THE EXPLORATION OF MULTICULTURAL PEDAGOGY ON RURAL STUDENT GLOBAL LITERACY AND COLLEGE PREPAREDNESS

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THE EXPLORATION OF MULTICULTURAL PEDAGOGY ON RURAL STUDENT
GLOBAL LITERACY AND COLLEGE PREPAREDNESS

by
Katelyn E. Kreis

Dissertation

Submitted to the Faculty of
Olivet Nazarene University
School of Graduate and Continuing Studies
in Partial Fulfillment of the Requirements for
the Degree of
Doctor of Education
in
Ethical Leadership

May 2019
ACKNOWLEDGEMENTS

There is no way that an endeavor like this can be accomplished without the love and support of family. Words cannot express how grateful I am for my parents, Kevin and Karen Kreis. The love, guidance, and support they have given me throughout my life is immeasurable. My big brother, Kevin Kreis, and his family, Jennifer, Alex, and Karolyn have been an incredible support system throughout this journey. I love each of you more than words can say. The love of our family is my life’s greatest blessing.

I am so incredibly grateful for Dr. Darcel Brady for being an amazing advisor and mentor throughout this entire process. Her endless guidance, compassion, and prayers have been profound. In addition, I would like to thank Dr. Dave Johnson who has been an incredible reader, providing feedback when I needed it the most.

To Cohort XVII, thank you for everything. The laughs, the tears, and the prayers led us on this incredible journey. You each influenced my life in a way that I will forever be thankful for. Thank you to the students and staff at Regent High School, especially Dr. John Palan, for allowing this research study to be completed. Thank you for taking a chance on a young teacher and letting me pursue my dream of having my own classroom.

Lastly, I would have never been able to accomplish this dream without the love, support, and patience of my husband, James Hortsman. You are the love of my life and my best friend, and I am forever grateful you chose me. You never cease to amaze me with your endless love and support of all of my dreams. I love you forever.
DEDICATION

To Carol Morales

November 21, 1956 - April 26, 2005

For being my guardian angel and listening through all four chapters.

May you fly high with angel’s wings.

To Dad and Mom

I am who I am today because of the both of you.

Forever yours, faithfully.
ABSTRACT

The study of the effectiveness of multicultural pedagogy on student global literacy and college preparedness is a topic of concern for educators and students. Multicultural education is a multifaceted pedagogical approach in which educators provide diverse experiences for students to learn to work within the global society. The purpose of this research study was to explore the influence multicultural pedagogy has on rural student global literacy and college preparedness. The quantitative approach examined:

differences between urban and rural samples, multicultural pedagogy, global citizenship, college preparedness, U.S. interconnectedness, and confidence of new literacies between students in a traditional instructional setting ($N = 18$) and a multicultural instructional setting ($N = 21$). The Global Literacy Survey (Hsu & Wang, 2010) and The Beginning College Survey of Student Engagement (Indiana University, 2016) were utilized and data analysis included descriptive statistics, a one-sample t-test, and analyses of covariance.

The findings indicated a statistically significant difference for the global literacy factor of willingness to become a global citizen between the rural students ($M = 3.21$) when compared to urban students ($M = 3.709$). The findings also indicated a statistically significant difference between the college preparedness of the students in the multicultural pedagogy grouping and the traditional grouping. Educational institutions should incorporate multicultural instructional methodologies to enhance the diverse willingness of students and increase college preparedness.
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CHAPTER I

INTRODUCTION

We all should know that diversity makes for a rich tapestry, and we must understand that all the threads of the tapestry are equal in value no matter what their color. It is time for parents to teach young people early on that in diversity there is beauty and there is strength. (Angelou, 2014, p. 6)

With these words, Angelou (2014) shared a vision with the world about the important role that respecting diversity and the unique differences the human race has with humanity. Angelou’s words drive cultural respect and acceptance by promoting the strength that diversity can have if accepted globally. Cultural respect and acceptance is foundationally begun at the home and in the surrounding community. At the educational-level, institutions have the ability to provide an educational experience that drives cultural respect and acceptance so that all students are able to compete globally, regardless of their race, gender, or socioeconomic status (Castro, 2014).

Students enrolled in secondary institutions must be afforded the opportunities to become globally receptive. Global citizenship, including being globally literate, culminates in the ideological beliefs of having the perceptions as being a citizen of the world, yearning for the opportunities to attain knowledge about the world, and allowing for abilities that support actions favorable to human beings’ best interests including the
attitudes and perceptions that are needed in order to respect cultural differences and be able to work within diverse environments (Zhang, Hui-Yin, & Wang, 2010).

Understanding the importance that diversity and multiculturalism has and the role that it plays in rural students’ future successes provided the inspiration for this study. In conducting the current study, the researcher combined multicultural pedagogy, including multicultural instructional methodologies, to research the role that multiculturalism has on rural students’ global literacy and the influence global literacy has on college preparedness.

Given the importance of multicultural education and the role it plays on students’ global literacy, intuitively, improving multicultural curricular methods and pedagogy may be helpful in improving the global literacy of students to promote college preparedness and preparedness of rural public school students (Cui, 2016). With the improvements in rural student global literacy, rural students may be better equipped to work within diverse environments following graduation from a traditional public high school.

Statement of the Problem

A rural public school located in a Midwestern state was selected for the current study because of the researcher’s knowledge and expertise with the conditions of the rural community, the educational institution, and the gaps within the curriculum. Taylor, Kumi-Yeboah, and Ringlaben (2016) articulated that:

The issue of diversity in U.S. K-12 schools requires significant training and experiences for teachers to recognize the importance of students’ socio-cultural,
religious values, and the influence their cultural background have in their quest to succeed in their educational endeavors. (p. 42)

In order for students to be successful following high school graduation, they must be equipped with the knowledge and the tools necessary to work within a global society.

Taylor et al. (2016) articulated that educators must be willing to be multiculturally aware and open to incorporate multicultural education pedagogical content into their curriculum structure. Not only will the educational experience be improved for students, but the lasting impacts of multicultural perspectives will be fostered for a lifetime.

Li (2015) discussed that across the United States, high schools are in the process of restructuring the curricular scope and sequences to establish a framework for teaching and learning that incorporates the new Common Core State Standards with prominent changes for the understanding of cultural diversity and with emphasis on higher order critical thinking skills and literacy skills. “The Common Core State Standards” (2014) established that:

Variables specific to particular readers and to particular tasks must also be considered when determining whether a text is appropriate for a given student. Such assessments are best made by teachers employing their professional judgment, experience, and knowledge of their students and the subject. (p. 4)

Although progress has been made with the additions of multicultural and diverse curriculum, specifically diverse texts, into public schools within the context of the Common Core State Standards, there are still numerous critical deficiencies within multicultural education. By omitting multicultural and diverse pedagogical content in
daily core instruction, the possibility for a truly inclusive curriculum that promotes social justice, respect, and global literacy is lessened.

Within the curriculum of the rural public school being used for this current research study, there are numerous curricular gaps because of the lack of diversity and multiculturalism in the scope and sequential framework. The gaps include a lack of diversity components needed for globally receptive students. The curricular components needed for globally literate students include differentiating instructional methodologies of the knowledge of the interconnectedness of the world, provided cultural experiences, and perceptual cultural receptivity (Merryfield & Subedi, 2006). The current research study sought to improve the educational quality for students to succeed in postsecondary education and the workforce (Hsu & Wang, 2010).

Merryfield and Subedi (2006) articulated the global literacy components needed also call for diverse global connections and interactions include the ability to understand and recognize the importance of being globally connected with individuals from other cultures and diverse backgrounds. Along with the ability to recognize the importance of being globally connected, globally literate individuals need to be able to address crucial international issues such as health care, environmental factors, human rights, competition within economies and between economies, interdependence, and political and social differences (Noddings, 2005). Regent High School, a pseudonym for a small rural public high school located in a Midwestern state, was selected in order to add to the body of knowledge surrounding multicultural education and the effects it has on the rural students’ global literacy for students in rural public schools in the Midwest.
Because of the lack of diversity in rural public schools, students are not exposed to diverse cultures and varying perceptions in order to be able to work within a diverse environment following high school (Lin & Scherz, 2014). The homogenous environments provided in rural public schools do not facilitate cultural receptivity and global literacy needed for rural public school students to compete globally (Brown, 2004).

Magogwe and Ketsitlile’s (2015) research supported the issue of the lack of diversity in rural public schools as a result of rural public school students working within homogenous environments. The goal for rural public school students is to foster the ability to work within a diverse environment in postsecondary education and in the workforce. As a result, the researcher focused this research study on the effects of the incorporation of multicultural curricular methods into rural public high school English Language Arts curricular resources and pedagogy to improve the diverse education of rural public school students to add to their global literacy and support college preparedness.

Banks and McGee Banks (2003) addressed a crucial problem in multicultural education and curriculum theory. The process of multicultural education is needed to promote various ways of thinking and behaving within the educational context. In order for a curricular change to be appropriate and to be meaningful to students, the school district must promote long-term investments of time from the faculty, staff, and students along with capitalizing resources for diverse student engagement. Because of the lack of resources in rural public schools, the educational context of promoting diversity and multiculturalism is a difficult facet for educators to provide to students, resulting in
students being unable to work within diverse environments following graduation from a public institution because of their lack of knowledge of diversity and multiculturalism.

Arnold, Newman, Gaddy, and Dean (2005) argued that rural school leaders, including teachers in the classrooms, are interested in providing information and interventions to enhance success of students within rural communities by providing increased rigor and curricular resources. Rude, Paolucci-Whitcomb, and Comerford (2005) also argued the importance of the role of the educator in providing students with the diverse educational experience in order to be successful. The researchers suggested, “Educators demonstrate an increased likelihood of teaching students to respect and model the ideals of diversity and human rights when those ideals are apparent in the school’s curriculum and within its culture” (Rude, et al. p. 29). The current researcher sought to address the gaps within the teaching model, pedagogical content and diverse curricular resources, and student engagement and success.

The purpose of the researcher’s study was to determine how multicultural curricular methods affect student global literacy initiatives and college preparedness in rural public schools in order to add to the knowledge base surrounding the influence multicultural education has on student perceptions of diversity and success following high school.

Background

The study of the effectiveness of multicultural pedagogy on student global literacy and college preparedness is a topic of concern for rural, urban, and suburban educators and students. Multicultural education is a multifaceted pedagogical approach in which educators must work with the school, students, faculty and staff, and community
members to provide an educational experience in which students are better equipped to compete in the global world (Banks, 1993).

Ford (2014) established that, “The goal of creating an education that is multicultural or culturally responsive is increasingly in demand for our classrooms and our schools” (p. 59). Due to the large percentages of minority students in classrooms across the United States, educators must provide educationally diverse opportunities for all students. The idea of multicultural education is a facet needed for students to be successful in the global world. Ford also articulated the necessity for students who live and attend schools in a homogenous environment to be exposed to other cultures in order to be more well-rounded citizens. In order to accomplish the goal of multicultural education, high quality texts and literature, along with film, biographies, and historical content must be utilized within the classroom environment to expose students to culturally different perspectives and lifestyles.

Banks and McGee Banks (2003) indicated that multicultural education focuses on the role that race, class, and gender plays in the climate and culture of an educational institution. Monoculturalism, or the way in which individuals view various cultures as single entities that work in homogenous environments, is a way in which individuals reinforce stereotypes and promote racial injustice (Ford, 2014). To alleviate monoculturalism, Banks (1993) articulated that the full implementation of multicultural education in schools must include alterations to curriculum, teaching materials, and pedagogical content to enhance curriculum and student experience. Banks also indicated that changes must also occur in cooperation with “the attitudes, perceptions, and
behaviors of the teachers and administrators, and the goals, norms, and cultures of the school” (p. 46).

Ford (2014) argued that, “Lesson plans that focus on the major racial and cultural groups without attention to subgroups fail to capture the uniqueness of each subgroup relative to their specific history, experience, language, and other cultural aspects” (p. 60). Without the ability for educators to provide educational experiences that encompass various cultures and diverse components, schools are doing a disservice to their students. In order for students to be able to work and succeed in the global economy, they must be able to work with individuals from other cultural backgrounds with differing perspectives and viewpoints.

Global literacy, in education, is another prominent facet that researchers have studied in order to make an impact on the global world. According to Hsu and Wang (2010):

Global literacy is a complex concept that relates to almost every aspect in our life. Students are expected to have basic literacy skills, apply critical thinking skills to judgment forming and to problem solving, use fluently a foreign language to communicate with people, respect different cultural and linguistic backgrounds, build up proactive attitudes to learn about global matters, and understand the roles and responsibilities of the students’ own country in the context of global matters. (p. 45)

The researchers articulated that gender and ethnicity played a role in identifying the awareness, willingness, approval, and confidence in student global literacy. The global education of students plays the most integral role in developing globally responsive
students. The enhancement of global literacy necessitates education along with authentic cultural experiences.

Dickson, Jepsen, and Barbee (2008) articulated that multicultural instructional strategies, when utilized effectively, provide students with better attitudes towards racial diversity and gender equality. Students who participate in multicultural trainings and multicultural educational experiences have greater levels of comfort when handling diverse or multicultural situations. Through multicultural instruction, students’ perceptions may be enhanced. The perceptions of culturally sensitive atmospheres provide cognitive attitudes towards issues of racial diversity. Osteen, Vanidestine, and Sharpe (2013) indicated that students enrolled in programs that required a multicultural or diversity component may have more positive outcomes for students’ attitudes regarding social justice and diversity.

The role of the educator, the multicultural pedagogy, and diverse materials presented to students plays an integral role in students’ global literacy. Lafferty (2014) indicated that when given a choice of literature, students do not choose to expose themselves to a variety of literature genres, including multicultural literature, regardless of their racial demographics. If given the opportunity, because of the lack of knowledge regarding multicultural resources presented in the classroom environment, students typically do not check out materials written with a racially diverse multicultural author, multicultural protagonist, or diverse setting.

McCray and Beachum’s (2010) research indicated that multicultural education provides for an increase of self-awareness in high school students that leads to an overall better self-esteem of the student. Multicultural education also allows for cultural
pluralism to be present in the classroom environment and the school culture. In order for students to better understand the social, political, and economics of diversity in the school setting, a multicultural education curriculum should be present in the school culture, the classroom environment, and in the curricular methodology.

Although the implementation and changing of curricular pedagogical content is a long-term challenge, it is important to change what and how students are taught about the ideas of race and the importance of differing cultures (Davis, 2007). From the changes, over time, rural public school students will be able to understand the importance of being different and the necessity of various cultures within society.

Through the implementation of multicultural curricular resources, students are able to access multicultural perceptions at a micro, mezzo, and macro level (Rude, et al., 2005). In order for students to be fully integrated into a multicultural and diverse curriculum, students must go through a long-term process by which they study human rights, diversity, and acceptance of other cultures and belief systems.

Without a multicultural pedagogy and global literacy, students are unable to achieve their highest potential to work within diverse contexts. In order to alleviate this issue, educators must provide various levels of teaching within a hierarchical context, to expose students to diversity. At the most superficial level of supporting diversity within the classroom context, the micro level, students must be encouraged by their educator to examine personal strengths and struggles with diversity, racism, ageism, and classism (Rude, et al., 2005). Once this level is achieved and students realize the importance of various viewpoints, students move into the mezzo level of understanding diversity. At this point, teachers must advise students to work with others to research and develop
perceptions of individuals with disabilities, children, individuals struggling with poverty, people of differing races, and individuals of differing religions to expose students to various groups of people. Following the mezzo level of understanding diversity and human rights, students will then move through the curriculum to the macro level of understanding diversity. The macro level of understanding diversity allows for students to take their newly attained knowledge and make a difference in their community and in their future endeavors. From the implementation of the micro, mezzo, and macro levels, “These activities help students understand the need for and importance of human rights. Along with increasing their values, knowledge and skills, students and teacher concurrently increase their commitment to human rights” (Rude, et al. p. 24).

With the implementation of multicultural curricular resources, students will increase their knowledge of diversity and add to their attained global literacy and improve their preparedness for college. Banks and McGee Banks (2003) stated, “A school experience that is multicultural includes content, examples, and realistic images of diverse racial and ethnic groups. Also essential within such a school are adults who model the attitudes and behaviors they are trying to teach” (p. 23). Former research has indicated the need to study multicultural education in rural public schools.

As a topic of concern for rural, urban, and suburban school districts, this study sought to address the concerns from numerous research studies to increase the knowledge surrounding multicultural pedagogy, global literacy, and college preparedness.
Research Questions

The current study was guided by the following research questions. The research questions are accompanied with their associated research hypotheses and their associated null hypotheses.

1. To what extent is the global literacy among eleventh-grade students in a rural public school different from the global literacy for high school students in an urban city?

   $H_1$: Participants in the rural public high school multicultural training group will score higher on global literacy factor scales.

   $H_1$: $\bar{x}_{training} \neq \bar{x}_{non-training}$

   $H_0$: There will be no difference in global literacy rates between students in a rural public school and students in an urban city.

   $H_0$: $\mu_{training} = \mu_{non-training}$

2. What is the difference in the composite global literacy scores between students who are exposed to multicultural pedagogy and students who are not?

   $H_1$: Participants in the multicultural pedagogy training group will score higher on the composite global literacy scores than participants in the non-multicultural pedagogy training group.

   $H_1$: $\bar{z}_{training} \neq \bar{z}_{non-training}$

   $H_0$: There will be no difference in global literacy composite scores between participants in the multicultural pedagogy training group and participants in the non-multicultural training group.

   $H_0$: $\mu_{training} = \mu_{non-training}$
3. To what extent do students who go through multicultural pedagogy have higher college preparedness than students who do not go through multicultural pedagogy?

\[ H_1: \bar{x}_{\text{training}} \neq \bar{x}_{\text{non-training}} \]

\[ H_0: \mu_{\text{training}} = \mu_{\text{non-training}} \]

Description of Terms

The following key terms were operationally defined for the context and the purpose of the researcher’s current study.

*College preparedness.* “The measurement of students’ high school academic and co-curricular experiences as well as their expectations for participating in educational purposeful activities during the first year of college” (Indiana University, 2016, p. 1).

*Critical pedagogy.* The integration of instructional practices to foster a learning community that promotes equality, social justice, and cognitive learning (Ford, 2014).

*Culture.*

Most social scientists today view culture as consisting primarily of the symbolic, ideational, and intangible aspects of human societies. The essence of a culture is not its artifacts, tools, or other tangible cultural elements but how the members of the group interpret, use, and perceive them. It is the values, symbols,
interpretations, and perspectives that distinguish one people from another in modernized societies; it is not material objects and other tangible aspects of human societies. People within a culture usually interpret the meaning of symbols, artifacts, and behaviors in the same or in similar ways. (Banks & McGee Banks, 1989, p. 29)

*Global Literacy.* A four tiered characteristic of global receptiveness applied to student populations. The characteristics include:

An awareness of the importance of comprehending and appreciating various cross-culture perspectives; willingness to become a global citizen; approval of the structure and performance of United States’ interconnectedness and interdependence with other countries on a global scale; and confidence in using ‘new literacies’ skills to compete and succeed in a global village. (Hsu & Wang, 2010, p. 46)

*Multicultural Education.*

A progressive approach for transforming education that holistically critiques and addresses current shortcomings, failings, and discriminatory practices in education. It is grounded in ideals of social justice, education equity, and a dedication to facilitating educational experiences in which all students reach their full potential as learners and as socially aware and active beings, locally, nationally, and globally. (Gorski, 2010, p. 2)

**Significance of the Study**

The current study was important for the contributions it made to academia, specifically the education of rural public school students in a Midwestern state. By
examining the effects multicultural pedagogy has on rural student global literacy, this research study addressed a curricular and educational need for rural public school students. Along with addressing the academic needs of students, this research study also addressed the influence that multicultural pedagogical content has on rural student college preparedness. Furthermore, evidence provided by this current research study may assist in providing the educational knowledge, tools, and skill-sets to advance the education of rural public school students to be able to work within diverse environments following high school graduation.

Erikson (1980) addressed high school as the most critical stage for students to develop their identities, contributing to their preparation for advanced training within educational institutions and future jobs. This research sought to address a gap in the formation of the identities of rural public school students by exposing them to various diverse contexts and differing viewpoints so they will be better equipped to compete in a globally receptive society.

Process to Accomplish

The purpose of this research was to explore the effects of multicultural pedagogy on student global literacy. The resultant findings and conclusions may provide practical evidence to improve curriculum and instruction for rural public school students in order for those students to be able to work within a diverse environment in post-secondary education or in the workforce. The goal of this research was to investigate whether a multicultural pedagogy would effectively expand rural students’ global literacy and contribute to college preparedness. If such pedagogy is effective, it may foster rural
public school students’ ability to work within a diverse environment in the workplace or in postsecondary education.

Participants

The research study took place during an eight-week period throughout the months of November through December, 2017 at Regent High School, a small rural high school located in a Midwestern state. The enrollment at Regent High School consists of approximately 184 students ranging between grades nine through 12. Students participating in the research study were in grade 11 for the entire duration of the research study. The sample consisted of 41 eleventh grade students in two classrooms. 39 students returned in the informed consent and youth assent forms to become participants.

Measures

The current research study used the Global Literacy Survey (Hsu & Wang, 2010) to assess participants’ global literacy. The Global Literacy Survey consists of 25 items assessing four underlying factors: awareness of diversity (six items, e.g., “I am willing to understand a different culture”), willingness to become a global citizen (five items, e.g., “I pay attention to international news”), approval of the structure and performances of the United States’ interconnectedness and interdependence with other countries on a global scale (five items, e.g., “I believe that our country follows the international law and regulations in a global society”), and confidence in using “new literacies” skills to compete and succeed in a global village (three items, e.g., “I know how to research further in-depth information for a specific international issue”). The survey also includes extra items regarding the global citizenship of students (six items, e.g., “I believe that our unique U.S. culture can coexist harmoniously with others”). Participants responded to
these items on a five-point Likert scale from Strongly Disagree, Disagree, Neutral, Agree, to Strongly Agree. The survey also includes nine additional multiple-choice questions intended to assess opinions on United States’ policy, international news, approaches to understanding world issues, and school-related functions to being globally literate (e.g. “Does your school organize any activities to interact with schools abroad?” with options of Often, Occasionally, and No). In addition to the Global Literacy Survey, participants were also asked their age, gender, and ethnicity.

In addition to these measures, the researcher also referenced the means and standard deviations for the four factors of global literacy based on a sample of 2157 high school students from an urban city described in the research conducted by Hsu and Wang (2010). The data analysis from the means and standard deviations was used to compare the rural student group to the urban student group.

Along with the Global Literacy Survey (Hsu & Wang, 2010), the researcher utilized questions from the Beginning College Survey of Student Engagement (Indiana University, 2016) to assess the college preparedness of students. The Beginning College Survey of Student Engagement consists of 42 items categorized into nine subscales, each assessed using Likert-type response options from Very Often, Often, Sometimes, to Never. Subscale one assessed High School Quantitative Reasoning (Instructions: “During your last year of high school, about how often did you do the following?” with three items, e.g., “Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.).” The second subscale assessed High School Engagement in Learning Strategies (Instructions: “During your last year of high school, about how often did you do the following?” with three items, e.g., “Identified key
information from reading assignments”). The third subscale assessed Expected Engagement in Collaborative Learning (Instructions: “During the coming school year, about how often do you expect to do each of the following?” with four items, e.g., “Ask another student to help you understand course material”). The fourth subscale assessed Expected Engagement with Faculty (Instructions: “During the coming school year, about how often do you expect to do each of the following?” with four items, e.g., “Talk about career plans with a faculty member”). The fifth subscale assessed Expected Engagement with Diverse Others (Instructions: “During the coming school year, about how often do you expect to have discussions with people from the following groups?” with four items, e.g., “People of a race or ethnicity other than your own”). The sixth subscale measured Expected Academic Perseverance (Instructions: “During the coming school year, how certain are you that you will do the following?” with six items, e.g., “Study when there are other interesting things to do”). The seventh subscale measured Expected Academic Difficulty (Instructions: “During the coming school year, how difficult do you expect the following to be?” with four items, e.g., “Learning course material”). The eighth subscale assessed Perceived Academic Preparation (Instructions: “How prepared are you to do the following in your academic work at this institution?” with seven items, e.g., “Write clearly and effectively”). The ninth subscale measured Importance of Campus Environment (Instructions: “How important is it to you that your institution provides each of the following?” with seven items, e.g., “A challenging academic experience”).

Procedures

This research study was conducted in an ethical manner and was driven by moral and ethical standards. Research calls for ethical protection from harm, maintenance of
privacy of the participants, informed consent for the participants, confidentiality of the data, debriefing, and professional concern when sharing information with specialized colleagues (Salkind, 2012). Prior to any research being conducted, the researcher obtained informed consent from the participants and their legal guardians since participants were under the age of 18. Participants were told that their participation was voluntary and that they were allowed to stop at any time without penalty. Following the research study, all ethical guidelines were followed by the researcher.

The researcher compared two classrooms of students, one of which was given multicultural pedagogy for a six-week unit, and the other of which was given general education for a six-week unit. Students in the multicultural pedagogy and the general education classes were first administered the Global Literacy Survey (Hsu & Wang, 2010), in addition to demographic questions. Following this pretest, students in the multicultural pedagogy grouping were taught using multicultural curricular methods. The students enrolled in the General Education grouping were taught the Illinois Common Core curriculum as done in the past. The unit engrained with multicultural pedagogy took place over a six-week period which included multicultural lessons. Following the lessons, which will include a multicultural novel, activities, and assessment, both the multicultural pedagogy and general education classrooms were administered the Global Literacy Survey for a second time.
Research Questions

The research questions serving to guide the researcher’s study were as follows.

Research Question 1. To what extent is the global literacy among eleventh-grade students in a rural public school different from the global literacy for high school students in an urban city?

Hypotheses for Research Question 1.

$H_{11}$: Participants in the rural public high school multicultural training group will score higher on global literacy factor scales.

\[ H_{11}: \bar{x}_{\text{training}} \neq \bar{x}_{\text{non-training}} \]

$H_{01}$: There will be no difference in global literacy rates between students in a rural public school and students in an urban city.

\[ H_{01}: \mu_{\text{training}} = \mu_{\text{non-training}} \]

Data used.

For Research Question 1, the four outcome variables were scores on each of the four global literacy factors: awareness of diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence of new literacies. The reliability of each set of Likert items from the 25-item Global Literacy Survey was assessed for each subscale using Cronbach’s alpha, after relevant items were reverse-coded. Since the items were reliable, the researcher calculated an average of the items in each subscale to create four composite global literacy factor scores.

Analyses.

Four one-sample $t$-tests were conducted for each of the four global literacy factors. The one-sample $t$-tests were used to compare the average awareness of diversity,
willingness to become a global citizen, approval of U.S. interconnectedness and confidence in new literacies among the eleventh-grade sample to those of an urban sample.

Research Question 2. What is the difference in the composite global literacy between students who are exposed to multicultural pedagogy and students who are not?

Hypotheses for Research Question 2.

H₁₁: Participants in the multicultural pedagogy training group will score higher on the composite global literacy scores than participants in the non-multicultural pedagogy training group.

\[ H₁₁: \bar{\gamma}_{\text{training}} \neq \bar{\gamma}_{\text{no-training}} \]

H₀₁: There will be no difference in global literacy composite scores between participants in the multicultural pedagogy training group and participants in the non-multicultural training group.

\[ H₀₁: \mu_{\text{training}} = \mu_{\text{non-training}} \]

Data Used.

For Research Question 2, the predictor variable was pedagogy type (multicultural pedagogy vs. general education). The outcome variable was global literacy. The four composite global literacy factor scores described in Research Question 1 were again used here. If students were in the multicultural pedagogy classroom, they were assigned a code of one, whereas if they were in the general education classroom, they were assigned a two.
Analyses.

The researcher conducted an ANCOVA. The ANCOVA was used for predicting global literacy from pedagogy type (between-subjects: multicultural vs. general) while controlling for the pretest assessment.

Research Question 3. To what extent do students who go through multicultural pedagogy have higher college preparedness than students who do not go through multicultural pedagogy?

Hypotheses for Research Question 3.

H_1: Participants in the multicultural pedagogy training group will score higher in college preparedness than participants in the non-multicultural pedagogy training group.

H_1: \bar{\chi}_{training} \neq \bar{\chi}_{non-training}

H_0: There will be no difference in college preparedness between participants in the multicultural pedagogy training group and participants in the non-multicultural training group.

H_0: \mu_{training} = \mu_{non-training}

Data Used.

For Research Question 3, the predictor variable was pedagogy type (multicultural pedagogy vs. general education) and the outcome variable was college preparedness. The reliability of the 42 items on the Beginning College Survey of Student Engagement was assessed using Cronbach’s alpha, after relevant items were reverse-coded. Since the items were reliable, the researcher calculated an average of the 36 items to create a composite College Preparedness score.
Analyses.

The researcher conducted an ANCOVA. The ANCOVA was used for predicting the college preparedness scores from pedagogy type (between-subjects: multicultural vs. general) controlling for the influence of the pretest assessment.

Summary

The following dissertation extends the body of knowledge surrounding multicultural pedagogical content and the influence the instructional methodologies have on rural student global literacy and college preparedness. An increasing body of research has demonstrated the need for multicultural education to be implemented in rural public schools to add to the global literacy of students. The empowerment of a school through the integration of multicultural content, construction knowledge of diversity of students, reducing prejudices, and promoting equity within pedagogy will establish a learning environment and school culture that promotes multiculturalism (Banks & McGee Banks, 2003).

Chapter II articulates a review of a body of literature that provided scholarly and theoretical constructs for providing the necessity for the applied research project. The review of the body of literature is comprehensive for multicultural education and multicultural literature in rural public schools.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

“We can learn to see each other and see ourselves in each other and recognize that human beings are more alike than we are unalike” (Angelou, 2014, p. 26).

Angelou (2014) demonstrated and preached about the respect that individuals and society must have for one another in order to work together and live together within the public and private sphere. Not only must the human race be able to live and work together harmoniously in a global society, but human beings must respect the democratic justices of humanity by respecting and valuing the importance of diversity. In order to accomplish the respect that the diverse society must have for one another and be able to promote equality, it is essential to address a curricular gap within rural public high school institutions (Melton & Dail, 2010).

By addressing a multicultural curricular gap, rural public high school institutions, their administrative teams, and instructional faculty must be provided with the skillset and opportunities to improve the education and overall diverse facets of enrolled students (Magogwe & Ketsitlile, 2015). Through addressing a curricular gap, the diverse education of rural public school students may be improved and rural public high schools can foster a multicultural environment of success for all students who graduate from their institutions.
Multicultural education has been in existence for years within the educational realm, but in recent years, with the implementation of the Illinois Common Core State Standards and the College and Career Readiness Standards (College Board, 2017), the integration of multicultural education and pedagogy has become a necessary component within the English Language Arts classroom curricular scope and sequential framework in rural public high schools. Bachman (1994) expressed that multicultural education is a necessity as the global society becomes more engaged with different cultures and as the United States becomes an agent for societal norms.

Because of the nature of multicultural education within rural public schools, educators struggle with the necessary components, knowledge, and pedagogical framework to properly institute a multicultural curriculum within the institution (Gukalenko & Borisenkov, 2016). Rural public schools are typically comprised of students of the same racial background, creating a homogenous environment with limited diverse and multicultural experiences for the students who are enrolled in the institution (Ford, 2012). The culture and demographic components of rural public schools do not afford students the opportunity to work within diverse environments and multicultural contexts.

Because of the climate and culture of rural public school institutions, students are not exposed to multicultural pedagogical content and diverse experiences until they graduate their high school institution and enter a diverse college campus or heterogeneous workforce (Narvaez & Hill, 2010). Students are graduating their high school institutions with a limited knowledge base and inadequate experiences with
cultures different from the one with which the student and the community identifies (Huh, Choi, & Jun, 2015).

The current research study examined the effects of multicultural pedagogy on rural student global literacy and college preparedness. The goal of the following literature review was to understand the statistically significant effects multicultural education and pedagogical content have on students, articulate the importance of students being globally literate and receptive, and finally to focus on the specific definitions and articulated meanings between college readiness and college preparedness.

Chapter II exemplified the scholarly empirical research and theoretical examination relative to multicultural pedagogy, global literacy, and preparedness for college in regards to being socially, emotionally, and mentally ready to work within diverse environments following the graduation of high school. The literature review sought to address the curricular gap in rural public institutions and also sought to articulate where gaps in the research still may exist.

In addition, Chapter II also allowed for a discussion about the various influences and positive interactions that students who are engaged with a multicultural curriculum and pedagogical context have when they enter postsecondary education or the workforce following the graduation from their high school institutions. The comprehensive literature review discussed the fundamental necessities of addressing the curricular gaps in rural public schools, while integrating research relating to the components of the explicit research questions presented in Chapter I.
Multicultural Pedagogy: A Framework for Teaching

Fischer (2011) expressed that colleges and universities have some of the most diverse settings and contexts in the culture of the United States. Smith, Senter, and Strachan (2013) continued to assess colleges and universities as institutions that provide curricular, instructional, and interactional practices that provide diverse experiences for the collegiate student body. The diversity on college and university campuses is brought forth because of the diligent work of student recruitment and student admissions offices in the university settings. By allowing campuses to be more globally diverse, the university environment engages individuals from the international community. The unique diverse environment of college and university campuses allows for an atmosphere that integrates and interacts with cultures from around the globe.

Both minority students and majority students benefit greatly from having multicultural instruction prior to engaging in the university setting and in the workforce because it provides a differentiated learning opportunity that is comprehensive regarding societal norms of the global world (Smith et al., 2013). Prior to graduating from high school and either attending a collegiate setting or entering the workforce, it is of vital importance that rural public high school students are provided with the multicultural education and experiences that encourage a smooth integrated transition into the next phase of their lives (Sharma, 2012). Ford (2014) indicated that a primary goal for secondary classroom instructors and high school institutions should be to foster a culturally responsive multicultural education system and framework for students enrolled in districts across the United States.
By providing the multicultural framework in teaching standards and pedagogical construct, Sugrue, et. al (1999) articulated that it is a necessity for students to have diverse educational experiences because unique cultural experiences promote civility, allow for students to be more intellectually engaged, and provide the constructs for students to attain higher advances in skills related to intellectual and academic foundations. Smith et al. (2013) continued to stress the importance of utilizing the high school classroom experiences to embrace differing worldviews that provide the critical analysis of the resentment of various racial identities, the effects and experiences of cultural segregation, and the various positive effects that promoting a multicultural world has on students.

Huh et al. (2015) examined how by providing multicultural education, pedagogical content, and diverse context, rural public school students will be afforded the opportunity to learn and articulate differing perceptions, lifestyles, viewpoints, and notions of individuals culturally different from their own identity. Through the integration of multicultural curricula, students will be better equipped to work within a global marketplace and be successful in the competitive global marketplace (Bachman, 1994).

Multicultural education and pedagogy must allow, encourage, and promote democracy, pluralistic societal norms, and the respect for diversity (Salgur & Gursoy, 2015). The relationship between how students are educated and the way they transition into the university setting or in the workforce is correlated between how they are either positively or negatively affected by cultural factors.
In order to improve the facet of multicultural education, it is vital to begin a multicultural framework for teaching by encouraging students to understand and truly learn about their own culture and identity, critically engage with components of culture, and learn how various cultures can coexist harmoniously and interact with one another in a respectful manner (Nieto, 2000). The knowledge that students have of their own culture will critically engage other viewpoints and components of cultures foreign to students’ learning (Salgur, 2013). By promoting a framework for multicultural education, students can engage with their own culture and identity. In addition, students can also compare their own culture and identity to various diverse cultures from around the globe. An in-depth critical analysis enhances a student’s ability to delve into the differences and employ respect for diversity and cultural differences (Gurin, Nagda, & Lopez, 2004).

The diverse background, provided in multicultural education, encourages students to engage in utilizing better communicative skills, fostering better relationships and friendships, promoting stability in their communities, and providing stable and respective work environments following graduation. The multicultural socialization of students, at an early age, promotes alleviating the sustained influence of the negative attitudes and atomistic education that students have towards individuals from cultures differing from their own (Henry & Sears, 2002). Multicultural education and diverse experiences also enrich a student’s creativity to experience unconventional knowledge in a differentiated and cognitive process (Leung, Maddux, Galinsky, & Chiu, 2008).

Basbay (2014) articulated that the design of multicultural education and the learning environment of the students must ensure a variety of cultural characteristics to ensure that students are attuned to the respectful attitudes that must ensue with discussing
multicultural contexts. Another notion included in providing a multicultural educational experience for rural public school students must be that of the recognition of the cultural characteristics of the learners. Hall (2013) supported the notion that students must learn from critical engagement about how to promote justice, provide rationality for thought-processes, and respect the differing viewpoints of other individuals, especially those from differing backgrounds and diverse cultures. In order to provide a multicultural framework, students should be exposed to a variety of curricular resources such as pieces of multicultural literature, diverse visual representations, media outlets that allow for diverse engagement, guest speakers from their own culture and cultures different from the majority, and primary research (Ford, 2014).

Fischer (2011) continued to support the promotion of multicultural education by illustrating that students enrolled in rural public high schools are generally segregated into their racial residential communities. The majority of college-bound students grow up in communities that are dominated by the race or ethnicity with which the student identifies. The ability to increase the likelihood of understanding diversity, culture, and varying perspectives allows an influential growth and respect for diversity for the students and for individuals with whom the student has contact within his or her postsecondary education or in the workforce.

Because rural public school students have not been afforded the opportunity to work within heterogeneous environments, students are struggling to improve multicultural dispositions when they leave their high school community and enter the next phase of their lives (Melton & Dail, 2010). Students from rural institutions enter
their postsecondary plans or the workforce and are faced with culture shock because they are not attuned to the cultural differences of the global marketplace (Lightweis, 2014).

In order to alleviate the stressors of transitioning to college and to the workforce, students must be prepared socially, emotionally, and mentally to handle the diverse settings and contexts that the university setting has established and that the multicultural workforce necessitates. Through the integration of multicultural pedagogy, rural public high school students are given the opportunity to learn through a multicultural lens. Rural public school students are engaged through differing texts and allowed to have critical discussions to seek justice, eliminate social distance, and reject typical stereotypes through the integration of multicultural texts in the English Language Arts classroom with diverse authors and settings (Ford, 2012).

Summers and Volet (2008) demonstrated that individuals who work within multicultural contexts have greater task performances compared to their homogenous group counterparts. Multicultural contexts necessitate postsecondary settings that increase exposure to diversity in the workforce and equips students who are college-bound with the skills and the perceptions to effectively work within diverse and culturally different groups. A high school setting that utilizes multicultural approaches to learning, may afford students with the experiences necessary to succeed in their task performances in the global marketplace (Yeung, Spanierman, Landrum-Brown, 2013).

Cui (2016) demonstrated that students who are afforded the opportunity to have multicultural experiences in the classroom environment have a greater sense of cultural intelligence. The students’ background, cultural experiences, and the interactions with multicultural individuals and perspectives promotes a proportion of cultural intelligence.
Students who had increased levels of interaction with individuals of culturally diverse backgrounds and experience with multicultural pedagogy also had increased levels of intercultural competence.

Intercultural competence, according to Pricope (2013), necessitates that teaching and learning is a focused activity that encourages both the instructor and the student to have positive attitudes towards multicultural competences. Based on the mutual cooperation between the instructor and the student, the intercultural experiences include the instructor recognizing ethnocentric behaviors and ideologies, the instructor acknowledging the cultural origin and the social, economic, and political constructs of his or her students, and the instructor recognizing cultural conduct. In addition, the teacher must authorize for cultural decision-making and for constructive conversations to occur regarding cultural attitudes and notions. The intercultural competence of an instructional setting must recognize, “The intercultural academic group is different from the monoculture one by a low degree of homogeneity, a less visible hierarchy, given the fundamental principles of intercultural education, which are tolerance and cultural relativity” (Pricope, p.78).

Dickson, et al. (2008) stated that it is essential to examine the “influence of program cultural ambience, multicultural instructional strategies, and multicultural clinical training experiences in predicting student cognitive and affective attitudes toward racial diversity and gender equity” (pp.114-115). Joseph (2012) indicated that multicultural inclusion in departmental curriculum is essential for students to be exposed to because of the rich cultural history that the multicultural instructional pedagogy provides. The inclusion of multicultural pedagogy and content in the curriculum
promotes learning for students, builds friendships, strengthens the networking abilities of students, and encourages diversity respect.

Markowitz and Puchner (2014) continued to support multicultural pedagogy and context in the classroom environment because the promotion of racial diversity is valuable in the school setting. Students develop both socially and intellectually when integrated with students from various cultures and diverse backgrounds and learn from a variety of various perceptions. Students also can engage socially and intellectually through the use of multicultural texts and contexts provided by the instructional faculty (Lee, 2012). Pergalajar-Palomino and Colmerero-Ruíz (2014) indicated an increased ability for students to acquire the proper knowledge, and be motivated to develop emotionally, socially, and academically within the context of a multicultural classroom.

West-Olatunji, Behar-Horenstein, Rant, and Cohen-Phillips (2008) indicated that it is essential to develop culturally responsive instructional strategies and culturally relevant instructional lessons that assist students in the learning process. Rural public school students, if afforded the opportunity to have critical multicultural instruction, will engage in the instructional opportunities (Jayakumar, 2008). Salako, Eze, and Adu (2013) specified that cooperative learning as a teaching model is an effective mode of instruction to increase achievement and student knowledge and attitudes of multicultural education concepts. Schellen and King (2014) articulated that the use of multicultural courses of study, textbook requirements, and field experiences properly equipped students with the training needed to be able to work within diverse and multicultural environments.

Garriott, Reiter, and Brownfield (2016) discussed the importance of multicultural education and the positive influences that it has on students’ perceptions of racial
attitudes and discriminatory ideologies. By providing a cultural context for education, it not only promotes multicultural education in the classroom, but also the sensitivities needed to understand the differences between cultures. Along with that notion, multicultural education allows for educators to teach skills that empower students to seek justice and respect representations of ethnicity, race, gender, class, and other differences in regards to culture. The empowerment of rural public school students allows for their diverse education to flourish and leads to the promotion of democratization (Trifonas, 2002).

Ryan and Kennedy (2016) promoted that students must be engaged in multiculturalism because it involves students in pedagogical content that is diverse. Because of the pluralistic notion of American society, it is crucial that students and instructors are embracing multiculturalism in the classroom setting and educational communities. Hall (2011) articulated that it is vital that students and teachers implement multiculturalism in the educational community to promote the democratic justices and the equity that diversity necessitates. Multiculturalism, in American classrooms, supports critical thinking skills, the self-esteem of students, and the development of a child’s moral values (Souto-Manning, 2009). Multiculturalism has the ability to promote and enhance a student’s capacity to empathize and appreciate the diverse contexts of modern societal norms.

Steinberg, Giroux, and Macedo (2007) argued that multicultural education and pedagogy does not simply allow students a new way to critically think and act, but a necessary component to a multicultural critical pedagogy is the concern for providing students with the knowledge and diverse skills they will need to expand their critical
thinking. The ability for students to expand their capabilities and their capacities, engaging in multicultural pedagogy, promotes students’ empowerment and their responsibility to become global competitors and respective members of a global society. By providing a multicultural framework for teaching and learning, rural public school students may be afforded the opportunity to engage with diverse cultures different from their own, permitting the students to be able to focus on the benefits of a diverse society and global marketplace.

Multicultural teaching, and the diverse education of students, provides meaningful opportunities for students to achieve their greatest potential. The differences between individual diverse cultures provides American students with heterogeneous cultures that have some of the nation’s strongest and most needed attributes. The ideological beliefs that are delivered within multicultural education recognize that students are able to contribute to a variety of entities from a wealth of resources (Abdi, 1997).

Multicultural Pedagogy: The Role of the Instructor and School Community

Abdi (1997) supported the integration of multicultural experiences for rural public school students by promoting the need for teachers to recognize the benefits of integrating minority cultures into the classroom curriculum and experiences. Teachers need to express to students the importance of recognizing the benefits of respectfully coexisting with individuals of other cultures. By promoting multicultural pedagogy in the classroom, students are able to maximize their highest potential with interdependence in societal norms. The coexisting of different cultures within the societal construct necessitates students to engage in multicultural pedagogy.
Now more than ever, students need to understand the importance of expanding beyond their monocultural views and perceptions in order to focus on the culturally different populations that they will be exposed to and have to work with in the global community (Ford, 2014). Bachman (1994) combined the notions of the importance of the reexamination of cultural perspectives along with the assumptions that are made within monocultural institutions. Teachers must be able to employ instructional strategies that are attuned to the various cognitive styles of students, their ideological beliefs and values they hold, and the behavioral and cultural norms that are instilled and engrained in their educational upbringing. The instructional strategies must advocate for students to feel safe and respected in their environment so that diverse conversations and multicultural learning has to be approached and articulated in a professional and respectful manner.

Seefelt (2001) demonstrated that one of the most important factors for students is the role that the teacher plays and the instructional obligation that the faculty member provides within fostering a multicultural education. By accepting cultural differences, and being a role model as an instructional force, students are more engaged in the diverse educational process that a multicultural curriculum displays (Bennett, 2003). In order to implement a multicultural curriculum, Gay (2000) articulated five dimensions that allow for instructors to facilitate instructional models that are culturally responsive including: allowing for students to develop a knowledge base surrounding cultural diversity, providing a curriculum that is diverse and relevant to modern societal norms, fostering a learning community that is compassionate and responsive to cultural differences, communicating cross-culturally, and bringing forth instruction that is culturally
consistent. Through the implementation of the dimensions of a multicultural curriculum, students will be given a holistic approach to learning about multicultural education.

Banks and McGee Banks (2003) supported the research conducted by Gay (2000) and illustrated that a holistic approach to utilizing multicultural pedagogy should be employed to foster an environment of multicultural education. In order to promote a holistic approach to multicultural education, the instructor and the school community should engage the five components to multicultural education: content integration, knowledge construction, equity pedagogy, prejudice reduction, and empowerment of school culture.

By including the five components of the multicultural education curricular framework constructed by Banks and McGee Banks (2003), students are provided with a holistic approach to multicultural education. By beginning a scope and sequential framework that integrates content from various cultures, rural public school students will be afforded the opportunity to learn about diversity and the various ways other cultures engage in life. Following content integration, the role of the instructor becomes a vital component to integrating the multicultural framework. The instructor must promote students to engage in multicultural conversations and be able to drive the discussion in a respectful and multicultural manner. The teacher constructs a diverse knowledge-base of pedagogical content. In addition, the instructor of the multicultural framework for teaching must provide equity pedagogy, modifying their instructional practices to increase equity in the school environment. Through the modification of the teaching materials and the instructional practices, the instructor will then reduce prejudices. Finally, the school environment may be empowered through the integration of the dimensions of a
multicultural curricular framework. By engaging in the multicultural framework for teaching, instructors may be able to provide a learning environment that allows for diverse engagement and success for students. The multicultural education framework for teaching is depicted in the Figure 1, with the components explicitly outlined (Banks & McGee Banks, 2003).

Figure 1. Holistic approach to multicultural education (Banks, 1993).

Global Literacy: Building Students a Global Future

According to The National Council for the Social Studies (2016), students, who are going to be globally literate and globally competitive in college and in the workforce, must understand the ideas of being interdependent globally. The interdependence allows...
for students to acknowledge the importance of the increasingly diverse global society among international nations. Students must be allowed, in multicultural classroom instruction, to address issues relating to global connectedness, healthcare, environmental factors, human rights, justice, and competition between economies (Fischer, 2007).

Because of the homogenous environment that rural public school students work within on a daily basis, exposing the student body to diversity and the realms of a global society will inspire their competitive nature to be exposed through being globally literate (Jayakumar, 2008). High school educators must meet the growing challenges of building globally literate and receptive students. In order to build cross-culturally competent students, educators must provide opportunities for critical discussions that encourage various international and culturally diverse issues to be assessed and assist students in becoming globally literate individuals.

Global awareness constitutes the learning attributes, the attitudes, and the abilities of global citizens that allows those individuals to be able to understand how to integrate the ideologies of a global citizenship into their daily lives (Zhang et. al, 2010). Globally literate individuals, who are exposed to multicultural education, recognize the inequities between differing cultural norms and educational consistencies, the commercialization of education, the differing values of cultural systems, and attempt to alleviate the disconnect between the social institutions (Gukalenko & Borisenkov, 2016).

The National Council for the Social Studies (2016) also integrates:

That the human experience is an increasingly globalized phenomenon in which people are constantly being influenced by transnational, cross-cultural, multi-cultural, multi-ethnic interactions. Viewing human experience only in relation to a
North American or European frame of reference is unrealistic given the
globalized nature of American society today. (p. 1)

The National Council for the Social Studies also incorporates that, because the globalized
work is increasing each day, rural public school communities should provide educational
experiences for students in order for them to understand the globalized nature of being
influenced by the interactions of transnational, multicultural and multiethnic, and diverse
experiences. In order to provide the most comprehensive global literacy education
possible, rural public school educators, along with the administration and school
community must be able to:

Use an interdisciplinary approach within and beyond social studies and make
links to multicultural education, take advantage of technology, including Internet
and e-mail, utilize primary sources from other countries, from constitutions to
literature to artifacts, include internationally experienced persons; students,
teachers, parents, and others in the community, emphasize interactive
methodology, such as a model United Nations and cross-cultural simulations and
role plays, address global issues with an approach that promotes multiple
perspectives and intellectual honesty and action, encourage new avenues for
research in the international arena. (The National Council for the Social Studies,
2016, p. 1)

It is increasingly important for school communities to approach the multicultural
framework for teaching to provide a realm of global literacy.

Global literacy is comprised of how students' life experiences differ and the
factors that relate to being culturally responsive to sociocultural factors (Kang, Youn, &
Stilwel, 2014). Stornaiuolo and LeBlanc (2014) indicated that global literacy must be facilitated in a way that encourages students to engage in dialogues from digital frameworks, and supports students to utilize the cultural, textual, national, and linguistic borders to navigate ideas and texts. In addition to this notion, globally literate individuals must recognize and respect the cultural differences from local histories and cultures that provide for engrained ideological belief systems of differing cultural norms.

Educators must also provide a global citizenship framework into the curriculum to provide an environment in which students are able to “encompass cognitive, participatory, and affective domains that address the three global-education elements of critical thinking skills, world knowledge, and cross-cultural awareness” (Kerr, 1979, p. 109). In providing a framework that necessitates students to become globally literate, students have a better perspective of the global world and the global marketplace that they will enter following graduation from a secondary institution.

Zhang et al. (2010) validated that students in the United States must take initiative to build their global literacy in order to be able to compete in the demanding workforce that modern day society necessitates. Because of the evolving global society, students must be able to handle the facets of diversity. Students, in particular, rural public school students, must learn to handle the diverse entities and be able to adapt to their surroundings. In addition, it is the individual schools and the educators in the classroom who must articulate the importance of being globally literate. Students must recognize and appreciate the diverse learning opportunities and understand the strengths that the global society has in being multicultural and diverse.
Kirkwood (2001) noted that all students enrolled in classrooms across the United States need to be able to be a collaborative force in order to understand the diverse backgrounds of the global marketplace. Students must also be able to understand and contend with controversial issues and be able to compete within the global economy in a way that will allow them to be innovative thinkers.

Zhang et al. (2010) deemed individuals who are globally literate have an increased knowledge base of the world and the global facets of collaborative nations, increased critical thinking skills, and respectful attitudes that allow human constructs to be diverse and appreciated. College students, who are still growing emotionally and mentally, must relate their cultural values to being globally literate. It is essential to understand the college and work life of students, and reflect on the societal expectations and cultural norms those students have on a daily basis (Kang, Youn, Stilwel, 2014).

As the world continues to be a global marketplace, it is essential for rural public school students to engage their literacy skills to become more globally literate. The United States Department of Education’s mission statement explains that, schools mission, “is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access” (United States Department of Education, 2017). Global literacy allows for new literacies to develop for students such as the skills that encourage analyzing and synthesizing information that promote communication skills that support global collaboration. By being globally literate, it will increase students’ awareness and receptiveness to be able to compete with students from around the globe (Davies, 2006).
The “Common Core State Standards” (2014) mandate the standards for teaching and learning in classrooms across the United States. For English Language Arts, by the end of 12th grade, the mandated standards articulate that students will:

Come to understand other perspectives and cultures. Students appreciate that the twenty-first-century classroom and workplace are settings in which people from often widely divergent cultures and who represent diverse experiences and perspectives must learn and work together. Students actively seek to understand other perspectives and cultures through reading and listening, and they are able to communicate effectively with people of varied backgrounds. They evaluate other points of view critically and constructively. Through reading great classic and contemporary works of literature representative of a variety of periods, cultures, and worldviews, students can vicariously inhabit worlds and have experiences much different than their own. (p.1)

The issue remains that although standards mandate cultural and diverse instructional materials through covering various cultural backgrounds, students in rural public schools are still not meeting and exceeding diversity standards to be able to work within diverse environments and become globally literate. Often times, because of a school districts’ limited resources, students are not exposed to diversity in the curriculum and teachers are forced to utilize the curricular resources provided (Ford, 2014). By introducing a set of multicultural instructional frameworks, along with global literacy instruction, students will foster a learning environment that presents itself with critical discussion and achievement. By becoming globally literate, students will be afforded the opportunities to engage in critical discussions and become change agents.
Overview of College Readiness versus College Preparedness

In recent years, high schools have struggled with the quality of their education curriculum and programs related to the college preparedness of their students (Conley, 2007; Dougherty, Mellor, & Smith, 2006). Conley (2012) assessed students’ success in college and in the workforce was directly related to the quality of education that they received during their high school years. Various educational agencies provide different ideologies and programs that affect the public and private educational arenas. According to the Department of Education for the United States of America (2017):

Education systems only are as strong as the expectations they hold for their students. But for too long, our nation's schools have not set consistently rigorous goals for students. Students will face high expectations in the real world of college and careers. Aligning schools' standards with those high expectations is vital to ensuring student success, and to giving families and communities an accurate sense of students' progress. It's critical that, collectively, we raise the bar so that every student in this country—regardless of socioeconomic status, race, or geographic location—is held to high learning standards that will ensure students have the skills to compete in today's global, knowledge-based economy. (p.1)

Each state provides standards for their constituents. Students must be amply prepared to work within heterogeneous environments and compete in the global marketplace, regardless of their state of residence. The Illinois State Board of Education (2017) stated:

The Illinois Learning Standards for English Language Arts establish clear and coherent expectations for what students should know and be able to do at each grade level. By emphasizing depth over breadth, the Illinois Learning Standards
for English Language Arts ensures students are provided comprehensive understanding of key concepts. The Common Core English Language Arts standards set a level of high quality, rigorous expectations for all students which emphasize application of knowledge to real world situations and prepare students for the challenges of college and career. (p. 1)

School districts must provide a holistic quality education for students to attain higher order thinking skills. School districts must also promote and engage students in critical discussions that contribute to thought provoking contexts and conversations.

One of the most prominent issues relating to college readiness and college preparedness is the definition of what being ready to work within a collegiate institution or within the workforce constitutes. Because of the metrics utilized for admission into an institution, often times, students are admitted only through the indication of their standardized test scores, academic grade point average, and class rank. Combs et al. (2010) investigated indicators that predict college-readiness including the ability to enroll in dual courses, examination scores from Advanced Placement summative assessments, advanced courses in sciences, mathematics, and foreign languages, state assessments, the American College Testing, more commonly known as the ACT, and the Scholastic Aptitude Test, more commonly known as the SAT. Within the constructs of college readiness, a student’s emotional and social ability was not in the indicators of being successful in the collegiate institution.

Being ready for college or ready for the work force constitutes a variety of entities including the academic abilities, knowledge construction, social and emotional preparedness, and maturity for increased responsibility (Melzer & Grant, 2016). The
National Center for Education Statistics (2013) delineated that current findings suggest that admission to a university cannot solely rely on the academic skills of a student. Test scores and grades are not sufficient predictors for successful collegiate performance. A student’s ability to succeed should be assessed not only through academic predictor-scoring guidelines, but also through his or her ability to successfully be able to handle the social, cultural, and political differences of a university context. The assessment between the aspects of academic skills and social readiness delineates the differences between being college ready and college prepared.

Transitioning into college can be a difficult task for numerous college-bound students (Holles, 2016). Because of the nature of college with rigorous courses, a different climate and culture of the classroom instructional model, and increased responsibility, many students are not properly placed in the classes that will allow them to be the most successful. Melzer and Grant (2016) delineated that students who are underprepared for college are below the college readiness standards for math, reading, and writing skills. Not only are the students facing the academic challenges of being ready for college, they are not prepared for the social, emotional, and mental aspects of the collegiate realm. Because of the education system in the United States, students are not provided with the educational constructs that promote students to ask critical questions regarding diversity and the role it plays in the collegiate institutions and in the workforce (Mildred & Zúñiga, 2004).

Lease (2004) articulated that students who are not prepared for college and career readiness have an increased likelihood to have immediate low self-efficacy compared to their collegiately prepared counterparts. Because of poor academic performance and
college and career readiness, students are more likely to drop-out of the collegiate realm, quit their job, and have poor decision-making abilities and skills (Baiocco, Laghi, & D’Alessio, 2009).

Juyakumar (2008) suggested that collegiately prepared students are able to promote the ethnic and racial diversity in various cross-cultural academic and workforce competencies. The benefits of being able to socially interact with diverse individuals in post-secondary education and in the workforce benefits the nature of relations of individuals. “Engaging in cross-racial interaction during college is related to lasting pluralistic orientation, even when an individual does not continue to socialize with people of other races after college” (Juyakumar, p. 641). The ability to work within heterogeneous environments and relate to individuals with respect provides open-mindedness and critical thinking engagement.

Watt, Golden, Schumacher, and Moreno (2013) articulated that the goal for multicultural initiatives should be to transform the instructional practices to provide equitable opportunities and outcomes for all students. In order for students to be collegiately prepared, they must have places within their educational construct that encourage the cultural and authentic participation and exploration of multicultural and diverse experiences.

Sweeney, Weaven, and Herington (2008) described that students who are collegiately prepared can work collaboratively with students from differing backgrounds and cultures through fostering diverse relationships. Because it is necessary to work with other individuals within the workplace, students, who are exposed to a multicultural framework for teaching, may become effective team members within the work
environment. Students who are collegiately prepared are not only academically prepared, but are socially and emotionally prepared to explore and work with individuals from different cultural backgrounds. Students are also able to overcome cultural ethnocentrism and are able to utilize learning opportunities to understand differing perceptions and viewpoints.

Summers and Volet (2008) articulated that in order for a student to be collegiately prepared, a student must be able to work within their performance tasks. Through a multicultural education with diverse pedagogy, a student will be able to foster the educational knowledge and constructs to provide an environment in which a student will be able to respect other cultures and individuals within those cultures. Not only will students be able to effectively work with culturally mixed groupings of students, but students will also be able to work effectively in order to increase their contributions to a multicultural workforce.

College Readiness

The difference between college readiness and college preparedness is found between the academic component of knowledge and success and the social, emotional, and maturity component of success following high school completion.

College readiness is defined by The College Board (2017) through the Scholastic Aptitude Test (SAT) as:

Students are considered college- and career-ready when their SAT section scores meet both the Math and the Evidence-Based Reading and Writing benchmarks. It is important to note that college readiness is a continuum — students scoring below the SAT benchmarks can still be successful in college, especially with
additional preparation and perseverance. Students with an SAT Math section score that meets or exceeds the benchmark have a 75 percent chance of earning at least a C in first-semester, credit-bearing college courses in algebra, statistics, pre-calculus, or calculus. Students with an SAT Evidence-Based Reading and Writing (ERW) section score that meets or exceeds the benchmark have a 75 percent chance of earning at least a C in first-semester, credit-bearing college courses in history, literature, social sciences, or writing classes. (p.1)

Students are divided into three color groupings to determine college readiness from the standardized assessment scores. The color grouping indicates the level of college and career readiness that a student ascertains at the point in which the standardized assessment was taken by the student. The highest level of achievement is green which indicates, “the section score meets or exceeds the benchmark,” followed by the yellow benchmark which indicates, “the section score is within one year’s academic growth of the benchmark,” and finally red, which indicates, “the section score is below the benchmark by more than one year’s academic growth” (College Board, 2017, p. 2).

For standardized test academic predictors, the SAT is benchmarked on a scale of 1600, delineated on a 200-800 point scale. Table 1 depicts the college and career readiness benchmarks with scoring indicators from The College Board (2017) standards for excellence.
Table 1

**SAT Section Score Ranges**

<table>
<thead>
<tr>
<th></th>
<th>Red</th>
<th>Yellow</th>
<th>Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence-Based Reading and Writing</td>
<td>200-450</td>
<td>460-470</td>
<td>480-800</td>
</tr>
<tr>
<td>Math</td>
<td>200-500</td>
<td>510-520</td>
<td>530-800</td>
</tr>
</tbody>
</table>

*Note. 200-800 point scale for a composite score out of 1600 points.*

Another component to addressing college readiness is the American College Testing (ACT) assessment. Similar to SAT high stakes assessment, the ACT is a component that addresses college readiness. The college readiness standards, according to the ACT (2017) are identified as:

The ACT College Readiness Benchmarks are scores that represent the level of achievement required for students to have a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing courses. Benchmarks have been established for the ACT and ACT Aspire subject-area tests and the supplemental STEM and English Language Arts scores. The ACT Readiness Benchmarks for ACT Aspire are linked to the ACT College Readiness Benchmarks. Students at or above the benchmark are on target to meet the corresponding ACT College Readiness Benchmark in grade 11 (p. 1).

Students who take the ACT must attain the benchmark score on the assessment to be deemed as *college ready*. Table 2 depicts the ACT College and Career Readiness Scores that provide the scoring and the subject area of a collegiate-ready student. Table 2 also indicates the course in college that the student may potentially be successful in passing.
Table 2

*ACT College and Career Readiness Scores*

<table>
<thead>
<tr>
<th>Subject</th>
<th>Score on the ACT</th>
<th>First Year College Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>18</td>
<td>English Composition</td>
</tr>
<tr>
<td>Math</td>
<td>22</td>
<td>College Algebra</td>
</tr>
<tr>
<td>Reading</td>
<td>22</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>Science</td>
<td>23</td>
<td>Biology</td>
</tr>
<tr>
<td>English Language Arts</td>
<td>20</td>
<td>English Composition and Social Sciences</td>
</tr>
<tr>
<td>STEM (Science, Technology, Engineering, Math)</td>
<td>26</td>
<td>Calculus, Chemistry, Biology, Physics, and Engineering</td>
</tr>
</tbody>
</table>

Note. 36 Point Scale

Standardized test scores, such as the SAT and the ACT, high school grade point averages, challenging high school coursework, and dual-enrollment programs seek to identify and predict collegiate academic potential as a student’s ability to be ready for college (Holles, 2016). College readiness predictors fail to articulate how a student will engage in diverse contexts, heterogeneous environments, and transitioning into an environment much different from their home context. A necessary component to successful transition to college and the career workforce constitutes the social, emotional, and maturity aspects of the student. (Summers & Volet, 2008) The student must have the
ability to work within a diverse environment, understand cultural contexts, and be open to new ideas and ways of thinking.

According to the National Center for Public Policy and Higher Education, The Stanford Research Institute for Higher Education and Research, and the Institute for Educational Leadership, in a research study conducted by Schneider (2005), in order for schools to amply prepare students to be collegiately ready, schools must have courses and assessments that align to the postsecondary expectations. Numerous students enter the collegiate realm and the workforce, being unable to perform college level constructs. Students must also be ready to take on the financial burdens of college and the workforce. Through the collaboration between schools, their curriculum, and colleges, students should have access to the proper education that allows for students to understand budgeting for college. Not only should students be able to budget for their postsecondary plans, but students should be accountable for his or her academic needs and emotional concerns (Schneider, 2005).

Alvarado and An (2015) expressed that the relationship between college bound individuals and college readiness is proven through the early formation of collective capital. A student’s educational success is not only proven through their education expectations and racial and ethnic backgrounds, but on the ability to work within various subgroupings of people for a common goal.

College Preparedness

In contrast to college readiness, Indiana University (2016) defines college preparedness as “The measurement of students’ high school academic and co-curricular experiences as well as their expectations for participating in educational purposeful
activities during the first year of college” (p. 1). Being collegiately prepared consists of academic coursework along with extracurricular experiences, and the ability to participate in diverse environments that promote individuals to be able to work within heterogeneous environments to endorse the receptive growth of knowledge and perceptions. By holistically assessing both academic knowledge and the ability to work within an environment that is diverse and differing from the traditional high school experience of a rural public school student, the assessment of college preparedness allows for an in-depth assessment of the needs of rural public school students to be successful following high school.

Researchers have identified that not only are a student’s academic ability and success essential in understanding college preparedness, but also his or her holistic life spheres of influences contribute to a better understanding of how a student will succeed in post-secondary education and in the workforce. An individual’s frame of reference, his or her past life experiences, educational upbringing, and cultural norms are also predictors of college preparedness (Holles, 2016).

Conley (2012) showed that students entering college and the workforce must be adept in four areas of college and career preparedness. The four key areas that Conley described included the ability to utilize cognitive strategies, utilize knowledge of content areas, have college transition knowledge and skills to transition to college life, and understand the usefulness of learning skills and techniques. The holistic approach mandates for students to be assessed on college preparedness through their academic abilities and their social and emotional maturity to be able to transition into the collegiate realm. The components of being holistically prepared for college interact with and affect
the notions completely to bring forth a holistic student who will be afforded the opportunities to succeed. By utilizing the four key skills, rural public school students will be prepared to compete in the global world of being prepared for the collegiate realm and the workforce.

Arnold, Lu, and Armstrong (2012) supported Conley’s research and articulated that students, their environmental upbringing, and their sphere of influence are inseparably intertwined. Utilizing the importance of college and career preparedness to take a holistic approach, the researchers utilized the ecological framework of Bronfenbrenner (1979) to illustrate the importance of allowing for a holistic approach for college preparedness to take place.

Within Bronfenbrenner’s (1979) framework, an individual is comprised of a variety of levels that necessitate his or her holistic development and his other ability to be prepared for college and the workforce following high school graduation. The microsystem is comprised of an individual’s formal education, the individual with whom he or she chooses to surround herself or himself, familial relationships, educator influence, and activities out of school. The mesosystem is comprised of the interactions of the school culture and the disciplines between her or his social and cultural world. The exosystem is the formal education system, the curriculum that is utilized within the education system, and the cultural community that the student is exposed to on a daily basis. The macrosystem is comprised of the global factors that affect a students’ ability to be collegiately prepared such as the foundational beliefs and ideologies they have for particular interests. The final level is the chronosytem which indicates the changes to occur over time with the process of evolving standards in education and other factors.
Because all of the levels work together to comprise a student’s holistic approach to be successful in education, it is vital to support college preparedness beyond just the academic portion of the assessment (Lease, 2004).

Figure 2. Bronfenbrenner’s framework for holistic education (Bronfenbrenner, 1979).
Bronfrenbrenner’s (1979) framework illustrates the importance of allowing for a holistic approach to take place to ensure that rural public school students are able to learn and compete with the global world. The academic rigor of their high school preparation courses, the cultural realm of their institution and community, and other societal influences all play a significant role in the formation of a collegiately prepared student. By allowing for multicultural and diverse experiences prior to the graduation from high school, rural public school students who work within homogenous environments can be afforded more opportunities to broaden their sphere of influence. Students are also able to continue to increase their multicultural perspectives and diverse appreciation (Bronfenbrenner, 1979).

Bronfenbrenner (1979) argued that a holistic approach to understanding a student’s preparedness for life in the college or university setting and in the workforce is a necessity. By being able to understand a student’s frame of reference, support his or her cultural values and allow for her or him to value other diverse factors, a student can be more likely to succeed following an implementation of a multicultural pedagogical scope and sequential framework.

In order for students to be both collegiately ready and collegiately prepared, they must understand the outcomes for immersion in college (Schaefer, 2014). The outcomes for collegiate immersion include the contextual skills and awareness, academic behaviors, content knowledge, and cognitive strategies. Students must recognize the academic rigor necessitated to be successful in the collegiate arena and the positive outcomes of being able to work collaboratively with diverse individuals and in multicultural situations. With successful recognition, students will be able to immerse themselves into college and in
the workforce (Chang, Denson, Sáenz, & Misa, 2006). Figure 3 below is a visual representation of a student’s immersion into postsecondary education.

**Figure 3.** Reconceptualization of College and Career Readiness (Schaefer, 2014).

**Conclusion**

In conclusion, Chapter II addressed and reviewed an extensive body of research that supported the integration of multicultural pedagogy in rural public institutions to support rural student global literacy and college preparedness. As a holistic approach, an extensive body of research has demonstrated the positive effects of the integration of multicultural pedagogy in education and on student learning initiatives. Moreover, the
research suggested the importance of promoting for students to become globally literate in order be able to compete in the global marketplace.

The research presented in Chapter II also demonstrated the importance of implementing multicultural curriculum and pedagogical constructs to afford students the opportunity to learn from diverse experiences and cultural familiarities. By becoming more globally literate and familiar with multicultural constructs and by alleviating the curricular gap within rural public institutions, students may be more prepared for the social, emotional, and mental aspects of a globally diverse and competitive society.

Summary

The central purpose of the current research study was to investigate the effects of multicultural pedagogy on rural student global literacy and college preparedness. Chapter II reviewed the existing research and literature regarding the integration of multicultural pedagogy and the role that the implementation of such instructional strategies has on student preparedness. Chapter II also reviewed existing literature on global literacy, college readiness, and college preparedness. Because of the holistic approach to this current research study, all entities were extensively researched and reviewed.

The following chapter, Chapter III, includes an in-depth review of the quantitative methodologies utilized in conducting the research investigation to answer the three research questions presented in Chapter I.
CHAPTER III

METHODOLOGY

Introduction

You may not control all the events that happen to you, but you can decide not to be reduced by them. Try to be a rainbow in someone else’s cloud. Do not complain. Make every effort to change things you do not like. If you cannot make a change, change the way you have been thinking. You might find a new solution. (Angelou, 2014, p. 38).

Through acceptance of others for their differences and learning about the significance of global interactions, Angelou demonstrated the importance of being a life-long learner. With the ever-changing global society, it is essential that educators prepare students to be life-long learners in order for their unique abilities to be able to transfer into the global marketplace.

In the previous chapter, the researcher reviewed the literature related to the effects that multicultural pedagogy has on rural student global literacy and college preparedness. The goals of Chapter II were to understand the significant effects that multicultural education and pedagogical content has on students, articulate the importance of students being globally literate and receptive, and define the meanings between college readiness and college preparedness.
Chapter II exemplified the scholarly empirical research and theoretical examination relative to multicultural pedagogy, global literacy, and preparedness for college in regards to being socially, emotionally, and mentally prepared to work within diverse environments following the graduation of high school. Chapter II also discussed the various influences and positive outcomes that students who are engaged with a multicultural framework have when they enter a postsecondary institution or the workforce.

Chapter III addressed the research design which sought to answer the research questions regarding global literacy and college preparedness. Chapter III provides a description of the researcher’s methodology for each of the specific research questions. Included in Chapter III is a description of the research design, participants, sample sizes, data collection, analytical methods, and limitations.

The research study was guided by the following three research questions. Each research question is accompanied by an associated research hypothesis and an associated null hypothesis.

1. To what extent is the global literacy among eleventh-grade students in a rural public school different from the global literacy for high school students in an urban city?

   \[ H_{11} : \bar{\tilde{\xi}}_{\text{training}} \neq \bar{\tilde{\xi}}_{\text{non-training}} \]

   \[ H_{01} : \bar{\mu}_{\text{training}} = \bar{\mu}_{\text{non-training}} \]
2. What is the difference in the composite global literacy between students who are exposed to multicultural pedagogy and students who are not?

H₁₁: Participants in the multicultural pedagogy training group will score higher on the global literacy composite scores than participants in the non-multicultural pedagogy training group.

\[ H₁₁: \bar{x}_{training} \neq \bar{x}_{non-training} \]

H₀₁: There will be no difference in global literacy composite scores between participants in the multicultural pedagogy training group and participants in the non-multicultural training group.

\[ H₀₁: \mu_{training} = \mu_{non-training} \]

3. To what extent do students who go through multicultural pedagogy have higher college preparedness than students who do not go through multicultural pedagogy?

H₁₁: Participants in the multicultural pedagogy training group will score higher in college preparedness than participants in the non-multicultural pedagogy training group.

\[ H₁₁: \bar{x}_{training} \neq \bar{x}_{non-training} \]

H₀₁: There will be no difference in college preparedness between participants in the multicultural pedagogy training group and participants in the non-multicultural training group.

\[ H₀₁: \mu_{training} = \mu_{non-training} \]

Research Design

The purpose of this research study was to explore the effects of multicultural pedagogy, specifically multicultural literature, on rural student global literacy and college preparedness. The resultant findings and conclusions may provide practical evidence to
improve curriculum and instruction for rural public school students in order for students to be able to work within a diverse environment in post-secondary education or in the workforce. The goal of this research was to investigate whether a multicultural pedagogy would effectively expand rural students’ global literacy and contribute to college preparedness. If such pedagogy is effective, it may foster rural public school students’ ability to work within a diverse environment in the workplace or in postsecondary education.

As an experiment, the researcher compared both between-groups and within-subjects. The between-groups design utilized the manipulated variable, or the multicultural pedagogy, as the difference between the two groupings of students. For the purpose of the study, the researcher labeled the two groupings as; multicultural pedagogy training group and traditional training group.

The researcher compared two classrooms of students, both of which were rural public school classrooms in a Midwestern state. The students were enrolled in eleventh grade for the entire duration of the study. One group of students, the multicultural pedagogy training group, was given multicultural pedagogy for an eight-week unit and the other group of students, the traditional training group, was given traditional common core general education for an eight-week unit. The multicultural pedagogy training group and the traditional training group’s objectives, outcomes, and standards both meet the requirements of The Illinois State Common Core Standards for English Language Arts for 11th and 12th grade.

Students in the multicultural pedagogy training group and the traditional training group classes were first administered the Global Literacy Survey (Hsu & Wang, 2010)
and the Beginning College Survey of Student Engagement (Indiana University, 2016). Following this pretest, students in the multicultural pedagogy grouping were taught using multicultural curricular methods, specifically utilizing multicultural literature. The students enrolled in the traditional education grouping were taught the Illinois Common Core curriculum as done in the past. The unit engrained with multicultural pedagogy took place over an eight-week period which included multicultural lessons. Following the lessons, both the multicultural pedagogy and general education classrooms were administered the Global Literacy Survey and the Beginning College Survey of Student Engagement survey for a second time. Hsu and Wang articulated that:

To determine the reliability of the global literacy survey, we used Cronbach’s alpha (p ¼ 0.767 for the first factor, p ¼ 0.70 for the second factor, p ¼ 0.64 for the third factor, and p ¼ 0.71 for the fourth factor). The original questionnaire included 19 items. We added 15 more items to gauge student perceptions of “global education”-related activities. Among the 34 items, 25 items were part of a five-point Likert-type scale of potential responses: strongly agree, agree, neutral, disagree, and strongly disagree. We computed the scores by adding points assigned to each of the five items. The most agreeable choice received a value of 5 and the most disagreeable choice received a value of 1. (p. 46)

For Research Question 1 and Research Question 2, the reliability of each set of Likert items from the 25-item Global Literacy Survey was assessed for each subscale using Cronbach’s alpha, after relevant items were reverse-coded. Since the items were reliable, the researcher calculated an average of the items in each subscale to create four composite global literacy factor scores for each participant. The global literacy factor
scores include the average awareness of diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence in new literacies. According to Indiana University (2016):

Two statistical techniques were used to examine the psychometric properties of the BCSSE Scales. First, item- and scale-level descriptive statistics were computed to show response patterns, measures of central tendency, and data distribution (e.g., skewness). The second technique used confirmatory factor analysis (CFA) to examine the construct validity for the scales. Acceptable construct validity indicates that the data adequately represent the constructs being investigated and allows researchers to make valid inferences and use of the data. (pp. 1-2)

For Research Question 3, the reliability of the 42 items on the Beginning College Survey of Student Engagement was assessed using Cronbach’s alpha, after relevant items were reverse-coded. Since the items were reliable, the researcher calculated an average of the 36 items to create a composite College Preparedness score.

The researcher utilized two main statistical analyses for the current research study. The first statistical procedure that the researcher used were four one-sample *t*-tests followed by a series of ANCOVAs.

For Research Question 1, four one-sample *t*-tests were conducted for each of the four global literacy factors. The one-sample *t*-tests were used to compare the average awareness of diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence in new literacies among the 11th-grade sample to those of a normative urban sample.
For Research Question 2, the researcher conducted an ANCOVA. The ANCOVA was used for predicting global literacy from pedagogy type (between-subjects: multicultural vs. general) and global literacy type controlling for the influence of the pretest assessment.

For Research Question 3, the researcher conducted an ANCOVA. The ANCOVA was used for predicting the college preparedness scores from pedagogy type (between-subjects: multicultural vs. general) controlling for the influence of the pretest assessment.

For Research Question 1, the four outcome variables were scores on each of the four global literacy factors on the Global Literacy Survey (Hsu & Wang, 2010): awareness of diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence of new literacies. Research Question 1 utilized Likert scale measurements, indicating that the level of measurement for each of the individual questions was ordinal. Because there are more than fifteen potential responses, the measurement can be treated as interval.

The Global Literacy Survey (Hsu & Wang, 2010) consists of 25 items assessing four underlying factors: awareness of diversity (six items, e.g., “I am willing to understand a different culture”), willingness to become a global citizen (five items, e.g., “I pay attention to international news”), approval of the structure and performances of the United States’ interconnectedness and interdependence with other countries on a global scale (five items, e.g., “I believe that our country follows the international law and regulations in a global society”), and confidence in using “new literacies” skills to compete and succeed in a global village (three items, e.g., “I know how to research further in-depth information for a specific international issue”). Participants responded to
these items on a five-point Likert scale from Strongly Disagree, Disagree, Neutral, Agree, to Strongly Agree.

For Research Question 2, the predictor variables were pedagogy type (multicultural pedagogy vs. general education), and global literacy type (awareness of diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence in new literacies). The outcome variable was global literacy. As with Research Question 1, Research Question 2 utilized Likert scale measurements from the Global Literacy Survey, indicating that the level for each of the individual questions was ordinal. Because there are more than fifteen potential responses, the measurement can be treated as interval.

Along with the Global Literacy Survey (Hsu & Wang, 2010), the researcher utilized the Beginning College Survey of Student Engagement (Indiana University, 2016) to assess the college preparedness of students. The Beginning College Survey of Student Engagement consists of 42 items categorized into nine subscales, each assessed using Likert-type response options from Very Often, Often, Sometimes, to Never.

For Research Question 3, the predictor variable was pedagogy type (multicultural pedagogy vs. general education) and the outcome variable was college preparedness. Scores were obtained utilizing the Beginning College Survey of Student Engagement (Indiana University, 2016). The scores from the Beginning College Survey of Student Engagement are Likert scale measurements, indicating that the level of measurement for each of the individual questions was ordinal. Because there are more than fifteen potential responses, the measurement can be treated as interval.
Scores were obtained during an eight-week period throughout the months of November through December, 2017 at Regent High School, a small rural high school located in a Midwestern state. Students participating in the research study were in grade 11 for the entire duration of the research study. The sample consisted of 39 eleventh grade students in two classrooms. The multicultural pedagogy grouping of students contained 21 students, 13 of whom were male and eight of whom were female. The general education grouping of students contained 18 students, 10 of whom were male and 8 of whom were female. Students took both the Global Literacy Survey (Hsu & Wang, 2010) and the Beginning College Survey of Student Engagement (Indiana University, 2016) as a pre and post assessment.

For Research Question 1, the specific scores of the Global Literacy Survey (Hsu & Wang, 2010) were delineated into four factors. For each factor, the mean and standard deviation were calculated. The factors included:

Factor 1: Awareness of Diversity

Question 15. I am willing to understand a different country

Question 16. I am willing to respect a different culture

Question 17. I like to (or I want to) study or travel abroad

Question 6. I believe that the development patterns, lifestyles, and values of developing countries are affected by developed countries.

Question 1. In order to facilitate culture exchange, we can keep our own cultural identity while remaining open-minded to others.

Question 21. Schools should be responsible for cultivating students’ global awareness
Factor 2: Willingness to become a global citizen

Question 13. I pay attention to international news

Question 14. I usually pay attention to information about world politics, economics, or culture

Question 12. It is important that I become a global citizen

Question 22. I enjoy the “global awareness”-related events hosted in my school

Question 9. I need to be aware of world trends and their impact on global society

Factor 3: Approval of the structure and performances of the United States’ interconnectedness and interdependence with other countries on a global scale

Question 3. I believe that our country follows the international law and regulations in a global society

Question 5. I believe our country collaborates frequently with other countries to resolve world issues

Question 11. The United Nations plays a proper role in resolving international affairs

Question 10. The law and order of our global society remains stable now

Question 23. My teachers have been doing a great job in guiding me to understand world culture.

Factor 4: Confidence in using “new literacies” skills to compete and succeed in a global village

Question 19. I know how to research further in-depth information for a specific international issue.
Question 18. I have strong skills for using computer technologies to research information and to communicate with others.

Question 20. If I want my friends to be aware of an international issue, I know how to research, evaluate, analyze, and present information to them.

In addition to these measures obtained through the survey instruments, the researcher also referenced the means and standard deviations for the four factors of global literacy based on a sample of 2157 high school students from an urban city described in the research conducted by Hsu and Wang (2010). The data analysis from the means and standard deviations was used to compare the rural student group to the urban student group.

For Research Question 2, the means and standard deviations of the measures from the four factors on the Global Literacy Survey (Hsu & Wang, 2010) were once again used to predict global literacy from pedagogy type (between-subjects: multicultural vs. general) and global literacy type.

For Research Question 3, the researcher utilized questions from the Beginning College Survey of Student Engagement (Indiana University, 2016) to assess the college preparedness of students. The Beginning College Survey of Student Engagement is delineated into nine subscales. The data analysis from the means and standard deviations was used to predict the college preparedness scores from pedagogy type (between-subjects: multicultural vs. general) controlling for the pretest assessment.

Subscale 1: High School Quantitative Reasoning

Question 10. During your last year of high school, about how often did you do the following?
(c) Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)

(d) Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)

(e) Evaluated what others have concluded from numerical information

Subscale 2: High School Learning Strategies

Question 10. During your last year of high school, about how often did you do the following?

(f) Identified key information from reading assignments

(g) Reviewed your notes after class

(h) Summarized what you learned in class or from course materials

Subscale 3: Expected Collaborative Learning

Question 15. During the coming school year, about how often do you expect to do each of the following?

(a) Ask another student to help you understand course materials

(b) Explain course material to one or more students

(c) Prepare for exams by discussing or working through course materials with other students

(d) Work with other students on course projects or assignments

Subscale 4: Expected Student-Faculty Interaction

Question 15. During the coming school year, about how often do you expect to do each of the following?

(a) Talk about career plans with a faculty member
(b) Work with a faculty member on activities other than coursework
(c) Discuss your academic performance with a faculty member
(d) Discuss course topics, ideas, or concepts with a faculty member outside of class

Subscale 5: Expected Interactions with Diverse Others

Question 16. During the coming school year, about how often do you expect to have discussions with people from the following groups?

(a) People of a race or ethnicity other than your own
(b) People form an economic background other than your own
(c) People with religious beliefs other than your own
(d) People with political views other than your own

Subscale 6: Expected Academic Perseverance

Question 17. During the coming school year, how certain are you that you will do the following?

(a) Study when there are other interesting things to do
(b) Find additional information for course assignments when you don’t understand the material
(c) Participate regularly in course discussions, even when you don’t feel like it
(d) Ask instructors for help when you struggle with course assignments
(e) Finish something you have started when you encounter challenges
(f) Stay positive, even when you do poorly on a test or assignments
Subscale 7: Expected Academic Difficulty

Question 18. During the coming school year, how difficult do you expect the following to be?

(a) Learning course material
(b) Managing your time
(c) Getting help with school work
(d) Interacting with faculty

Subscale 8: Perceived Academic Preparation

Question 20. How prepared are you to do the following in your academic work at this institution?

(a) Write clearly and effectively
(b) Speak clearly and effectively
(c) Think critically and analytically
(d) Analyze numerical and statistical information
(e) Work effectively with others
(f) Use computing and information technology
(g) Learn effectively on your own

Subscale 9: Importance of Campus Environment

Question 21. How important is it to you that your institution provides each of the following?

(a) A challenging academic experience
(b) Support to help students succeed academically
(c) Opportunities to interact with students from different backgrounds
(d) Help managing your non-academic responsibilities

(e) Opportunities to be involved socially

(f) Opportunities to attend campus activities and events

(g) Learning support services

Participants

The current study sought to address the effects of multicultural pedagogy on rural student global literacy and college preparedness of all rural public high school students enrolled in 11th grade throughout the United States. For the current research study, the researcher sampled 41 eleventh grade students at Regent High School, a small rural high school located in a Midwestern state. The total enrollment of students in 11th grade at Regent High School is 41 students. Of the 41 students who were sampled, 39 returned the informed consent and youth assent forms and were able to participate in the research study. The response rate of the students who participated was 39 out of 41 students, or 95% of the 11th grade student body at Regent High School. Of the 95% of students who were sampled, the multicultural pedagogy grouping of students contained 21 students, 13 of whom were male and eight of whom were female. The general education grouping of students contained 18 students, 10 of whom were male and eight of whom were female.

All of the participants who participated in the research study were at the age of 16 throughout the duration of the study. Out of the 39 students who were sampled, 36 of the participants classified their ethnicity and race as White-Caucasian, or 92.3% of the participants. Another 5.1% of the participants, or two individuals, classified themselves as Latino or Hispanic, and a final 2.6%, or one student, classified his or herself as African American (Non-Hispanic). Table 3 depicts the demographic data summary between the
combined groupings of students. Table 4 and Table 5 illustrate the differences between
gender and ethnicity between the multicultural pedagogy grouping and the traditional
grouping.

Table 3

*Multicultural and Traditional Combined Group Gender and Ethnicity Demographic Data Summary*

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
<th>n = 39</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>23</td>
<td>59</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>16</td>
<td>41</td>
</tr>
<tr>
<td>Ethnicity</td>
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<td></td>
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<tr>
<td>Caucasian (Non-Hispanic)</td>
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<td>36</td>
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<tr>
<td>African American (Non-Hispanic)</td>
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<tr>
<td>Asian/Pacific Islander</td>
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</tr>
<tr>
<td>Latino or Hispanic</td>
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<td>0.05</td>
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<tr>
<td>Native American</td>
<td></td>
<td>0</td>
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<td>Others</td>
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Table 4
*Multicultural Pedagogy Grouping Demographic Data Summary*

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<tr>
<td>Male</td>
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<td>62</td>
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<tr>
<td>Female</td>
<td>8</td>
<td>38</td>
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<tr>
<td>Ethnicity</td>
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<td>African American (Non-Hispanic)</td>
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<tr>
<td>Latino or Hispanic</td>
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<td>0.04</td>
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<tr>
<td>Others</td>
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</table>

Table 5
*Traditional Common Core Grouping Demographic Data Summary*

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<th>Percent</th>
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<td>Male</td>
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<td>Female</td>
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<td>Ethnicity</td>
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<td>African American (Non-Hispanic)</td>
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<tr>
<td>Asian/Pacific Islander</td>
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<td>0</td>
</tr>
<tr>
<td>Latino or Hispanic</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Native American</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
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</tr>
</tbody>
</table>
Data Collection

Because the research study was conducted in a rural public high school in a Midwestern state, the researcher needed to obtain permission from the school district’s superintendent prior to moving forward with the research study. The researcher obtained permission to conduct the research with the 11th grade junior class. See Appendix A for permission.

Prior to any research being conducted, the researcher obtained informed consent from the participants and their legal guardians since participants were under the age of 18 throughout the entire duration of the study. The informed consent form can be found in Appendix B. Participants were given a youth assent form to fill out informing them of the purpose of the research study and their role within the context of the study. See Appendix C for the youth assent form.

Participants were told that their participation was voluntary and that they were allowed to stop at any time without penalty. Participants and their guardians were also told that refusal to participate in the research study would have no negative consequences on the student or affect the students’ grade in their English Language Arts class. Because the multicultural literature text and the traditional literature text met The Illinois Common Core Standards, students would remain enrolled in the classes for the entire duration of the unit. Students who refused to participate in the research study did not take The Global Literacy Survey (Hsu & Wang, 2010) or The Beginning College Survey of Student Engagement (Indiana University, 2016) that was being utilized for data analysis.

The researcher conducted a parent and/or guardian meeting at the school for all participants and their legal guardians to attend to ask any questions regarding their
participation with the study. The meeting coincided with parent-teacher conferences in order for the researcher to be able to witness the signing of the informed consent forms. The researcher collected the informed consent forms from both the legal guardians of the minors and the assent forms from the students who agreed to participate in the research study.

The Global Literacy Survey (Hsu & Wang, 2010) and The Beginning College Survey of Student Engagement (Indiana University, 2016) were both utilized as survey instruments for the current research study. The Global Literacy survey addressed the global literacy of rural public school students in four factors including awareness of diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence of new literacies. The researcher obtained permission to utilize the survey instrument as part of the current research study. See Appendix D for permission to use the survey instrument. See Appendix E for the Global Literacy Survey instrument that assessed the global literacy of the rural public school students.

The Beginning College Survey of Student Engagement (Indiana University, 2016) addressed the college preparedness of students enrolling at collegiate institutions. The researcher licensed The Beginning College Survey of Student Engagement from Indiana University. See Appendix F for the licensing agreement. See Appendix G for The Beginning College Survey of Student Engagement that assessed the college preparedness of rural public school students.

Surveys were administered at two distinct points of time. The pretest administration was given during the first week of November 2017. Following the pretest, the researcher taught an eight-week unit utilizing multicultural curricular methods to the
multicultural pedagogy training group of students. The students in the control group, or the traditional grouping, were taught utilizing the same curriculum that had been taught in the past. The posttest administration was given during the last week of school prior to winter break in December of 2017. For both groupings of students, students accessed the survey through an online survey site where the survey was being hosted. They were provided the link to the survey by the researcher. Students accessed the survey through their school-owned chrome book and were asked to complete the survey during their English Language Arts course during first and second period of the school day.

Analytical Methods

For Research Question 1, the researcher utilized a one sample \( t \)-test. A one sample \( t \)-test was used because the researcher wanted to compare the means of an established study, the study conducted by Hsu and Wang in 2010 in an urban city, to the means of the researcher’s study conducted in a rural community. The one sample \( t \)-test was used to compare the means and standard deviations of the multicultural pedagogy grouping of students to the four global literacy factors of those of a normative urban sample based on the established study of Hsu and Wang. The established sample consisted of 2157 high school students from an urban city, and the data analysis from the means and standard deviations was used to compare the rural student group to the urban student group.

For Research Question 2 the researcher conducted an ANCOVA. An ANCOVA was used because it allowed the researcher to equalize the differences between the two groupings of students (Salkind, 2017). The ANCOVA was used for predicting global literacy from pedagogy type (between-subjects: multicultural vs. general) and global literacy type.
For Research Question 3 the researcher also conducted an ANCOVA. The ANCOVA was used for predicting the college preparedness scores from pedagogy type (between-subjects: multicultural vs. general) controlling for the influence of the pretest assessment.

The procedures allowed the researcher to answer the research questions to assess the differences between the two groupings of students and the influence that multicultural pedagogy has on rural student global literacy and college preparedness.

Limitations

The current research study faced three substantial limitations to the research design. The first limitation was that the researcher only collected data at a single rural public school located in a Midwestern state. In addition, the researcher only had access to a limited number of students to be sampled for the purpose of the study. Finally, another limitation that the researcher faced within the constraints of the research study included the passage of time and instruction that could potentially affect students’ capabilities. Because the participants were engaged in a pre and posttest design, students saw the same survey instrument on more than one occasion. The limitations may have affected the results to skew in favor of the necessity of multicultural pedagogy.

Summary

Chapter III provided the details to the current research study’s research design and the methodological steps utilized to answer the research questions regarding global literacy and college preparedness. The description of the research design, participants, sample sizes, analytical methods, and limitations were used to detail the steps necessitated to complete the research study. Included in Chapter III was a detailed
explanation of the statistical procedures used to address the research questions presented. In addition, demographic data was detailed to provide information to answer the research questions.

Chapter IV, the final chapter of the researcher’s dissertation, will indicate the researcher’s findings based on the statistical procedures used to answer the research questions. The interpreted data, conclusions, and implications of the research will be presented in the final chapter. In addition, recommendations, based on the findings and conclusions, will be indicated for further research.
CHAPTER IV
FINDINGS AND CONCLUSIONS

Introduction

I love wisdom. And you can never be great at anything unless you love it. Not be in love with it, but love the thing, admire the thing. And it seems that if you love the thing, and you don't just want to possess it, it will find you (Angelou, 2014, p.86).

Angelou (2014) illustrated the importance of utilizing the unique qualities of humanity to find a passion in life and pursue it. When an individual finds a passion in life, wisdom with that entity comes naturally. Students in rural public schools need to be afforded the opportunity to have as many diverse experiences and opportunities that can be provided to them by their educational institutions (Magogwe & Ketsitlile, 2015). Ford (2014) indicated that it is the duty of educators to allow for students who grow up in homogenous environments to recognize the importance of diversity. With the recognition of diversity and the amount of responsibility that comes with being globally literate, it is essential that students become aware of their need to be globally competitive in the world (Gay, 2000).

Chapter I of the current research study introduced the problem statement, background information, and research questions in order to explore the effect that multicultural pedagogy has on rural student global literacy and college preparedness. In
addition, the researcher provided a description of terms as well as the significance of the study and the process to accomplish within the scope and sphere of the research process.

In Chapter II of this current research study, the researcher reviewed the literature related to the effects that multicultural pedagogy has on rural student global literacy and college preparedness. The goals of Chapter II were to understand the significant effects that multicultural education and pedagogical content has on students, articulate the importance of students being globally literate and receptive, and define the meanings between college readiness and college preparedness.

Chapter II exemplified the scholarly empirical research and theoretical examination relative to multicultural pedagogy, global literacy, and preparedness for college in regards to being socially, emotionally, and mentally prepared to work within diverse environments following the graduation from high school. Chapter II also discussed the various influences and positive outcomes that students who are engaged with a multicultural framework have when they enter a postsecondary institution or the workforce.

In the previous chapter, Chapter III, the researcher addressed the research design which sought to answer the research questions regarding the influence multicultural pedagogy has on rural student global literacy and college preparedness. Chapter III provided a description of the researcher’s methodology for each of the specific research questions. Included in Chapter III was a description of the research design, participants, sample sizes, data collection, analytical methods, and limitations.

The following chapter, Chapter IV, illustrates the findings and conclusions of the researcher’s current study including implications and recommendations for future
research related to the effects of multicultural pedagogy on rural student global literacy and college preparedness.

Research Questions

The current study was guided by the following research questions. Each research question is accompanied by its associated research hypothesis and its associated null hypothesis.

1. To what extent is the global literacy among eleventh-grade students in a rural public school different from the global literacy for high school students in an urban city?
   
   \( H_1 \): Participants in the rural public high school multicultural training group will score higher on global literacy factor scales.

   \[ H_1: \hat{\bar{y}}_{\text{training}} \neq \hat{\bar{y}}_{\text{non-training}} \]

   \( H_0 \): There will be no difference in global literacy rates between students in a rural public school and students in an urban city.

   \[ H_0: \mu_{\text{training}} = \mu_{\text{non-training}} \]

2. What is the difference in the composite global literacy scores between students who are exposed to multicultural pedagogy and students who are not?

   \( H_1 \): Participants in the multicultural pedagogy training group will score higher on the global literacy composite scores than participants in the non-multicultural pedagogy training group.

   \[ H_1: \hat{\bar{y}}_{\text{training}} \neq \hat{\bar{y}}_{\text{non-training}} \]

   \( H_0 \): There will be no difference in global literacy composite scores between participants in the multicultural pedagogy training group and participants in the non-multicultural training group.
H₀₁: \( \mu_{\text{training}} = \mu_{\text{non-training}} \)

3. To what extent do students who go through multicultural pedagogy have higher college preparedness than students who do not go through multicultural pedagogy?

H₁₁: Participants in the multicultural pedagogy training group will score higher in college preparedness than participants in the non-multicultural pedagogy training group.

\[ H₁₁: \bar{x}_{\text{training}} \neq \bar{x}_{\text{non-training}} \]

H₀₁: There will be no difference in college preparedness between participants in the multicultural pedagogy training group and participants in the non-multicultural training group.

\[ H₀₁: \mu_{\text{training}} = \mu_{\text{non-training}} \]

Findings

Research Question 1

Research Question 1 asked “To what extent is the global literacy among eleventh-grade students in a rural public school different from the global literacy for high school students in an urban city?” The corresponding hypothesis was that:

H₁₁: Participants in the rural public high school multicultural training group will score higher on global literacy factor scales.

\[ H₁₁: \bar{x}_{\text{training}} \neq \bar{x}_{\text{non-training}} \]

For Research Question 1, the four outcome variables were scores on each of the four global literacy factors: awareness of diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence of new literacies. For Research Question 1, four one-sample \( t \)-tests were conducted for each of the four global literacy factors. The one-sample \( t \)-tests were used to compare the average awareness of
diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence in new literacies among the eleventh-grade sample to those of an urban sample in a study conducted by Hsu and Wang (2010).

A one sample t-test comparing the multicultural pedagogy grouping of students to an urban sample was nonsignificant for awareness of diversity \( t(20) = .182, p = .857, d = .873 \), was nonsignificant for approval of the structure and performance of US interconnectedness and interdependence with other countries on a global scale \( t(20) = .747, p = .464, d = .16 \), and was nonsignificant for confidence in using *new literacies* skills to compete and succeed in a global village \( t(20) = .025, p = .980, d = .001 \).

The statistical nonsignificant results of the findings for Research Question 1 indicated that there was not a statistical significant difference between the multicultural pedagogy grouping of students to the urban grouping of students in the global literacy factors for the average awareness of diversity, approval of U.S. interconnectedness, and confidence in new literacies

A one sample t-test comparing the multicultural pedagogy grouping of students to an urban sample was significant for the factor of willingness to become a global citizen \( t(20) = -4.14, p = .001, d = -0.94 \). The statistical significant differences indicated that the multicultural grouping of students had a lower willingness \( M = 3.21 \) to become global citizens when compared to the urban grouping of students \( M = 3.709 \).

Using Bonferroni’s correction for Research Question 1, the results from the one sample t-tests indicated that the hypothesis for Research Question 1 was not supported for the factors of awareness of diversity, approval of U.S. interconnectedness, and confidence in using new literacies. Although the results were statistically significant for
the factor of willingness to become a global citizen, the hypothesis for Research Question 1 was not supported because the multicultural grouping had a decreased willingness to become global citizens when compared to the urban grouping of students.

Table 6

*Factors of Global Literacy*

<table>
<thead>
<tr>
<th>Factor</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of diversity</td>
<td>3.91</td>
<td>.873</td>
<td>.182</td>
<td>20</td>
<td>.857</td>
<td>.873</td>
</tr>
<tr>
<td>Willingness to become a global citizen</td>
<td>3.21</td>
<td>.260</td>
<td>-4.14</td>
<td>20</td>
<td>.001*</td>
<td>-0.94</td>
</tr>
<tr>
<td>Approval of U.S. interconnectedness</td>
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<td>.588</td>
<td>.747</td>
<td>20</td>
<td>.464</td>
<td>.16</td>
</tr>
<tr>
<td>Confidence in using “new literacies”</td>
<td>3.71</td>
<td>.968</td>
<td>.025</td>
<td>20</td>
<td>.980</td>
<td>0.001</td>
</tr>
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</table>

*p < .05

Research Question 2

Research Question 2 asked “What is the difference in the composite global literacy between students who are exposed to multicultural pedagogy and students who are not?” The corresponding hypothesis was that:

\[ H_{11}: \bar{x}_{training} \neq \bar{x}_{non-training} \]
For Research Question 2, the predictor variable was pedagogy type (multicultural pedagogy vs. traditional pedagogy) and the outcome variable was global literacy. For Research Question 2, the researcher conducted an ANCOVA controlling for the influence of the pretest scores. The ANCOVA was used for predicting global literacy from pedagogy type (between-subjects: multicultural pedagogy vs. traditional pedagogy). An ANCOVA predicting global literacy from pedagogy type was nonsignificant \((F (1, 36) = 1.32, p = .26, R^2 = .054)\). After analyzing the results from the ANCOVA, the results failed to reject the null hypothesis.

Research Question 3

Research Question 3 asked, “To what extent do students who go through multicultural pedagogy have higher college preparedness than students who do not go through multicultural pedagogy?” The corresponding hypothesis was that:

\(H_1: \text{Participants in the multicultural pedagogy training group will score higher in college preparedness than participants in the non-multicultural pedagogy training group.} \)

\(H_1: \bar{x}_{training} \neq \bar{x}_{non-training} \)

For Research Question 3, the predictor variable was pedagogy type (multicultural pedagogy vs. traditional education) and the outcome variable was college preparedness. For Research Question 3, the researcher conducted an ANCOVA that was used for predicting the college preparedness scores from pedagogy type (between-subjects: multicultural pedagogy vs. traditional pedagogy) while controlling for the influence of the pretest scores. There was a statistically significant difference between the multicultural group and the traditional group in the posttest assessment when controlling for the influence of the pretest \((F (1, 34) = 5.78, p = .022, R^2 = .184)\).
After analyzing the results from Research Question 3, the results supported the hypothesis indicating that students in the multicultural pedagogy training group were higher in college preparedness than participants in the non-multicultural pedagogy training group because of the influence of the multicultural pedagogy. Figure 4 illustrates a depiction of the results.

![Graph showing Pre and Post Survey Results](image)

*Figure 1.* Pretest and Posttest results between the Multicultural and Traditional groupings of students on the Beginning College Survey of Student Engagement.

Conclusions

The first research question in the current study examined whether there was a difference in the four composite scores of the four outcome variables of awareness of diversity, willingness to become a global citizen, approval of U.S. interconnectedness, and confidence of new literacies on the Global Literacy Survey (Hsu & Wang, 2010). The hypothesis was that participants in the rural public high school multicultural training
group will score higher on global literacy factor scales. Analysis of the data, illustrated in Table 5, indicated that there was no statistically significant difference between the multicultural pedagogy grouping of students and the urban grouping of students for the factors of awareness of diversity, approval of U.S. interconnectedness, and confidence of new literacies. Therefore, Hypothesis 1 intended for the factors of awareness of diversity, approval of U.S. interconnectedness, and confidence in using new literacies was not supported indicating that there was no statistically significant difference between the rural and urban samples for the associated factors.

However, concerning the factor of willingness to become a global citizen, the variables indicated a statistically significant difference between the multicultural grouping of students and the urban grouping of students. The statistically significant differences indicated that the multicultural grouping of students had a lower willingness ($M = 3.21$) to become global citizens when compared to the urban grouping of students ($M = 3.709$). Therefore, Hypothesis 1, regarding the factor of willingness to become a global citizen, was not supported because the rural public school sample had a lower willingness; however, the results did support a statistically significant difference in the willingness to become a global citizen.

Because of the results from Research Question 1 indicated a statistically significant difference with respect to the factor of willingness to become a global citizen when rural public school students were compared to an urban sample, educators have the responsibility to include multicultural instructional methodologies to build the willingness of rural public school students to become global citizens.
With the mean score of the factor of willingness to become a global citizen of the rural students \(M = 3.21\) being significantly lower than the mean of the urban grouping of students \(M = 3.709\), it is essential that educators provide opportunities for students to build their willingness to become diverse and global citizens. By building various diverse foundations for students, it is vital that educators provide opportunities for students to realize the impact and the importance of being willing to become globally literate (Banks & McGee Banks, 2003).

Because of rural public school students growing up in homogenous environments and not being exposed to diverse cultures and diverse experience, it is hindering their ability to work within heterogeneous environments when they leave their school community. Educators must include multicultural pedagogy so that students better understand the importance of diversity and be willing to become global citizens.

Promoting the global literacy of rural public school students may provide them with the knowledge and skills that are necessitated to become willing to work within heterogeneous environments following the conclusion of a multicultural pedagogy program (Cui, 2016). The researcher can assert that students necessitate a variety of diverse experiences, including various diverse text structures, diverse Socratic seminar discussions, and engagement in global conversations to build their willingness of students to become global citizens in order to contribute to being globally literate and collegiately prepared. Through the integration of multicultural pedagogy into the instructional methodologies of an English Language Arts curricular scope and sequence, the researcher can assert that the multicultural methodologies may provide experiences to support the enhancement of rural students to willingly become global citizens.
Because of the statistically significant results for the factor of willingness to become a global citizen, it is crucial that educators provide the opportunities for rural public school students to build their willingness to become global citizens including utilizing multicultural frameworks for teaching and multicultural instructional methodologies. By including diverse texts and multicultural pedagogical constructs, students will be afforded opportunities to be exposed to instructional methodologies that they rarely encounter in traditional instructional practices. Through utilizing multicultural pedagogical constructs, instructors may provide students with opportunities to build their willingness to become global citizens by providing interesting and innovative ways of learning about the ever-changing global world.

The second research question in the current study examined whether there was a difference in the composite global literacy rates between the multicultural pedagogy grouping of students when compared to the traditional grouping of students. The hypothesis was that participants in the multicultural pedagogy training group will score higher on the composite global literacy score than participants in the non-multicultural pedagogy training group.

After analysis of an ANCOVA while controlling for the pretest assessment, the results indicated that there was no statistically significant difference between the multicultural pedagogy grouping of students and the traditional grouping of students on the composite global literacy scores. Because of the results of the ANCOVA, the results did not support the hypothesis that was associated with Research Question 2. Although the results did not support the hypothesis for Research Question 2, subsequent research
should afford a longer duration of time to include various modes of multicultural instruction. More multicultural instruction may provide varying results.

The third and final research question in the current research study examined whether there was a difference between the college preparedness of students who go through a multicultural pedagogy training unit when compared to students who do not go through multicultural pedagogy. The hypothesis was that participants in the multicultural pedagogy training group will score higher in college preparedness than participants in the non-multicultural pedagogy training group.

After analyzing the data from an ANCOVA while controlling for the influence of the pretest scores, the results indicated a statistically significant difference between the college preparedness of the students in the multicultural pedagogy grouping and the traditional grouping. The researcher can assert that the results supported the hypothesis indicating that students in the multicultural pedagogy training group were higher in college preparedness than participants in the non-multicultural pedagogy training group because of the influence of the multicultural pedagogy.

Indiana University (2016) defines college preparedness as “The measurement of students’ high school academic and co-curricular experiences as well as their expectations for participating in educational purposeful activities during the first year of college” (p. 1). Being collegiately prepared consists of academic coursework along with extracurricular experiences, and the ability to participate in diverse environments that promote the respect of diversity in all facets of engagement.

The multicultural pedagogical constructs, specifically utilizing multicultural literature allowed students to engage with various texts that were written by diverse
authors. Students who were engaged with the multicultural pedagogy had higher college preparedness when compared with students who were engaged with the traditional instructional patterns. With this notion, the multicultural pedagogy provided students with opportunities to engage in conversations that endorsed the diverse receptive growth of knowledge and perceptions. Students were able to utilize cognitive strategies, utilize knowledge of content areas, have conversations that engaged differing viewpoints, and understand the usefulness of learning skills and techniques from diverse content areas.

Because of the results of Research Question 3, it is necessary that educators provide rural public school students with the multicultural instructional methodologies to contribute to the collegiate preparedness of students. With the ability to engage students with nontraditional conversations, it better equips students with the ability to work within heterogeneous environments following graduation as they move into college or into the workforce.

Implications and Recommendations

The findings of the current research study clearly indicate a statistically significant difference for the global literacy factor of willingness to become a global citizen between the rural grouping of students when compared to an urban sample. In addition, the findings also clearly indicate a statistically significant difference between the college preparedness of the students in the multicultural pedagogy grouping and the traditional grouping.

Because of the results of Research Question 1 and Research Question 3, educators should take note that the influence of multicultural pedagogy may play a role within the willingness to become global citizens and college preparedness of rural public school
students. Because of this notion, educators and administrators must begin to shift their instructional methodologies to include multicultural literature and other resources within their curricular scope and sequential framework in order to assist in the educational foundations of multiculturalism for rural public school students (Basbay, 2014). Curriculum planning for rural public schools should indicate changes in incorporating diversity into the instructional planning models.

In addition, as a result of the current research study, teacher preparation programs around the country should start to shift their curriculum and instruction courses to include multicultural pedagogical constructs as a component for licensing highly qualified educators. Changes in teacher preparation programs will afford pre-service teachers with the opportunity to learn about the importance of engaging students with diverse contexts and the positive influence that providing multicultural instructional strategies has on students following the conclusion of a multicultural framework (Banks & McGee Banks, 2003).

With all research, there are certain limitations within the scope and sphere of the study. Future studies may duplicate the current research study in terms of location and means of collecting data. In addition, the researcher only had access to a limited number of students to be sampled for the purpose of the study. Future studies should replicate the current study to broaden the research through the use of various rural public schools with a larger sample size.

Another limitation that the researcher faced within the constraints of the research study included the passage of time and instruction that could potentially have affected students’ capabilities. Because the participants were engaged in a pretest and posttest
design, students saw the same survey instrument on more than one occasion in a span of an eight-week unit. Future studies should utilize various design structures, such as a longitudinal approach, with more time to enhance the instructional methodologies and the length between the pretest assessment and the posttest assessment. Additional studies are necessitated to validate the findings to a broader population.

There is a lack of research regarding the impact of multicultural pedagogy on rural students’ global literacy and college preparedness. In order to successfully overcome the limitation experienced in the researcher’s current study, subsequent research should focus on examining various facets of multicultural pedagogy and the effectiveness it has on assisting rural students in education and in becoming globally literate citizens. In addition, subsequent research should also focus on how students become collegiately prepared to work within heterogeneous environments, not solely based on the standardized assessments that delineate their academic ability. The way in which a student is able to work with others from various ethnic, religious, and political groups is equally important as his or her academic ability (Castro, 2014).

As Angelou (2014) once stated, “I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel” (p. 72). It is the duty of educators and of public schools to provide the diverse experiences for students to allow them to become global members of society with respect for the difference that humanity entails and to realize the necessity the global world has for diversity. With the ever-changing global world, it is vital that students recognize the importance for being different and respect the differing viewpoints of those with whom they engage. The success of students is not defined by their test scores, but rather it is
defined by the human beings they become after they graduate from educational institutions. Educators should provide opportunities for students to learn about their own individual strengths, recognize their weaknesses, respect the differences that make the world a unique place, and become agents for change. If students become successful at being good human beings, they will be successful in whatever path they choose to follow and choose to engage in.
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*International Journal of Global Education.* 2(1). 26-34


*Euromentor Journal,* 6(3), 7-17.


Appendix A

Permission from Regent High School
RE: Informed Consent- for your program

John Palan
Tue 11/8/2016 8:30 AM
Kate Kreis

Sure

From: Katie Kreis
Sent: Tuesday, November 08, 2016 7:46 AM
To: John Palan <john.palan@grantparkdragons.org>
Subject: Re: Informed Consent- for your program

Thank you SO much. I will not start anything until after this summer—I have to have the first chapter of my dissertation written and defended prior to data collection. I will send everything your way once it is finalized in the next few months prior to starting.

Thank you again,
Katie

Katie Kreis
English Teacher
Grant Park High School
katie.kreis@grantparkdragons.org

From: John Palan
Sent: Monday, November 7, 2016 3:44:43 PM
To: Katie Kreis
Subject: Informed Consent- for your program

Afternoon. I did confirm with the district attorney this afternoon. The district would need the consent forms to be both parent and student signed (of course with date as well). Please include the scope of the study in the consent forms (your University or Committee Chair will assist you with the requirements). The district, for the temporary file, would need a copy. Key is that we have the consent forms for anyone participating.

Let me know if you have questions and good luck. I'm proud of you.

Dr. John Palan

https://outlook.office.com/owa/?viewmodel=ReadMessageItem&ItemID=AQMkADY5Zj... 3/14/2017
Fw: IRB Approval for Research Study

Katelyn Kreis
Thu 9/14, 8:32 PM
Katelyn Kreis

You forwarded this message on 9/14/2017 8:56 PM

Phish Alert

From: John Palan
Sent: Thursday, September 14, 2017 4:02 PM
To: Katie Kreis
Subject: RE: IRB Approval for Research Study

Katie- once again, you have approval to complete the research study at Grant Park High School.

Dr. John Palan
Superintendent, Grant Park #6

From: Katie Kreis
Sent: Thursday, September 14, 2017 2:10 PM
To: John Palan <john.palan@grantparkdragons.org>
Subject: IRB Approval for Research Study

Hi Dr. Palan,
I am in the process of going through the IRB review for my doctoral program. I am so sorry to bother you again, but I need to ensure that my approval to conduct research at Grant Park is explicit. The research project encompasses me teaching one section of juniors utilizing a multicultural novel (written by a diverse author) and the other section of juniors utilizing a traditional text (written by a white male author). Both sections of juniors will be taking two surveys that I will use for my data analysis. As you know, both sections meet The Illinois Common Core State Standards and are in my curriculum scope and sequential framework for grade 11. Please let me know if I have approval to conduct this research at our school. I appreciate everything you are doing in supporting me through this program! Thank you, thank you, thank you!!

Katie

https://outlook.office365.com/owa/?viewmodel=ReadMessageItem&ItemID=AAMkADll... 9/18/2017
Appendix B

Informed Consent Document
INFORMED CONSENT DOCUMENT

Project Title: THE EFFECTS OF MULTICULTURAL LITERATURE ON RURAL STUDENT GLOBAL LITERACY AND COLLEGE PREPAREDNESS

Principal Investigator: Katelyn E. Kreis

Your child is being asked to participate in a research project conducted through Olivet Nazarene University. The University requires that you give your signed agreement for your child to participate in this project.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask him/her any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you then decide to allow your student to participate in the project, please sign on the last page of this form in the presence of the person who explained the project to you. You should be given a copy of this form to keep.

1. Nature and Purpose of the Project:

The purpose of THE EFFECTS OF MULTICULTURAL LITERATURE ON RURAL STUDENT GLOBAL LITERACY AND COLLEGE PREPAREDNESS is to explore the effects of multicultural literature on rural student global literacy and college preparedness.

2. Explanation of Procedures:

Prior to any research being conducted, the researcher will obtain informed consent from the participants and their legal guardians since participants are under the age of eighteen. Participants will be told that their participation is voluntary and that they are allowed to stop at any time without penalty. Refusal to participate in the research study will have no negative consequences on the student or affect the students’ grade in their English Language Arts class. Because the multicultural literature text and the traditional literature text meet The Illinois Common Core Standards, students will remain enrolled in the classes for the entire duration of the unit. Students who refuse to participate in the research study will not take The Global Literacy Survey (Hsu & Wang, 2010) or The Beginning College Survey of Student Engagement (Indiana University, 2014) that will be utilized for data analysis.

The researcher will compare two classrooms of students, one of which will be given multicultural literature for a six-week unit, and the other of which will be given traditional literature for a six-week unit. Both groupings of students will be taught by the researcher using similar instructional strategies. The only difference between the two groupings of students is the piece of literature being
used as the anchor text for the unit. The multicultural literature grouping and the traditional literature grouping both meet standards and objectives for The Illinois State Common Core Standards.

Students in the multicultural literature and the traditional literature classes will be first administered The Global Literacy Survey (Hsu & Wang, 2010), in addition to demographic questions and The Beginning College Survey of Student Engagement (Indiana University, 2014). Following the survey pretest, students in the multicultural literature grouping will be taught using a multicultural novel approved by The Illinois State Common Core Standards and Grant Park School District #6. The students enrolled in the traditional literature grouping will be taught utilizing a traditional piece of literature as done in the past. The unit engra ined with multicultural literature will take place over a six-week period which will include critical discussions over the text. The unit following the traditional model will include critical discussions as well, but the text will be written from a non-diverse author. Following the unit, both the multicultural literature and the traditional literature classrooms will be administered The Global Literacy Survey and The Beginning College Survey of Student Engagement for a second time as a survey posttest.

3. **Discomfort and Risks:**

   Students participating in the multicultural literature grouping will be asked to read multicultural and diverse texts and pieces of literature. They will engage in critical discussions regarding diversity, social justice, equality, and respect. Some of the materials and discussions that will occur will be sensitive topics. Students may feel uncomfortable or be offended from the materials and/or the discussions.

4. **Benefits:**

   The current research study is important for the contributions it could make to academia, specifically the education of rural public school students in a Midwestern state. By examining the effects multicultural literature has on rural student global literacy, this research study will address a curricular and educational need for rural public school students. Along with addressing the academic needs of students, this research study also will address the influence that multicultural content has on rural student college preparedness. Furthermore, evidence provided by this current research study may assist in providing the educational knowledge, tools, and skill-sets to advance the education of rural public school students to be able to work within diverse environments following high school graduation.

5. **Confidentiality:**

   All participant information will be held in the strictest confidence. Students will participate in the two surveys anonymously and will be given numerical coding.
The informed consent forms and the survey tools will be collected separately to ensure the strictest confidentiality. Data will be saved for three years at Olivet Nazarene University and on an electronic flash drive only accessible to the researcher.

6. **Refusal/Withdrawal:**

Refusal to participate in this study will have no effect on any future services you may be entitled to from the school. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

*You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.*

_____________________________  ____________________________
Signature of Participant        Date

_____________________________  ____________________________
Witness                        Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY THE OLIVET NAZARENE UNIVERSITY INSTITUTIONAL REVIEW BOARD
INFORMED CONSENT DOCUMENT

___________________________________  ________________________
Signature of Participant               Date

___________________________________  ________________________
Witness                                Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT
THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY
THE OLIVET NAZARENE UNIVERSITY INSTITUTIONAL REVIEW BOARD
Appendix C

Informed Consent Document for Minors
INFORMED CONSENT DOCUMENT
FOR RESEARCH INVOLVING MINORS

I, ________________________________, understand that my parents and or
guardians have given permission for me to take part in a project about The Effects of
Multicultural Pedagogy on Rural Student Global Literacy and College Preparedness
under the direction of Ms. Katelyn Kreis.

My participation in this project is voluntary, and I have been told that I may stop my
participation in this study at any time. If I choose not to participate, it will not affect my
grade in any way. There will be no negative consequences for students or parents of
students who choose not to participate.

Student Signature ________________________________    Date __________________

Note: For children unable to read and sign written assent forms, a verbal script for
assent should be submitted in lieu of the above.
Appendix D

Permission to Utilize and Publish Global Literacy Survey
Re: Global literacy survey

Hui-Yin Hsu <huiyinh@gmail.com>  
Set 11/5/2016, 10:09 PM  
Katelyn Kreis

Yes you have my permission to use the survey. Dr. Hsu :)

--
Hui-Yin Hsu, Ph.D  
Chair & Associate Professor, Teacher Education  
School of Interdisciplinary Studies and Education  
New York Institute of Technology  
Phone: (516) 686-1322  
Email: hhsu02@nyit.edu  
http://iris.nyi.edu/~hhsu02

Sent from my iPhone

On Nov 5, 2016, at 12:24 PM, Katelyn Kreis <kreis@olivet.edu> wrote:

--
Re: Global literacy survey

Please see attached for the survey. Let me know if you have any questions. Best of luck! Dr. Hsu :)

--
Hui-Yin Hsu, Ph.D  
Chair & Associate Professor, Teacher Education  
School of Interdisciplinary Studies and Education  
New York Institute of Technology  
Phone: (516) 686-1322  
Email: hhsu02@nyit.edu  
http://iris.nyi.edu/~hhsu02

Sent from my iPhone

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Re: Global literacy survey

Hui-Yin Hsu
Sat 4/7, 8:40 AM
Katelyn Kreis

Inbox

You forwarded this message on 4/8/2018 3:07 PM

Phish Alert  Action Items

Yes of course! Dr. Hsu :)

Check out my article - E-Learning: An Essential Tool For Improving The Public Teacher Corps

Hui-Yin Hsu, Ph.D.
Chair and Professor/President of CAAPS
Teacher Education | School of Interdisciplinary Studies and Education
New York Institute of Technology
Tel: 516.686.1322 | Fax: 516.686.7655
Wisser Library | Room 335 | Old Westbury Campus

Sent from my iPhone

On Apr 6, 2018, at 7:08 PM, Katelyn Kreis <kekreis@olivet.edu> wrote:

Good Evening, Dr. Hsu,

I hope this email finds you well. Last year, you provided me with permission to utilize your survey instrument (Global Literacy Survey) as a part of my doctoral studies at Olivet Nazarene University. I am in the final stages of writing my dissertation, and I was wondering if I could have your permission to publish the survey tool in the appendix of my dissertation. I have given you full credit for the survey and the instrument throughout my entire dissertation. If you could please let me know at your earliest convenience, I would greatly appreciate it.

Your research has been instrumental in my study, and I have been inspired by the work you did in New York.

https://outlook.office.com/owa/projection.aspx
Appendix E

Global Literacy Survey Instrument
Global Literacy Survey

The purpose of this questionnaire is to collect data for a global literacy research project. It is designed to assess your perceptions of global literacy. Completion of the survey will require about 15 minutes of your time. Usually it is best to respond with your first impression, without giving any single question or much thought. Your answers will remain confidential and only researchers will be able to access your responses. Your participation is entirely voluntary. You can withdraw at any time without penalty.

Please circle the letter of the appropriate demographic information.

• Gender:
  a) Female           b) Male

• Your age: _________________

• Years you have been using computer (at home or at school):__________

• Which city (country if not in U.S.) were you born? _____________
• Which city do you live in? ______________________
• How many years have you been living in this city?_____________

• Ethnicity and Race:
  a. Caucasians (Non-Hispanic)
  b. African-American (Non-Hispanic)
  c. Asian/Pacific Islanders
  d. Latino or Hispanic
  e. Native American
  f. Others

• GPA up to this point:_______________

• How many languages can you speak fluently other than your native language?
  a. None.
  b. One.
  c. Two.
  d. Three or more
Please indicate your agreement with the following statements.

1. In order to facilitate cultural exchange, we can keep our own cultural identity while remaining open-minded to others.

2. I do NOT believe that our unique US culture can coexist harmoniously with others.

3. I believe that our country follows the international law and regulations in a global society.

4. Our country will continue to develop and become stronger without support and assistance from other countries.

5. I believe our country collaborates frequently with other countries to resolve world issues (e.g. greenhouse effect, poverty, human rights).

6. I believe that the pattern of development, lifestyle and values of developing countries are affected by the developed countries.

7. An individual plays an important role in the process of achieving world peace.

8. I do NOT believe that the world issues will be resolved in the future.

9. I need to be aware of the world trends and their impact on the global society.

10. The law and order of our global society remain stable now.
11. The United Nation plays a proper role in resolving international affairs.

12. It is important that I become a global citizen.

13. I pay great attention to the international affairs.

14. I do NOT usually pay attention to the information regards to world politics, economics or culture.

15. I am willing to understand a different culture.

16. I am willing to respect a different culture.

17. I like to (or I want to) study or travel abroad.

18. I have strong skills to use computer technologies to research information and communicate with others.

19. I know how to research further in-depth information for a specific international issue.

20. If I want my friends to be aware of an international issue, I know how to research, evaluate, analyze and present the information to them.

21. Schools should be responsible for cultivating students’ global awareness.

22. I do NOT enjoy the global awareness related events hosted in my school.

23. My teachers have been doing a great job in guiding me understand the world culture.
24. I believe people who live in U.S. should be able to utilize English fluently in addition to their first language.

25. If expenditure is not a concern, I would like to purchase a hybrid car, even though its speed is slower than a regular car.

26. In your opinion, what are the most THREE urgent issues that US should take care immediately?
   A. Human rights,
   B. Economy equality
   C. Social justice
   D. Conservation
   E. World peace
   F. Regional collaboration with U.S. nearby countries
   G. Educational equality

27. In your opinion, what factor causes the conflicts among different cultures?
   A. Differences between developed countries and less developed countries or developing countries
   B. Differences in cultural norms and practices
   C. Lack of understanding of a specific culture

28. In your opinion, what is the biggest threat to human beings?
   A. Terrorism
   B. World war
   C. Energy shortage
   D. Nuclear power
   E. Epidemic diseases
   F. Environmental deterioration
   G. Others

29. What kind of interactional news do you pay most attention to?
   A. Military.
   B. Politics.
   C. Economy.
   D. National security.
   E. Culture.
   F. Others
30. Which is your favorite approach to understand this world?
   A. Classroom learning
   B. Media
   C. Travel
   D. Communicate face to face with people from different countries
   E. Others

31. How do you obtain the information and knowledge about international affairs?
   A. Classroom learning,
   B. School activities
   C. TV, radio, newspaper
   D. WWW
   E. Books
   F. Travel
   G. Others

32. Does your school organize any activities to interact with schools abroad?
   A. Often
   B. Occasionally
   C. No

33. Given a cross-cultural assignment, with whom do you want to collaborate if they all speak fluent English?
   A. French student
   B. British student
   C. Chinese student
   D. Japanese student
   E. India student
   F. Egypt student
   G. Others

34. What are activities you would often do as a global citizen?
   A. Recycle
   B. Save energy
   C. Participate parades such as anti-war, anti-children labor
   D. Help my family or friends understand the importance of environmental protection
   E. Write articles to advocate the importance of global awareness related issues on the web
   F. Donate to support children in poverty and help them get access to education
   G. Discuss international news or events with my family or friends
   H. Never
   I. Others
Appendix F

Beginning College Survey of Student Engagement Licensing Agreement
The National Survey of Student Engagement’s (NSSE) survey instrument, the *Beginning College Survey of Student Engagement*, is copyrighted and the copyright is owned by The Trustees of Indiana University. Any use of survey items contained within the *Beginning College Survey of Student Engagement* is prohibited without prior written permission from Indiana University. When fully executed, this Agreement constitutes written permission from the University, on behalf of NSSE, for the party named below to use an item or items from the *Beginning College Survey of Student Engagement* in accordance with the terms of this Agreement.

In consideration of the mutual promises below, the parties hereby agree as follows:

1) The University hereby grants Katelyn Kreds ("Licensee") a nonexclusive, worldwide, irrevocable license to use, reproduce, distribute, publicly display and perform, and create derivatives from, in all media now known or hereafter developed, the item(s) listed in the proposal attached as Exhibit A, solely for the purpose of including such item(s) in the survey activity described in Exhibit A, which is incorporated by reference into this Agreement. This license does not include any right to sublicense others. This license only covers the survey instrument, time frame, population, and other terms described in Exhibit A. Any different or repeated use of the item(s) shall require an additional license.

2) In exchange for the license granted in section 1, Licensee agrees:

   a) there will be no licensing fee to use NSSE items for the purposes described in Exhibit A;

   b) to provide to NSSE frequency distributions and means on the licensed item(s);

   c) on the survey form itself, and in all publications or presentations of data obtained through the licensed item(s), to include the following citation: "Items xx and xx used with permission from the *Beginning College Survey of Student Engagement*, National Survey of Student Engagement. Copyright 2001-017 The Trustees of Indiana University";

   d) to provide to NSSE a copy of any derivatives of, or alterations to, the item(s) that Licensee makes for the purpose of Licensee’s survey ("modified items"), for NSSE’s own nonprofit, educational purposes, which shall include the use of the modified items in the *Beginning College Survey of Student Engagement* or any other survey instruments, reports, or other educational or professional materials that NSSE may develop or use in the future. Licensee hereby grants the University a nonexclusive, worldwide, irrevocable, royalty-free license to use, reproduce, distribute, create derivatives from, and publicly display and perform the modified items, in any media now known or hereafter developed, and
Beginning college survey of student engagement

c) to provide to NSSE, for its own nonprofit, educational purposes, a copy of all reports, presentations, analyses, or other materials in which the item(s) licensed under this Agreement, or modified items, and any responses to licensed or modified items, are presented, discussed, or analyzed. NSSE shall not make public any data it obtains under this subsection in a manner that identifies specific institutions or individuals, except with the consent of the Licensee.

3) This Agreement expires on December 31, 2017.

The undersigned hereby consent to the terms of this Agreement and confirm that they have all necessary authority to enter into this Agreement.

For The Trustees of Indiana University:

Alexander C. McConnell
Director
National Survey of Student Engagement

For Licensee:

Katelyn Kreig
Student
Oliver Nazarene University

For Advisor:

Dr. Darsey Brady
Faculty
Oliver Nazarene University

Indiana University Center for Postsecondary Research
1900 East Tenth Street • Sigvaldahl Hall, Suite 110 • Bloomington, IN 47408
Phone: (812) 856-1425 • Fax: (812) 856-1550 • E-mail: nssr@indiana.edu • Web address: www.nssr.iub.edu

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Appendix G

Beginning College Survey of Student Engagement Survey Instrument
Beginning College Survey of Student Engagement

We are interested in your high school experiences and how often you expect to participate in certain activities during your first year of college. The information that you provide will help your institution improve teaching, learning and the quality of the student experience. Thanks for your help. Write or mark your answers in the boxes. Examples: ☑️ or ☐️

Please print your student ID number in the box below. Do not print your Social Security number.

Please write in the 5-digit ZIP code of your home during your last year of high school.

(U.S. residents only.)

HIGH SCHOOL EXPERIENCES

1. Please write in the year you graduated from high school (for example, 2017):

2. From which type of high school did you graduate? (Select only one.)
☐ Public ☐ Home school
☐ Private, religiously-affiliated ☐ Other (GED, etc.)
☐ Private, not religiously-affiliated

3. What were most of your high school grades? (Select only one.)
☐ A+ ☐ B+ ☐ C+ ☐ Grades not used
☐ A ☐ B ☐ C ☐ A- ☐ B- ☐ C- or lower

4. To date, in which of the following math classes have you earned a grade of "C" or better? (Select all that apply.)
☐ Algebra II ☐ Pre-Calculus/Trigonometry
☐ Calculus ☐ Probability or Statistics

5. If you completed the SAT and/or ACT, enter your scores below (as best you remember):

SAT (possible range=200-800)
Reading & Writing
Math
Composite

ACT (possible range=1-36)

Are these SAT scores from March 2016 or later?
☐ Yes ☐ No

6. During high school, how many of the following types of classes did you complete?

 Classes: 0 1-2 3-4 5-6 7-8 9-10 11 or more
a. Advanced Placement (AP) ☐ ☐ ☐ ☐ ☐ ☐ ☐
b. College or university courses for credit ☐ ☐ ☐ ☐ ☐ ☐ ☐
c. International Baccalaureate (IB) ☐ ☐ ☐ ☐ ☐ ☐ ☐

7. During your last year of high school, about how many papers, reports, or other writing tasks of the following lengths did you complete?

a. Up to 5 pages
☐ None ☐ 1-2 ☐ 3-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ More than 20
b. Between 6 and 10 pages
☐ None ☐ 1-2 ☐ 3-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ More than 20
c. 11 pages or more
☐ None ☐ 1-2 ☐ 3-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ More than 20

8. During your last year of high school, about how many hours did you spend in a typical 7-day week doing the following?

a. Preparing for class (studying, reading, doing homework, etc.)
☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

b. Working for pay
☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

c. Participating in co-curricular activities (organizations, school publications, student government, sports, etc.)
☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

d. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)
☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

9. During your last year of high school, of the time you spent preparing for class in a typical 7-day week, about how much was on assigned reading?

☐ Very little ☐ Some ☐ About half ☐ Most ☐ Almost all

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### During your last year of high school, about how often did you do the following?

**Very often** | **Often** | **Sometimes** | **Never**
--- | --- | --- | ---
1. Came to class without completing readings or assignments
2. Prepared two or more drafts of a paper or assignment before turning it in
3. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)
4. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)
5. Evaluated what others have concluded from numerical information
6. Identified key information from reading assignments
7. Reviewed your notes after class
8. Summarized what you learned in class or from course materials
9. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments
10. Examined the strengths and weaknesses of your own views on a topic or issue
11. Tried to better understand someone else’s views by imagining how an issue looks from their perspective

### During your last year of high school, to what extent did your courses challenge you to do your best work?

Not at all | Sometimes | Often | Very much
--- | --- | --- | ---
12. | | | |

### EXPECTED FIRST YEAR EXPERIENCES

### During the coming school year, about how many hours do you expect to spend in a typical 7-day week doing the following?

**Hours per week**

**a.** Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)

- 0
- 1-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26-30
- More than 30

**b.** Working for pay on or off campus

- 0
- 1-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26-30
- More than 30

**c.** Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)

- 0
- 1-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26-30
- More than 30

**d.** Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)

- 0
- 1-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26-30
- More than 30

### During the coming school year, of the time you expect to spend preparing for class in a typical 7-day week, about how much will be on assigned reading?

- Very little
- Some
- About half
- Most
- Almost all

### During the coming school year, about how often do you expect to do the following?

**Very often** | **Often** | **Sometimes** | **Never**
--- | --- | --- | ---
13. | | | |

- Ask another student to help you understand course material
- Explain course material to one or more students
- Prepare for exams by discussing or working through course material with other students
- Work with other students on course projects or assignments
15. During the coming school year, about how often do you expect to do each of the following? (Continued)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Very Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>e. Talk about career plans with a faculty member</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Work with a faculty member on activities other than coursework (committees, student groups, etc.)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g. Discuss your academic performance with a faculty member</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h. Discuss course topics, ideas, or concepts with a faculty member outside of class</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>i. Prepare two or more drafts of a paper or assignment before turning it in</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>j. Come to class without completing readings or assignments</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

16. During the coming school year, about how often do you expect to have discussions with people from the following groups?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Very Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. People of a race or ethnicity other than your own</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. People from an economic background other than your own</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. People with religious beliefs other than your own</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. People with political views other than your own</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

17. During the coming school year, how certain are you that you will do the following?

<table>
<thead>
<tr>
<th>Certainty</th>
<th>Not at all certain</th>
<th>Very certain</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Study when there are other interesting things to do</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Find additional information for course assignments when you don't understand the material</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Participate regularly in course discussions, even when you don't feel like it</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Ask instructors for help when you struggle with course assignments</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Finish something you have started when you encounter challenges</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Stay positive, even when you do poorly on a test or assignment</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

18. During the coming school year, how difficult do you expect the following to be?

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Not at all difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Learning course material</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Managing your time</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Paying college or university expenses</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Getting help with coursework</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Making new friends</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Interacting with faculty</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

19. During the coming school year, about how often do you expect to seek help with coursework from the following sources?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Very Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Faculty members</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Academic advisors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Learning support services (tutoring, writing center, success coaching, etc.)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Friends or other students</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Family members</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Other persons or offices</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

20. How prepared are you to do the following in your academic work at this institution?

<table>
<thead>
<tr>
<th>Preparedness</th>
<th>Not at all prepared</th>
<th>Very prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Write clearly and effectively</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Speak clearly and effectively</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Think critically and analytically</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Analyze numerical and statistical information</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Work effectively with others</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Use computing and information technology</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g. Learn effectively on your own</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>