discussion, Scrappy told the group that he chose to write about his brother because, “He’s always telling me to do stuff and go for it. He never doubts me.” Sam and Curtis respectively decided their collective family is the most positive influence in their lives.

Discussion

The primary purpose of this study was to glean an understanding of middle-school boys’ experiences as emerging writers. The participants capably defined expository writing as a form of writing that entails explanation, description, or information. The articulations of their definitions of expository writing served as robust markers of the participants’ cognitive, social, and linguistic advancement. This elucidation of the metamorphosis children undergo as they advance from elementary to middle school aligns with previous research. At the end of elementary school, children are able to learn from explicit instruction in syntax and discourse (Ravid & Tolchinsky, 2004; Zins & Hooper, 2012).

In opposition to the stance that boys do not view themselves as decent writers (Nippold et al., 2005), the participants believed in their writing capabilities. The participants included that it was Young Adult Literature (YAL) authors that motivated them to write. Their views on a literary culture dominated by men enabled them to identify writing with masculinity thus cultivating positive feelings towards the art of writing. Villalón, Mateos, and Cuevas (2015)

assert that students' perceptions of writing significantly impacts the quality of writing that students produce.

Given a choice between narrative and expository writing, 6th grade boys prefer narrative writing. They feel as though they are able to write about themselves in an unobstructed manner. Daly (2002) expresses that boys feel restricted by structured writing styles. In opposition to previous considerations (Harrison, 2010; Newkirk, 2000), the participants did not shy away from expressive, emotional writing that might be considered feminine. In deep contrast, the boys' writing included sadness over the loss of a loved one and the extraordinary bonds they hold with close family members.

Implications

Particularly acute is the need for ELA educators to possess and to practice the most current knowledge in the field in order to meet the needs of all students. This study denotes an integral weakness in current trends in writing instruction for adolescent boys. When teachers are mainly concerned with complying with prescribed prompts for standardized tests, they stifle boys' natural story telling abilities (Dyson & Freedman, 1991). It is possible that differentiated practices with writing instruction could enhance boys' writing proficiency and thereby academic success. Further research needs to focus on the blending of narrative in expository text as a gateway to more sophisticated writing techniques.

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On Strategies for Teaching Culturally Diverse Literary Texts

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Abstract: This paper discusses strategies for developing students' cross-cultural literature appreciation abilities. It aims at facilitating students' cultural understanding of literary texts by demonstrating the current approaches of literature teaching practice.

For nearly half a century, research has been conducted on learning and understanding literature from a variety of cultures. With the ever growing trend of globalization and modernization, it becomes more and more common to see teaching and learning practices on literature that are different from the teachers' and the students' cultural backgrounds.

Over the last 50 years, the dominant educational method for literature teaching and learning has been biographical and formalist criticism (Christenbury, 2000; Karolides, 2000). With the goal of identifying the common features of literary works from different cultural traditions, the two critical approaches promote a detached and pre-determined understanding of the nature of the meaning of literary texts, and they advocate an objective approach to analyzing literature (Christenbury, 2000; Karolides, 2000). Formalism and biographical criticism approaches guide students to understand the literature through comprehensive analysis of text-based information and identification of historical or bibliographical background in literary works. However, they have neglected the fact that literature comprehension involves readers' participation, which further includes the active understanding of cultural elements from the text as well as from the influences of their native culture.

Definition of Culture

Different scholars have different understandings of culture. According to Tapp (2007), "culture is a set of learned beliefs and behaviors shaping how members view and experience the world" (p. 45). Robbins, Fantone, Hermann, Alexander, and Zweifler (1998) stated that individuals bring their cultures of affiliation. In these scholars' perspective, cultures of affiliation may include in part religious groups, ethnic groups, social classes, and voluntary and professional organizations they have come to embrace (Robbins et al., 1998). According to Philipsen (1987), "a culture can be viewed from many perspectives, each of which provides one partial but important glance at the nature of things cultural" (p.76). In Goodenough's (1964) views, culture does not consist of things, people, behavior, or emotions. It is rather an organization of these things. It is the forms of things that people have in mind, their models for perceiving, relating, and otherwise interpreting them. Robinson (1985) viewed cultural understanding as "an ongoing, dynamic process in which learners continually synthesize cultural inputs with their own past and present experience in order to create meaning—a synthesis between the learner's home culture, the target culture input, and the learner as an individual" (pp. 11-12).

From the definition cited above, different scholars defined culture in different perspectives. However, the common ground of their definition is based on associating culture

with communication. Different theories of culture indicate that culture shapes individuals' understanding of literary texts.

Relationship between Literacy, Literature, and Culture

There is a close relationship between literature, language, and literacy. As Moody (1967) demonstrated, "the study of literature is fundamentally a study of language in operation" (p. 22). Each literary work is essentially the collection of words that are permanently available for the student to inspect, to investigate, to analyze, and to build together (Moody, 1967). The inclusion of literature in the curriculum helps train students in the skills of reading, writing, and thinking, because literary works incorporate so many complex language structures, skillful writing styles, intricate social and cultural contexts, and deep portrayals of reality based on authors' observation, reflection, and recreation of the subjects that they are confronted with. The more a person reads, the more knowledge he or she gains in reading, writing, and thinking. Therefore, experiencing a work of literature for the student is an intellectual process of acquiring knowledge and developing critical thinking from text (Peregoy & Boyle, 2000).

Jodan and Purves (1993) asserted that writers usually inhabit cultural contexts in literary texts. Literary works created by people from different backgrounds represent their own identities, and images and serve as memoranda for their descendants. According to Soter (1997), "the power of literature to transport readers into other worlds has never been doubted by those who, despite their own worlds, have been captured by writers no matter how different the culture they inhabit" (p. 214). Soter (1997) further pointed out that readers will play the role as insiders to understand the culture if they are familiar with the sociocultural and political context of the literary setting.

Further, different human groups have different understandings of culture (Fairchild, 1967; Tapp, 2007). Literature, as a part of culture, could be regarded as a mirror that reflects the accumulated culture. To be more specific, literature can serve ideally as a true reflection of what the society is, who humans are, and why the world has become as it is (Tapp, 2007). Spears-Bunton (1992) held the view that literature plays the role of facilitating individuals in decoding the mystery of their culture. By learning literature, one can be familiar with a certain culture. As Spears-Bunton (1992) pointed out, "literature provides us with a way of looking at how members use language to codify knowledge, determine relevance and make connections between past heroes and prophets, and present concerns and situations" (p.46).

In a sense, literary texts are culturally embedded; texts could be regarded as cultural documents that reflect all kinds of accumulated culture at racial, ethnic, national, regional, and local levels. In sum, literature, literacy, and culture are three forces constantly interacting with each other, shaping each other and ultimately affecting people now and those generations to come.

For the purpose of this paper, culturally diverse literary texts refer to literary works that reflect a multitude of cultural groups (Temple, Martinez, & Yokota, 2006). They cover the diverse voices from distinctive cultural groups that demonstrate all kinds of culture vividly and colorfully. Cultural understanding is a method in which readers use the cultural knowledge instructed by teachers to understand the literary works. Cultural understanding of literature

refers to understanding of the cultural influences in literary texts from perspectives of the general concept of the culture, such as “a nation’s civilization, psychological structure of the nation, spiritual pursuits, cultural customs, religion, history, economy, political system and other aspects of ideology from different facets” (Zhen, 2012, p. 36).

As different human groups have preconceived cultural perspective, reading the text is to read it in the light of the culture. To some extent, how to interpret the literary works as intimate parts of their culture becomes an essential issue. However, for the current teaching practice of culturally diverse literary texts, the crucial reality is that the importance of cultural understanding is often neglected or given minimal consideration in practical literature classes.

Dealing with such problems, a growing body of research suggests that the pedagogy used by teachers who are successful with students in teaching culturally diverse literary texts can be described as a culturally-responsive approach. Such research suggests that cultural awareness of multiple identities in different races, classes, and ethnicities needs to be integrated into school curricula (Dolby, 2000; Gay, 2000; Herbert, 2001). The interrelationship of culture, literature, and literacy should receive more attention in the teaching of literary works. Lin (1994) viewed the relationship between culture and literature as something like whole and part. As Lin (1994) stated, “a culture can exist and still be divided into literature, music, etc., but literature cannot exist without a culture to portray and illuminate, and to be influenced by” (p. 27).

Pedagogical Issues and Suggestions for Teaching Literary Texts

Some scholars have addressed specific pedagogical approaches to teaching literature through cultural understanding for K-12 students and college-level students, especially in the aspect of constructing new knowledge through a critical cultural perspective. Hines (1997) identified different approaches that four teachers used in literature classrooms: (a) a new critical perspective that incorporates the text-centered and teacher-led orientations to literature instruction; (b) a reader-response orientation that encourages students to join a classroom community where reader knowledge and experience are valued dimensions of the reading experience; (c) a social justice framework that raises social justice issues and allows students to “read” culture; and (d) cultural criticism that challenges and critiques received “ways of seeing” in the literary texts. In presenting the four different teaching approaches, Hines (1997) held the view that “knowledge, language, and truth are socially constructed; thus students can assert, contest, and complicate truth claims in the classroom” (p. 118).

Jordan and Purves (1993) explored the challenges confronted by both teachers and students while they are reading texts that are from their own culture or while they are reading texts that are different from their own culture. Teachers and students are required to understand the specific texts of one or more of the target cultures (African American, Asian, Native American, Hispanic/Latino, and Anglo-European). The study indicated that on the one hand, teachers have no exact idea regarding how to “best influence students to see the same cultural concerns they have” (Jordan & Purves, 1993, p. 19). On the other hand, students have difficulties in reading texts from other cultures. The major challenges they have in the literature reading include: (a) being incapable of reading the texts within a cultural context; (b) rejecting the text as alien because of stereotyping; (c) misunderstanding the texts because of readers’ pleasant interpretations; and (d) readers’ personal judgment of texts from different perspectives

(Jordan & Purves, 1993).

Scholars (Banks, 1996; Beach, 1997; Hines, 1997; Milner, 1983) suggested that teachers need to consider as important how to deal with conflicts between personal and cultural knowledge and to employ cultural understanding of the literary works as a means of teaching literature. Milner (1983) argued that since personal and cultural knowledge is problematic when it conflicts with scientific ways of validating knowledge, it is oppositional to the culture of the school or challenges the main tenets and assumptions of mainstream academic knowledge. Some of what students learn from their home culture about unfamiliar cultures consists of misconceptions, stereotypes, and partial truths. Several scholars (Beach, 1997; Hines, 1997; Soter, 1997) pointed out that students have few opportunities to learn firsthand about the cultures of people from different racial, ethnic, cultural, religious, and social-class groups in literature classes. Banks (1996) supports this view and further explains the importance of learning about multiple viewpoints in the classroom:

[T]he concepts, explanations, and interpretations that students derive from personal experiences in their homes, families, and community cultures constitute personal and cultural knowledge. The assumptions, perspectives, and insights that students derive from experiences in their homes and community cultures are used as screens to view and interpret the knowledge and experiences that they encounter in the school and in other institutions within the larger society. (p. 51)

Banks (1996) asserted that an important goal of education in literature teaching is to free students from their cultural and ethnic boundaries and enable them to cross cultural borders freely, although the school should recognize, validate, and make effective uses of students' personal and cultural knowledge in instruction. Clearly, the challenge that teachers face is how to make effective instructional use of the personal and cultural knowledge of students while at the same time helping them to reach beyond their own cultural boundaries in teaching literature.

In Banks' (1996) opinion, literature teaching aims at helping students to understand how knowledge is constructed. From Banks' (1996) point of view, teachers in traditional literature classes tend to transmit predetermined literature knowledge to the students. They pay a lot of attention to telling students what each piece of literature is about, dictating notes, and creating synopses, character studies, and similar products. They also ask students to write summaries of plots and themes, to identify certain characteristics that represent period or genre, and to identify certain traits of style and structure. Since such mechanical pedagogy shows little concern for the students' own appreciation of the text, it fails to recognize students as the primary actors in constructing the literary world. Banks (1996) proposed two possible ways that teachers could implement this in literature classes. One is to help students understand the way that the knowledge is constructed and how it reflects the social context in which it is created, and thereby enable them to develop the understandings and skills needed to become knowledge builders themselves. Another is to share their own cultural experiences and interpretations of events as a way to motivate students to share theirs (Banks, 1996). In this way, students could have more opportunities to investigate and determine how cultural assumptions, frames of reference, perspectives, and biases within a discipline influence the ways that knowledge is constructed. They will also have more opportunities to create knowledge themselves and to identify ways in

which the knowledge they construct is influenced and limited by their personal assumptions, positions, and experiences.

Fickel (2000) suggested that teachers could integrate political and cultural context into literature classes and encourage students to reflect the social reality critically by reading literature. Fickel (2000) suggested that teaching students basic reading and writing skills in literary works is only the first step for teachers in class. The more important issue for teachers is to help students to acquire mental habits that will lead to literary insight, critical judgment, and ethical and social understanding. Fickel (2000) pointed out that the sources of literature are derived from social and cultural reality. When teachers explicitly engage students in interrogating the social, political, and economic forces widely existing in literary works, students could come to understand the text as a social, political, and ideological statement that reflects conceptions of right, good, truth, and other beliefs (Fickel, 2000).

Beach (1997) suggested that teachers could adopt an ethnographic approach to teaching literary texts. An ethnographic approach means that students are provided with opportunities to observe and experience characters' lives in the field or to have access to the first-hand resources that could reflect the authentic culture in the text (Beach, 1997). To be specific, teachers could require students to explore deeply particular cultural traditions or norms depicted in the text through interviewing people who are insiders of the culture, collecting written material or visual resources that are related to the cultural context of the literary works, and writing reflections that record their progress in cultural understanding of the literary works. Lapp, Flood, Jensen, and Squire (2002) stated that by using an ethnographic approach, students play the roles of cultural anthropologist. They seek understandings of the cultural patterns and practices of everyday life of the group under study from an emic or insiders' perspective (Lapp et al., 2002). They explore the culture through constant reading and observing. They confirm and contrast what they listened to, what they saw, and what they read, and eventually uncover the ways in which insiders view the world; how they construct the patterns of life; and how through their actions, they construct values, beliefs, ideas, and symbolic-meaningful systems.

Implications

Considering culture's important role in understanding literary texts, a more practical improvement of the literature teaching pedagogy is to bridge the cultural gaps between the readers and the texts. Specifically, the following approaches could be used to facilitate cultural understandings of literature texts: (a) consider readers' cultural context; (b) provide students with opportunities to observe and experience characters' lives in the field or provide access to the first-hand resources that could reflect the authentic culture in the text; (c) orient students to exploring a particular cultural issue or theme after a close reading of one or more literary works; and (d) support students' inquiry towards a particular culture and facilitate cross-cultural communication in the learning process.

In sum, it is essential for teachers to employ cultural understanding as a means of teaching literature in professional practice. The importance of using approaches of cultural understanding is as follows: First, it could demonstrate a kind of unique culture value that might not occur to students. To some extent, the perspective that each literary text provides students has unique culturally authentic characteristics. Second, it encourages students to explore a

multiplicity of cultural perspectives and to participate in cultural exchanges from diverse literary forms and literary works. Eventually students can distinguish among different cultures, ethnicities, and national identities.

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Baby Boomers: The Use of Technology to Support Learning

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Abstract: Baby Boomers are lifelong learners. Mobile devices and shared information over the Internet have made technology a significant platform for learning. It is a popular misconception, however, that Baby Boomers are alien to technology. This paper explores existing literature on the use of technology to support learning in Baby Boomers.

Individuals born between 1946 and 1964 are in a generational cohort known within the United States (US) as Baby Boomers or Boomers (Howe & Strauss, 1991). Generational cohorts are groupings of individuals with indiscriminate behaviors and characteristics shaped by historical conditions during key phases of their life cycles (Howe & Strauss, 1991; Pew Research, 2015).

Individuals have four life cycles inclusive of youth, rising adulthood, midlife, and elderhood (Howe & Strauss, 1991). Historical conditions during key phases of a life cycle shape one's worldview, identity, and value systems (Pew Research, 2015). The Baby Boomer generation is shaped by the US emergence as the world power at the end of World War II and the US's subsequent social unraveling, all coinciding with the election of John F. Kennedy (Sandeen, 2008).

Common characterizations that are used to define Boomers include workaholics, skeptics of authority, social reformers, thrill seekers, questioners of authority, and lifelong learners (Pew Research, 2015; Sandeen, 2008). Boomers are the first generational cohort in the United States who have continued to seek educational and learning experiences while moving throughout their life cycles (American Association of Retired Persons [AARP], 2000; Howe & Strauss, 1991). Research on Boomers has historically been conducted on those who are generally categorized as "middle class." With a lack of research on Boomers of lower socioeconomic status or immigration segments, there is a gap in the current research, resulting in many misconceptions on the Boomers' profile (American Council on Education, 2007; Sandeen, 2008).

A common misconception of Boomers is that they lack understanding of and/or fail to effectively utilize technology. The expansion of radio, television, mobile phones, personal computers, and the Internet all have been pioneered by Boomers; however, the relationship between technology and Boomers is vastly different in comparison to other generations (Keenan, 2009). The digital age occurred well into the midpoint of the Boomers' life cycle. The digital age is the time in which rapid changes and advancements in technology and technology's nationwide affordability occurred. Boomers' values and perspectives on technology were formed prior to the insurgence of and dependency on technology in daily life. Boomers, unlike other generations, utilize technology to help create their desired lifestyle as opposed to allowing technology to shape their existence (Keenan, 2009). As an example, Boomers' "social networks" were formed prior to the digital age, and as a result, personal and physical contact is more important to Boomers than digital connections and the use of technology to interact with others.

Missing from the dialogue on Boomers is their use of technology and how technology is

used as a tool to support learning for Boomers. Technology that is used for sharing information, such as mobile devices, online chat environments and media, represent the perfect platform for learning. Research exploring how Boomers use current technology and how these information-sharing technologies support their individual learning as a generational cohort is in need of further examination.

Purpose and Research Questions

The purpose of this structured literature review (Rocco, Stein, & Lee, 2003) is to examine existing literature on the use of technology to support learning in Boomers. The structured literature review method was used to identify, select, and classify trends and issues in the current literature. This review was guided by the following research questions:

1. What are the trends and issues involved in understanding how technology supports learning in Boomers as discussed in the related literature?
2. Is the learning style of Boomers a function of their interaction with technology?
3. What are the ramifications of the use of technology with respect to Boomers' learning style?

The process used for identifying trends and issues is explained in the Methods section. Following the explanation of the process is the identification of the trends and issues.

Method

The literature was examined to identify trends and issues in relation to how technology supports learning in Boomers. For the purpose of this study, a trend is an identifiable event or contextual factor that is coupled with significant change (Rocco et al., 2003) and results in different societal behaviors. Issues are defined as matters that can only be changed through the activation of formal structures and power (Rocco et al., 2003). For example, a trend in the workforce is the use of electronic-learning tools (e-learning) as an addition to traditional models for training and developing employees. A correlating issue includes how organizations in the workforce are ensuring employees accustomed to traditional methods of training and development are not alienated.

Scanning was used as the principal method to investigate the literature and identify trends and issues (Rocco et al., 2003). Scanning was the first step of the method which involved: (a) identification of material, (b) selecting appropriate literature, (c) establishing a database, and (d) conducting a thematic analysis.

Identification of Material

To develop search parameters and determine the best online academic databases to review, a university reference librarian was consulted. Three databases representative of education, technology, psychology, and business were selected for the review. The three databases include: (a) Educational Resources Information Center - ERIC ProQuest, (b) PsycINFO ProQuest, and (c) EBSCO Host Business Source.

The first cluster of Boomers began the transition from the midlife point in their life cycles to elderhood in 2010. Research on *older workers* or *retirees* prior to 2010 would capture data on individuals outside of Baby Boomers cohort and would not be applicable to this generation. Additionally, the US release of Long Term Evolution (LTE) telecommunications technology occurred in 2010. LTE technological devices allowed for the sending/receiving of data communications and capabilities not possible on previous telecommunications technology (Park & Kim, 2013). As a result, the selected search by date criteria included the years 2010 through 2015.

The selected timeframe was chosen as it helped to identify characteristics scholars have recently identified relevant to the Boomer generation. We recognize that the search date criteria may pose a limitation with respect to identifying trends. However, we considered that (a) rapid change in technology occurred between 2010 and 2015, and (b) much of the data may come from empirical studies on the workplace, and with the desire to only capture information relative to Boomers, the criteria were deemed necessary. The terms used when searching the online academic databases included (a) “baby boomer*” or “older worker” or “retiree*” and (b) “learning style” or “learning” and (c) “computer*” or “Internet” or “technology.” The searches were performed between September 29 and October 2, 2015. Abstracts were used to discover trends and issues (Rocco et al., 2003), as it was more feasible to scan multiple abstracts as opposed to full articles.

Selecting Appropriate Literature

The search parameters dictated peer-reviewed articles appearing in scholarly, popular, or practitioner journals. Excluded from the search were non-English articles. All subject areas other than education, technology, psychology, and business were excluded. Articles were required to address Boomers’ or the learning of older workers with support of technology.

ERIC ProQuest produced 2,139 results, of which 125 were selected for review. PsycINFO ProQuest returned 747 results, of which 82 were used for review. EBSCO Host Business Source returned 734 results, of which 50 were selected for review. Publications selected for review were imported into Refworks, and a total of 257 abstracts were included in the review.

Establishing a Database

Each abstract selected for review was organized in a spreadsheet database. Each abstract was read and categorized by (a) date; (b) type of journal (academic, popular, or practitioner); (c) contextual factors (educational environment, workplace, community, etc.); (d) relevance to learning, technology, or Boomers; and (e) emergent trends and issues.

Conducting a Thematic Analysis

According to Boyatzis (1998), a thematic analysis is used to understand themes within articles. A theme is a pattern that describes observable information (Rocco et al., 2003). A theme can be at the manifest-level, with evident, explicit information or at the latent-level, with non-obvious, implicit causes of phenomena (Boyatzis, 1998; Rocco et al., 2003). For example, a manifest-level theme in an article reviewed indicates that older managers (Boomers) often wrestle with increased use of technology as a learning tool throughout organizations due to uncertainty in the technology’s capacity to increase efficiency (Cartney, 2013). However, at a latent level of analysis, older managers (Boomers) may be nervous about the use of technology, but are less likely to express their discomfort. Thematic analysis is a three-step process involving (a) understanding the data being sampled; (b) developing codes (themes); and (c) validating the codes identified. The development of codes is prerequisite to analyzing, interpreting, and presenting trends and issues (Boyatzis, 1998; Rocco et al., 2003).

The first step in the thematic analysis was reviewing abstracts selected for review. Each researcher inductively identified themes within the assigned database: ERIC ProQuest, PsycINFO ProQuest, and EBSCO Host Business Source. Each abstract was read and notes on the abstract were added to the spreadsheet database. An additional column was used to notate themes that occur on the latent level. The authors developed codes. The codes were utilized to label and define a theme, as well as to indicate when a theme occurred. For example, the theme

of older managers reluctant to the use technology was created by (a) label: lack affinity for the use of technology; (b) definition: Boomers prefer not to use technology; and (c) indicators: statements indicating a lack of technological knowledge or resistance to technology. Data were inserted under multiple codes, if appropriate. After sorting the spreadsheet database by code, the literature was reviewed to ensure that codes were logged appropriately. A set of themes was agreed upon by the authors.

Findings: Emergent Trends Identification and Analysis

Using the scanning method (Rocco et al., 2003), the primary goal of this review was to find data that explored the relationship between Boomers and how technology supports learning in this generation. The review was also attentive to the location of where technology is used to support learning of Boomers (workplace, educational environment, community, etc.). The following four sections identify the event(s) or contextual factor that has resulted in significant change in societal behaviors or perspectives towards Boomers and technology. The four sections include (a) the use of technology as a learning tool, (b) multiple generations in the workplace, (c) mobile devices as a platform for learning, and (d) the pressure of learning new technologies.

Technology as a Learning Tool

Technology is a primary tool used for creating training and learning experiences. There was a noticeable increase in scholarly work indicating that technology is becoming a primary tool for training and development efforts in the workplace. As a result, older workers are forced to learn new technologies and adapt to digital environments (Huber & Watson, 2014). Similarly, the literature revealed that older workers in an instructor or trainer role are forced to learn new technologies, as more classrooms and training environments use technology as a primary platform for instruction and program facilitation. When given the choice between forced adaptation or retirement, older workers are choosing to retire and live a satisfying, stress-free life over adapting to newer, more stressful environments (Ahituv & Zeira, 2011).

Organizations can experience “brain drain” if employees seek employment elsewhere or prematurely retire to avoid adaptation to new technological environments (Ahituv & Zeira, 2011; Becker, Fleming, & Keijsers, 2012). To avoid this phenomenon, organizations need to keep workers engaged and consider the impact of their training practices on all workers within the organization (Becker et al., 2012). Employing the use of technology as a learning tool poses the complication of ensuring all members of an organization are equally considered prior to its implementation to ensure universal comfort and avoid alienation of particular groups and/ or individuals.

Organizations are experiencing a shift in which it is not uncommon for younger workers to supervise older workers, particularly in technological sectors (Matuson, 2011). Matuson (2011) suggests that while some older workers are resisting the use of technology in the workplace, younger employees more adept at technology are gaining managerial positions, as organizational success in today’s workplace is dictated by the effectual use of technology to connect with consumers and thrive in global markets. Unfortunately, older workers are often not given the opportunity to learn new technologies in professional training programs (Pike, 2011). Where technological training programs exist, older workers are often not given the proper time allotments to learn new technology (Van Rooij, 2012). Organizations often struggle with the practice of allowing older workers the opportunity and time to learn new things that are not delivered in a one-size-fits-all model (Canning, 2011). Older workers are willing to learn new technologies if given the proper time and tools to be successful (Ravichandran, Cichy, Powers, &

Kirby, 2015).

Multiple Generations in the Workplace

Organizations need to be aware that there are multiple generations in the workplace, with each generation having a unique style and approach to work. Older workers are not naturally resistant to technology; however, they are resistant to the forced implementation of tools they deem unnecessary or inappropriate (Tishman, Van Looy, & Bruyère, 2010). There is much disconnect between generational cohorts as it relates to the use of technology and appropriate settings. For example, the use of instant messaging or text messaging in educational environments or for business-related transactions may seem inappropriate for older individuals, while it may not for those who are younger (Levinson, 2010). Organizations must consider the advantages and disadvantages of how technology is used throughout the organization and help create a standard of appropriateness that is reflective of the organization's vision, mission, and goals.

Mobile Devices as a New Platform for Learning

Although older workers are stereotyped as having challenges with technology, the introduction of mobile technology is increasing older workers' functionality with technology. Mobile devices have become more affordable, convenient, and user friendly. Mastering mobile devices typically means connecting to new digital environments and using technologies in unique ways (Kavanaugh, Puckett, & Tatar, 2013). Video games, for example, can increase older individuals' competencies with technology and increase their ability to learn new things (Basak, Voss, Erickson, Boot, & Kramer, 2011). Mobile devices are a platform for content delivery as well as a tool that can be exploited to increase levels of intimacy and comfort with technologies, while simultaneously creating new expectations, attitudes, and levels of satisfaction through user interaction and "tinkering" (Hachiya, 2010). Although younger individuals typically view mobile technology as a social presentation of themselves, older workers view and utilize mobile technologies as devices that can enhance their quality of life (Hachiya, 2010).

Pressure of Learning New Technologies

Older individuals are under a considerable amount of pressure to learn new competencies, to work effectively with technologies, and/or to understand how technologies can assist in their transition from more traditional forms of interactions to modern ones (Hoskin, 2010; Kraan et al., 2014). Although there is much pressure within the workplace to learn new technologies, there are equal social and economic pressures to learn new technologies. Healthcare, retirement benefits, and assisted living arrangements are all introducing digital platforms geared toward educating and enhancing their stakeholders' experience. As community entities introduce new technologies as a part of their operations, older individuals are often required learn new technologies with little training (Ravichandran et al., 2015). A continuous issue tends to be how community organizations and public services can offer more convenient services, while not alienating the older populations they intend to serve. With newer technologies such as mobile devices, more thought, training, and explanations of how newer technologies can add to the life experience of older individuals are needed.

Discussion

Using technology as a training and development tool is a trend that is consistent in educational environments, the workplace, and the community. Research suggests that employers should pay particular attention to employees' needs to avoid occurrences such as employee

relocation or early retirement due to job dissatisfaction. Questions to be asked when engaging older individuals in a learning process that involves technology should include: to what extent are providers confronting the reality that many of their services are offered to populations not comfortable with the use or intrusion of technology? How are educational environments, employers, and community service providers avoiding the alienation of older individuals when implementing new technologies? What emotional intelligence is being employed to guide the activation of new technology to ensure that older workers feel as if their skill sets match employers' vision for an organization?

Mobile devices are a way in which most employers can begin to connect with older workers. The number of older workers using mobile devices has increased as mobile devices are universally more affordable; unfortunately, not many workplaces or educational environments are taking advantage of this tool as a way to connect with older individuals. The use of mobile devices is not without challenges, however. Employers or educational environments hoping to use tools associated with mobile devices, such as text messaging, will need a rationale for the application of the tool to the specific work-related needs.

Although older individuals face problems with the use of technology in educational environments, the workplace, or when interacting with community service providers, there are few empirical studies that explore Boomers' learning styles and technology. There are no studies that indicate a trend or issue in the Boomers' learning style in relation to technology. There is a pattern in the literature that discusses the fact that Boomers are not interdependent on technology, but rather use technology to enhance their lifestyles. Otherwise, it is difficult to assess any ramifications of the use of technology on Boomers' learning styles.

Implications

This structured literature review highlights the fact that there are implications for the future of both practice and research as it relates to Boomers' use of technology and learning environments.

Practice

Baby Boomers make up over 30% of the population of the United States (Pew Research, 2015). Careful examination of how organizations introduce technologies is important. There is a growing change in how Boomers engage with technologies due to mobile devices. Practices aimed at connecting with Boomers through mobile devices will prove beneficial. Alleviating the pressure on older individuals of learning new technologies can have a significant effect on companies retaining older workers and older workers feeling supported throughout their educational and community environments. Some suggestions for advisable practices are:

- (a) Increased awareness of stakeholders' profiles. Organizations should know what generation they serve. This will aid organizations in understanding if they are meeting the needs of their stakeholders;
- (b) Changing how technologies are introduced. The introduction of newer technologies should be accompanied by appropriate training programs applicable to a wide variety of audiences; and
- (c) Creating supportive environments for learning and development, where employees can feel comfortable learning new technologies.

Future Research

Future research on Boomers should explore the issue of how this generational cohort was taught and subsequently learns. How Boomers learn, whether or not they have unique learning

styles, and how those learning styles may improve how society frames Boomers' use of technology is a perspective that may prove beneficial.

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A Change in Engagement: The Relationship between Employee Engagement and Generational Differences

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Abstract: Employee engagement changes generationally. This literature review explores employee engagement and shared life experiences that define the characteristics of each generation; shaping generational perception on employee engagement and how each generation actually engages at work. Resultantly, generational differences, characteristics, and shared life experiences make salient how employee engagement changes.

Employee engagement has become a popular term within the field of Human Resource Development (HRD) for scholars, consultants, and communication practitioners (Shuck & Wollard, 2010). The popularity surrounding employee engagement is due to today's organizations seeking support for better employee productivity, effectiveness, and health (Shuck & Wollard, 2010). "Employee engagement is an individual employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes" (Shuck & Wollard, 2010, p. 103). Employee engagement can also be considered a trait, a state, or a behavior that an employee demonstrates: challenging the status quo, being innovative or just being a good corporate citizen (Mone & London, 2010). As the research around employee engagement grows, there is still a gap in exploring generational differences within employee engagement. The prominent generations currently working within the workplace are Baby Boomers, born in 1946-1964; Generation X, born in 1965-1981; and Millennials, born in 1982-2001 (Schullery, 2013). The purpose of this paper is to examine the literature on employee engagement in effort to understand how engagement differs for each generation: Baby Boomers, Generation X, and Millennials. In our discussion on generational differences and employee engagement, we seek to answer the following research questions:

1. What are the differences in characteristics for each prominent generation within the workplace?
2. How do these differences and characteristics shape the perspective of each generation on employee engagement?

A Closer Look at Employee Engagement

Engagement has become synonymous with terms like involvement, commitment, passion, enthusiasm, absorption, focus effort, and dedication (Truss, Shantz, & Soane, 2013). These terms are crucial to employee engagement, when exploring concepts like employee commitment and employee attitudes or perspectives. There are three types of employee engagement: cognitive, emotional and behavioral (Shuck & Wollard, 2010). Cognitive engagement is how an employee reasons, justifies, and gives meaning to or comprehends his or her job, company, and culture. Cognitive engagement also represents the employee's intellectual commitment to the organization (Shuck & Reio, 2011). Emotional engagement is the emotional connection one feels toward his or her workplace and a willingness to involve personal resources such as pride, belief, feelings, and knowledge (Shuck & Reio, 2011). Behavioral engagement is

the physical willingness to engage with job responsibilities and leads to increased productivity (Shuck & Reio, 2011). The cognitive, emotional, and behavioral engagement of employees aids practitioners in linking employee engagement to commitment and job satisfaction, which all drive performance. Therefore, an engaged employee is someone who feels involved, committed, passionate, and empowered and demonstrates those feelings in working behavior (Mone & London, 2010).

At the Corporate Leadership Council in 2004, engagement was pronounced as the extent to which employees commit to something or someone in their organization, how hard they work, and how long they stay as a result of that commitment (Chalofsky & Krishna, 2009). This type of commitment is deemed voluntary and cannot be demanded, artificially created, or inflated. However, employee engagement relies on the organizational development and willingness to understand engagement and its outcome (Shuck & Rose, 2013). Some scholars believe commitment and job satisfaction are coupled relative to an employee's engagement in the workplace. "Engaged employees are more committed, contribute more loyalty and are less likely to leave their organizations" (Macey & Schneider, 2008, p. 4).

Both commitment and engagement promote organizational retention and performance that eventually lead to job satisfaction (Chalofsky & Krishna, 2009). Hence, being engaged at work reveals greater workplace performance (Shuck, Reio, & Rocco, 2011). "An engaged employee is an individual who is enthusiastic about his or her occupation and cannot detach themselves from their work" (Yalabik, van Rossenberg, Kinnie, & Swart, 2014, p. 1605). Engaged employees are able to create their own resource and will be able to foster engagement again over time, creating a positive gain spiral (Bakker & Demerouti, 2008). There are four reasons why engaged workers perform better than disengaged workers: engaged employees experience more positive emotions, engaged employees appear to have better health, engaged employees create their own jobs and personal resources, and engaged employees transfer their engagement to others (Bakker & Demerouti, 2008).

Generational Differences

Within many organizations, there are various influences that foster diversity. The most prominent and common influence or agent of diversity is age (Glover & Branine, 2001). Therefore, age is important because each generation engages differently due to varying life experiences and characteristics, which shape and mold their generational work attributes and perspectives on employee engagement.

Baby Boomers

Baby Boomers have been generalized as a cohort represented by the following shared life experiences (events), such as the Civil Rights Movement, and the assassinations of (American) President John F. Kennedy and the Reverend Dr. Martin Luther King Jr., as shown in Table 1. The Baby Boomer generation was shaped by the advent of television, and they were educated in "Traditional" education systems that provided rigorous academic standards (Schullery, 2013). These shared experiences shaped the cohorts' characteristics: value for teamwork and group discussion, and value for workplace commitment and company loyalty, leading to long tenured employment (Jorgensen, 2003), as shown in Table 1. Amongst characteristics like teamwork or consensus building, Baby Boomers are strong willed and provide mentoring to others within their organizations (Kupperschmidt, 2000). Unsurprisingly, mentoring within their organization is considered inherent, as Baby Boomers are found to be more diligent and attentive on the job,

and they desire high power positions within their workplace organizations (Wong, Gardiner, Lang, & Coulon, 2008).

Generation X

Generation X (Gen Xers), connected to Boomers in chronological succession, grew up in a period of financial, familial and societal insecurity. Some Gen Xers grew up in households where both parents worked and others were raised in single parent households because divorce rates were high (Tolbize, 2008). For Gen Xers, these family structures left Gen Xers to fend for themselves (Tolbize, 2008). These outcomes—Gen Xers fending for themselves, family structures, and societal insecurities—better enable Gen Xers to balance life between home and work, by increasing their value for family and working through flexible work environments (Hansen & Leuty, 2011). As shown in Table 1, Gen Xers share life experiences and characteristics such as heightened familiarity with worldwide competition (globalization), MTV, AIDS, emerging technology (computers), and embracement of diversity (Hart, 2006; Schullery, 2013). Additionally, shown in Table 1, corporate layoffs and downsizing, the dotcom burst, and the recession of the early 2000s, exacerbated by 9/11, all shaped the attitudes of Gen Xers toward their careers (Zemke, Raines, & Filipeczak, 1999).

Notably, as employees, Gen Xers are multitasking thinkers, technically competent, embrace challenges on the job, value learning, and are expectant of balance between work and leisure (Kupperschmidt, 2000). Additionally, Gen Xers are influenced by the sense of belonging, capable of obtaining new information, interested in job security, feedback, and appreciate short term rewards (Jukiewicz, 2000). However, Gen Xers are described negatively as slackers, more arrogant, lazier and more disloyal than other generations before them (Hart, 2006).

Millennials

The Millennial cohort are overprotected at school because of Columbine-type incidents, and they are overprotected at home because of kidnappings and AMBER Alerts, shown in Table 1 (Fishman, 2015). Presumably these types of occurrences led to a cultural-socio shift that pushed Millennial children to engage in more indoor activities such as video games and computer accessed media. The outcome of these indoor activities have made Millennials technologically competent, as they prominently use computers, tablets, and the Internet in schools today and they experience plug -and-play making even their learning not only challenging but more enjoyable (Schullery, 2013). Millennials are often described as “digital natives” (Prensky, 2001). They are also deemed competent in other areas, such as performing multiple tasks concurrently, responding to visual stimulation, and filtering information (Hershatter & Epstein, 2010). Like other generational cohorts, Millennials have very valuable qualities but they also have undesirable traits such as lacking loyalty and work ethics (Myers & Sadaghiani, 2010). In addition to these undesirable traits, Millennials are identified for using too much slang, lacking good communication skills, and being self-centered (Deal, Altman, & Rogelberg, 2010). It is generally perceived that Baby Boomers and Gen Xers experience some level of discomfort, disrespect, and distrust relative to Millennials and have adopted negative perceptions about the entire Millennials cohort. These negative perceptions make it difficult for Millennials to earn workplace respect and credibility from their generationally different co-workers (Myers & Sadaghiani, 2010).

A Change in Engagement: How Different Generations Engage

While examining the characteristics of each generation, we find differences in employee engagement amongst the prominent generations within the workplace. Baby Boomers have learned the value of teamwork; they have an inordinate appreciation for the power of teams and for working in harmony with others (Johnson & Johnson, 2010). Boomers' value of teamwork is important in understanding their engagement in the workplace. Baby Boomers tend to be most engaged when they feel valuable to the organization, have the freedom to act on their accumulated knowledge and skills, are not micromanaged, are motivated about their jobs, and feel secure about the organization supporting their needs (Johnson & Johnson, 2010), shown in Table 1.

In contrast, Generation Xers tend to be highly independent workers, not liking to work in teams. Gen Xers' disdain for teamwork is only superseded by their explicit or tacit need for sustainability (Johnson & Johnson, 2010). Gen Xers expect work to be engaging, place high value on fast-paced action and having fun, tend to get bored quickly, and appreciate work environments that are challenging, exciting, and have opportunities for growth (Johnson & Johnson, 2010). Millennials require interest in them as a person and view engaging as the ability to reach out and relationally connect with their direct report, while finding points of connection (Espinoza, Ukleja, & Rusch, 2010). In addition, Millennials expect others in the workplace to be empathetic, curious, and to invest in relationships built on trust (Espinoza et al., 2010).

For Baby Boomers, work has become the most important goal in their lives. Boomers work hard and self-identify by their work performance (Zemke et al., 1999). Therefore, Boomers put lots of effort into their work. Consequently, Boomers expect to receive recognition, especially publicly, and are resultantly looking for respect for their accomplishments (Zemke et al., 1999). Generation Xers consider survival most important to them and are most often focused on the struggle to achieve work-life balance (Kupperschmidt, 2000) as shown in Table 1. Gen Xers are regarded to be "the most attention-deprived and neglected generation in a long time" (Zemke et al., 1999). Millennials are considered to possess characteristics from both the Boomer and Gen Xer cohorts: teamwork spirit and technological savvy, respectively (Zemke et al., 1999). Nonetheless, Millennials are deemed unpolished in areas of experience and interpersonal skills, especially handling difficult people issues. These unpolished areas bring Millennials hard times in the workplace (Zemke et al., 1999). Millennials grew up in protective environments, protected by parents and teachers who have counseled and consoled them throughout their lives (Zemke et al. 1999). Millennials want to innovate, revamp and make things better (Lancaster & Stillman, 2010). The combination of Millennials' outward confidence and competency in technology characterizes them as a cohort wanting its voice to be heard (Lancaster & Stillman, 2010).

Engaged or Disengaged: What Demotivates Employees?

It is very important to understand the different drivers of engagement, as generations may disproportionately share similar drivers motivating their engagement or disengagement in the workplace. However, scholars should pay very close attention to disengagement and the components that inhibit or deter employee engagement (Byrne, 2014). Disengagement refers to people who withdraw themselves and display effortless performance (Byrne, 2014). Disengaged employees usually remove themselves from challenging or questioning others (conflict) and simply do as they are told (Byrne, 2014). As shown in Table 1, Millennials often appear as disengaged employees because they are seen as self-centered and often exemplify a "what's in it

for me attitude” (Deal et al., 2010). Conversely, the perception of Baby Boomers is positive, as they are considered highly engaged and hard workers climbing the corporate ladder for higher positions (Wong et al., 2008).

The few salient reasons contributing to employee disengagement are work burnout, personal situations, and emotional exhaustion. Burnout occurs when employees distance themselves emotionally and cognitively. Personal situations occur when life or work is unbalanced. Emotional exhaustion involves employees’ health and well-being. Relative to these drivers, scholars propose that there are further inhibitors to engagement, such as distrust, inequality, organizational change, staff reduction and loss of job resources, threats to psychological availability, meaningfulness, and safety (Byrne, 2014).

Beyond these deterrent drivers or inhibitors, there are common problems found amongst employees: conflicts or hostilities between others, withdrawn interactions, miscommunication or aggressive communication, and lack of interest (Dyer, 1995). These common problems stem from differences in values, ambitions, views, mind-sets, demographics, and intergenerational conflict (Zemke et al., 1999). Intergenerational conflicts are unfortunate outcomes that mitigate against positive creative synergy and are differences in values, views, ways of working, talking, and thinking that set people in opposition to one another and challenge employee engagement and organizational best interest (Zemke et al., 1999). Intergenerational conflicts arise from explicit or tacit miscommunication and often cause aggressive communication amongst generations. Consequently, conflicts and potential conflicts are anticipated and will surface. Generational differences are based primarily on forms of miscommunication: unarticulated assumptions and criteria (Zemke et al., 1999).

Understanding generational differences and surfacing conflicts will take a giant step toward resolving them (Zemke et al., 1999). Conflicts can serve a constructive purpose by identifying important issues that need to be resolved (Mendes, 1995). The energy of behind-the-back complaining, passive-aggressive behavior, and open hostility can be rechanneled to projects that can be profitable from different points of view, particularly the fresh perspectives of the young and the wisdom of experience from the older (Zemke et al., 1999). Thus, the acknowledgement of points of view between generations is contingent on open and effective lines of communication. Employees often feel disengaged due to fear of conflict or damaged lines of communication. Particularly, Millennials avoid conflict arising from the lack of interpersonal and good communication skills (Deal et al., 2010).

"Communication is both verbal and nonverbal and communication practices are strong forces in organizational life" (Arredondo, 1996, p. 14). There are several reasons for ineffective communication: employees representing different levels of work units consistently report problems that point back to dysfunctional communication organizationally wide; employees describe their own communication inadequacies and their desire to have a larger repertoire of skills; and communicating change traditionally tends to be top down, not face to face, and not considerate of the intended audience (Arredondo, 1996).

The problems of conflicts, withdrawn interactions, ineffective and damaged communication lead to workplace stress and are important to employee engagement. Thus, the problems leading to stress have social implications and suggest that employees need social support for active engagement and increased performance. Social support allows individuals to cope with workplace stress (Sauter & Murphy, 1995). Employees who enjoy such support are better able to master conditions and situations in the workplace because they feel valued and are

embedded in a network of communication and mutual obligation (Sauter & Murphy, 1995). Social support attributes are innate to Boomers, as they feel the need for and are enthused by teamwork (Johnson & Johnson, 2010). Employees who do not have social support might feel burned out or taxed in their adaptive abilities and are not able to perform on an adequate level (Sauter & Murphy, 1995). Gen Xers may often feel the brunt of stress, as they tend to need or desire the ability to work alone or independent and desire work-life-balance (Johnson & Johnson, 2010), as shown in Table 1. Along with examining social aspects, some evidence suggests that emotional aspects of the job may play an important part in job stress.

Some scholars found that positive and negative emotions at work were strongly correlated with employee engagement: depression, anxiety, and frustration. The negative emotions (inhibitors) link to lower job satisfaction and performance, and higher intent to quit the job (Sauter & Murphy, 1995). Therefore, employee engagement strongly correlates to a number of individual cohorts or groups and corporate performance outcomes. These performance outcomes include recruiting, retention, turnover, individual productivity, customer service, customer loyalty growth in operating margins increased profit margins, and even revenue growth rates (Mone & London, 2010). Relatively, employee engagement should be examined closer, especially with regard to each generational cohort.

Conclusion

Employee engagement gauges the level of connection employees feel with their employer or coworkers, as demonstrated by their willingness and ability to help their company succeed (Espinoza et al., 2010). Resultantly, Boomers find satisfaction when they are recognized for their wisdom and cooperation when working with others. Boomers feel more engaged when their needs are met by the organization (Johnson & Johnson, 2010). Gen Xers appreciate productivity in an organization that challenges their potential (Johnson & Johnson, 2010). Millennials value structure, trust, and relationships (Espinoza et al., 2010). Conclusively, employee engagement changes generationally due to differences in perception on workplace engagement. Generational perspectives are shaped by shared life experiences, characteristics, needs (motivational drivers and deterrents), employee relations, job satisfaction, commitment, and communication practices. Generational differences influence each cohort's level of engagement and impact performance outcomes, turnover, and companies' bottom lines and needs future study.

Future Implications for Employee Engagement

The development and understanding of these two concepts, employee engagement and generational differences, will provide meaning and broader comprehension of the factors that promote or deter engagement in different generations. Scholars and HRD practitioners should conduct empirical studies surrounding generational differences, employee engagement, generational cohorts' perspectives on engagement in the workplace, and their impact on performance outcomes. In addition, scholars and HRD practitioners should commit a focused study on the interactions between management and generationally different employees to improve personnel management skills, training techniques, recruiting practices, corporate culture, career development, and career paths within organizations.

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Generations	Shared Life Experience	Cohort Characteristics	Perspective on Engagement
Baby Boomers Born 1946 – 1964 (Age 52–70 in 2016)	<ul style="list-style-type: none"> • First moon landing • Vietnam War • Build Berlin Wall • JFK assassinated 	<ul style="list-style-type: none"> • Optimism • Team orientation • Personal gratification • Health & wealth • Strong willed 	<ul style="list-style-type: none"> • Workaholics • Willing to go the extra mile • Prefer in-person interaction • Good team player

	<ul style="list-style-type: none"> • MLK- Civil Rights Movement • Traditional Education Systems 	<ul style="list-style-type: none"> • Diligent • Personal growth • Involvement • “Live to Work” • Derives identity from work accomplishment 	<ul style="list-style-type: none"> • Reluctant to go against peers • Overly sensitive to feedback • Judgmental of those who see things differently
<p>Gen Xers Born 1965 - 1981 (Age 35–51 in 2016)</p>	<ul style="list-style-type: none"> • Vietnam War • Feminist Movement • Nixon’s resignation • Fall of Berlin Wall • End of Cold War • AIDS • Chernobyl • Globalization • Computers • Difficult family structures 	<ul style="list-style-type: none"> • Diversity • Thinking globally • Values Work/life balance • Techno-literacy • Fun (leisure) • Informality • Self-reliant • Pragmatism • Wants it all-Good Career and the “Good” Life • Sense of belonging 	<ul style="list-style-type: none"> • Adaptable • Techno-literate • Independent • Unintimidated by authority • Creative • Slacker • Arrogant • Impatient • Bored quickly • Like challenges • Cynical • Attention seeker • Disloyal to job
<p>Millennials Born 1982 - 2001 (Age 15-34 in 2016)</p>	<ul style="list-style-type: none"> • Violence: school-shootings • School Testing, stress • Technology • War on terrorism (9/11) • Gender equity • War in Iraq, Afghanistan • Social networking • Mobile data technology • Kidnappings 	<ul style="list-style-type: none"> • Optimistic • Civic duty • Confidence • Entitled • Sociability • Declining Morality • Street smart • Promotes acceptance • “Work to live...their way” • Meaningful work seeking • Visually Stimulated 	<ul style="list-style-type: none"> • Collective action • Tenacious • Multitaskers • Technological savvy • Goal-oriented • Needs supervision and structure • Inexperienced • Lack interpersonal skills • Avoids conflict • Self-centered

Note. Adapted from “Millennials at work: What we know and what we need to do (if anything),”

By Deal, J. J., Altman, D. G., and Rogelberg, S. G., 2010, *Journal of Business and Psychology*, 25(2), 191–199., from “Generations, Inc.: From boomers to Linksters - managing the friction

between generations at work,” by Johnson, M., & Johnson, L., 2010., from “Generation X and Generation Y?: Policy implications for defense forces in the modern era,” by Jorgensen, B., 2003, *Foresight*, 5(4), 41–49., from “Workplace engagement and generational differences in values,” by Schullery, N. M., 2013, *Business Communication Quarterly*, 76(2), 252–265., and from “Generations at work: Managing the clash of veterans, boomers, Xers, Nexters in your workplace (1st ed.),” by Zemke, R., Raines, C., and Filipczak, B.1999.

The Impact of a Training Component on the “Job” Satisfaction of Foster Parents: Implications for HRD

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Abstract: Foster parent retention is an important component of the well-being of foster children. This study investigates foster parents’ perceptions about their post-licensing training and the impact that an individualized continuing education plan may have on their satisfaction. Suggestions are made for further exploration of foster parents’ satisfaction and retention through HRD perspectives.

In the U. S., over 400,000 children are living in the foster care system, with 46% of these children residing in non-relative family foster homes (Administration for Children & Families, 2015). Foster parents are extremely important to the well being of these children, but unfortunately, there is historically a shortage of foster homes and a large turnover of foster parents (Murray, Tarren-Sweeney, & France, 2011; Rhodes, Orme, & Buehler, 2001). Along with recruiting new foster homes, efforts to maintain or even increase the number of available foster homes are largely dependent on the retention of current foster parents. Equipping foster parents to navigate the system as well as meet the unique needs of the children in their care is considered a vital element in the efforts to increase the satisfaction and retention of foster parents (Buehler, Rhodes, & Orme, 2006). Although a few studies have looked at foster parent training programs (Cooley & Petren, 2011; Murray et al., 2011; Rork & McNeil, 2011), implications have not been developed from a Human Resource Development (HRD) perspective regarding these training programs’ effects of the role, or “job” satisfaction of foster parents.

Factors involving the “job” satisfaction of foster parents are difficult to identify, as their role is somewhat ambiguous from a human resource perspective. Foster parents do receive some compensation to cover the costs of the child in their home, and they have rules and regulations to abide by from both the state and their licensing agency, but they are not “employees.” Although they are not employees, foster parents cannot be categorized as “volunteers” either. They do volunteer to become a foster parent and understand there is no wage or salary for them, but they also agree to provide around-the-clock care for a child in their home. This is much more involved than being a mere volunteer; this falls into a potentially vague area for understanding motivation, satisfaction, and retention.

Foster Parent Training

Florida currently requires thirty hours of pre-service training as part of the screening and application process for becoming a licensed foster parent. Twelve hours per year of continuing education are then required to maintain an active licensure. Even with this current level of training, some foster parents indicate that they are still unprepared for issues that arise with their foster children (Cooley & Petren, 2011; Pasztor, Hollinger, Inkelas, & Halfon, 2006). The ensuing frustration and emotional strain can cause these foster parents to lose confidence, become dissatisfied, and quit. What can a closer look at this required training component of foster care tell us about HRD strategies that may be beneficial to the satisfaction and retention of foster parents?

Purpose of the Research

The high dropout rate of foster parents has long been a concern to the child welfare system, and researching and addressing the reasons why foster parents quit or stop accepting children can begin to improve the job satisfaction and retention rates of these very important front line providers (Buehler et al., 2006; Cooley & Petren, 2011; Pasztor & Wynne, 1995). Utilizing an inquiry regarding post-licensing continuing education (an aspect of foster care that is a requirement for all foster parents), the purpose of this study was (a) to explore foster parents' perceptions and feelings regarding their post-licensing continuing education training, and (b) to explore foster parents' perceptions of utilizing an individualized continuing education plan (ICEP) developed around the specific needs of their foster home. The following research questions guided this study:

1. How do foster parents describe their post-licensing continuing education experiences?
2. What are foster parents' perceptions regarding the value of their post-licensing continuing education trainings?
3. What impact do foster parents feel an individualized continuing education plan (ICEP) will have on their knowledge, confidence, job satisfaction, and desire to continue fostering?

Method

Participants

Eleven foster parents from two licensing agencies in southeast Florida participated in this study. The foster parents were contacted by an employee at their agency and asked if they would consider participating in this study. The contact information was then passed on to the researcher, and the parents were contacted to confirm their willingness and availability to participate. The foster parents' participation was voluntary, and no compensation was received.

Data Collection

This study first utilized a questionnaire asking the foster parents about their feelings toward specific issues of preparedness, confidence, and satisfaction. Questions were structured for a Likert-Scale response ranging from "strongly disagree" to "strongly agree." A semi-structured interview was also conducted with each participant. The interview was conducted as an "extended conversation" (Rubin & Rubin, 2012, p. 12) and lasted approximately 60 minutes. The combined use of the questionnaire and the interview (a) gathered data that addressed specific foster parent issues discussed in the literature, and (b) explored perceptions that could be self-prompted and expanded upon during a conversation.

Data Analysis

The survey responses were compiled and are reported as percentages of participants who responded "agree" or "strongly agree" to the particular issue prompt. Recordings from the interviews were transcribed and then reviewed for recurring themes among participants' responses. These themes were then organized by this study's research questions.

Findings and Discussion

The results of the questionnaire reveal overall positive feelings of foster parents regarding their levels of preparedness for meeting the needs of the children in their care. The lowest levels came in the categories of feeling prepared for system issues (43%) and feeling prepared to help a child through a sense of loss (10%). A full 100% of participants feel that they make a difference

by being a foster parent.

Table 1
Foster Parent Feelings and Perceptions

Issue	Agree/strongly agree
Feel confident	86%
Feel like I make a difference	100%
Feel satisfied	86%
Feel prepared for:	
Agency issues	71%
System issues	43%
Caseworkers	86%
Child's feelings of loss	10%
Attachment issues	86%
Managing child's behaviors	86%
Birth family issues	71%

How do Foster Parents Describe Their Post-Licensing Continuing Education Experience?

The first research question asks how foster parents describe their post-licensing continuing education experience. The first interview question simply asked parents to describe their post licensing education experience. One major theme that emerged regarding an explanation of the general process was accessibility, or delivery of, the classes (Rork & McNeil, 2011). Some training sessions are offered online or through self-study, but six hours per year need to be obtained through live classes. One father spoke a lot about the accessibility of an online course versus a live course: "You've got to do six hours live – and the live one's a hard one to do; we're busy and we have to carve out an evening." Another foster parent concurred: "It's just frustrating personally because of our situation [an aging parent living with them] and living so far from where they hold them." Referring to the online course options, most foster parents found them convenient, with one participant stating, "You learn something...and you can do it in the comfort of your own home." No parent ever referred to the post licensing education as an opportunity, and the participants seemed to widely describe this education only in practical terms of required hours and class formats.

What are Foster Parents' Perceptions Regarding the Value of Their Post-licensing Education Trainings?

The second research question addressed the foster parents' perceptions regarding the *value* of their continuing education requirement. Interview questions designed to gather this information clearly asked about the perceived value of different trainings and the value of the education requirement as a whole. There was mixed response regarding agency or foster parent meetings that were social in nature but awarded continuing education hours. One foster parent

stated, “I learn a lot by interacting with other parents at the picnic and social events.” Another stated that she did not think of events or social gatherings as educational. All respondents relayed that they perceived value from the trainings when the topics were “specific” and “practical” (Pasztor et al., 2006).

Some respondents felt that the continuing education classes being offered involved information already known to them. One mother who fosters medically needy children and has more stringent training requirements found her trainings to be “very adequate” and “always informational.” Many respondents referred to trainings on the “system” as very helpful for navigating their needs of the children in their care, thus reiterating the perceived value of trainings with specific and practical topics.

What Impact do Foster Parents Feel an Individualized Continuing Education Plan (ICEP) Will Have on Their Knowledge, Confidence, and Job Satisfaction?

Research question 3 asks about the impact of an individualized continuing education plan as a way of identifying continuing education opportunities specifically relevant to that particular household. All participants felt that an individualized plan would be beneficial in their role as a foster parent. Many felt that it would help them gauge their own progress and development, thus increasing their job satisfaction (Cooley & Petran, 2011; Whelan, Oxlad, & Lushington, 2009). One foster mother stated that it would make her feel better about the licensing agency if she were “actually being asked for their input on trainings and topics.” Other parents expressed that same sentiment about wanting to contribute ideas to some agency policies and procedures. They felt this would evidence support from their agency (Sanchirico, Lau, Jablonka, & Russell, 1998). One parent was cautious about an individualized plan being mandatory, as she felt it would be “just one more thing we had to do.” This same parent felt it would be beneficial if the specific topics or trainings were “suggestions rather than requirements.”

Significance and Implications for HRD

The findings from exploring foster parents’ experiences and perceptions of their post licensing continuing education can provide valuable insights for foster care agencies when they are designing their post licensing educational programs and opportunities. Unfortunately, none of the participants spoke of their post-licensing training as an opportunity for learning or growth. This may indicate that the current focus is on achieving the required number of hours rather than maximizing the learning opportunities. These respondents spoke about wanting specific topics addressed rather than broad “discussions.” Although these respondents felt that a “requirement” for specific training based on their foster child’s situation may feel like a burden, they all agreed that “suggestions” through an individualized continuing education plan (ICEP) would be valuable to them while choosing classes to attend. This concept can be explored further by actually implementing an individualized continuing education plan with foster parents as their training year begins and helping them to locate the trainings and classes that will help them best address the needs in their particular homes. Assessing these parents’ satisfaction levels at the end of the year can provide some short-term insights, and longer-term studies can see the impact that the ICEPs have on retention rates.

Human Resource Development professionals have long studied employee retention and implemented practices to increase job satisfaction, job retention, and employee engagement. HRD professionals have also tried to perfect the implementation of professional development plans (similar to ICEP), which include education and training. The HRD profession has not yet addressed foster parents as a group to study these concepts. We can agree that foster parents are

hard to place in a neatly defined category: they are not employees, but they do receive compensation, have regulations to follow, and have ongoing expectations placed on them. Foster parents are not mere volunteers who pick and choose certain tasks and activities in which they will participate. Their duties are around-the-clock and in their own homes. Although harder to categorize, foster parents as a group would certainly benefit from the theories, strategies and practices being developed and implemented by the HRD profession for the corporate and organizational sector.

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Understanding Organizational Creativity: Relationships among Cross-level Variables and Creativity in Research and Development Organizations

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and Gary N. McLean, McLean Global Consulting, Inc.

Abstract: We examined the association of creativity with creative personality, domain expertise, non-controlling supervision, and organizational learning culture, as well as cross-level interactions in R&D organizations. Using HLM, domain expertise and non-controlling supervision were found to be positively associated with creativity. Practical implications and recommendations for further research are provided.

Employee creativity has received substantial attention in the literature for the role that it plays, particularly in research and development (R&D) organizations that consider employee creativity as the lifeblood for their survival (McLean, 2011). However, the majority of scholars have investigated this phenomenon primarily at the individual level: “The major focus in creativity research has been on the individual creator and his or her personality, traits, abilities, experiences, and thought processes” (Williams & Yang, 1999, p. 378).

It has been only recently that more scholars have turned their focus to the influence of organizational context on employee creativity: “The social environment can influence both the level and frequency of creative behavior” (Amabile, Conti, Coon, Lazenby, & Herron, 1996, p. 1155). Employee creativity should not be understood as an individual behavior that is a part of a person’s characteristics or abilities but as a complex phenomenon that is influenced by organizational contexts, such as supervisor’s leadership style or organizational climate (McLean, 2011). As the current study incorporates multiple variables at different levels of organizations that might influence employee creativity, it contributes to expanding the knowledge base about creativity.

Purpose, Research Questions, and Hypotheses

The purpose of this study was to examine the associations among four variables (i.e., domain expertise, creative personality, non-controlling supervision style, and organizational learning culture) to understand how creativity is related to each variable, as well as the cross-level interactions. Research questions were:

1. What are the associations between supervisor rating of employee creativity in R&D organizations and individual-level variables (i.e., personality and expertise) and team-level variables (i.e., supervision style and organizational learning culture)?
2. Do team-level variables moderate the associations between supervisor rating of employee creativity and individual-level variables?

The following hypotheses were tested:

Hypothesis 1: Creative personality is positively associated with employee creativity.

Hypothesis 2: Domain expertise is positively associated with employee creativity.

Hypothesis 3a: Non-controlling supervision is positively associated with employee creativity.

Hypothesis 3b: The strength of the relationship between creative personality and creativity

- across supervisors is positively moderated by non-controlling supervision style.
- Hypothesis 3c: The strength of the relationship between domain expertise and creativity across supervisors is positively moderated by non-controlling supervision style.
- Hypothesis 4a: Organizational learning culture is positively associated with employee creativity.
- Hypothesis 4b: The strength of the relationship between creative personality and creativity across supervisors depends on organizational learning culture.
- Hypothesis 4c: The strength of the relationship between domain expertise and creativity across supervisors is positively moderated by organizational learning culture.
- Hypothesis 5: Creativity-related personal characteristics and contextual variables interact in such a way that employee creativity is highest when employees have a highly creative personality, possess high domain expertise, are supervised in a non-controlling manner, and perceive a strong organizational learning culture.

Literature Review

Amabile (1983) asserted that there are three necessary and sufficient components to produce creativity: (a) domain-relevant skills (or domain expertise), (b) creativity-relevant skills, and (c) task motivation. Domain-relevant skills indicate “factual knowledge, technical skills, and special talents in the domain in question” (Amabile, 1983, p. 67). Expertise refers to a person’s tacit and explicit knowledge of a certain domain, and experts are able to identify problems and go beyond what is already known (McLean, 2011). Tiwana and McLean (2005) found that individuals’ expertise integration plays a central role in achieving team creativity.

“Creativity-related skills include cognitive style, application of heuristics for the exploration of new cognitive pathways, and working style” (Amabile, 1983, p. 67). An individual’s creativity is claimed to be a dispositional phenomenon, and the profile of a creative personality includes being unconventional, independent, open to new experiences, and risk-taking (Simonton, 2000).

Lastly, task motivation includes “the individual’s baseline attitude toward the task...and the individual’s perceptions of his reasons for undertaking the task” (Amabile, 1983, p. 76) and is known to be the most effective component in enhancing creativity (Gumusluoglu & Ilsev, 2009). Organizational climate affects employees’ motivation to generate new ideas, and organizational climate is largely affected by leadership style. Zhang and Bartol (2010) provided empirical evidence that empowering leadership has positive associations with both intrinsic motivation and employee creativity. Furthermore, Gumusluoglu and Ilsev (2009) found a positive association between transformational leadership and employee creativity. Values, norms, and beliefs that are driven by the organizational culture either support or inhibit employee creativity (Martins & Terblanche, 2003).

The claim has been made and empirically tested that individual and contextual factors described above are related to employee creativity. However, how might these factors at different levels interact to influence creativity? What factors, when combined, produce the greatest employee creativity? Scholars have recently begun to investigate antecedents across levels that influence creativity. Despite current efforts, much more work is needed to specify better models incorporating the right combination of variables, to validate models across populations, and to replicate these studies to increase confidence in them (McLean, 2011).

Methods

The target population was employees in the R&D function (e.g., scientists, engineers, and

technicians but excluding administrative staff and management) in organizations engaged in new product development in the United States. The first author's personal network was used to select organizations willing to participate; thus, convenience sampling was used. As a result, four R&D organizations participated, and an online survey was utilized to inquire into their perceptions of their personalities, their direct supervisor's supervision style, and the organizational learning culture. In addition, their direct supervisors were asked to complete a separate survey that reflects their perceptions of each employee's level of expertise and creativity. Lastly, secondary data for each organization, including invention disclosures written, patent applications filed, and patents received, were collected as a measure of creativity. The number of survey questions across both the employees' and supervisors' versions was 65. According to the Cronbach's alpha test, all instrument variables were reliable, except for the creative personality scale, .65, which is less than the .70, the threshold of acceptable reliability (DeVellis, 2003). Therefore, results from this scale should be interpreted with some caution. Domain expertise was validated by using inter-rater correlations. The validity of the other instruments was based on research conducted by the instrument developers.

The overall response rate was approximately 70% (596 of 848). At the supervisor level, the response rate was 64% (104 of 154). At the employee level, the response rate was 71% (492 of 694); 93.3% of the respondents possessed a post-secondary degree, and 54% had graduate degrees. The average working experience of the respondents was 13.1 years (s.d. 9.4) with 11.2 years (s.d. 8.6) at his/her organization.

Honoring the nature of the two-level data structure, hierarchical linear modeling (HLM) and general linear modeling (GLM) with the generalized estimating equation (GEE) were used for data analysis.

Results

HLM results showed that there is a positive association between supervisor rating of employee creativity and non-controlling supervision style, and that there is a positive association between supervisor rating of employee creativity and domain expertise ($p < .01$). However, the relationships between creative personality and organizational learning culture and creativity were not significant. None of the interactions among the predictors had a significant relationship with creativity. The level 2 variables explained 95% of the variance in random effect on expertise across supervisors. The results using invention disclosures as the measure of creativity showed that only domain expertise predicted at a significant level ($p < .01$) the likelihood that an individual in an R&D organization would have at least one invention disclosure. Neither creative personality, non-controlling supervision style, nor organizational learning culture predicted the likelihood that an individual had at least one invention disclosure at a significant level ($p < .05$). Tables 1 and 2 summarize the outcomes of the tests of each of the hypotheses in this study. All hypotheses were rejected except for hypotheses 2 and 3a.

Table 1

Results of HLM Full Model for Supervisor Rating of Employee Creativity

Effect	Estimate	SE	<i>t</i>	<i>p</i>
Within Supervisor				
Intercept	11.09	0.14	77.95	<.0001***
Expertise	1.04	0.14	7.69	<.0001***
Creative Personality	.02	0.03	0.62	0.534
Between Supervisor – Intercepts				
Non-controlling Supervision	.13	0.04	3.47	0.001***
Organizational Learning Culture	.01	0.01	1.09	0.277
Expertise Slope				
Non-controlling Supervision	-0.01	0.06	-1.96	0.051
Creative Personality Slope Non-controlling Supervision				
Organizational Learning Culture	0.02	0.01	1.56	0.120

*** $p < .001$, ** $p < .01$, * $p < .05$

Table 2

General Linear Model Using Invention Disclosures as Measure of Creativity

Effect	Estimate	SE	<i>p</i>
Intercept	.99	.18	4.07e-08 ***
Expertise	.65	.20	.001 **
Creative Personality	.00	.05	.968
Non-controlling	-.08	.06	.138
Organizational	-.02	.01	.071
Org1	.31	.48	.520
Org2	-1.84	.39	2.09e-06 ***
Org3	.96	.43	.0251 *

*** $p < .001$, ** $p < .01$, * $p < .05$

Discussion

Based on the results of this study, four key findings can be made. First, domain expertise of employees in R&D organizations positively affects supervisor rating of creativity. There has been an on-going debate in the literature of whether expertise promotes or stifles creativity. Some scholars have argued that creating novel ideas or solutions requires a high level of expertise, as it reflects the existence of deep knowledge and skills in a given domain (Kulkarni & Simobate, 1988). Others have claimed that a firm grasp of knowledge can block the generation of new thinking and ideas (Frensch & Sternberg, 1989; Hausman, 1984). This study provides empirical evidence that supports a positive relationship between expertise and supervisor rating of creativity. One caution related to this finding is necessary: Creativity in this study was determined by supervisor ratings, which is an indirect and potentially limited measure of creativity. Supervisor ratings in appraisals have been seriously questioned (Suddath, 2013).

Second, this study found that non-controlling supervision style positively predicts the level of employee creativity, whether measured by supervisor ratings or invention disclosure. Non-controlling leadership is likely to create a climate that promotes creativity, as it increases job autonomy, motivation, and employee empowerment. Controlling supervisors are generally autocratic, exclude employees from decision-making processes, and expect employees to behave as they are told; thus, it is more likely to hinder creativity among employees (Zellars, Tepper, & Duffy, 2002). Interestingly, the study results provided evidence that non-controlling supervision did not affect the relationship between domain expertise and creativity as measured by invention disclosure. In other words, non-controlling supervision style was the only variable positively associated with creativity, whether an employee was rated low or high by his or her supervisor or invention disclosure.

Third, creative personality and organizational learning culture showed no significant relationships to creativity, in any measures used, calling into question the importance of these variables when studying creativity, at least in the population examined for this study. The relationship between personality and creativity has been well captured in the literature. A person with a high level of creativity tends to be more open to exploring new experiences and being less conventional (Flynn, 2005). Considering the weight of evidence in the literature, the current study results seem to be counter-intuitive. A possible explanation might be an invalidity of the Creative Personality Scale (CPS) as a measure of creative personality for the current study sample. Developing and validating the CPS, Gough (1979) collected data from twelve different occupations and found that the instrument was not validated for male research scientists and female mathematicians. Thus, it is possible that the CPS was not valid for the present study's population.

The relationship between creativity and organizational learning has not been well established in the literature. However, the literature has suggested a positive link between these two constructs. "An organization learns when, through its processing of information, it increases the probability that its future actions will lead to its improved performance" (Huber, 1998, p. 3). To generate and combine new ideas, it is important that they be exposed in an environment that provides multiple learning resources (Robinson & Stern, 1997). Hirst, Van Knippenberg, and Zhou (2009) found that individuals working in a team that displayed a high level of team learning behavior tend to exhibit a greater level of creativity. Joo, Song, Lim, and Yoon (2011) also found a positive association between organization learning and creativity. However, surprisingly, the current study result is not consistent with the extant literature. The instrument DLOQ, a measure for organization learning for the present study, consists of seven factors that make up the complete scale. It may be that, although there is no significant relationship between the DLOQ scale as a whole and creativity, one or more of the sub-factors of the DLOQ may have a significant positive relationship. Future research should investigate whether any of the sub-dimensions of the DLOQ scale are significantly related to creativity.

Finally, this study highlights the difficulty of defining and measuring creativity. We know that supervisor ratings are not particularly valid measures of anything, and the variable of invention disclosures provided little variability. Thus, researchers in the area of creativity need to work at uncovering better measures of creativity.

Implications for the Field

This study sheds a light to employee expertise and non-controlling supervision style as these factors are discovered to be positively associated with employee creativity. Expertise and supervision style can be promoted by actions such as hiring, promotion, and training and development interventions. HR practitioners can arrange organizational initiatives to draw attention to and improve in these areas. They also should continue their efforts to pursue systemic solutions but can start with these factors that are more easily influenced. The current study presents new opportunities for researchers and practitioners to partner to understand creativity better and to improve the likelihood of producing greater creativity (McLean, 2011).

Recommendations for Future Research

First, more cross-level research that tests a various set of antecedent of employee creativity should be conducted. There is a scarcity of published empirical research that examined the interactions across the multiple levels in organizations. Other combinations of variables across levels should be studied with an aim towards further deciding and understanding which variables are most strongly related, how those variables interact, and which level(s) is/are most important for creativity (McLean, 2011).

Future research should also explore what outcome variable can be used in measuring employee creativity. The way in which creativity is defined in what domain or field, as something novel and useful (Sternberg & Lubart, 1999), creates challenges for measurement. Both *novel* and *useful* are often to be subjective and relative terms. “The researcher must decide how to define creativity to answer several subjective questions, such as, ‘Novel to whom? Useful to whom? Novel at what point in time? Useful compared to what? ‘Besides R&D, what other functions require creativity?’ among others” (McLean, 2011, p. 85).

The present study explored a new set of variables across multiple levels that has not been investigated previously. We hope that the field of creativity research will continue to make progress towards addressing some of the challenges highlighted in this study.

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2016 South Florida Education Research Conference Symposia

FIU/CASE-Andrea Castillo-Ronald Reagan Senior High Teaching Academy: A Potential for Long Term and Positive Impact in our Community

Abstract

An increasing teacher shortage is creating a need for teachers across our communities. School districts and other institutions, such as universities, are engaging in joint efforts to recruit and retain highly qualified teacher professionals. In this combined effort, one way the vision of attracting teachers to the field is being characterized by an interest in teaching academies. These academies promise to provide students with an educational opportunity that facilitates their ability to reach their professional goals in teaching while making them employable. This symposium will present a new initiative at a local senior high school by introducing the Teaching Academy model and the story behind the making of this initiative. This local academy intends to create lifelong learners and improve the access to educational resources available to our community. This symposium will show the initiative's challenges, successes, and potential for future development.

Participants

Maria V. Tsalikis, Florida International University

Exploring the Roles of Adult Education and Human Resource Development before and after Retirement of Faculty and Practitioners in the Fields

Abstract

Given the large numbers of baby boomers who are at an age where retirement is an active consideration, it is critical for HRD and AE scholars and practitioners to consider seriously their roles in preparing such professionals for making appropriate decisions; making their retirement healthy, productive, and rewarding; and assisting such professionals in achieving their visions once that decision is made. There is a void in the literature addressing these roles. In this symposium, we will explore with attendees what these roles might be, expanding our understanding about what retirement means, and how to expand the research in these areas.

Participants

Dr. Gary N. McLean is president, McLean Global Consulting. He teaches in the PhD program, HROD, NIDA (National Institute for Development Administration), Thailand. He is professor emeritus, University of Minnesota. He served as President, Academy of HRD and IMDA. His research focuses on organization development; societal, national, and international HRD.

Dr. Thomas G. Reio, Jr. is Associate Dean of Graduate Studies and Professor of Adult Education and HRD at Florida International University. He served as Editor of *Human Resource Development Review* and serves as an Associate Editor of *Human Resource Development Quarterly*. His research concerns workplace motivation, socialization, and incivility.

Teachers' Perceptions of Subjective Objective Assessment Plan (SOAP) Formatted Post-Observation Conversations

Abstract

The purpose of this qualitative study was to determine the efficacy of structuring post-observation conversations through the use of medical SOAP notes to incorporate key principals of effective feedback as evidenced by teacher perceptions. Additionally, this research determined how SOAP formatted post-observation conversations influenced changes to instruction. Understanding teacher perceptions about the post-observation conference led to more clearly collaborative processes that enhanced teaching and learning.

Participants

Dr. Carla C. Hozebin

Adequate Support for Distance Learners: An Ongoing Challenge for Distance Education Programs

Abstract

Distance education is a thriving force that has been challenged with a lack of satisfactory student support services in many postsecondary institutions for almost a decade. This symposium attends to the need of a support services base that can suitably tend to the learning needs of students enrolled in distance education programs. An examination of a student support services structure already in place at a public 4-year institution will be performed so as to identify factors that are called for in the design and development of services that can effectively motivate, sustain, and guide students enrolled in distance education programs.

Participants

Elizabeth Adadi is a doctoral student studying for a Doctorate of Education in Instructional Technology and Distance Education at Nova Southeastern University while also studying for a Doctorate of Philosophy in Curriculum and Instruction at Florida International University. She is employed full-time by FIU Online.

Technology Invasion: Apps to revolutionize the diverse 21st Century classroom. Time to Launch!

Abstract

Professors of pre-service teachers are usually referred as digital immigrants, while their students are typically described as digital natives. The presentation delivered by professors and students will discuss the integration of cutting-edge technology in Higher Education classrooms. As digital immigrants, teachers and their students learn to become seasoned professionals in innovation, through the use of apps on iPads that assist with productivity, efficiency and convenience, allowing students to thrive as digital natives and meet the demands of a diverse 21st century classroom.

Participants

Carmen Ronnie is a Doctoral student at Lynn University. She is currently working as an adjunct professor at Lynn University teaching undergraduate Elementary Education K-6.

Dr. Jennifer Lesh has a Ph.D. from Barry University. She is currently an Assistant Professor and the Coordinator Master's program in Exceptional Student Education at Lynn University.

Dr. Kelly Burlison has an Ed.D from Nova Southeastern University. She is currently an Assistant Professor and Program Coordinator Elementary Education K-6 at Lynn University.

Anika Smith is a Graduate student, obtaining her Master's in Exceptional Student Education at Lynn University. She currently works in an aftercare program and upon graduation, hopes to work with students with disabilities.

Nicola Gomez is a junior obtaining an Elementary Education K-6 undergraduate degree at Lynn University.

Turning Challenges into Opportunities: Career Development and Financial Stability for Marginalized Populations

Abstract

Marginalization includes certain societal groups being kept in a lesser position within a society for a number of factors. Certain people within these marginalized populations have unique concerns regarding their career development and financial stability. This session discusses various barriers faced by marginalized groups as well as curative strategies that can be implemented.

Participants

Lori Ann Gionti has over 25 years of advocacy experience in the south Florida child welfare system. She has served as a mentor, guardian ad litem, foster parent trainer, and a MAPP trainer for the state of Florida. Lori and her husband have also built their family through adopting seven children from foster care. Lori is currently a doctoral candidate at FIU with research interests in the career development and higher education experiences of former foster youth. Contact Information: lgionti@hotmail.com

Chaundra Whitehead is a doctoral candidate in Adult Education and Human Resource Development at Florida International University, has over 10 years teaching experience in literacy, vocational, and corrections education. Her research interests are corrections and adult basic education. She is a Research Assistant with a university-community partnership in Miami. She actively volunteers as a facilitator with Alternatives to Violence Project in South Florida prisons. She has a MS from FIU and a BA from Florida A&M University. Contact Information: cwhit015@fiu.edu

Amanda Giust is the Program Manager for Project Panther LIFE: Learning is For Everyone at Florida International University. Ms. Giust received a bachelor's degree in Early Childhood Education from Bowling Green State University in Ohio. Following her undergraduate degree she began working as a high school tutor where she worked directly with students with learning disabilities. Ms. Giust decided to further her education and received her master's degree in Adult Education and Human Resource Development from Florida International University (FIU) in Miami. During her master's degree she was a Graduate Assistant for Panther LIFE and three years later is now the Program Manager. Currently, she is a doctoral candidate at FIU with a specific research interest in employment outcomes for adults with intellectual disabilities. Contact Information: agiust@fiu.edu

Maeva Chiche is a second year student in the Panther LIFE: Learning Is For Everyone program at FIU. During her time as an FIU student, Maeva has held job shadowing experiences at the Office of Multicultural Programs and Services and the Hospitality Food and Beverage Science Program. She has also presented on behalf of Panther LIFE at local and state conferences including the South Florida Education Research Conference in Miami, Florida and the VISIONS XXII Conference in Orlando, Florida.

2016 South Florida Education Research Conference Posters

Author Name	Author's Affiliation	Title of the Study
Christina Aleman	FIU	Reciprocal Peer Tutoring with Corrective Feedback for Teaching Decoding and Building Fluency in Students with Learning Disabilities
Elaine Sharonda Allen	FIU	Financial Skills for Students with Intellectual Disabilities and Autism
Lena Alonso	FIU	Task Performance for Adolescents with Autism Spectrum Disorders
Josefina Beyra	FIU	Using Task Analysis to Improve Procedural Thinking Skills of Students with Disabilities in the Art Classroom
Martha Brackett	FIU	Motivating Students Who Struggle with Math Achievement
Drenee Bryant	FIU	Mathematics Instruction for Young Children
Kari Camacho	FIU	Task Performance for Adolescents with Autism Spectrum Disorders
Nidia Cooper	FIU	Self-Regulatory Skills to Enhance Academic Success
Hemaghini Das	Barry	Web 2.0 Directed Learning Activities in Gifted, Fifth Grade Students
Lindsay Davidson	FIU	Video Modeling for Students with Autism Spectrum Disorder

Matasha Defrand	FIU	Generalization: From Classroom to the Community
Silvina Demaria	FIU	Second Language Acquisition in Elementary Aged Students
Vania Diaz	FIU	Differentiated Instruction in Mathematics
Angela Donnino	FIU	Increasing Communication with Intellectually Disabled Students
Alexis Duarte	FIU	Autism Spectrum Disorder and Reading Comprehension
Vania Diaz	FIU	Differentiated Instruction in Mathematics
Jennifer Freesland	FIU	Intervention for Struggling Writers in Elementary School
Itauma Itauma & Terri Bubb	Keiser	Academic Success Centers: Improving Resource Utilization using Grounded Theory Methodology
Bria Lundy	FIU	Closing the Reading Gap
Helen Martinez	FIU	Improving Mathematics Fluency
Ana Mas	FIU	Self-Monitoring Behaviors in Students with Attention Deficit Hyperactivity Disorder
Keri McCarthy	FIU	Using iPads to Motivate Reluctant Readers during Literacy Instruction in Elementary School

Deborah McLaughlin	FIU	Functional Communication Skills for Students With Autism Spectrum Disorder
Egleevelyn Nunez	FIU	Reading Comprehension and Students with Learning Disabilities
Yanirys Rios	FIU	Tracing with Dots as a Strategy to Teach Writing to Young Children with Autism Spectrum Disorder
Shekeyla Roberts	FIU	Oral Reading Fluency and Comprehension
Jennifer Sauer	FIU	Initiation of Communication in Students with Autism
Olga Torguet	FIU	Strategies for Teaching English Language Learners with a Specific Learning Disability
Michael Vergara	FIU	Figurative Language and Students with Autism Spectrum Disorder
Pilar Villegas	FIU	Use of Video Modeling to Improve Independent Functioning skills and Decrease Prompt Dependency in Students with Autism Spectrum Disorder
Lauren A. Vivar	FIU	Frustration and Task Avoidance in Students with Autism Spectrum Disorder

Appendices

The 15th South Florida Education Research Conference 2016 Program

The 15th Annual South Florida Education Research Conference



Saturday, June 4, 2016

Florida International University
Biscayne Bay Campus | Wolfe University Center Ballroom

Editor in Chief:
Sarah M. Nielsen, Ed.D.
Associate Professor, English, DeVry University

Hosted by:

FIU | Arts, Sciences
& Education
FLORIDA INTERNATIONAL UNIVERSITY

The South Florida Education Research Conference is hosted by Florida International University in partnership with Barry University, DeVry University, Florida Atlantic University, Florida Memorial University, Johnson and Wales University, Keiser University, Miami Dade College, Nova Southeastern University, St. Thomas University and University of Miami.

Acknowledgements

The South Florida Education Research Conference Steering Committee (SFERC) would like to thank the member universities and their faculty and students for supporting the fifteenth annual SFERC. The members of the steering committee include Florida International University, DeVry University, Keiser University, Barry University, Miami Dade College, Florida Memorial University, Johnson & Wales University, Florida Atlantic University, St. Thomas University, University of Miami, and Nova Southeastern University.

Special thanks must also go to Michael Record, Gerene Starratt, Sarah Nielsen and Lori Ann Gionti who have provided insights, stepped up to take on tasks, and given freely of their time and effort to make this conference a success.

Thank you to Keiser University for their new sponsorship of the Keiser University Graduate School Poster Presentation Award. Thank you to Michael Record (Keiser) for his organization and handling of all aspects of this award. Thank you also to Thomas Reio (FIU) and the Lorraine R. Gay Award for Excellence in Research/Scholarship Committee for their work.

Sarah M. Nielsen (DeVry) has served as editor of the proceedings for years, and now serves as editor in chief. Her attention to detail, editing skills, and patience have made the proceedings a quality publication. Teresa Lucas (FIU), Jacqueline Pena (MDC), Lori Ann Gionti (FIU), and Sarah Nielsen (DeVry) all co-chair the Paper Review and Selection Committee and facilitated the review process. This includes locating faculty to review, prompting reviewers to return reviews, being third reviewers when the student and faculty reviews are opposed, and doing additional reviews when reviewers fail to return their reviews. Lori Ann Gionti (FIU) also headed the poster review and selection committee.

Without the continuing support of so many, this conference would not exist, so thank you again for making our fourteenth annual conference so successful!

Tonette S. Rocco, Chair, South Florida Education Research Conference Steering Committee

	8:00 – 8:30 a.m. Registration & Continental Breakfast	Wolfe University Center Grand Ballroom Lobby Grand Ballroom 244 A/B
	8:30 – 9:30 a.m.	Wolfe University Center Grand Ballroom 244 A/B

Welcome

Tonette Rocco, PhD
Chair, Conference Steering Committee, Florida International University

Morning Keynote:

Integration of Colleges

Kenneth G. Furton, PhD
Provost and Executive Vice President, Florida International University

Kenneth G. Furton was appointed Provost and Executive Vice President of Florida International University on July 2014. He is a leading scholar in forensic chemistry, specializing in scent detection. Dr. Furton has spent over 27 years at FIU. He was appointed the dean of the College of Arts and Sciences in 2007, where he transformed the university's largest college into three mission-based interdisciplinary schools to explore and address some of the biggest issues facing society today. During his tenure, the college of Arts and Sciences raised over \$41 million in philanthropic gifts and saw its research grants funding increase from \$27 million to \$60 million annually. Notably, Dr. Furton chaired the iREAL (integrating Research, Engagement, Assessment and Learning) Commission as Dean of the College to develop the vision paper that informed FIU's 2015-2020 BeyondPossible2020 Strategic Plan.

Having started at FIU in 1988 as an assistant professor in chemistry, Dr. Furton in 1997 founded FIU's International Forensic Research Institute (IFRI), which is globally recognized as one of the premier research and teaching institutes on forensic science. He subsequently served as associate dean of budget, facilities and research and remains director emeritus at IFRI, where he continues to be active, directing the research of graduate and undergraduate students and publishing papers and filing patents.

Dr. Furton earned a B.S. in Forensic Science at the University of Central Florida in 1983, a Ph.D. in Analytical Chemistry at Wayne State University in 1986 and completed post-doctoral studies in Nuclear Chemistry at the University of Wales, Swansea, and U.K in 1988. His expertise has led him to serve in numerous local, national and international professional organizations, including the National Academy of Sciences, the National Nuclear Security Administration and the Scientific Working Group on Dog and Orthogonal Detector Guidelines, which he chaired since its inception in 2004. He is currently chair of the Organization for Scientific Area Committees Dog and Sensor working group of the National Commission on Forensic Science.

Deeply committed to the academy, Dr. Furton is the author or co-author of more than 700 publications and presentations. His research projects have been continuously funded for more than two decades, totaling more than \$10 million in external funding. He has shared his expertise in forensic science through hundreds of invited talks nationally and internationally and has testified as an expert witness in dozens of state and federal trials.

Dr. Furton is the proud father of twins, Robert and Courtney, who are currently juniors attending FIU.

9:40 – 10:25 a.m. <i>Symposium 1, Concurrent Sessions 1, 2, & 3, and Poster Session 1</i>		
Symposium 1	Teachers' Perceptions of Subjective Objective Assessment Plan (SOAP) Formatted Post-Observation Conversations	Wolfe University Center Grand Ballroom 244
	<p><i>Chair:</i> Carla C. Hozebin, Florida International University</p> <p>The purpose of this qualitative study was to determine the efficacy of structuring post-observation conversations through the use of medical SOAP notes to incorporate key principles of effective feedback as evidenced by teacher perceptions. Additionally, this research determined how SOAP formatted post-observation conversations influenced changes to instruction. Understanding teacher perceptions about the post-observation conference led to more clearly collaborative processes that enhanced teaching and learning.</p>	
Session 1	Education and Policy Development	Wolfe University Center Room 221
<p><i>An Analysis of the Connection Between Workforce Development and Higher Education Within State Policy and the Sharing of Best Practices</i> Arthur C. Evans, III Athens Technical College, USA</p>		
Session 2	Learning Culture and the Workplace	Wolfe University Center Room 223
<p><i>Understanding Organizational Creativity: Relationships among Cross-level Variables and Creativity in Research and Development Organizations</i> Laird D. McLean, McLean Global Consulting, Inc.; Shinhee Jeong, Texas A&M University; and Gary N. McLean, McLean Global Consulting, Inc.</p>		
Session 3	Reading Education	Wolfe University Center Room 245
<p><i>Using the HPST Framework to Improve Reading Comprehension with Students with Intellectual Disabilities in a University Setting</i> Jose M. Pombo and Amanda Giust Florida International University, USA</p>		
Poster Session 1: Learning and Exceptional Populations		Wolfe University Center Grand Ballroom Lobby
<p><i>Generalization: From Classroom to the Community</i> Matasha Defrand, Florida International University</p> <p><i>Increasing Communication with Intellectually Disabled Students</i> Angela Donnino, Florida International University</p> <p><i>Self-Monitoring Behaviors in Students with Attention Deficit Hyperactivity Disorder</i> Ana Mas, Florida International University</p> <p><i>Strategies for Teaching English Language Learners with a Specific Learning Disability</i> Olga Torquet, Florida International University</p> <p><i>Figurative Language and Students with Autism Spectrum Disorder</i> Michael Vergara, Florida International University</p>		
<p><i>Use of Video Modeling to Improve Independent Functioning skills and Decrease Prompt Dependency in Students with Autism Spectrum Disorder</i> Pilar Villegas, Florida International University</p>		

10:35 – 11:20 a.m. <i>Symposium 2, Concurrent Sessions 4, 5, & 6, and Poster Session 2</i>		
Symposium 2	Adequate Support for Distance Learners: An Ongoing Challenge for Distance Education Programs	Wolfe University Center Grand Ballroom 244
	<p><i>Chair:</i> Elizabeth K. Adadi, Florida International University, and Nova Southeastern University</p> <p>Distance education is a thriving force that has been challenged with a lack of satisfactory student support services in many postsecondary institutions for almost a decade. This symposium attends to the need of a support services base that can suitably tend to the learning needs of students enrolled in distance education programs. An examination of a student support services structure already in place at a public 4-year institution will be performed so as to identify factors that are called for in the design and development of services that can effectively motivate, sustain, and guide students enrolled in distance education programs.</p>	
Session 4	Human Resource Development	Wolfe University Center Room 221
<p><i>The Impact of a Training Component on the "Job" Satisfaction of Foster Parents: Implications for HRD</i> Lori Ann Gionti Florida International University, USA</p>		
Session 5	Language and Literacy	Wolfe University Center Room 223
<p><i>Difficulties of Chinese Students with Their Academic English: Evidence from a China-United States University Program</i> Yinhong Duan and Xiuyuan Yang Florida International University, USA</p> <p><i>On Strategies for Teaching Culturally Diverse Literary Texts</i> Yu Zhang Florida International University, USA</p>		
Session 6	Scholarly Writing	Wolfe University Center Room 245
<p><i>Writing the Literature Review Section: Teaching Undergraduate Psychology Students Scientific Writing</i> Hung-Tao Chen Florida International University, USA</p>		
Poster Session 2: STEM Strategies		Wolfe University Center Grand Ballroom Lobby
<p><i>Financial Skills for Students with Intellectual Disabilities and Autism</i> Elaine Sharonda Allen, Florida International University</p> <p><i>Motivating Students Who Struggle with Math Achievement</i> Marth Brackett, Florida International University</p> <p><i>Mathematics Instruction for Young Children</i> Drenee Bryant, Florida International University</p> <p><i>Differentiated Instruction in Mathematics</i> Vania Diaz, Florida International University</p> <p><i>The Effects of a Visual Activity Schedule on Students with ASD Multiplication Fluency</i> Luis Antonio Figueroa, Florida International University</p> <p><i>Improving Mathematics Fluency</i> Helen Martinez, Florida International University</p>		

11:30 – 1:15 p.m.

Lunch is served buffet style. Quickly and quietly get your lunch at the back of the room, find a seat, and prepare for a delightful keynote address.

Wolfe University Center, Grand Ballroom 244 A/B

SFERC 2016 Lunchtime Panel

Crisis Management in Education: The Active Shooter Concern

Moderator:

Jennifer Kross, Director of Advisement and Career Services, Miami Dade College

Jennifer Kross spent 18 years as a hostage negotiator in the Iowa prison system, and she also developed and instituted the first prison hospice in Iowa. In her roles as a Family Program Assistant for the US Army Reserves and a Program Coordinator for Single Stop at Miami Dade College, she has worked directly with suicidal soldiers, students, inmates, and family members. Currently serving as the Director of Advisement and Career Services at Miami Dade College's North Campus as well as studying as a doctoral student at FIU, Jennifer continues to assist people in crisis on an individual basis in an effort to minimize mass casualty incidents in our Institutions of Higher Education.

Panelists:

Alexander D. Casas, Chief of Police at Florida International University

Alexander Casas was appointed to the position of Chief in September 2011. Prior to coming to FIU, he was the Acting Division Chief of Police at Miami-Dade Police Department, South Operations Division. He served for twenty-two years with the Miami-Dade Police Department and held a variety of positions and assignments throughout the County. He led daily operations to include police response, investigative response, crime prevention, community outreach, homicide investigation, sexual battery investigation, and community oriented policing. Additionally, he has served as an Adjunct Professor at FIU from May 2011 to present. Chief Casas participates in many professional associations and organizations including the International Association of Campus Law Enforcement Administrators, International Association of Chiefs of Police, Florida Police Chiefs Association, Miami-Dade County Association of Chiefs of Police, and National Association of Chiefs of Police. He is a founding board member and currently Chair of the Academir Charter School serving as a volunteer. He attended FIU attaining a Bachelor of Science in Criminal Justice in 2006 and received a Master of Science in Leadership from Nova Southeastern University in 2010. He has one son and three daughters.

Major Rick Rocco, City of Lauderhill Police Department

In 1995 Rick Rocco joined the Lauderhill Police Department. He has served as the Department's Training Coordinator, Road Patrol Sergeant, Professional Standards Unit/Internal Affairs Supervisor, Patrol Lieutenant/Watch Commander, Commander of the Support Services Bureau/Criminal Investigations Division, and Special Operations Division Commander. Currently he is the Commander of the Patrol Division, and oversees Special Events, Media Relations, and the Underwater Recovery Team. Major Rocco is a graduate of the Southern Police Institute's 31st Command Officer's Development Course, Nova Southeastern University Executive Leadership Program and holds a Bachelor of Science Degree in Business Management. He is the Co-Chair of the FDLE Region 13 Criminal Justice Training Council, member of the International Law Enforcement Trainers and Educators and Trainers Association, International Association of Firearms Instructors, Associate member of the International Association of Chiefs of Police, and Associate Member of the Broward County Chiefs of Police Association.

Dr. Edward Walker, Commander, Miami-Dade County Public Schools Police Department

Dr. Edward Walker has more than 27 years of experience in law enforcement and is an FBI National Academy graduate. Currently, he has been appointed as a Police Commander for the Miami Dade Public Schools Police Department in the Investigative Division. Serving as the Director over the \$4.6million NIJ Grant, Edward is leading the efforts for Campus Shield the Miami Dade Schools Police Department's Intelligence Center. Further he is retired Captain with the Marion County Sheriff's Department Indianapolis, Indiana and retired Army Reservist. His experience includes project management, operations management, intelligence management, and international leadership training and operations in Haiti, Europe, and the United States. As an experienced professor, law enforcement instructor trainer and former military trainer, he consults professional criminal justice researchers and serves as a consultant. His doctoral dissertation examined officer job satisfaction and leadership for leadership succession and officer retention. He has taught and managed criminal justice courses at Harrison College and Miami Dade College. Currently, Edward is also a faculty mentor with Walden University's College of Management and Technology, guiding students through the doctoral study process.

1:25 – 2:10 p.m. <i>Symposium 3, Concurrent Sessions 7, 8, & 9, and Poster Session 3</i>		
Symposium 3	Exploring the Roles of Adult Education and Human Resource Development before and after Retirement of Faculty and Practitioners in the Fields	Wolfe University Center Grand Ballroom 244
	<p><i>Chair:</i> Gary N. McLean, McLean Global Consulting, Inc. <i>Discussant:</i> Thomas G. Reio, Jr., Florida International University</p> <p>Given the large numbers of baby boomers who are at an age where retirement is an active consideration, it is critical for HRD and AE scholars and practitioners to consider seriously their roles in preparing such professionals for making appropriate decisions; making their retirement healthy, productive, and rewarding; and assisting such professionals in achieving their visions once that decision is made. There is a void in the literature addressing these roles. In this symposium, we will explore with attendees what these roles might be, expanding our understanding about what retirement means, and how to expand the research in these areas.</p>	
Session 7	Higher Education Policy	Wolfe University Center Room 221
<p><i>Higher Education Reform and the Increased Cost of Post-Secondary Education in the U.S.: A Review of Current Policy Plans and Policy Proposals</i> Arthur C. Evans, III Athens Technical College, USA</p>		
Session 8	Academic Literacy	Wolfe University Center Room 245
<p><i>Improving Academic Literacy for EAP Students at the Postsecondary Level: A Literature Review</i> Jennifer Lannon Florida International University, USA</p>		
Session 9	Literacy in Middle School	Wolfe University Center Room 223
<p><i>Transitioning From Narrative to Expository in the Middle School: A Look at Boys' Preferred Writing Techniques</i> Ilisa J. Lieberman Florida International University, USA</p> <p><i>Public Middle School English Teachers Using LGBT Discriminatory District Curriculum "Multicultural" Guides</i> Ruben Caceres Barry University, USA</p>		
Poster Session 3: Skills for Academic Success		Wolfe University Center Grand Ballroom Lobby

<p><i>Reciprocal Peer Tutoring with Corrective Feedback for Teaching Decoding and Building Fluency in Students with Learning Disabilities</i> Christina Aleman, Florida International University</p> <p><i>Using Task Analysis to Improve Procedural Thinking Skills of Students with Disabilities in the Art Classroom</i> Josefina Beyra, Florida International University</p> <p><i>Self-Regulatory Skills to Enhance Academic Success</i> Nidia Cooper, Florida International University</p> <p><i>Web 2.0 Directed Learning Activities in Gifted, Fifth Grade Students</i> Hemaghini Das, Barry University</p> <p><i>Academic Success Centers: Improving Resource Utilization using Grounded Theory Methodology</i> Itauma Itauma and Terri Bubb, Keiser University</p> <p><i>Using iPads to Motivate Reluctant Readers during Literacy Instruction in Elementary School</i> Keri McCarthy, Florida International University</p>

2:20 – 3:05 p.m. <i>Symposium 4, Concurrent Sessions 10 & 11, and Poster Session 4</i>		
Symposium 4	Turning Challenges into Opportunities: Career Development and Financial Stability for Marginalized Populations	Wolfe University Center Grand Ballroom 244
	<p><i>Chair:</i> Lori Ann Gionti, Florida International University <i>Discussants:</i> Chaundra L. Whitehead, Amanda Giust, and Maeva Chiche, Florida International University</p> <p>Marginalization includes certain societal groups being kept in a lesser position within a society for a number of factors. Certain people within these marginalized populations have unique concerns regarding their career development and financial stability. This session discusses various barriers faced by marginalized groups as well as curative strategies that can be implemented.</p>	
Session 10	Learning and Generational Differences	Wolfe University Center Room 221
<p><i>A Change in Engagement: The Relationship between Employee Engagement and Generational Differences</i> Markease Doe, Yvena Muselaire, and Wing Shan Vinus Fong Florida International University, USA</p> <p><i>Baby Boomers: The Use of Technology to Support Learning</i> Debaro Huyler and Daniel Ciocca Florida International University, USA</p>		
Session 11	Education and Social Consciousness	Wolfe University Center Room 223
<p><i>Construction of Stereotypes and Their Effects on Education</i> Indira Gil Florida International University, USA</p>		
Poster Session 4: Students with Autism Spectrum Disorder		Wolfe University Center Grand Ballroom Lobby

<p><i>Task Performance for Adolescents with Autism Spectrum Disorders</i> Lena Alonso, Florida International University</p> <p><i>Classroom Jobs: An Intervention for a Student with ASD</i> Kari Camacho, Florida International University</p> <p><i>Video Modeling for Students with Autism Spectrum Disorder</i> Lindsay Davidson, Florida International University</p> <p><i>Functional Communication Skills for Students With Autism Spectrum Disorder</i> Deborah McLaughlin, Florida International University</p> <p><i>Initiation of Communication in Students with Autism</i> Jennifer Sauer, Florida International University</p> <p><i>Frustration and Task Avoidance in Students with Autism Spectrum Disorder</i> Lauren A. Vivar, Florida International University</p>		
<p>3:15 – 4:00 p.m. Symposia 5 & 6, Concurrent Sessions 12 & 13, and Poster Session 5</p>		
Symposium 5	FIU/CASE-Andrea Castillo-Ronald Reagan Senior High Teaching Academy: A Potential for Long Term and Positive Impact in our Community	Wolfe University Center Grand Ballroom 244
	<p><i>Chair:</i> Maria V. Tsalikis, Florida International University</p> <p>An increasing teacher shortage is creating a need for teachers across our communities. School districts and other institutions, such as universities, are engaging in joint efforts to recruit and retain highly qualified teacher professionals. In this combined effort, one way the vision of attracting teachers to the field is being characterized by an interest in teaching academies. These academies promise to provide students with an educational opportunity that facilitates their ability to reach their professional goals in teaching while making them employable. This symposium will present a new initiative at a local senior high school by introducing the Teaching Academy model and the story behind the making of this initiative. This local academy intends to create lifelong learners and improve the access to educational resources available to our community. This symposium will show the initiative's challenges, successes, and potential for future development.</p>	
Symposium 6	Technology Invasion: Apps to revolutionize the diverse 21st Century classroom. Time to Launch!	Wolfe University Center Room 221
	<p><i>Chair:</i> Jennifer Lesh, Lynn University <i>Discussants:</i> Kelly Burlison, Carmen Ronnie, Anika Smith, and Nicola Gomez, Lynn University</p> <p>Professors of pre-service teachers are usually referred as digital immigrants, while their students are typically described as digital natives. The presentation delivered by professors and students will discuss the integration of cutting-edge technology in Higher Education classrooms.</p>	
	<p>As digital immigrants, teachers and their students learn to become seasoned professionals in innovation, through the use of apps on iPads that assist with productivity, efficiency and convenience, allowing students to thrive as digital natives and meet the demands of a diverse 21st century classroom.</p>	

Session 12	Global Education	Wolfe University Center Room 223
<p><i>A Global Perspective and FIU Undergraduates: The Interpersonal Domain</i> L. Bahia Simons-Lane Florida International University, USA</p>		
Session 13	Social Justice	Wolfe University Center Room 245
<p><i>Traversing STEM: Creating Pathways for Social Justice in the United States</i> Remy Dou Florida International University, USA</p>		
Poster Session 5: Reading and Writing		Wolfe University Center Grand Ballroom Lobby
<p><i>Second Language Acquisition in Elementary Aged Students</i> Silvina Demaria, Florida International University</p> <p><i>Autism Spectrum Disorder and Reading Comprehension</i> Alexis Duarte, Florida International University</p> <p><i>Intervention for Struggling Writers in Elementary School</i> Jennifer Freesland, Florida International University</p> <p><i>Closing the Reading Gap</i> Bria Lundy, Florida International University</p> <p><i>Reading Comprehension and Students with Learning Disabilities</i> Egleevelyn Nunez, Florida International University</p> <p><i>Tracing with Dots as a Strategy to Teach Writing to Young Children with Autism Spectrum Disorder</i> Yanirys Rios, Florida International University</p> <p><i>Oral Reading Fluency and Comprehension</i> Shekeyla Roberts, Florida International University</p>		
<p>4:10 – 4:45 p.m. Award Presentations and Raffle Wolfe University Center Grand Ballroom 244 A/B</p>		

The Lorraine R. Gay Award for Excellence in Research and ScholarshipThomas G. Reio, Jr., *Chair* (FIU)Joanne Sanders-Reio (FIU), Jesus Fernandez (DeVry), and Laura Dinehart (FIU), *Committee Members*
Award for Best Graduate Student Paper**Barnes & Noble Best Faculty-Student Paper**Thomas G. Reio, Jr., *Chair* (FIU)Joanne Sanders-Reio (FIU), Jesus Fernandez (DeVry), and Laura Dinehart (FIU), *Committee Members*
Award for Best Faculty-Student Student Paper**Keiser University Graduate School Poster Presentation Award**Michael Record, *Chair*

Award for Best Poster Presentation

Closing

Tonette S. Rocco,

Chair, Conference Steering Committee

