PROMOTING GLOBAL COMPETENCE AMONG HIGH SCHOOL STUDENTS

by

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Submitted to the Graduate Faculty of
the School of Education in partial fulfillment
of the requirements for the degree of

Doctor of Education

University of Pittsburgh

2018
UNIVERSITY OF PITTSBURGH
SCHOOL OF EDUCATION

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Applying a mixed methods approach, the researcher explores how students in a suburban, Western Pennsylvania-area high school develop global competence through an Introduction to Global Studies (IGS) course. The study site is a home to 1763 students located in an affluent and predominantly white suburb with a strongly motivated teaching staff, high levels of student performance, with an engaged community and families’ participation. This site was chosen because it afforded the best of only two available local opportunities to study an existing global studies curriculum. The two areas of inquiry included the level of incoming students’ knowledge and skills as related to global competence and how the design and implementation of the IGS course impacted students’ global competence aptitude and critical thinking skills. Incoming students’ global competence aptitude was measured by administering the Global Competence Aptitude Assessment (Hunter, 2006) to 20 students and compiling results according to different scales. The impact of the IGS course on these students’ further development was examined through in class observations later analyzed employing Paul and Elder’s (2007) Critical Thinking Competency Standards. The results point to how teacher strategies, including specific emphasis on teaching critical thinking and critical analysis of information, contribute significantly to increasing students' global competence. They also demonstrated the rather low level of incoming students’ global competence aptitude and the role of a highly motivated and globally aware
teacher on the classroom setting and outcomes. Future research on this topic should take advantage of longer time horizons to administer more effective pre and post assessment, address the potential implications of variation in teachers’ competence on course quality, and explore how variation in the resources, culture, socio-economic environment and other factors across school districts could impact outcomes.
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PREFACE

I believe that most people having taken a path in obtaining an advanced degree, while simultaneously juggling life in all its complexities, would agree that such a journey cannot be traveled alone. I, too, would not be at this point without all who have generously shared of their time, expertise, respect, encouragement, and love.

This project in its entirety would have not happened without Dr. Lovorn, Dr. Donato, and Dr. Bromberg. You have provided me with substantive feedback, challenging ideas, and concrete suggestions to make my project the best it can be and I am forever grateful for your expertise and time. To Julianne, who always found time to prepare and share in advance information that made it easier for me to conduct this study while never lacking enthusiasm, knowledge, and passion for teaching, I am endlessly thankful. Equally, I am thankful to the wonderful class of students who agreed to partake in my research. Without them, this study would not exist.

To friends and colleagues who, on short notice and many requests, provided me with vital feedback, editorial comments, as well as necessary technical and other details that made my search for information so much easier – thank you Bill, Patrick, Jacqueline, Mark, Dr. Porter, and my LLC group. Without your support and encouragement, I would have been lost.

To my Global Studies colleagues: Michael, Roger, Veronica, Elaine, Lisa, and Jessica, you made it possible for me to fulfil my goal while working full time. Only your supportive environment, full of encouragement and trust, made this happen.
To Deanna, who inspired me to embark on this journey and kept encouraging me throughout, I admire your ability to keep going no matter how difficult it got.

To Sue – THANK YOU for loving and encouraging my kids to be everything they are and want to be, and for all the hugs and kisses you gave them at times when I wasn’t around. I am honored to call you our Grandma Sue!

To Mom and Dad Konitzer, who trusted in me and, throughout, offered me words of encouragement and praise. I am grateful for your never-ending support and for continually telling me how proud you are.

To Mama i Tata Budovalcev – for always believing in me and never once questioning my motives and dreams. Your hard-working ethics taught me that I can accomplish anything! Your trust in me is what continually gives me strength to never give up!

Moje ljubavice: Sasha, Doroteja, i Olivija – you never ceased to amaze me! Thank you for always giving me time and space to finish my “homework” while not once making me question my motherhood/parenthood. This is what makes each one of you my superhero! You are my life and I love you.

Finally, to you Andy – thank you! For never-ever giving up on me and for always being right there by my side especially during my many missteps. For your encouragement, your belief in me, and for your reasoning and “advices” from the moment we got together 14 years ago. I am eternally grateful for you being the person you are; intelligent, funny, hard-working, selfless, and loving. I am grateful to you for sharing this life with me, I love you.
1.0 PROBLEM STATEMENT

Our highly interconnected and global world increasingly compels schools to consider changes to the current curriculum to promote the development of globally-competent students. Recent developments of social-networking, texting, and emailing, have revolutionized global communication and connectivity, placing a wealth of information in the hands of children and young adults (Johnson, Boyer, & Brown, 2011) creating possibilities for instant access to information and interaction among people around the world. With access to the vast repositories of information, the students’ curious minds are exposed to information influencing their knowledge, the lens through which they view the world around them, and the role they decide to play in contributing to the future. Numerous political, environmental, technological, and other geo-political changes of the recent past, including the West’s relationship with Russia, the Syrian civil war and its refugees, and the U.S. withdrawal from the Climate Agreement, attach increasing importance to study abroad, the learning of foreign languages, and the overall globalization of curricula (Shams & George, 2006). According to some specialists it is now essential to provide future citizens of the increasingly multicultural and multilingual world with the necessary social and cultural tools to address new, more global, challenges (Brodin, 2010). During this period of rapidly developing economic interactions, population movements, and highly connective digital technologies, specialists are cultivating an educational discourse around students becoming global citizens (Merryfield, 2008; Zhao, 2010). Educational leaders
must create the bases for future generations to interact “peacefully, respectfully, and productively” (Reimers, 2009). Reimers further notes, the lack of global competence as a policy priority and as an agreed upon set of knowledge and skills hinders implementation at schools world-wide, as such presenting challenges in developing the knowledge base opportunities for teacher preparation and high-quality instructional material.

Grounding his extensive research and work in the field of global education, and education in general, Reimers (2009) defines global competence as the knowledge and skills that help students comprehend the importance of global events and issues across disciplinary domains. Ferreira (2012) in her research concluded that students “need to understand interrelationships of people worldwide in preparation for their participation as global citizens” (p. 19). Her findings in a study of high school students from 14 different schools revealed that students were lacking in the skills necessary to meet new global challenges. Furthermore, given the recent U.S. political climate, political discourse around Brexit in the United Kingdom, and various conflicts taking place around the world, it is essential to obtain the necessary skills to understand, respect, and acknowledge the interactions of these global events.

Responding to these urgent needs, I seek to understand how high school students critically analyze, interpret, and understand their learning experiences in an Introduction to Global Studies class in a globally-focused curriculum. The overall purpose of students’ engagement in this class is to think critically while examining how global interactions and processes occur and are interrelated. In this course, the teacher aspires to teach skills through content by explicitly instructing students to think about multiple perspectives, how to engage with certain texts, and how to participate in deliberative dialogue. For the purpose of this study, a
skills through content approach fits well as the skills become more permanent while content changes over time (i.e. Brexit, Syria, etc.).

As previously stated, in today’s interconnected world, students have access to information and a responsibility to address contemporary global problems. However, many lack the skills and knowledge, i.e., global competence, with which to address these problems. My aim is to explore students’ global competence in a newly-developed high school elective course to determine how global competence is taught and learned. While researchers collectively argue that our educational system inadequately deals with the challenges of a new globalized world, there are sufficient efforts underway to address this problem whereby we can now step back and assess whether these early efforts are meeting new demands, and to also better understand the challenges facing any globalized curriculum in real world settings.

There exists general agreement that students’ knowledge, skills, and attitudes are critical to obtaining global competence. However, this agreement is complicated by the varying nuances of the researchers’ approaches to obtaining global competence and what motivates their definitions. As I demonstrate below, the literature in global competence is largely concerned with students’ communication skills and how students are able to engage with people from diverse backgrounds, learn to speak the language, and communicate effectively to solve problems. For others, a discourse around global competence revolves around individual values and instilling an ethical attitude in solving global issues of war, poverty, and inequalities, to name a few. Furthermore, for some, there appears to be an increased emphasis on the necessity to equip students with real world skills for addressing real-world problems. Reflected in definitions and motivations behind a discussion of global competence is an agenda that some consider to be too liberal and that politics has no place in the classroom. On the other hand, there
may be more interest in preparing students for jobs. In this case, education is considered to be a form of capital – it educates and produces individuals ready to profit in the global marketplace building. My position within this debate is that while all definitions of global competence are important, I attempt a more neutral ground and concentrate on students’ knowledge and skills as the two most important factors shaping the student to take an active role in being a member of the interconnected world.

1.1 CONTEXT OF THE STUDY

1.1.1 Inquiry Setting

The site for my study is a suburban high school in a Western Pennsylvania community characterized by a strong commitment to education and active parental involvement with the school district. Responding to ever evolving global challenges, the high school currently offers its students an opportunity to participate in a global studies program and to take a select number of courses analyzing current global trends and issues. One such course is the Introduction to Global Studies. By selecting courses within the global studies program, students explore, interpret, and respond to global processes that impact politics, social relations, the environment, and other key issues. It is important to note that students self-select into Introduction to Global Studies and are more likely to have a higher interest and global focus than other students in this high school.

This subject suburban high school has a student population whereby 93% of graduates enroll in post-secondary programs. The school takes particular pride in a motivated student body,
a highly-skilled teaching staff, and a high involvement of parents and community members. The average student/teacher ratio is 23:1 and within the district, there are 337 teachers with advanced degrees. The school and its constituency are committed to mastering core academic objectives in developing student competencies, particularly in meeting the myriad global challenges of the 21st century.

1.1.2 Teacher Credentials

The Introduction to Global Studies course instructor, A.K.A. “Ms. Smith”, has been teaching at the subject institution (henceforth known as the “school”) since fall of 2003. Prior to teaching in the school, Ms. Smith taught at other Pennsylvania school districts for two years. In addition to her current teaching assignment at the school, Ms. Smith has been the Social Studies department chair since the fall of 2016. She is fully certified and has received both Bachelors and Master’s degrees in the State of Pennsylvania.

Ms. Smith has an espoused focused devotion to, and passion for, facilitating students’ development of competencies in understanding the interconnectedness of our world. When asked about her position as to why the Introduction to Global Studies course is important for students, she responded:

“I think Global Competency should be a requirement of all high school students in the United States. Students need to have an awareness about international and transnational concerns. Without this awareness, I worry that they are susceptible to false information, dramatized scenarios, or limited thinking about places and people different from the communities most familiar to them. They ought to have an appreciation of cultural diversity and an understanding about the many ways in which the world's people are
increasingly interconnected. They also need to think critically about their role in global systems and be asked to consider how they can make a positive difference, both immediately and in the future, through the choices they make.” (J. Smith, personal conversation, October 30, 2017).

As further evidence to Ms. Smith’s point about the importance of this course and what the course is attempting to achieve, students are expected to view themselves as change agents as their awareness about globalization and global concerns shifts over time.

1.1.3 Introduction to Global Studies Course

The Introduction to Global Studies course (henceforth referred to as “IGS”) is a college preparatory course. IGS is scheduled daily, Monday through Friday, during the first period starting in January and ending at the end of the academic year. Importantly, even though a college preparatory course, it is not offered throughout the full academic year, thus is not considered for college. Students who select IGS are either participating in the school’s established Global Studies Program (henceforth referred to as “GSP”) or are taking the course as an elective.

To further describe the connection between the IGS class and the GSP, it is helpful to know that the current GSP offers students three levels of participation: (a) students can choose to select any course from the GSP list of courses, including Introduction to Global Studies, International Relations, Anthropology, World Language, Comparative Religions, etc.; (b) students can select any course from the GSP list of courses, as well as participate in external opportunities including extracurricular and co-curricular experiences, which allow students to explore the wide variety of careers that require global competence; and (c) students can participate fully in the GSP,
resulting in students’ receiving a Global Studies certificate upon the completion of the program.

The IGS class stands out on the list of available courses as available to all students in the school. For example, students participating in the full GSP tract that leads to a certificate may choose the aforementioned International Relations (IR) class which is embedded in the field of political science. However, it is considered an Honors Level (HL) as well as an Advanced Placement (AP) class. Thus, this course is only available to higher achieving students with access to various other options. At the time the GSP was being designed, select teachers within the school, including Ms. Smith, advocated for a program that was accessible to all students. Thus, IGS was created without a designation as an HL or AP level course. As a school wide interdisciplinary course, IGS became available to all regardless of academic standing.

From a curricular point of view, the IGS course is designed to provide students with knowledge and skills necessary to investigate the global perspective, communicate ideas, and present actions as citizens of an interconnected world. Specifically, IGS sets out the following objectives:

- Students become familiar with the major economic/political/cultural dimensions of globalization;
- Students gain awareness about ways peoples’ lives are interconnected with major global players;
- Students consider how their lives and choices are connected to global concerns (i.e. climate change, food security, wealth inequality, etc.);
- Students navigate the complexity of transnational concerns and the discourse surrounding those concerns;
- Students are informed about major global issues that will affect their future; and
Students consider one’s ability to enact transnational change.

Ms. Smith aspires to teach students skills through content and appreciate the value of learning about cultures. This is accomplished by explicitly instructing students to think about multiple perspectives, how to engage with certain text, and how to participate in deliberative dialogue.

1.1.4 Stakeholders and Student Population

As of September 2017, the school is a home to 1,763 students. According to the Pennsylvania School Performance Profile (2016), 5.47% of the student body are gifted students. The School District is predominantly white (88%), with a smaller percentage of diverse groups comprised of 6% Asian, 2.65% Hispanic, and 2% African American. Of the students enrolled, there is a near equal distribution in students’ gender (female 49.22% and male 50.78%). Economically disadvantaged students represent 9% of the student population.

1.2 PROBLEM OF PRACTICE AND RESEARCH QUESTIONS

The problem of practice I have selected to analyze is related to understanding how high school students critically analyze, interpret, and understand the learning experiences in an IGS course. More specifically, it was important for Ms. Smith to teach skills through content such that students would think about multiple perspectives as stated above.

The overall purpose of students’ engagement in this class was to think critically while examining how global interactions and processes occur and are interrelated. It is generally recognized that students’ ability to think critically is a necessary tool for students in order to
address forces of global change, complexity, and interdependence. For the purpose of my research, I defined critical thinking in accord with Elder & Paul (1994) who stated that “Only those minds which are eminently adaptable and flexible, which are experienced in continually thinking and rethinking about issues and problems, and which do not resist questioning and overturning fundamental notions and practices are ready to cope with this irresistible three-fold force (i.e. change, complexity, and interdependence)” (p. 34). The research questions I address are:

1. What are high school students’ knowledge and skills related to global competence?

2. How is the Introduction to Global Studies course implemented to support high school students’ development of global competence?

For the first question, I administered Hunter’s (2006) Global Competence Aptitude Assessment (GCAA) to all students enrolled in the IGS class which assesses students’ knowledge, skills, and attitudes that previous research has shown are necessary for the development of global competence. The findings from this assessment provided me with comprehensive data and reports detailing with students’ present levels of global competence. In addition, the comprehensive reports offered an opportunity to identify students’ area strengths and developmental prospects for enhancing their global competence. This informed my first research question. As to the second research question, a descriptive case study approach examining the implementation of the IGS course through a conversation with the instructor on pre-identified key moments in class helped me to establish, through participant-observation (Yin, 2014), the goals, objectives, and practices of the course. I then used these as a basis for exploring the students’ actual, temporal learning experiences. This method provided rich descriptions of the
global competencies and critical thinking in which students were engaging. The findings from this part of the study informed both of my research questions posited above.

1.3 SUMMARY

Developing students’ global competence and their ability to think critically appear to be issues worthy of pursuit in today’s interconnected and globalized age. My aim was to analyze data from the IGS class and further describe how this class, with Ms. Smith’s instructional strategies, can achieve course goals. The GCAA data of participating students conveyed the need for focusing on students’ aptitude of global competence. In addition, describing a process of the explicit teaching of students to critically analyze information provided an important reason as to why the IGS course can play an integral role in students’ development of global competence.

At times this may appear to be an evaluative study of Ms. Smith and the students in the IGS class, however, this was not my intent. Rather I was interested in conducting a bounded case study, a research design that is descriptive and nonexperimental (Merriam, 1988), to examine how students critically think and understand a globally-focused curriculum; thus, allowing recommendations for using what is learned to help guide the development of any subsequent curriculum.
2.0 REVIEW OF RELATED LITERATURE

2.1 CORE CONCEPTS LINKED TO GLOBAL COMPETENCE

The purpose of this section is to discuss the existing body of scholarship related to high school students’ global competence and their learning experiences in a globally-focused curriculum. While the literature review revealed numerous articles in which authors increasingly utilize a conceptualization of global competence, much of it is inconsistent definitionally. Fujikane (2003), Kirkwood (2001), and Agbaria (2011) stated that “[G]lobal scholars have used such terms as global education, world-centered education, and global perspectives in education interchangeably. Others asserted that each term has its own distinct meaning” (p. 61). Therefore, given the growing importance of global competence within higher and secondary education, it is imperative to more closely examine the concept and explore the common meanings.

One challenge in defining global competence is that terms and definitions are as amorphous and evolving as their ever-changing subject matter. Numerous disruptions around the globe, including terrorist attacks, increasing migration, and climate change, require a rapid response in generating ideas to address such challenges. The varied definitions then depend on context, experiences, and interpretations (Deardorff, 2011) and are established based on certain professional group’s needs and interests (Hunter, White, & Godbey, 2006). For example, teachers teaching a foreign language class in high school or administrators advancing a global
studies curriculum are likely to offer definitions of global competence that reflect a bias premised on agendas and contexts.

Over the last several decades, multiple research terminologies linked to global competence have emerged in the literature. These include *global mindedness*, *global workforce*, *global citizenship*, and *global perspective*. One of the earliest definitions offered by Hett (1993) introduced *global mindedness* as a “worldview in which one sees oneself connected to the world community and feels a sense of responsibility for its members” (p. 143). Further, increased connectedness and interdependence of the world’s people defined *global workforce* (Rosenzweig, 1998). This referred to the challenges transnational companies face as they acquire a workforce that is spread across continents and countries consisting of multinational, multicultural, and multilingual participants. More recently, concepts of *global citizenship* and *global perspective* have emerged. Morais & Ogden (2011) defined *global citizenship* as “a multidimensional construct that hinges on the interrelated dimensions of social responsibility, global competence, and global civic engagement” (p. 449). *Global perspective*, as coined by Merrill, Braskamp, & Braskamp (2012), refers to the “acquisition of knowledge, attitudes, and skills important to intercultural communication and holistic development of more complex epistemological processes, identities, and interpersonal relations” (p. 356).

Throughout the literature, a general consensus of global competence (my research focus) is characterized in terms of three learning dimensions: knowledge, skills, and attitudes. Reimers’ (2010) definition of global competence, noted above, emphasized learning domains that included knowledge, skills, and attitudes. Hunter (2004) defined global competence as “having an open mind while actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate, and work effectively outside one’s
environment” (p. 130-131). Also, a definition of global competence derived by the Asia Society Partnership for Global Learning (Mansilla & Jackson, 2011), as “the capacity and disposition to understand and act on issues of global significance” (p. xiii), conceptually implies utility of the three domains: knowledge, skills, and attitudes.

In attempt to advance a working definition of global competence, Hunter et al. (2006) acknowledged that researchers and educational scholars have since posited definitions to include the “required knowledge, skills, attitudes, and experiences necessary to become globally competent” (p. 274). The knowledge, skills, attitudes and experiences are identifying inputs students are exposed to for the purpose of producing an outcome, a globally competent student.

For the purpose of this research, I define global competence in accord with Reimers’ (2010) definition,

“the knowledge and skills to help people understand the flat world in which they live, integrate across disciplinary domains to comprehend global affairs and events, and create possibilities to address them. Global competencies are also the attitudinal and ethical dispositions that make it possible to interact peacefully, respectfully, and productively with fellow human beings from diverse geographies” (p. 184).

While existing disagreements on the concepts and the definitions continue to persist, scholars agree that knowledge, skills, attitudes, and experiences contribute to students’ global competence. Utilizing the above definition, the remainder of this literature review will be organized around three themes: (a) the historical evolution of global competence; (b) a glimpse into contemporary global studies classroom/characteristics of global studies classroom; and (c) contemporary challenges.
Historical evolution plays an integral role in developing globally competent students. The unprecedented interconnectedness of today’s world has been generating efforts to define global competence since the early 1970s. In the last four decades, numerous authors and researchers developed working definitions of global competence to fit their need and agendas for the interconnectedness of the world in the 21st century. Recognizing that global competence is not a “one-size fits all,” schools have designed and implemented programming to address the need for globally-competent students. It therefore becomes important to emphasize the schools’ persistence in aligning their programming to cultivate globally-ready generations and to point out the characteristics of their programs. The Common Core State Standards articulate the importance of developing global competence and how it is “both a critical outcome of learning and a pathway for achieving the foundational disciplinary and interdisciplinary knowledge and skills” (Jacobs, 2013, p. 3). Therefore, aligning the work infused with the global content to the Common Core State Standards fits an agenda for schools that have adopted these standards.

For program development, it is important to address the additional challenges that are likely to arise when today’s teachers advise students who will live and work in a fundamentally different world than the world the teachers know. Therefore, teachers need to be able to revisit core concepts and align them with the concepts for a deeper and more participatory understanding of the world in which today’s youth live.

2.1.1 Historical Evolution of Global Competence/Global Studies

Global competence – as an international education initiative – plays an important role in the field of global education. Hunter et al. (2006) noted that the first mention of global competence appeared on the 1988 report by the Council on International Educational Exchange as a call to
universities across the U.S. to send students to study abroad. As an educational tool, and in place of a non-existent global curriculum at the time, Hill (1991) and Machorro (2009) documented that study abroad offered students cross-cultural experiences and enhanced their global competence. One important tension arising from this focus on study abroad is that global experience only partially defines global competence and a respectful and peaceful interaction. This gave rise to an awareness that instructors teaching global competence today need to convey global values currently not done in U.S. schools. Current thinking of exposing students to cross-cultural experiences/encounters that students would emerge as globally competent students, in lieu of teachers explicitly teaching a set of global values of learning about other cultures, is not enough.

In recent decades, a perceived need for more globally-infused programs in secondary education has forced many schools to recognize and implement teaching global competence and this has given rise to different models. Initial attempts of teaching about the world focused on social studies, as the “global” primarily concerned the realm of social interactions and politics. In the first “social sciences” stage of the globalization effort, U.S. schools viewed social studies subjects, including history, geography, political science, sociology, language arts/English, and the fine arts, as the main subjects through which students were exposed to the building blocks of global citizenship. At the time, the National Council for the Social Studies (NCSS) asserted that the primary purpose of social studies curriculum was to aid students to develop decision making for the public good, and to equip students with the values needed to live in a culturally and linguistically diverse society (NCSS, 1994).

For the last two decades, adding global competence to an education policy agenda for equipping young adults with the knowledge and skills necessary to be effective citizens of the
21st century is a priority of the Partnership for 21st Century Skills (P21). Along with other leading advocates for educational reform, including The Asia Society, the American Forum for Global Education in the U.S., Oxfam, and Practical Action, P21 views the current educational agenda as incomplete in terms of students’ skills and an acquisition of knowledge necessary for the global age (Partnership for 21st Century Skills, 2009). Standish's (2014) research findings resonated with P21 and he stated that “new global realities including multicultural communities, the global market and post-national politics demand a new approach to schooling” (p. 167). Similarly, the Common Core State Standards, adopted by 42 U.S. states, emphasize skill-based curriculum in which the learned skills are aligned with the content knowledge (Common Core State Standards, 2012).

One example of such activity noted by Standish (2014) describes the fourth-grade social studies lesson:

work in small groups to discuss problems that they have observed or heard about in their school such as bullying or graffiti. Convening as a whole class, students should come to some common agreement about the problems that are most meaningful. After the problem has been selected by mutual consent, students take responsibility for specifying elements of an inquiry into the causes and possible solutions to the problem (p. 178).

Within this activity, the teacher places emphasis upon students’ skills by engaging them in problem solving and communication rather than in advancing the knowledge. Engaging in this activity, the students are introduced to a real-life problem occurring within their immediate environment, are encouraged to work as teams to negotiate the meanings of a given global problem, and are invited to think critically and investigate the possible solutions to the problem.
This type of activity allows students to strengthen their skills and to later approach other problems they encounter in school and beyond.

While a social science curriculum is focusing on the students’ development through a skills-based curriculum, some school districts are moving beyond the conventional scope of social studies and internationalizing a broader spectrum of their programs and curriculum to address the need for globally-competent students. This entails developing a whole range of courses and disciplines with more purposeful global content that addresses real world challenges, making language and intercultural studies an integral part of students’ education, and strengthening any existing international studies programming (Klein, 2013). In instances where internationalization of curriculum is not realistic, due to tensions presented by standardized testing – whereby teachers are evaluated by their students’ performance on the exams and schools are rated based on test scores –, schools opt for various types of “global education” programs. These programs include, but are not limited to a Global Studies Program, a Global Studies Credential, Global Scholars Program and other facets of teaching competence.

Cozzolino DiCicco (2016) describes a type of global education program as one example of this more recent trend: A Global Studies Credential at a school where she observed. The credential included four requirements consisting of core and elective global courses, foreign language (with the intent to reach high level proficiency by taking the same language for three courses, or two courses of the same language and one Less Commonly Taught Language), independent participation in extracurricular and global enrichment experiences, and a final capstone project. In her research, Cozzolino DiCicco (2016) described the newly-established credential program as a necessary addition to the school curriculum reflecting an importance of challenging students living in a connected and interdependent world to understand and share
problems and seek solutions. However, Cozzolino DiCicco (2016) noted some problems with this approach. In her research, she found that the planned integration of teaching about the world into curricular offerings resulted in only the additional credential and several new courses in social studies which subsequently fell significantly short of a globally-infused curriculum as originally intended.

Recognizing a need to educate students to be informed and capable global citizens, Reimers (2011) extended his reasoning to suggest that students need to be ready for ‘life in the real world in their communities and societies’ both in school and beyond. The purpose of such schooling, in which students can connect what they learn in school with the real world experience, and as Mullen (2010) also agrees, offers future generations the means “to innovate by collaborating with partners to facilitate change, remove barriers from learning, and understand global connections” (p. 333). The people of nations facing issues of a global magnitude might be able to reconsider and recreate a form of civic participation needed to solve these issues. For that reason as recently as 2016, the U.S. Secretary of Education John B. King Jr. expressed the need for future generations and current educators to strengthen international studies, world language training, and global experience. In his press release, he emphasized the need for students to acquire the knowledge, understanding, and skills for the 21st century interconnected world that we live in (U.S. Department of Education, 2016).

More recently, the interconnectedness of the world in which we currently live is illuminated by another point raised by Steger & Wahlrab (2017). These authors discuss the importance of understanding the “‘What is there is also here and what is here is also there’… as a summary of globalization’s central dynamics of interconnectivity, reconfiguration of space and
time, and enhanced mobility” (p. 1) and how it relates to students’ ability to connect theoretical insights to practical knowledge.

Above, I described the literature that informed the historical context of global competence consisting of three learning domains: knowledge, skills, and attitudes. I also discussed the connection history forms with the increasing need for educating students to become globally competent. I briefly reviewed the tensions that exist between a need and desire to implement such programming and the lack of global competence as part of an educational policy agenda. Additionally, I described the importance of understanding the global-local connections and the implications they have on students’ skills and attitudes in schools and beyond. In the next section, I describe the characteristics of contemporary global studies classroom in high schools.

2.1.2 A Glimpse into Contemporary Global Studies Classroom

As established above, students and leaders of tomorrow must be prepared and equipped with the skills and disposition to embark upon issues of global importance. These skills and dispositions promote students’ positive engagement with cultural and historical differences of others, deep knowledge of global and interconnected issues, and the ability to speak foreign languages (Reimers, 2009). In addition, Shams & George (2006) describe a globally-competent person to be “one who demonstrates knowledge of world geography, conditions, and events. It is someone who has an awareness of the complexity and interdependency of world issues and events and an understanding of the historical forces that have shaped the current world system” (p. 249).

The Asia Society further extends this concept “as the capacity and disposition to understand and act on issues of global significance” (Mansilla, Jackson, & Jacobs, 2013, p. 5).
The Asia Society emphasizes the importance of acting on issues of global significance, and presents a framework for global competence illustrating the goals and critical attributes for students’ achievement of global competence. The core characteristics, based on the Asia Society framework, include:

- Investigate the World – students move beyond their immediate environment to identify issue and its significance.
- Recognize Perspectives – students recognize their own and perspectives of others, as they are influenced by culture, knowledge, and resources.
- Communicate Ideas – students articulate and communicate their ideas effectively across diverse audiences.
- Take Action – students create opportunities to collaborate and act in ethical ways to contribute to improvement.

As the Asia Society itself recognizes, it is not enough to simply envision the above-mentioned goals – they must be realized through concrete programming that ties the classroom experience to real global issues and challenges.

The Asia Society Global Competence matrix provides a clearer idea of how programming ties the classroom experience to existing and real global issues. Through “investigating the world,” students identify a global issue, generate a researchable question, and create a narrative around the impact of local, regional, or global significance to the issue. One example of students investigating the world is provided below (Mansilla & Jackson, 2012):

Students in Ms. Wise’s English language arts class were invited to study the work of a notable Latin American poet of their choice. They had to explain the writer’s global significance and examine how…the author’s personal experience and literary choices
convey his or her unique perspective. “Looking specifically at one continent of poets,” Ms. Wise explains, “enabled students to see how these storytellers not only reflect current social perspectives and cultural values, but they also have the power to direct and criticize public opinion”. [Student] draws on literary analysis tools to make sense of the work of a poet whose life was shaped by forces very different to those shaping her own. In doing so, she comes to understand the way in which this particular example of Latin American literature speaks to the political climate on which it stands (p. 22-24).

A next, and important step, students take toward global competence is by recognizing their own world view creates a certain perspective. For example:

Elkin, Roman, and Mistry designed the project to raise students’ awareness about global living conditions. The project encouraged students to think of themselves as contemporary artists taking part in a global conversation about how the majority of the world population lives. “How does what you make as an artist relate to your responsibilities as a citizen of the world?” teachers asked… Exchanging images and interacting online enabled students to see each other’s environments and analyze differences in culture, styles, and knowledge. Todd Elkin’s students at Washington High School immediately noticed the learning space used by Arzu Mistry’s students in Bangalore – where children worked typically on the ground, barefoot, and outdoors. The Indian students’ familiarity with natural elements and awareness of their environment became evident as they offered feedback to Elkin’s students’ designs. The U.S. students recognized that living and learning “closer” to their natural environment influenced their Indian peers’ viewpoints and priorities. Ideas from the students in Bangalore established
an important balance of power and respect across student groups… interaction and serious work can help students develop their beliefs about others living on opposite sides of the planet and in strikingly different socioeconomic conditions. Cross-cultural collaboration encourages them to challenge stereotypes and recognize that diversity of perspectives enriches their work – and their understanding of themselves as producers of work (p. 32-35).

The third important step students take toward global competence is through communicating ideas. For example:

Eighth-grade students at the Aki Kurose Middle School in Seattle have been studying the impact of global food crises on communities around the world – including their own. Through the Bridges to Understanding (BU) afterschool program, students analyzed digital stories by children in India and South Africa, exchanging ideas about rising food prices and community work. Determined to address this global problem by contributing locally, students created two edible gardens at their school. Vegetables were donated to the local food bank, and students produced their own digital story to share… The digital story and accompanying discussion forum had two purposes. First, it sought to show how school fields could be used to mitigate the global food crisis in local communities. And second, it sought to gather insights from more experienced gardeners online… Students explored the complexity of communicating with diverse audiences by examining first the diversity in their own classrooms. In a school where multiple languages are spoken at home, students created cultural self-portraits that revealed their unique perspectives and values. The portraits included issues that mattered to students both personally and
culturally, including their views on food and the food crisis. For these students, appreciating difference within the classroom set the foundation to embrace it globally online. How might others interpret the background image of our school building or the humorous note at the end of that online posting? How might others feel about our story and our (relatively protected) world? Recognizing cultural differences prompted students to communicate with sensitivity (40-41).

The last characteristic in building students’ global competence is in taking action to improve condition by envisioning and weighing options, for action based on evidence and insight. One example follows below:

Sofia was puzzled over her music teacher’s assertion that globalization is increasing the homogenization of music heard by youth, and, as a result, traditional pre-Columbian rhythms, cultures, and artifacts from the Andes region are disappearing… To address this problem, Sofia’s class conducted an in-depth study of Andean musical, artistic, and cultural heritage. After weighing options, the class decided to create a sustainable initiative to promote the survival of pre-Columbian artifacts and music…The class built a series of sikus (traditional Andean flutes) with recycled materials…To further help preserve this cultural tradition, Sofia’s class proceeded to teach the migrant children in a very poor neighborhood school how to produce, decorate, and play sustainable sikus themselves… Sofia’s global competence begins with her genuine concern about the loss of her cultural heritage in the face of globalization…In tackling the problem, Sofia, her teachers, and her peers considered several possible courses of action – organizing a school concert, writing an article for the school newspaper. They finally decided that a
multi-week interdisciplinary unit on art history and sustainable instrument design
promised the longest-lasting impact, especially if the work could be shared with children
whose families were direct descendants of Andean populations (p. 48-49).

The Asia Society’s four characteristics and real-life classroom examples presented above reflect
the education for students around global competence, the students’ positive engagement with
differences, and their use of knowledge and skills of issues for a global and interconnected
world.

These examples provide encouraging instances where ideas translate into action, in the
face of a wealth of counter-evidence suggesting that most existing programs are falling
considerably short. At a more general level, Reimers’ (2006) study of high school students
confirmed that the “lack of relevancy of education, of the fundamental disconnect between the
world of school and beyond, translates into disengagement with schools, and in some cases in
physical or psychological dropout” (p. 279). Furthermore, as shown in the study by Hu, Pazaki,
& Velander (2014), students often lack curiosity and motivation to explore global issues and
oftentimes there are cultural and institutional barriers impeding on students’ global competence.

2.1.3 Contemporary Challenges

In this section I address the challenges associated with the implementation of various global
studies programs into the school curricula. The first section focuses on broader policy challenges
by examining the relationship of two educational acts, the No Child Left Behind (NCLB) and
Every Student Succeeds Act (ESSA) and their effect on school curricula. The latter section
moves to the level of the classroom by examining the skills and experiences that existing educators can bring to the classroom by incorporating a globally-focused methodology.

2.1.3.1 NCLB and ESSA in relationship to school curriculum

Twenty years after Lambert (1994) defined a globally competent person, some schools sought to create and implement different types of global high school curricula. However, the literature suggests that the federally-imposed NCLB Act of 2001 negatively impacted the incentives for programmatic innovation. The NCLB was signed into law in January 2002 by President Bush (NCLB, 2001) and required public schools receiving federal funding to annually administer standardized tests with the goal of tracking (and improving) scores in math, reading, and writing. The test scores would further be used in teacher evaluations. According to Stecher, Hamilton, & Gonzalez (2003), the “NCLB focuses the federal role in K-12 education on the goal of making all students proficient in reading and mathematics and, as a result, closing the achievement gap between disadvantaged and minority students and their peers” (p. 7). According to Resnick, Stein, & Coon (2008), the goals of the standards-based system were two-fold: “to ensure educational equity for the country’s growing racial and ethnic minority populations, and to implement any kind of national program in a country in which states…retained constitutional power over education” (p. 106).

The NCLB’s seemingly well-intentioned effort to establish measures and incentives for improvement resulted in the now well-known negative outcome of “teaching to the test.” Once measures and goals were established, teachers were incentivized to meet those goals – and those goals alone. This not only stifled a more nuanced and broader intellectual development, but it also disincentivized programmatic innovation. This raises the question - why would a district,
school, or instructor expend the time and energy to innovate at the potential expense of the standardized testing results upon which funding and career advancement were based?

The Every Student Succeeds Act (ESSA) attempted to address some of these issues. While it continued to focus on standardized testing, it shifted the locus of the standards from the federal government to individual states. This shift allowed states to select their own standards and to create their own tests and goals. In shifting the choice of standards to the state and local level, ESSA opened the possibility for schools to experiment with other programming, including globally-enhanced curricula. Nonetheless, while ESSA introduced more flexibility, it still restricted the scope of ‘educational laboratories’ to the state level. If states did not see new programming such as global curricula to be beneficial, then they could explicitly or implicitly disincentivize these types of curriculum innovations.

In the article about the students’ global citizenship education within the context of accountability, Cozzolino DiCicco (2016) argued that the alignment to standards along test-based accountability did indeed hamper the shift to broadening the curriculum to develop students’ global citizenship. In the same vein, Zhao (2010) argued that students as citizens of the globe need to develop a sense of global citizenship; however, there is difficulty of accomplishing this task because “No Child Left Behind has already squeezed out any room for subjects other than what is being tested” (p. 426).

2.1.3.2 Educators’ skills and experiences

Moving from policy to the more micro level of individual instruction, we find a host of additional challenges to effective globalization of curricula. For schools to be able to support globally oriented programming, educators must have the capacity and desire to teach and model global competence. Each educator brings with him or her their skills, knowledge, preferences,
perspective, strengths, and weaknesses. The extent to which educators are willing and able to address issues of a global nature in their classrooms will have a direct effect on students’ development of global competence (Harshman & Augustine, 2013).

Unfortunately, existing research suggests that many instructors are ill-prepared or unwilling to take on this task. In his study of educators, Rapoport (2010) concluded that they “often do not feel comfortable teaching courses that touch on world issues, especially when they have not had exposure during their teacher education programs” (p. 60). Furthermore, studies addressing global citizenship education found that U.S. teachers in comparison to teachers in other countries, including Canada, Southeast Asia, and Western Europe, prefer to teach a national model over global citizenship (Myers, 2006; Rapaport, 2010). In the same vein, Gallavan's (2008) study investigated teacher candidates’ views on world citizenship and attempted to determine how to modify and enhance teacher education programs and professional development opportunities to prepare future teachers to effectively teach world citizenship to their students. Gallavan (2008) concluded that a majority of teachers in P-12, although enthusiastic about teaching world citizenship, expressed concern about not being adequately prepared. Reimers (2011) suggested that this problem is not specific to teachers. His study of school principals indicated that administrators also lacked the knowledge and willingness to promote and incentivize innovative global curriculum.

Curiously, the findings about teacher preparation and willingness to teach globally-infused curricula is out of step with the interest of their students. According to Klein (2013), student interest in global curricula is quite high. Klein (2013) cited a study conducted by World Savvy (2012) indicating that students ages 18-24 tend to favor shifts from less emphasis on national to more emphasis on international education. In addition, only 12% of students believed
that schools and educators were preparing them to understand issues of global domains. Based on a preponderance and scope of similar studies, it is a fair assumption that these statistics are also accurate for high school-aged students, if not more so, given high school students are thrust into higher education ill-prepared for programs that have an international focus.

2.2 SUMMARY

In this review of literature, I addressed the diverse and sometimes confused global education terminology, briefly discussed the historical context of global education efforts, and presented a potential framework for educating globally competent students. I then examined how NCLB and ESSA affected/inhibited a move toward global education curriculum in secondary schools.

After an extensive review of the literature, however, there are unanswered questions that warrant further research. The purpose of this treatise is an attempt to contribute to the existing literature on how global studies can operate within secondary schools. Although some organizations and universities have advanced the area of evaluation and assessment of this programming, Klein (2013) asserts that “it remains difficult to quantifiably assess ‘immeasurable’ skills, such as empathy, connectedness, and curiosity” (p. 488). Future research can contribute to this area.
3.0 METHODOLOGY

3.1 EPISTEMOLOGICAL APPROACH

As I conducted this study, I took a pragmatic approach to both my research and data analysis. This is consistent with Tashakkori & Teddlie’s (2010) approach in choosing mixed methods research. According to Jick (1979), one key advantage of pragmatism is that it allows “for new and deeper dimensions to emerge” (p. 604). Further, for Feilzer (2012) mixed methods “has proven to be a great tool to go beyond testing a particular idea and describing a status quo” (p. 13). Therefore, as my research questions suggest, I focus not only on exploring students’ global competence as measured by the GCA, but also focus on students’ learning experiences in the classroom and how they exhibit critical thinking skills. The latter qualitative methodology allowed me to look “for new and deeper dimensions” of students’ learning experiences.

3.2 INQUIRY APPROACH

The purpose of this study was to collect data from a single course in a curriculum infused with global content and to fully understand how the course is implemented. Specifically, the teacher in this course aspired to have students think about multiple perspectives, teach them how to engage with a text, and how to engage in deliberative dialogue, in other words, through content.
The goal of this study was to explore students’ development of global competence by analyzing data collected from the GCAA administered at the beginning of the IGS course and then utilizing these findings for describing the sample participants. In this study I aim to discover how this course attempts to achieve its goals and whether the students were in fact achieving them within the broader context of the IGS curriculum.

Using a descriptive case study approach to examine the implementation of the IGS course on predetermined key moments during class, I as a ‘complete observer’ (Hesse-Biber & Leavy, 2006) can more accurately determine the goals, objectives, and practices within the course. I then use these as a basis for exploring students’ actual, temporal learning experiences. This method, it is hoped, will provide rich descriptions of global competence and critical thinking skills utilized by students. Yin (2014) stated the purpose of a case study approach is “to gain an in-depth (and up-close) examination of a “case” within its real-world context” (p. 220).

Choosing a case study approach as a method to examine my inquiry was further justified by the virtue of my research question of “what” and “how”. As quoted in Duke & Mallette (2011), Yin stated that the case study research “generally answers one or more questions that begin with how or why” (p. 21). An additional characteristic of this approach was studying a bounded system (Stake, 2000; Yin, 2009). In my study, the bounded system was the course, IGS. This decision allowed for a deeper and more thorough understanding of the course and its students. Stake (1978) also noted that the observer describes events while focusing on activities taking place with the ultimate goal of providing rich description.
3.2.1 Data Sources

Data sources for this study included data collected through administering Hunter’s (2006) Global Competence Aptitude Assessment (GCAA) (Appendix A) and complete participant observation (Mertens, 2015) at numerous IGS class meetings. These observations heavily rely on observation protocol (Appendix B), which guided my observation. Throughout the interpretation of the data, I maintained scrutiny of my original inquiry questions as they directly relate to data interpretation and analysis. The research questions I explored were: What are high school students’ knowledge and skills related to global competence? and How is the Introduction to Global Studies course implemented to support high school students’ development of global competence?

Hunter’s (2006) GCAA instrument is designed to profile and measure students’ incoming levels of global competence across eight different dimensions. Key components of the instrument were developed (Hunter, 2006) in part by surveying a Delphi panel of experts, which included educators, human resources managers, United Nations officials, government officials, and intercultural consultants, among many others. Prior research conducted by Hunter (2006) demonstrated the reliability and validity of this instrument. A subsequent study conducted by Kaushik, Raisinghani, Gibson, & Assis (2017) assessed the validity of the GCAA instrument by conducting a correlation and factor analysis and measuring the internal consistency of the data using Cronbach’s Alpha. Results of this study further strengthened the case for using the GCAA to measure levels of global competence.

The basis of the GCAA is a standardized test consisting of 109 questions querying students’ responses to various types of situations including meetings and travels, global understanding including history, international affairs, business etiquette, and cultural etiquette. In
addition, questions querying students’ personal choices related to global experiences including travel and food, responses to scenarios that test students’ comfort level, and whether they agree or disagree with statements about self, others, and situations are part of the GCAA test. Test results are then transformed into scores on a scale from zero to 100 across eight dimensions of global competency. Two example scales are depicted in Figures 1 and 2 below.

![Figure 1. Internal Readiness Scale](image1)

![Figure 2. External Readiness Scale](image2)

The eight dimensions (see Table 1 below) include four internal readiness components of **Self-Awareness**, **Risk Taking**, **Open-Mindedness**, and **Attentiveness to Diversity**. In general terms, these dimensions describe the personal characteristics and attitudes that enable students to effectively understand and interact across cultural boundaries. Four external readiness components consist of **Global Awareness**, **Historical Perspective**, **Intercultural Capability**, and **Collaboration Across Cultures**. Broadly speaking these dimensions represent students’ global knowledge and people-skills, acquired throughout a students’ life and various other experiences, thus enabling them to effectively navigate the complexities of today’s interdependent world.
Individual results across the four internal readiness components were averaged into a composite **Internal Readiness Score** while results across the four external readiness components were averaged into a composite **External Readiness Score**.

**Table 1. Internal and External Readiness Dimensions**

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<thead>
<tr>
<th><strong>Internal Readiness Dimension</strong></th>
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<tbody>
<tr>
<td><strong>Self-Awareness</strong></td>
<td>Realistic view of one’s personality and ability to confidently interact with others.</td>
</tr>
<tr>
<td><strong>Risk Taking</strong></td>
<td>Willingness to expose oneself to unfamiliar for the purpose of personal growth, and to tackle challenges that often time come with failure for the purpose of learning from mistakes.</td>
</tr>
<tr>
<td><strong>Open-Mindedness</strong></td>
<td>Ability to be receptive when the opposing views are presented, and curious for wide variety of information and sources.</td>
</tr>
<tr>
<td><strong>Attentiveness to Diversity</strong></td>
<td>Insight, thoughtfulness, and sensitivity into differences among people.</td>
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<table>
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<tr>
<th><strong>External Readiness Dimension</strong></th>
<th></th>
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<tbody>
<tr>
<td><strong>Global Awareness</strong></td>
<td>Knowledge about people including their languages, religions, and geographies and the increasing interconnectivity among all.</td>
</tr>
<tr>
<td><strong>Historical Perspective</strong></td>
<td>Understanding of historical events and realization of how these events have shaped people and their beliefs, behaviors, and attitudes.</td>
</tr>
<tr>
<td><strong>Intercultural Capability</strong></td>
<td>Ability to interact across cultures and willingness to make necessary adjustments to remain open and flexible to other cultures.</td>
</tr>
<tr>
<td><strong>Collaboration Across Cultures</strong></td>
<td>Capacity to be inclusive and work in diverse teams through cultural barriers.</td>
</tr>
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The IGS class has 24 registered students of whom 22 participated in the study. Students (and parents/guardians of minors) who opted to participate in the study signed consent forms prior to the start of the course. To ensure participating students’ full participation during the administration of GCAA, Ms. Smith agreed to designate one IGS class – among the first classes taught – for students to complete the instrument. In addition to numeric ranges for each internal and external readiness factors, the GCAA provided me a detailed and interpretive report of
individual student’s introductory, developing, or high aptitude rating for their current global competence, along with improvement opportunities of targeted areas for students’ further development of global competence aptitude. As a result, the data from this inquiry served as indicators of students’ levels of both internal and external readiness, and provided students with a benchmark as a basis for future personal growth. In addition, data from the comprehensive reports provided an overall picture of the sample population.

The second inquiry question for exploration was: How is the Introduction to Global Studies course implemented to support high school students’ development of global competence? This exploratory qualitative analysis began with an extensive conversation with the course instructor several months prior to in-class observations and the data collection process. During this conversation, I was introduced to the goals and objectives of this course and the manner in which Ms. Smith was going to implement them in her IGS classroom. A further immersion into the course happened as I began my class observations. Monitoring the students’ conversations during class times allowed me to be a complete observer (Hesse-Biber & Leavy, 2006) and to be able to fully absorb students processing of the information. The value of being a complete and direct observer is that researchers observe students in their predictable classroom setting as indicated by Patton (2002). In my case, the students analyzed, interpreted, and discussed current events and other issues of a global domain identified by the instructor in a familiar space – the classroom – and resulted in various opportunities of data collection.

Observation protocols (Appendix B) used to code in-class observations were structured around Paul & Elder’s (2007) framework of Critical Thinking Competency Standards; an existing and well-regarded model that has proven to be constructive in conceptualizing observations. Thus, observation protocols were also grounded in both research questions.
The Critical Thinking Competency Standards (Paul & Elder, 2007) consist of 25 components. Paul & Elder (2007) asserted that the seminal role of critical thinking lays in developing students’ skills for active and functional participation in an increasingly complex world due to “accelerating change, intensifying complexity, escalating interdependence, and increasing danger” (p.10) for the purpose of becoming “effective citizens, capable of reasoning ethically and acting in the public good” (p. 9). In coding the observations, I worked with the classroom instructor to choose a subset of the 25 standards. This recognized not only the fact that not all 25 standards could possibly be represented at this instructional level, but it also acknowledged Ms. Smith’s influence how classroom content and methodology impact the level and type of critical thinking exhibited by students. We thus identified a set of critical thinking standards as depicted in Table 2 below. In choosing this subset, we reminded ourselves that the goals of this course were to build on the types of skills and knowledge represented in the GCAA. Therefore, we chose standards that most closely matched GCAA dimensions. If students were exhibiting behaviors consistent with these standards, then we could reasonably anticipate that this would impact positively on their GCCA-measured skills over time. For the purpose of this study therefore, the standards shown in Table 2 have shown to be exemplary for critical thinking. Ms. Smith also agreed that while all standards are important to reach, many seemed too advanced for most high school students.

Table 2. Observed and Teacher-recommended Critical Thinking Standards

<table>
<thead>
<tr>
<th>GCAA</th>
<th>Critical Thinking Standards</th>
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<tbody>
<tr>
<td>Risk Taking</td>
<td>• Intellectual Courage</td>
</tr>
<tr>
<td></td>
<td>• Insight into Sociocentricity</td>
</tr>
<tr>
<td>Self-Awareness</td>
<td>Intellectual Autonomy</td>
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Recognizing the difficulty of applying all of Paul & Elder’s (2007) highly detailed instrument to a class full of students, I further simplified this stage of the study by focusing on three students chosen by their classroom performance as assessed by their instructor. Each student was categorized by different achievement levels: (a) high-achieving, (b) mid-achieving, and (c) low-achieving. This allowed me to better determine the impact of the classroom activity on the development of critical thinking skills while reasonably controlling for exogenous variables including previous classroom performance and students’ incoming skills and aptitudes.

During class sessions, I recorded and saved the discussion on audio files. After transcribing the files, I then coded each of the three students’ contribution using both the transcripts and reviews of the original recordings. A spreadsheet was created with columns listing the outcomes for each of the six critical thinking standards. For each student statement, I assigned a one, zero, or minus one for each outcome within each standard. These numbers indicated instances where the students exhibited thinking consistent with that specific outcome (one), whether the statement was irrelevant to a specific outcome (zero), or whether the student exhibited thinking contrary to the specific outcome (minus one). Standard 10 (Fairmindedness) had seven outcomes, Standard 12 (Intellectual Courage) and Standard 18 (Insight into Egocentricity) each contained eight outcomes, Standard 13 (Intellectual Empathy) and Standard 19 (Insight into Sociocentricity) each had five outcomes, and Standard 17 (Intellectual
Autonomy) had 10 outcomes. Therefore, for each statement, a student would have a total of 43 values (zero, one, or minus one) spread across the six standards.

During the length of the study, I observed a total of sixteen 47-minute IGS classes. This represented the ‘3rd 9 weeks’ of the students’ academic year, therefore allowing time for students to get matriculated into their school courses. The bi-weekly in-class observations of students’ discussions were audio-recorded and transcribed into a text from which I coded the data in direct conjunction with my protocol. Observed in-class discussions were usually focused on materials from previous class sessions, an article students read, or a video they watched. In the process, I also gathered less formal additional information about how the class is implemented and was shaping the students’ critical thinking and global competence. To further strengthen the validity of my observations, the classroom transcripts were read and coded by multiple raters.

3.2.2 Sample

The study sample consisted of students consenting (with parents’ permission in the case of minors) to participate in the research study within the IGS course. Prior to administering the instrument, I obtained the codes and sent Ms. Smith email instructions on how to administer the GCAA, along with instrument codes to distribute to individual students. The instrument was administered by the course teacher. Participants were given time during one of the initial IGS classes to complete the instrument. In efforts to protect the confidentiality of the research participants, all participants were assigned numbers representing individual students during observations as well as for instrument data coding. Any documents or other information linking these numbers to the students’ identity were subsequently shredded or purged from electronic files.
A combination of methodological and pragmatic decisions led to the selection of this particular research site and the course. Three years prior to this study, Ms. Smith observed the IGS course taught at the University of Pittsburgh, which serves as a core course in the Global Studies Certificate program organized by the Global Studies Center. Ms. Smith took an active interest in the course and our program. She consulted with our course instructor and created an IGS class for high school students. In the course of her intensive interaction with our Center, we developed a strong working relationship and got to know much more about her background, interests, and motivations. When it came time to select a course for observation, there were only two relevant programs offered in this region. In addition to building upon an already established working relationship, the Global Studies Center’s detailed knowledge of Ms. Smith’s background, interests, and goals served a methodological purpose giving me a clear sense of what this instructor brings to the classroom setting. This allowed me to more easily draw certain conclusions about the instructor’s role in the findings section.

3.2.3 Data Analysis

Given the exploratory nature of this study and because the small sample size precluded the use of more sophisticated statistical methods, data produced from the administration of the GCAA was recoded and analyzed using simple frequency distributions. Raw scores on the composite internal and external readiness measures and individual dimensions of these composite measures were recoded into three categories indicating introductory, developing, and high levels of student aptitudes. Cut off scores for each category are drawn from those indicated in Figures 1 and 2 above.
Frequency distributions were then created for each composite (External and Internal) measure and for individual dimensions of the composites. I then analyzed the frequency distributions to determine how students performed on each measure. Once recorded, I then used each composite measure to determine which dimension most strongly influenced the composite outcomes. In doing so, I was able to develop the strengths and weaknesses of each student enrolled in the course.

Analysis of the classroom observation data presented its own set of challenges. As indicated in the Data Sources section above, I transcribed classroom discussions and assigned scores on a scale from minus one to one representing the degree to which the content of each response aligned with the specific outcomes of the critical thinking standards. This coding produced the data represented in Appendix C of this study.

Given the nature of the classroom discussion, coding for each individual statement could not be compared across the three students – each statement for each student occurred within a different context. One student’s initial statement could be a reaction to the instructor’s opening question, while another student’s initial statement could be a response to another student, to the instructor’s follow-up question, or to any number of other different stimuli.

Therefore, rather than compare the content of inconsistently comparable statements, I opted to create aggregate measures across all statements made by the three sample students of the classroom observations. This analysis took place across two stages. In the first stage, I took the average of all scores across all outcomes and standards from all students’ statements to create an aggregate “critical thinking” score for each student. Because each of the outcomes represented a different facet of each statement, a higher average across all standards would indicate that students were demonstrating a higher-order of critical thinking. With the randomized nature of
statements, I was capturing a broad representation of each student’s critical thinking capabilities.

In the second stage, I averaged scores for all statements by each individual student for outcomes within each of the critical thinking standards to produce a single score for each student in each of these standards. This allowed me to identify variation across each of the critical thinking standards, noting strengths and weaknesses for each individual student and patterns across all students. Results of these two stages are represented in Table 3 below.

3.3 LIMITATIONS OF THE METHOD/APPROACH

Any discussion of limitations recognizes that the approach to assessing the impact of a program on student learning should include a pre and post-test of the same instrument. For example, a post-test of the GCAA would have been a potential option. However, given the short time frames of the study, it was acknowledged early on by staff at Global Competence Consulting (the GCAA parent organization) that there would be little interpretable difference between the two scores. Therefore, as an initial pilot study, I determined that it would be more productive to take an initial measurement of the student’s global aptitude and then, through the classroom observations, provide a picture of the curriculum and classroom activities with the possibility of assessing the potential impact of similar programs over longer time periods on student aptitudes.

Further limitations and challenges arose completing participant observations after administering an instrument, such as the difficulty of interpreting student behaviors, being able to categorize these observations, and knowing that my presence could influence such behaviors of the program participants (Mertens, 2015). Regarding the ‘observer effect,’ it was clear in discussions with Ms. Smith that students sometimes refrained from engaging in constructive
discussions with the teacher and their peers which thus resulted in unanticipated minimal amount
of material to analyze.

There were additional physical limitations to data collection resulting from the structure
of the classroom and the conduct of class discussions. By choosing to observe certain students, I
kept the sample small and manageable; however, at times, due to student’s or group of students’
physical dispersal (Yin, 2014) in the classroom, I found it difficult to “be at the right place at the
right time” (p. 117) to audio-record certain students’ discussions. Thus, a sample size, already
reduced for practical reasons, was further cut by failures to capture all of the students’ class
contributions. Nonetheless, enough data was collected so that I could make valid and useful
observations about the curriculum and its application.

3.4 SUMMARY

This study represents a mixed-method approach to determining the potential impact on the
development of global competency-related critical thinking skills of an IGS course at the sample
high school. I measured students’ incoming aptitudes using the GCAA and then explored any
further development of students’ knowledge and skills related to global competence through
descriptive case study. The decision to use this approach provided rich descriptions of students’
particular experience characteristic to a specific context. Using complete participant
observations, documents, and results from an instrument as my data sources, I then explored my
research questions.
4.0 FINDINGS

The following findings present an analysis of data collected from the GCAA instrument and from personal complete participant observations. The GCAA-generated results allowed me to explore the high school students’ incoming global competence-related knowledge and skills and to offer descriptive insights into the type of students that enrolled in the course. The findings further drew from an analysis of approximately 13 hours of recorded classroom observations from 16 IGS class visits and on students’ documents and assignments. This second line of inquiry sought to explore how the IGS course is implemented to support high school students’ development of global competence. Analyses of this data relied heavily on protocols focused on student outcomes (Appendix B) which is consistent with Paul & Elder’s (2007) Critical Thinking Competency Standards.

4.1 ANALYSIS OF THE STUDENT GLOBAL COMPETENCE APTITUDE ASSESSMENT (GCAA)

The GCAA returned a total of twenty student reports whereby the distribution of student outcomes for internal and external readiness composite indicators and eight component dimensions are summarized in Figures 3, 4, 5 and 6.
Figure 3. Students’ Overall Internal Readiness

Figure 4: Students’ Internal Readiness Across Four Dimensions
With regards to the Internal Readiness composite indicator, no students’ score fell into a ‘High Aptitude’ category. Students were evenly split across both Introductory and Developing aptitude standards. Examining each component within Internal Readiness indicates students scored higher on Self-Awareness and Risk Taking. For Self-Awareness, 10% of the students fell into the ‘High Aptitude’ category, 60% into the ‘Developing’ category and only 30% in the ‘Introductory’ category. Student Aptitude on Risk Taking was only five percent less on ‘High Aptitude’ than Self-Awareness while 60% were ‘Developing’ and 35% were ‘Introductory’. Results for Open-Mindedness and Attentiveness to Diversity indicate overall lower levels of aptitude in comparison. Student Open-Mindedness indicated five percent ‘High’ aptitude, 45% ‘Developing’ and 50% ‘Introductory’. Results for Attentiveness to Diversity registered the lowest set of aptitude scores with students evenly split across ‘Developing’ and ‘Introductory’ categories and no students scoring ‘High’ aptitude. Results on students’ external readiness outcomes of four component dimensions are shown in Figure 5 and Figure 6. In comparison to the results on Internal Readiness, External Readiness indicates a markedly different distribution of aptitudes. Seventy percent of the students scored as ‘Introductory’ aptitude and only 10% scored as ‘Developing’. While no student indicated a ‘High’ aptitude for Internal Readiness, 20% of the students scored ‘High’ on External Readiness aptitude.

External Readiness component dimension scores (see Figure 6) offer further interesting results. Scores for Historical Perspective indicate 75% of the students scored in the lowest ‘Introductory’ aptitude category, 10% scored ‘Developing’, and 15% scored as ‘High’ aptitude. Global Awareness scores were distributed with 10% of the students scoring ‘High’ aptitude, 30% ‘Developing’, and 60% ‘Introductory.’ Intercultural Capability indicated a distribution of 20% ‘High’ aptitude, 35 ‘Developing’, and 45% ‘Introductory.’ Finally, Collaboration Across
Cultures indicate 30% of the students scored as ‘High’ aptitude, 25% ‘Developing’, and 45% ‘Introductory.’

Figure 5: Students’ Overall External Readiness

Figure 6: Students’ External Readiness Across Four Dimensions
Overall the results indicate students in this course scored either at the developing or introductory level across both composite measures and component dimensions. These results provide a strong indication of the need for a program focused on improving students’ global awareness and competency. As Ferreira (2012) indicated, students in the United States are not getting the education needed to operate successfully in an increasingly globalized world.

The next section will address the implications of the above findings by describing the type of students in the course based on the data collected from the GCAA.

4.2 THE STUDENTS IN THE IGS COURSE

Based on the data analysis, as presented and illustrated in previous section, the students’ scores pertaining to their internal and external readiness offers a descriptive picture of the target population in the IGS course.

4.2.1 Descriptors of Students’ Internal Readiness Aptitudes

Overall internal readiness of 20 students indicated that 50% of the students displayed an introductory aptitude for global competence. This group of students’ cross-cultural outlook has yet to be realized as their limited sense of self-awareness, and the ability to evaluate self as others see them, need additional attention in the form of personal reflection on their strengths and development areas. Furthermore, this same group of students tend to stay within their comfort zone and refrain from taking risks when exploring the unfamiliar. Alternatively, experiencing different and unfamiliar situations can instill confidence and allow room for personal growth. In
terms of this group’s open-mindedness and attentiveness to diversity, the analysis indicated a need for a greater information-seeking from a wide variety of sources and exposure to situations that warrant going beyond their comfort zone so they understand the norms and customs of others as a way to expand their own awareness.

The other 50% of students in this course exhibited a developing aptitude for internal readiness dimensions of global competence. Across the four dimensions of self-awareness, risk taking, open-mindedness, and attentiveness to diversity, this group of students is inclined to accurately evaluate themselves and recognize others’ points of view as they interact within and outside of their comfort zone. These students take some risks to gain additional experience, however still with hesitation. The hesitation is also reflected within their search for information from various sources as they construct conclusions. In terms of this group’s ability to recognize differing points of view as embedded in other’s cultures and norms, the students with developing aptitude often understand the existing characteristics, but can nevertheless benefit from additional cross-cultural experiences.

4.2.2 Descriptors of Students’ External Readiness Aptitudes

Considering students’ external readiness across the four key dimensions of historical perspectives, global awareness, intercultural capability, and collaboration across cultures, the data revealed that the largest percentage of students scored as having an introductory aptitude for global competence. The introductory aptitude emphasized students lack in the foundational knowledge of world history and the role it plays in various areas of society, including languages, religions, trade, and global governance, to name a few. In addition, these students have a limited awareness of the world’s increasing interconnectedness and its global-local connections. This
group’s relationship with people of diverse backgrounds is limited and they need to learn how to approach interactions and circumstances different from their own with flexibility and openness.

Students with a developing aptitude for global competence fared higher than the previous group on historical perspectives as they displayed the basic knowledge and foundational understanding of world history and, as such, are likely to understand the role history plays in the establishment of various societal needs. For this group, there was a moderate awareness of the world’s interconnectedness and students are likely to draw conclusions based on their recognition that events happening globally may impact regional and local geographies. Students with a developing aptitude for global competence in situations that warrant placing themselves outside of their comfort zone are inclined to purposefully adjust and therefore are more likely to be acknowledged by differing groups they interact with. Having a better understanding of differences of others also allow students to bridge cultural differences and allow opportunities for further interactions with those of diverse backgrounds.

The last group of students, exhibiting a high aptitude of global competence pertaining to external readiness, had a well-grounded knowledge and understanding of historical perspectives. The knowledge for this group of students serves as a framework to understanding others with diverse cultural backgrounds. In addition, students in this group tend to understand and are aware of the world’s interconnectedness, tying occurrences in one part of the world with events happening closer to home. High aptitude students work well within teams of diverse perspectives as they are likely to understand and make adjustments on their own when addressing divergent perspectives. They have a well-rounded knowledge and experience that spans a variety of cultures and societal norms, and are likely to exhibit requisite skills for functioning in a challenging and interconnected world.
4.3 CRITICAL THINKING SKILLS

I now turn to the classroom observation portion of my analysis. To remind the reader, there were 24 registered students in the IGS class. Twenty-two students submitted a consent to be observed during class with an average number of 21 students present in each observed class. As previously stated, one goal of this study was to discover student global competence aptitude based on Hunter (2006). An additional goal of this study was to observe students of the IGS class as they analyze, interpret, and understand global trends as they occur and how they are interrelated relying on outcome rubrics of critical thinking competency standards (Paul & Elder, 2007).

When students use critical thinking as the primary tool for learning, they develop their ability to:

- Raise vital questions and problems;
- gather and assess relevant information;
- come to well-reasoned conclusions and solutions;
- think open-mindedly within alternative systems of thought; and
- communicate effectively with others in figuring out solutions to complex problems (p. 4).

Next, I provide details of a ‘typical’ class session as viewed through the Critical Thinking Competency Standards. My intent was to demonstrate and provide deeper context for instructional strategies used by Ms. Smith for the purpose of creating a specific classroom environment while achieving her course goals. I then analyzed the three students’ discussion points following outcomes set forth by the critical thinking. To remind the audience, the focus was on three students chosen by their classroom performance as assessed by Ms. Smith.
4.3.1 Introduction to Global Studies Course – a Place to Exercise Critical Thinking

It’s 8:10 a.m. As students hurriedly enter the classroom just ahead of the bell, some appear sleepy, some chatter with friends, and others quietly munch on their morning snack while simultaneously checking their social media. A large monitor on the classroom wall presents the current issue of the day that Ms. Smith has chosen to open the morning class with. Standing behind her desk, Ms. Smith runs through the morning routine – taking attendance, responding to students’ inquiries, and consulting sources as a last-minute class prep. Taking a quick scan around the room, one can see numerous books on display on the window sills, walls partially covered with quotes and world maps. The classroom atmosphere appears inviting and relaxing. As the last students settle into their seats, Ms. Smith exchanges a few pleasantries and points to the current issue on the screen: Bipartisan DACA, border security deal fails in Senate.

Another look around the room and one can see several students nodding their heads recognizing the topic as a current issue. Several other students shake their heads as if in disagreement with the outcome. A few others seem a bit unsure, probably needing additional information about the topic. Ms. Smith quickly acknowledges this uncertain student facial expression and begins a conversation; “DACA is an acronym. What does DACA stand for?” One student offers the answer, “Deferred Action for Childhood Arrivals”.

**Ms. Smith:** Yes. There are four bills that the Senate has been looking at for the past week. One of them was the bipartisan bill that many believed would have passed yesterday. Who are the DACA immigrants? What is their status as immigrants and why under Obama administration were they given special status?

As Ms. Smith continues to pose questions related to DACA, students offer their responses:
**Student 1:** They were brought by their parents as children and many of them are now in their 20s and early 30s.

**Student 2:** I think we are talking about 2 million people living in the U.S. and this is the only home they know.

**Student 3:** Under Obama administration, they were given special status by the President that would allow them to stay safely in the country and avoid being deported.

With student responses trickling off, Ms. Smith provides additional information pertaining to the current issue,

President Trump said that he wanted that to be reviewed by Congress, for Congress to come up with legislation as part of the larger bill to address immigration. DACA was pulled by President Trump and something must be done by March 5. It won’t happen immediately, but then the time starts to tick.

This vignette offers a glimpse into the beginning of each IGS class. At times, Ms. Smith provided context or “missing pieces” for students to more clearly understand the topic of discussion. Ms. Smith’s approach to a current issue offered students an opportunity to share their current knowledge about the topic. When the students stopped participating, she continued to provide additional information pertaining to the topic and elicited additional thoughts and comments to move the conversation forward.

As both students and Ms. Smith moved away from the current issue, she turned students’ attention to the next question that framed the course in general. For example, *Has globalization contributed to a more peaceful world? A more democratic world?*

This subsequent question, or what the instructor also referred to as “essential questions and enduring understanding,” then continued to be a general topic for further discussion and
activities during the remainder of the class. In-class activities varied. At times, students were
divided into small groups of four to six to investigate and search for information that contributed
to their group’s discussion. The students were instructed to take positions of either analyzing
information from their own perspectives, or from the perspective of the
country/people/government they were investigating. One such activity took place when Ms.
Smith introduced the “wheel of fortune” game she previously created and was displaying on the
classroom monitor. The game was comprised of questions asking students to consider the impact
of the North American Free-Trade Agreement (NAFTA) – the current guiding question.
Examples of specific questions appearing on the wheel included Does NAFTA help or harm the
cause of global free trade? (students were to approach the question from their own point of
view) and Can President Trump get a “win” on NAFTA negotiations without Canada and
Mexico losing? (students were to approach this question from the perspective of the country they
researched including Canada, United States, or Mexico).

In the sample classroom scenarios presented above, I aimed to provide a richer context of
Ms. Smith’s instructional strategies. Additionally, Ms. Smith’s instructional strategies have been
viewed through the lens of the Critical Thinking Competency Standards.

4.3.2 Student Aggregate Scores of Critical Thinking Standards

IGS class meetings provided an opportunity for students to analyze, interpret, and discuss current
global issues. Ms. Smith worked to create numerous activities in which students practiced
exhibiting their critical thinking skills. The activities in which the students participated varied
from Socratic seminar discussions, to small group discussions, to online analysis of a wide
variety of information sources, to discussing the image and videos Ms. Smith selected and the students viewed.

As indicated in the methodology section, I observed class discussions, made audio recordings of all participating students and later transcribed the files. Working off of the transcripts and recordings, I then coded each of the three previously-selected student’s statement by assigning a score of minus one, zero, or one to each outcome of the subset of six critical thinking standards indicating the degree to which a statement contained elements representative of the type of thinking in that outcome.¹

During the analysis stage, I created a set of critical thinking scores for each of the three students based on these standards. First, I created an aggregate critical thinking score for each student by averaging their scores across all standards. This score is presented in the first column of Table 3 below. To explore patterns across these standards, I then calculated averages for each student across all statements for outcomes within specific standards. These results are presented in the subsequent columns in Table 3. Students’ names in Table 3 below are pseudonyms.

### Table 3. Aggregate Measures of Three Students’ Statements

<table>
<thead>
<tr>
<th></th>
<th>Aggregate</th>
<th>Fairmindedness</th>
<th>Intellectual Courage</th>
<th>Intellectual Empathy</th>
<th>Intellectual Autonomy</th>
<th>Insight into Egocentricity</th>
<th>Insight into Sociocentricity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norm</td>
<td>0.73</td>
<td>0.63</td>
<td>0.80</td>
<td>0.84</td>
<td>0.88</td>
<td>0.48</td>
<td>0.76</td>
</tr>
</tbody>
</table>

¹ As a reminder, the standards are: Fairmindedness (Standard 10), Intellectual Courage (Standard 12), Intellectual Empathy (Standard 13), Intellectual Autonomy (Standard 17), Insight into Egocentricity (Standard 18), and Insight into Sociocentricity (Standard 19).
A comparison of the Aggregate Critical Thinking scores, exhibited an unsurprising result. Simply, students’ scores neatly corresponded to the instructor’s subjective assessment of their academic strengths as determined by past class performance. Edward, the ‘low achieving’ student, returned the lowest aggregate score (.10), Norm, the ‘middle achieving’ student, returned an aggregate score of .73, and Elizabeth, the ‘high achieving’ student, returned an aggregate score of .83. This suggests that performance was best determined by the student’s academic experiences and achievements to date.

Some specific examples of classroom interactions provided additional background to the data presented in Table 3. Norm’s statement in response to the discussion of current refugee crises and its root causes of instability and violence in the developing world, elicited a reaction reflecting his thoughts:

So in one of the core readings it said how if you took everyone around the world that’s displaced and put them all together in one section of the world, they would make like the twenty third largest country in the world. I think it would make more sense to figure out to address the root cause and spend less money than to try to keep them, try to economically support them outside of country.

As students in this class surmised from their core readings and previous class discussions, many people are displaced today and as a result many developing countries are tackling this burden. Norm tried to address the question of who bears the responsibility and what that response ought to be. He positioned himself within this discussion to approach the problem of refugee crises by addressing the root cause. In terms of specific critical thinking outcomes, Norm effectively
exhibited elements of Intellectual Empathy. His ability to “role-play his defense of beliefs from others in an intelligent and insightful manner” as well as his “understanding of the importance of intellectual empathy in thinking within specific disciplines and professions” situated him within this discussion as someone who demonstrates his capacity to enter into points of view in a sympathetic way.

In response to the same general discussion topic of instability and violence in the developing world due to refugee crises, yet not as a direct response to Norm’s position, Edward and Elizabeth offered the following:

Edward: So like you can always come up with one big thing why they are leaving, like because of war or something like that, but in every place it is just going to be a different reason why they are leaving. We can’t just say they are all leaving because of one reason, different people are leaving for different reasons. I feel that if we are going to fix it [refugee crisis], we need to figure out why every group, why they are leaving that place and try to go in and make it easier. I know it’s hard to do, there is no one thing we can do that’ll fix all of it. So I just don’t think there is one big, one root cause; there are many, although they stem from one thing.

Elizabeth: I read the article that talks about the main causes of the Middle East crises. One of the main things they said, especially for Syria, can be traced back before the Arab Spring and the European and U.S. influences in the area. So the root cause is sort of neo-imperialism; that we tried to address…to impose on these other countries that aren’t as economically well off as we are. So if that’s the root cause in the place like that, than we need to hold back our increased influence in those areas, or try to make these influences more positive, rather than economically dominating it.
Although Edward attempted to position himself within this discussion as a proponent of the opposite view than that of Norm’s, he displayed little substantive critical thinking. For example, in his statements Edward did not take “every viewpoint relevant to a situation in an unbiased, unprejudiced way” bounded by the Fairmindedness standard of critical thinking. He also fell short in addressing any other viewpoints, made inaccurate statements and lacked sound logic. Elizabeth, on the other hand, displayed an array of critical thinking outcomes pertaining to multiple standards. One example, Elizabeth consistently provided “examples from history of negative consequences” and was able to “critically examine the groups to which they [Elizabeth] belong.” She therefore actively positioned herself as a citizen of the world who strives to promote equal human rights for all.

4.3.3 Standard-specific Outcomes

As noted earlier, in the second stage of my data coding and analysis, I averaged the three students’ statements within each of the critical thinking standards to arrive at a single score for each of the three students. My attempt here was to identify patterns of student strengths and weaknesses across the different standards. Results are presented in Figure 7.
Paul & Elder (2007) state that “Fair-mindedness requires that we treat all viewpoints alike, without reference to our own feelings or vested interests, or the feelings or vested interests of our friends, community, nation, or species” (p. 26). This critical thinking standard also corresponds closely to student’s open-mindedness, a component within the GCAA, whereby students have the ability to be receptive of opposing views while consulting a variety of information and sources. In this respect, a quote from Elizabeth is exemplary of fair-mindedness:

In the Myanmar crises, the Bangladesh government is trying to force them out of Bangladesh and back into Myanmar where they are currently being prosecuted. They [Bangladesh government] claim it’s safe for those people, but it’s definitely not, because
they are still being prosecuted, there is still genocide. The problem there is people are trying to push refugees back into their home countries and saying they are safe for them. If that is an option, the country needs to stop fighting, but for certain groups, if it’s an ethnic problem, there is no going back for them, so the resettlement also needs to be an option for those that can’t return anywhere for the next couple decades.

Elizabeth’s statement displayed her understanding of the refugee problem by exhibiting various viewpoints. As a critical thinker, Elizabeth adhered to accuracy and sound logic and represented the views of two distinct groups in an unbiased and unprejudiced way. As evidenced in Figure 6, Elizabeth’s single score across all statements pertaining to her critical thinking skills of fairmindedness showed the highest of the three students’ scores.

4.3.3.2 Intellectual Courage – Critical Thinking Standard 12

Over the course of the observation period, I coded and analyzed responses that correspond to the second (of the six selected to observe) critical thinking competency standard. When coding for Intellectual Courage, I explored students’ responses corresponding to Paul & Elder’s (2007) suggestion that intellectual courage is a students’ ability and willingness “to challenge popular beliefs” (p. 28). In the example that follows, Elizabeth exhibited the ability to face and address fairly the ideas, viewpoints, and beliefs of certain groups. Specifically, whether Europe’s Populist Right movement, a far right-leaning group, is a threat to democracy and civil liberties, Elizabeth responded,

Alt for Germany has the enemy positioned as incoming immigrants, as does the Freedom Party in the Netherlands. The difference between the two is that the Freedom Party has a special focus on Muslims from any culture or ethnicity whereas Alt for Germany is opposed to them in general. They also campaign against the elite in areas with high
unemployment or similar issues because the people there already have that sentiment. I think that the far right movement is a threat to democracy due to their historical and ideological ties to fascist regimes which are notorious for both dismantling democracy and heavily restricting civil liberties, so although they do not pose a severe threat yet, they may in the future if they continue to gain support and power in right-leaning counties.

Elizabeth’s perspective on two similar European countries, Germany and Netherlands, demonstrated her ability to state, elaborate, and exemplify the dynamics working in the countries she reviewed. She defended unpopular beliefs and questioned popular beliefs. These critical thinking outcomes are indicative of Intellectual Courage and her ability to critically analyze and challenge popular beliefs about the populist right movements in Europe.

4.3.3.3 Intellectual Empathy – Critical Thinking Standard 13

According to Paul & Elder (2007), Intellectual Empathy is “the capacity to sympathetically enter into points of view that differ from their own and articulate those views in an intelligent and insightful way” (p. 29). The intellectual courage standard also corresponds closely to GCAA’s definition of attentiveness to diversity. When coding for students’ intellectual courage, I placed particular emphasis on students’ ability to recall an aforementioned statement was incorrect. Intellectual Empathy is evident when students recognize incorrect instances and attempt to correct themselves or clarify their previous statements. One such statement, during the refugee crises discussion was as follows:

Norm: I think my first comment came out wrong. What I was trying to say is like there needs to be more of a general response. In one of the readings, like she [Maria] said, only one percent gets to resettle, but I read that the refugee number one request is to go home.
They don’t want to go to another country. But now the way it’s set up, it’s a permanent settlement somewhere else and I think it should be more like a circle affect.

At this time, Ms. Smith offered her own thoughts about Norm’s statement,

You would like international community to resolve the conflicts in the country of origin so that refugees can in fact make their way back. People are, at the moment, 15 years and more on average in periods of transitions. You want to see them return home—less resettlement. You’d like us to do more to resolve conflicts in Syria and Afghanistan. The top countries driving the global refugee crises are Syria, Afghanistan, Somalia, South Sudan, and Sudan, Democratic Republic of Congo, Central African Republic, and Myanmar. So think about these countries…and that you are saying that you’d like to help people get back to their home countries.

Further, Norm again exhibiting intellectual empathy by stating and elaborating on his previous point:

Yes, and what I also was trying to say is that it needs more long term effects. More long term solutions because it’s too economically hard to keep these people in camps. Instead of having people wait, sitting in developing countries year on end before they figure out what they are doing, it should be more set guidelines.

As Norm along with other discussion participants, considered the current refugee crises at its root cause, they were articulating critical thinking abilities pertaining to intellectual empathy.

4.3.3.4 Intellectual Autonomy – Critical Thinking Standard 17

Elder & Paul (2007) describe Intellectual Autonomy as students taking on “responsibility for their own thinking, beliefs, and values” (p. 32). This standard and its outcomes align with GCAA’s description of self-awareness whereby students are able to exhibit a refined sensibility
within a realistic view of their personality while monitoring and amending their thinking and mistakes. Through classroom discussion, Norm exhibited intellectual autonomy as follows:

I wasn’t saying like that they [refugees] have to go home. What I was trying to say, in Bhutan, I read the article, they got kicked out of Bhutan. Then the UN helped them set up the refugee camps in Nepal after they were kicked out of Bhutan. Then they had the influx of donations and set up several camps in Nepal, but 100,000 people sat in these camps for three decades before they were able to get anywhere else. Everyone was saying that they were in camps which was safe, but they were living in tents. And then the donations stopped coming. So what I was trying to say is that there needs to be a set plan, not setting up long term refugee camps in the second world country, but to have a plan to fix the root cause or assign them [the refugees] to a third-party country. Some are coming to the U.S. (Pittsburgh, especially) but because they’ve gone through so many transition years, the CDC [Centers for Decease Control and Prevention] reports they have the highest depression rates among everyone in the U.S. because they feel so ostracized because they went through like 30 years of transition before they were able to get here. It’s got to be more streamlined, it has to be a set plan between the entire world. The UN and everyone else have to be able to have the same guidelines when people get stuck like this. I think it’d be a lot easier to set up the system of resettlement if more of the developed world decided to help. I think it should be a joint decision between the UNHCR [The UN Refugee Agency], negotiations type of thing where the countries still have the saying but there needs to be global response.

Norm offered his understanding of the current issue and problems associated with the refugee crises. He established his Intellectual Autonomy by stating, elaborating, and providing examples
to support his thinking and beliefs. As Norm spoke, one could see his ability to think through his own conclusions and amend them along the way. Although Norm was placed in the middle of the three students in terms of overall critical thinking, he exhibited all positive (one) scores across this particular standard.

4.3.3.5 Insight into Egocentricity – Critical Thinking Standard 18

Paul & Elder’s (2007) Insight into Egocentricity standard relates to “students who think critically actively seek out (and deal with) egocentric tendencies in their thought” and “…work to uncover irrational or otherwise unjustifiable beliefs obscured in the mind” (p. 34). The GCAA dimension of intercultural capability aligns well with this particular critical thinking standard. An excerpt from a conversation by Elizabeth provides an excellent example of this type of thinking. The discussion involved whether a society can be convinced of the benefits of cultural diversity. One student (Mara) opened the discussion by stating:

**Mara:** One incentive for a country to accept more refugees is to think that it can help their economy, bring in new ideas. The refugees are willing to work and start a new life, and if they are resettled into their new country, they can bring economic growth. One of the articles I read talked about that the refugees should be resettled to the places that are maybe stagnant because they will help in labor force.

**Ms. Smith:** Japan, for example, has a growing elderly community but is culturally homogeneous. They are very intolerant as society historically, and today, of immigrant communities. If we think about Japan, what it might take a country like Japan to consider an influx of a refugee resettlement program? How would that conversation look?

**Elizabeth:** I feel the conversation wouldn’t really work. This is a noble goal, but it wouldn’t motivate them to do anything. So it would probably be better to put pressure on
those countries that are doing their part to accept refugees. Japan taking in refugees? Not only would they not want to do it, but if the people [refugees] got there, they [Japanese people] wouldn’t want them there and they would not be treated well. We would need to start to talk to people of Japan rather than with the ambassador to the UN.

This thread ended with Elizabeth’s comment and was indicative of an individual who examines the beliefs and practices embraced by the group. Elizabeth also provided examples of the negative consequences that arise out of sociocentric thought, and exemplified the social rules and conventions represented by the people of Japan.

4.3.3.6 Insight into Sociocentricity – Critical Thinking Standard 19

While the previous discussion statements are indicative of the standards in question, there were also examples that ran contrary to each of these standards. Paul & Elder (2007) described the Insight into Sociocentricity standard as representing instances where students “accurately explain, elaborate, and exemplify the social rules…” and “give multiple examples from history of negative consequences…” as well as “critically examine the groups to which they belong” (p. 35). This critical thinking competency standard aligned well with the GCAA dimension of risk taking defined as students’ willingness to expose oneself to uncomfortable situations for the purpose of learning from mistakes they make along the way. The following statements by Edward fell short of exhibiting outcomes that relate to students’ ability to critically examine beliefs and practices or provide historical data to support his claims,

I think in the long run we do want to see them [the refugees] go home. I feel like we can put both of these like together. I feel like it’s a good idea at the very beginning when they leave [their country] and they need somewhere to go, we should have places for them to
be, so that they feel not at home, but somewhere safe. I feel that that will make them settle down a little bit, not be scared, and at the end we would like to see them go home. Ms. Smith interjected, “But Norm is saying, this 18-year average-wait for refugees…”, to which Edward added this final thought,

Yeah, that I feel like it’s not an easy thing to do, you know, move all of these people and try to get them back and it will take time, but I feel like…oh, I don’t know what to say.

While Edward exhibited general concern about the refugees in his first statement, which positioned himself within the discussion as an individual who wanted “to do what is right for refugees,” he lacked relevant substance through his remarks. Coding of his statements relative to Insight into Sociocentricity scored mostly zeros (no relevant data displayed) and minus ones (opposite of what the standard’s outcomes indicated). Even with the instructor apparently attempting to push him towards less sociocentric thinking, Edward displayed no signs of correction. Aggregated scores on each of Paul & Elder’s (2007) standards by each of the three students is represented in Figure 6 above.
5.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of my study was to collect data from a curriculum inspired by global content to more fully understand how the curriculum is implemented in an IGS class offered at a local suburban high school. My goals were two-fold: to explore students’ current global competence and to use this as a basis for describing the student sample, and to accurately establish the goals, objectives, and practices of the course with the ultimate goal to provide rich descriptions of students’ growing global competence and critical thinking. Of the 24 students in the course, 22 completed an instrument measuring their current global competence. Additionally, observations were focused on three students to better determine the impact of classroom activities on the development of their critical thinking skills. Hunter’s (2006) GCAA was used to collect data on students’ current global competence while Paul & Elder’s (2007) Critical Thinking Competency Standards guided in-class observations, which proved to be constructive in conceptualizing observation protocols. The following are key findings that emerged from this inquiry process.
5.1 KEY FINDINGS

5.1.1 Key Finding #1

From the GCAA instrument, administered at the very beginning of the IGS course, the data revealed that the majority of students coming into this course were at the introductory or developing level across both composite measures (Internal and External Readiness) and all related component dimensions. The low scores indicated the students’ limited knowledge and skills in a globalized curriculum. Given these results, it could be concluded that there is indeed a need for programming focused on improving students’ global competence. Ferreira’s (2012) study indicated that the high school students lack the type of knowledge and skills needed to navigate successfully in an increasingly globalized world.

5.1.2 Key Finding #2

My initial conversation with Ms. Smith revealed that the overall purpose of students’ engagement in the class was to think critically while examining how global interactions and processes occur and are interrelated. In addition, Ms. Smith’s intent in this course was to teach students skills through content. The in-class student observations and data revealed that the Ms. Smith explicitly taught students to approach discussions and activities from multiple perspectives. In addition, she encouraged students to participate in a deliberate dialogue. She truly devoted her energy and time to teach students to navigate the interconnectedness of the world. As Ms. Smith stated,
“They [the students in the class] ought to have an appreciation of cultural diversity and an understanding about the many ways in which the world's people are increasingly interconnected. They also need to think critically about their role in global systems and be asked to consider how they can make a positive difference, both immediately and in the future, through the choices they make.” (personal conversation, October 30, 2017).

This study explored a dynamic program led by an exceptional teacher. However, this very fact pointed to the challenges likely faced by other schools – the lack of teachers who are both willing and prepared to teach such a course. Previous research by Rapoport (2010) suggests that “teachers often do not feel comfortable teaching courses that touch on world issues, especially when they have not had such exposure during their teacher education programs” (p. 60). The teacher for the course under examination was uniquely prepared and positioned to offer this course. Furthermore, she could draw on considerable expertise from a local research university which features a global studies center focused on supporting local schools. While the study of other schools was not formally explored in this study, the question remains as to how other schools lacking personal and institutional resources could hope to offer similar and similarly effective programming.

5.1.3 Key Finding #3

As part of my data collection process, I observed three focal students (low-, mid-, and high-achieving) in the IGS course closely following the Critical Thinking Competency Standards (Paul & Elder, 2007). Student outcomes of these three students, as part of the critical thinking standards, proved useful in conceptualizing my study and observation protocols.
Prior to coding of students’ observations, I consulted with the classroom instructor to choose a subset of Paul & Elder’s (2007) 25 standards. There was also concern on my part for coding all 25 standards across three focal students in a constrained time period. We therefore identified a set of critical thinking standards reflecting on the goals of the course to build on the types of various skills and knowledge represented by GCAA.

It is important to note that, in the process of reviewing the 25 standards as part of the critical thinking competency process, the instructor recognized the difficulty of teaching some or all standards at this instructional level. This observation raised doubts as to whether our expectations for global competence outcomes were too high for high school students. Similar doubts have been expressed by researchers and instructors associated with the University of Pittsburgh’s IGS course. Subsequent research should focus more closely on identifying both the types of global competencies and the level of global competency as a whole that can reasonably be mastered by students in high school courses.

5.1.4 Key Finding #4

The findings from this study raised another point worthy of brief discussion. As previously noted, the site for my study was a high school with a strong commitment to mastering not only core academic objectives, but also competencies for a global age. In addition, this residential high school has a highly-skilled teaching staff and generally motivated student body. It is also one of the wealthier school districts with an abundance of resources. This raises serious questions as to whether similar outcomes can be achieved in other schools or districts not as well endowed. The critical thinking levels exhibited by the three focal students in this course closely tracked with their here-to-fore academic performance. Therefore, there is some evidence to
suggest that, regardless of the course content, students will be ‘better performing’ or ‘worse’ citizens of the world depending upon whether they are ‘better’ or ‘worse’ students. While this seems to be a rather mundane observation, it takes on even greater importance when a similar program is moved out to other schools or districts. Is there hope that global studies programs will lead to some convergence between schools as they become more globally oriented, or will disparities between schools persist at higher absolute levels of global competence? These are questions that are relevant to any field of study and future research. Academia may need to curtail their expectations and focus more on developing programming that will raise the level for all as an effective and equitable process.

5.2 PROPOSED DEMONSTRATION OF SCHOLARLY PRACTICE

As the world continues to change rapidly and the linguistic and cultural diversity of student populations in the U.S. increases, students need to gain a richer understanding about how people’s lives are interconnected. Additionally, students need to consider how their own lives and choices are connected to current global concerns. Issues of a global domain, including climate change, migration, and international conflicts, to name a few, affect all societies.

The IGS course offered at this suburban residential high school strived to enhance students’ attitudes toward global competence by having students navigate the complexities of transnational concerns and the discourse surrounding those concerns. In addition, the course was designed to inform students about major global issues that will affect their future, and to teach them ways to consider their own ability to influence and enact changes. A case study of a course including conversation with the teacher, assessment of students’ knowledge and skills of the
global domain, and the examination of student artifacts linked to topics of global significance shed light on how an IGS course can inform practice. Courses can be taught which would benefit other urban and suburban high schools in teaching the knowledge and skills needed for being future citizens of an interconnected world. Courses can be inserted into current high school curricula for the benefit of students’ intercultural attitudes, knowledge, and skills.

To further inform teaching practices, the dissemination of these findings at academic national and international conferences will contribute to a broader discussion of preparing students for global competence. For example, the recent presentation *Developing Global Competence in the Foreign Language Classroom* at the Pittsburgh World Language Connection Conference: Classroom Connections took place in November 2017 (Fox Chapel Area High School). Moreover, to reach interested students, teachers, and scholars who wish to build on this research, I intend to present my findings to the high school where data collection occurred. Also, the opportunity to share these findings in social studies journals, such as the Journal of International Social Studies or Social Education Journal will add substantive information to the current body of literature.
APPENDIX A

GCAA INSTRUMENT – 109 TOTAL QUESTIONS

The GCAA Instrument is a commercial product consisting of 109 questions. It is available for purchase directly from GCAA. The research was permitted to use the instrument as a focal point of this study with the agreement that questions themselves would not be published. All commercially-available questions may be retrieved by contacting the GCAA directly at info@globallycompetent.com.
## APPENDIX B

### OBSERVATION PROTOCOL FOR CODING BI-WEEKLY VISITS TO INTRODUCTION TO GLOBAL STUDIES COURSE

**Standard 10 - Fairmindedness Outcomes**

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<td>1.</td>
<td>Students demonstrate understanding of fairmindedness by stating, elaborating and exemplifying the concept of fairmindedness.</td>
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<td>2.</td>
<td>Students avoid using their skills to gain advantage over others, score points on the, or make them look bad.</td>
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<td>3.</td>
<td>Students do not favor the viewpoints of those who support them, but equally consider the viewpoints of those who agree and those who oppose them (using the quality of reasoning in determining what to accept or reject).</td>
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<td>Students question their own purposes, evidence, conclusions, assumptions, concepts, and point of view with the same vigor that they question those of others.</td>
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<td>Students strive to treat every viewpoint relevant to a situation in an unbiased, unprejudiced way.</td>
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<td>Students actively work to diminish the powerful egocentric force in the mind that, by nature, seeks to favor one’s own viewpoint, and the viewpoints of one’s group, while distorting and misrepresenting viewpoints with which it disagrees.</td>
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<td>7.</td>
<td>Students demonstrate understanding of the importance of fairmindedness in thinking within specific disciplines and professions.</td>
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**Standard 12 – Intellectual Courage**

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<td>1.</td>
<td>Students demonstrate understanding of intellectual courage by stating, elaborating and exemplifying what it means.</td>
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2. Students examine critically any and all of their beliefs, especially those they hold dear.

3. Students fairly evaluate popular and unpopular ideas and beliefs, and determine their reasonability without reference to their popularity.

4. Students demonstrate understanding of the fact that social groups penalize non-conformity.

5. Students express reasonable dissenting views, thereby showing that they do not fear rejection by others.

6. Students question popular beliefs (when those beliefs do not seem rationally justified).

7. Students defend unpopular beliefs (when those beliefs seem relationally justified).

8. Students demonstrate understanding of the importance of intellectual courage in thinking within specific disciplines and professions.

---

**Standard 13 – Intellectual Empathy**

1. Students demonstrate understanding of intellectual empathy by stating, elaborating and exemplifying what it means in numerous ways.

2. Students frequently say, “I may be wrong here. I have often been wrong in the past,” or words to this effect.

3. Students imaginatively put themselves in the place of others (striving to accurately articulate others’ viewpoints).

4. Students regularly role-play the defense of beliefs other than their own (in an intelligent and insightful manner).

5. Students demonstrate understanding of the importance of intellectual empathy in thinking within specific disciplines and professions.

---

**Standard 17 – Intellectual Autonomy**

1. Students demonstrate understanding of intellectual autonomy by stating, elaborating and exemplifying what it means in numerous ways.

2. Students avoid passively or mindlessly accepting the beliefs of others.

3. Students thoughtfully form principles of thought and action.

4. Students accurately and logically evaluate the traditions and practices that others
4. often accept unquestioningly.
5. Students incorporate knowledge and insight into their thinking, independent of the social status of the source (of that knowledge or insight).
6. Students respond positively to the reasonable suggestions of others.
7. Students monitor their thinking and amend their own mistakes.
8. Students form values for themselves, and choose values based on their intrinsic worth.
9. Students reach independent, well-reasoned conclusions.
10. Students are willing to dissent from the majority view when the evidence requires it of them.

Standard 18 – Insight into Egocentricity

- Students demonstrate understanding of the concept of egocentricity, with its many complexities. They are able to state, elaborate, and exemplify the concept.
- Students demonstrate understanding of the concept of rationality and can describe in detail how it differs from egocentricity.
- Students manifest the recognition that egocentric thinking needs to be “corrected” by more reasonable thinking (that respects the right and needs of others).
- Students routinely identify their natural human tendency to focus on their own needs and desires at the expense of those of others.
- Students identify egocentric emotions that affect their thinking (emotions such as defensiveness, insecurity, anger, or arrogance). They are able to sympathize when others’ egocentric emotions are affecting their thinking.
- Students accurately identify egocentric thought in others.
- Students communicate in a rational, rather than egocentric way.
- Students respond constructively to people caught up in an egocentric mindset.

Standard 19 – Insight into Sociocentricity

- Students accurately explain, elaborate and exemplify in multiple ways the concept of sociocentricity and the powerful role it plays in human life.
- Students critically examine the groups to which they belong (as well as any group they study). They are able to accurately explain, elaborate, and exemplify the social rules, taboos, and conventions within each group (this would include, but not be limited to, family, peer groups, clubs, religious groups, country, and species).
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<td>3.</td>
<td>Students can give multiple examples from history of negative consequences that have resulted from sociocentric thought (and follow out the implications of sociocentric thought in existing human groups).</td>
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<td>4.</td>
<td>Students are willing to openly and publicly dissent from the mainstream view whenever reason and evidence require it.</td>
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<td>5.</td>
<td>Students choose not to associate with irrational or dysfunctional social groups, preferring, if necessary to stand alone.</td>
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APPENDIX C

EXAMPLE CONTENT CODING OF STUDENT RESPONSES ALIGNED WITH
OUTCOMES OF CRITICAL THINKING STANDARDS

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APPENDIX D

IRB APPROVAL
Memorandum

To: Jasmina Konitzer
From: IRB Office
Date: 1/8/2018
IRB#: PRO17090552
Subject: Promoting Global Competence Among High School Students

The above-referenced project has been reviewed by the Institutional Review Board. Based on the information provided, this project meets all the necessary criteria for an exemption, and is hereby designated as "exempt" under section 45 CFR 46.101(b)(2).

Please note the following information:

- Investigators should consult with the IRB whenever questions arise about whether planned changes to an exempt study might alter the exempt status. Use the "Send Comments to IRB Staff" link displayed on study workspace to request a review to ensure it continues to meet the exempt category.
- It is important to close your study when finished by using the "Study Completed" link displayed on the study workspace.
- Exempt studies will be archived after 3 years unless you choose to extend the study. If your study is archived, you can continue conducting research activities as the IRB has made the determination that your project met one of the required exempt categories. The only caveat is that no changes can be made to the application. If a change is needed, you will need to submit a NEW Exempt application.

Please be advised that your research study may be audited periodically by the University of Pittsburgh Research Conduct and Compliance Office.
APPENDIX E

LETTER SENT TO PARENTS/GUARDIANS OF STUDENTS, INVITING STUDENTS TO SERVE AS PARTICIPANTS IN THE STUDY

January 14, 2018

Dear Parents of Students in Ms. [Teacher’s Name] Introduction to Global Studies Class (Spring 2018):

My name is Jasmina (Maja) Budovalcev Konitzer and I am currently in my last year of the doctoral program in Education at the University of Pittsburgh. My research study will take place in Ms. [Teacher’s Name] “Introduction to Global Studies” class at [Name] High School during Spring 2018. The purpose of my research is to understand how high school students critically analyze, interpret, and understand the learning experiences in a globally-focused curriculum. For that reason, I will be administering the Global Competence Aptitude Assessment (electronic tool) to students enrolled in [Teacher’s Name] class. The survey will take approximately 45 minutes. The survey will ask the following types of questions: 1) social studies factual questions, 2) scenario style questions, 3) behavioral style items - how do students make decisions in real life situations, and 4) student self-assessment in which they will evaluate their own attitudes and interpersonal skills.

In addition to the electronic survey, I will be present during Introduction to Global Studies class taught by Mrs. [Teacher’s Name]. I will observe and audio record your student’s conversations with their peers and [Teacher’s Name], to glean into students’ critical thinking skills. I will not participate in any way in their classrooms discussions.

There are no foreseeable risks associated with this project, nor are there any direct benefits to your student. As participants, your student will not receive any payment for participation. You, as parents, have the right to opt in or out of any research involving your child. I am asking that you sign this letter on the line indicated below if you are willing to have your child participate in the research study. If you and/or your child do not provide permission and/or assent to participate, the teacher will provide an alternative activity during the observations and audio-recorded conversations with peers. Your decision regarding your child's participation and/or your child's decision regarding participation will have no effect on his/her grade/academic performance in the class. Your child’s participation is voluntary and you are free to withdraw from the study at any time.

Thank you for your time and consideration!

__________________________
Parent/Guardian Signature

Please return the signed letter to Ms. [Teacher’s Name] at [Teacher’s email] by January 30, 2018. Thank you!
BIBLIOGRAPHY


